P. A. C. No. 572

PUBLIC ACCOUNTS COMMITTEE (1977-78)

(SIXTH LOK SABHA)

(THIRTY-THIRD REPORT)

ON

HALDIA DOCK PROJECT

[MINISTRY OF SHIPPING & TRANSPORT]

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75, Union Government (Civil)]

Presented in Lok Sabha on 22 DEC 1977
Laid in Rajya Sabha on 22 DEC 1977

LOK SABHA SECRETARIAT
NEW DELHI

December, 1977/Agrahayana, 1899 (S)

Price : Rs. 5·85

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

Sl. No.	Name of Agent	Agency No.
	ANDHRA PRADESH	
1.	Andhra University General Cooperative Stores Ltd., Waltair (Visakhapatnam)	8
2.	G. R. Lakshmipathy Chetty and Sons, General Merchants and News Agents, Newpet, Chandragiri, Chittoor District.	94
	ASSAM	
3.	Western Book Depot, Pan Bazar, Gauhati.	7
	BIHAR	
4.	Amar Kitab Ghar, Post Box 78, Diagonal Road, Jamshedpur.	37
	GUJARAT	
5.	Vijay Stores, Station Road, Anand.	35
6.	The New Order Book Company Ellis Bridge, Ahmedabad-6.	63
	HARYANA	
7.	M/s. Prabhu Book Service, Nai Subzimandi, Gurgaon, (Haryana).	14
	MADHYA PRADESH	
8.	Modern Book House, Shiv Vilas Palace, Indore City.	13
	MAHARASHTRA	
9.	M/s. Sunderdas Gianchand, 601, Girgaum Road, Near Princess Street, Bombay-2.	6
10.	The International Book House (Private) Limited 9, Ash Lane, Mahatma Gandhi Road, Bombay-1.	22
11.	The International Book Service, Deccan Gymkhana Poona-4.	26
12.	Charles Lambert & Company, 101, Mahatma Gandhi Road, Opposite Clock Tower, Fort, Bombay.	30
13.	The Current Book House, Maruti Lane, Raghunath Dadaji Street, Bombay-1.	60
14.	Deccan Book Stall, Ferguson College Road, Poona-4.	65
15.	M/s. Usha Book Depot, 585/A, Chira Bazar Khan House, Girgaum Road, Bombay-2 B.R.	5
	MYSORE	
16.	M/s. Peoples Book House, App. Jaganmohan Palace, Mysore-1.	16
	RAJASTHAN	
17.	Information Centre, Government of Rajasthan, Tripolia, Jaipur City.	38
	UTTAR PRADESH	
18.	Swastik Industrial Works, 59, Holi Street Meerut City.	2
19.	Law Book Company, Sardar Patel Marg, Allahabad-1.	48
	WEST BENGAL	
20.	Granthaloka, 5/1, Ambica Mookherjee Road, Belgharia, 24 Parganas.	10
21.	W. Newman & Company Ltd. 3, Old Court House Street, Calcutta.	44
22.	Firma K. L. Mukhopadhyay, 6/1A, Banchharam Akrur Lane, Calcutta-12.	82
23.	M/s. Mukheji Book House, 8B, Duff Lane, Calcutta-6.	4

Corrigenda to the 33rd Report of the Public Accounts Committee (Sixth Lok Sabha) on Haldia Dock Project, presented to Lok Sabha on 22nd December 1977

Page	Para	Line	For	Read
(iv)	1	5	Haldid	Haldia
(iv)	3	2	Appendix	Appendix-III
3		2	is follows	is as follows
3	1.5	4	Amouut	Amount
6		1	early 1943-44	early as 1943-44
6	1.11	7	Filties	Fifties
6.	1.14	1	conceredn	concerned
10	2.14	1	abroad ship	aboard ship
12	2.19	5	tanker	tankers
31	3.17	27	add 'for' after 'steel'	
37	3.23	4	commenement	commencement
38		12	thereoftre	therefore
44	4.12	41	conlusive	conclusive
45	4.13	8	atleast period	at least a period
45	footnote		page 101	page 49
51	5 8	11	delete "It appears ...agreement"	
51	5.9	5	is no expected	is now expected
56	6.6	9	tents oul'	tests could
59	6.13	18	will in time	well in time
60	6.17	3	look entrence	lock entrance
60	6.17	5	the low	the lock
77	6.56	2	Hindsutan	Hindustan
82	6.67	22	Rs.4.8	Rs.4 35
39	6.82	7	experience nad	experience and
89	6.83	2	delete 'in' after 'and'	
98		11	Calcitta	Calcutta
103	7.15	11	fro mthe	from the
104	7.17	1	It It was	It was
105		5	cheniacl	chemical
105		12	November	December
105		13	Kartika	Agrahayana
115	2.20	6	27 500	87 500
117	Footnote		Barakha	Farakka
120	3.28	3	Oscalation	escalation
120	3.28	5	ingenuitions	ingenuities
122	4.13	7	consdiered	considered
123	5.8	12	delete "It appears...agreement"	
123	Footnote		Page 101	Page 49
125	6.17	2	apparaently	apparently
129	6.46	6	pumrpones	purposes
130	6.56	14	preplexed	perplexed
134	6.81	1	not that	note that
134	6.83	2	delete 'in' after 'and'	
139	7.19	13	ensured	ensure

CONTENTS

* Not printed (One cyclostyled copy laid on the Table of the House and five copies placed in Parliament Library)

PUBLIC ACCOUNTS COMMITTEE

(1977-78)

CHAIRMAN

Shri C.M. Stephen

MEMBERS

LOK SABHA

2. Shri Balak Ram
3. Shri Brij Raj Singh
4. Shri Tulsidas Dasappa
5. Shri Asoke Krishna Dutt
6. Shri Kanwar Lal Gupta
7. Shri P.K. Kodiyan
8. Shri B.P. Mandal
9. Shri R.K. Mhalgi
10. Dr. Laxminarayan Pandeya
11. Shri Gauri Shankar Rai
12. Shri M. Satyanarayan Rao
13. Shri Vasant Sathe
14. *Shri Sheo Narain
15. *Shri Jagdambi Prasad Yadav

RAJYA SABHA

16. Smt. Sushila Shanker Adivarekar
17. Shri Sardar Amjad Ali
18. Shri M. Kadershah
19. Shri Piare Lall Kureel
    urf Piare Lall Talib
20. Shri S.A. Khaja Mohideen
21. Shri Bezawada Papireddi
22. Shri Zawar Hussain

SECRETARIAT

1. Shri B.K. Mukherjee	*Joint Secretary.*
2. Shri T.R. Ghai	*Senior Financial Committee Officer.*

*Ceased to be Member of the Committee on his appointment as Minister of the State with effect from 14-8-1977.

INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Thirty-Third Report of the Public Accounts Committee (Sixth Lok Sabha) on paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75, Union Government (Civil) Haldid Dock Project.

2. The Report of the Comptroller and Auditor General of India for the year 1974-75, Union Government (Civil) was laid on the Table of the House on 26 March, 1976. The Public Accounts Committee (1976-77) examined paragraph 33 of the said Audit Report at their sittings held on 25 and 26 June, 1976, but could not finalise the Report on account of dissolution of the Lok Sabha on 18 January, 1977. The Public Accounts Committee (1977-78) considered and finalised this Report at their sitting held on 18 November, 1977. Minutes* of the sittings of the Committee form Part II of the Report.

3. A consolidated statement containing conclusions/recommendations of the Committee is appended to the Report (Appendix). For facility of reference, these have been printed in thick type in the body of the Rport.

4. The Committee place on record their appreciation of the commendable work done by the Chairman and Members of the Public Accounts Committee (1976-77) in taking evidence and obtaining information for this Report.

5. The Committee also place on record their appreciation of the assistance rendered to them in the examination of the subject by the Comptroller and Auditor General of India.

6. The Committee would also like to express their thanks to the Officers of the Ministries of Shipping & Transport, Railways, Petroleum, Fertilizers & Chemicals, Commerce, Industry (Department of Heavy Industry), Steel & Mines (Department of Steel) and Agriculture & Irrigation (Department of Agriculture) and the Calcutta Port Trust/Haldia Dock Project for the co-operation extended by them in giving information to the Committee.

---

* Not printed. One cyclostyled copy laid on the table of the house and five copies placed in Parliament Library.

NEW DELHI :
December 6, 1977
Agrahayana 15, 1899 (*Saka*)

C. M. STEPHEN
Chairman,
Public Accounts Committee

CHAPTER I

INTRODUCTORY

Audit Paragraph

1.1. *Haldia Dock Project.*—The riverine port of Calcutta has been functioning for more than 100 years. It is 126 miles away from the Bay of Bengal. Proper functioning of this port is largely dependent on the navigability of the Hooghly river. In 1938-39 the maximum and minimum drafts of the river were 30 feet and 22.5 feet. In that year the draft of the river fell below 26 feet on 92 days. After five years in 1943-44 the maximum and the minimum drafts of the river were 29 feet and 18 feet; in that year the draft was below 26 feet on 285 days. The position was worst in 1961-62 when the maximum and minimum drafts were 25.5 feet and 17.5 feet. This trend continued and although the position improved in certain years in between, the maximum and minimum drafts in 1972-73 were 27 feet and 17.4 feet, and on 323 days in that year the draft was below 26 feet in spite of the expenditure of Rs. 3.99 crores on dredging during that year. There are also sharp bends in the river in the downstream from Calcutta. These bends and low draft of the river limit the size of the ships which can visit the port. The drafts available during 1964-65 to 1973-74 and expenditure on dredging during those years are shown below :—

Year	Maximum draft	Minimum draft	Number of days when draft was below 26 feet	Expenditure on dredging
	(In feet)			(In crores of rupees)
1964-65	27·4	20·1	329	1·69
1965-66	29·0	18·5	329	1·86
1966-67	29·0	18·8	308	2·58
1967-68	28·0	18·3	289	2·64
1968-69	29·5	18·8	243	2·87
1969-70	28·5	19·0	284	3·15
1970-71	29·0	19·5	307	3·29
1971-72	28·6	18·0	313	3·17
1972-73	27·0	17·4	323	3·99
1973-74	28·6	18·0	311	3·89

According to Calcutta Port Trust (January 1975), the maximum length of the ships which can enter the port is 515 feet (12,000 DWT) for Kidderpore dock, 565 feet (16,000 DWT) for Netaji Subash dock and 620 feet (20,000 DWT) for Budge Budge. Only 8 ships above 514 feet length can be given alongside berths inside the docks at a time. Larger ships of 650 feet length (above 25,000 DWT) and above require more than 28 feet. More and more world cargo is gradually being carried by bigger ships because of freight advantage.

Calcutta port caters to the needs of the eastern part of the country. Due to limitations of draft the traffic handled by Calcutta port decreased from 110 lakh tonnes in 1964-65 to 63 lakh tonnes in 1973-74; the total number of ships handled declined from 1807 to 1045 during the same period.

The question of construction of a subsidiary port had been under consideration from the early 1950s. In the meantime, due to non-availability of adequate drafts, in October 1959 the port trust started lightening the Ships at Haldia about 56½ nautical miles downstream from Calcutta and carrying some portion of the cargo in barges so that the ships could proceed to Calcutta. In 1960 the Port Trust approved a provisional estimate of Rs. 25 crores (foreign exchange element : Rs. 14 crores) for construction of a new port at Haldia nearabout where the ships were being lightened. A master plan of the project was drawn up in 1962. The master plan envisaged setting up of a port and an industrial complex in an area of about 14 square miles, including an oil refinery and a fertiliser factory in the public sector and various other medium and small-scale industries. The master plan provides for 6 bulk cargo berths, 28 general cargo berths, 2 dry docks and 2 riverside jetties.

* * * *

1.2. Under the Haldia dock project an impounded dock, *i.e.*, dock in an inland man-made lagoon connected with the river through a lock-system, is being constructed by dredging of land in an area of about 170 acres. The nearest point of the lagoon to the river is about 100 metres from the river bank and the farthest point about 1,500 metres. The dock basin consists of two parts, a turning circle of 1,800 feet diameter and the 5,000 feet long and 970 feet wide dock area. Except the oil jetty and the lead-in-jetty (where ships will be berthed before they are taken inside the impounded dock) which are on the river side, all the other berths are on the inland lagoon. This impounded dock basin will provide a safe berthing zone for the ships free from tidal variations of the river. The impounded dock will be connected with the river by a water-way, called lock entrance, for passage of ships from the river to the dock basin and *vice versa*.

Major components of the dock construction work taken up under the first phase of the project are—

(i) construction of the berths,

(ii) construction of the lock entrance,

(iii) dredging of the impounded dock lagoon, and

(iv) installation of mechanical equipment.

* * * *

1.3. Between 1971-72 and 1973-74 total cargo in the major ports in the country rose from 592 lakh tonnes to 644 lakh tonnes, *i.e.*, an increase of about 8 per cent. During the same period the traffic handled by Calcutta Port decreased from 74 lakh tonnes to 63 lakh tonnes.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil) —pp. 107—109, 113-114 and 134]

1.4. The Audit paragraph mentions about the drafts available in the river Hooghly from year to year between 1964-65 and 1973-74. The

Committee called for information relating to subsequent years and the consolidated picture that emerges upto 1975-76, is follows :

Year	Maximum draft (in ft.)	Minimum draft (in ft.)	No. of days when draft was below 26 ft.	Expenditure on dradging (in crores
1964-65	27·4	20·1	329	1·69
1965-66	29·0	18·5	329	1·86
1966-67	29·0	18·8	308	2·58
1967-68	28·0	18·3	289	2·64
1968-69	29·5	18·8	243	2·87
1969-70	28·5	19·0	284	3·15
1970-71	29·0	19·5	307	3·29
1971-72	28·6	18·0	313	3·17
1972-73	27·0	17·4	323	3·99
1973-74	28·6	18·0	311	3·89
1974-75	28·87	17·06	288	4·76
1975-76	28·87	17·06	276	4·95
*1976-77	28·6	18'-5	319	9·00 (Provisional)

*Not Verified by Audit.

1.5. The position in regard to the total number of ships and the amount of traffic handled during the period 1964-65 to 1975-76 is given below :

Year	Total No. of Ships handled	Amouut of Traffic handled (In tonnes)
1964-65	1807	1110 lakh
××	××	××
1973-74	1045	63 lakh
1974-75	2060	75·3 lakh
1975-76	2039	76·9 lakh
*1976-77	984	83 lakh

*Not verified by Audit

1.6. The deteriorating position in regard to the traffic handled at Calcutta Port was directly related to the condition of the river Hooghly. As far back as 1966 the Estimates Committee were informed by the Government that due to factors beyond the control of the Port authority the River Hooghly had been deteriorating for a long time. "While intensive studies have been and are being made and very large expenditure is being incurred on intensive dredging, it would not be possible to arrest the deterioration until the Farakka Barrage is ready and upland water supply from the Ganga is available throughout the year". The Farakka Barrage Project was therefore conceived to ensure guaranteed provision of headwater supply along the Bhagirathi-Hooghly for the preservation of the long seriously threatened Port of Calcutta.

It was estimated that there must be a guaranteed supply of 40,000 cusecs of water in the lean months of the year to the River Hooghly. It was hoped that with this supply the Calcutta Port would have a fair chance of winning the fight for its own life and the life of the river, in the process ensuring that no harm comes further downstream to the enormously important Haldia complex in which the country has invested so much of its scarce resources.

1.7. The Public Accounts Committee in their 196th Report (5th Lok Sabha) on the Farakka Barrage Project noted with satisfaction that the Farakka Project has been completed and the Bhagirathi-Hooghly has started receiving 40,000 cusecs of water from the Ganga since 1975. For the economic development of the Haldia complex, the contribution made by the Farakka Barrage Project cannot be over-estimated.

1.8. During evidence (June 1976) on the Audit para (Haldia Dock Project), discussed in the present Report, the Committee desired to know the position regarding draft of the river at Haldia and the effect of Farakka thereon. In reply, the Development Adviser (Posts) has stated :

> "....these drafts which have been shown here represent the drafts available for the Port of Calcutta. The governing bar for the port of Calcutta in Balari bar which is just upstream of the Haldia complex. The Balari bar controls the drafts to the port of Calcutta and as there has been no improvement—or rather there has been deterioration—on the Balari bar initially, therefore, there has been no improvement in the draft for the Port of Calcutta.
>
> As regards Haldia, the position is that today we have got draft of approx. 32 to 33 feet in the port of Haldia and we are expecting that by the end of this year we will achieve drafts of 35' to the port of Haldia. We had planned to achieve 35' in the port of Haldia by the end of 1975 but that has not been possible because of certain difficulties which we have experienced as a result of re-shoaling. We have four bars between the sea and Haldia, namely; Jallinghom, Auckland, Middleton and Gasper. Middleton and Gasper are in the outer estuary. They have been dredged and are available for drafts of 35' already. The two bars of Auckland and Jellinghom which are in the inner estuary are giving continuous difficulty because of re-shoaling which has been much worse than expected. The last survey taken towards the end of May showed that on the Auckland bar we have been able to get a depth of approx. 7 metres and allowing for another 3 metres rise of tide wave the navigable depth is 32. The Jellinghom bar has not respondent well. The main reason for this is that dumping grounds are so far away that the output of the dredger falls considerably.
>
> * * * *
>
> 32' draft which I have mentioned is now available for approx. 300 days in a year. We may even be able to get 35' draft upto Haldia but that will be for a short time say only 15 to 20 days in a year. The minimum draft will not fall below 30'."

Asked about the size and tonnage of ships that would sail in the above-mentioned draft the witness added :

"Normally fully-loaded vessel of 30,000 tonnes—either tanker or bulk carrier can sail in on a draft of 32'. We are also using our larger tankers of 87,000 tonnes dead freighted to between 50—55 thousand tonnes.

* * * *

The planned drafts are only 40' and that too by 1980-81. It would allow the normal standard size ship of 60,000 tonnes. It will also admit 80,000 tonnes ships short-loaded to 70,000 tonnes."

1.9. In the context of the country taking its due share in the World trade, the Committee desired to know whether any exercise had been done by Government as to the role of Haldia, both present and future, which could serve as a guide to the nation in the matter of expectations from Haldia. In reply, Secretary, Transport has stated :

"We are in touch with the various Ministries so far as the growth of traffic is concerned. One thing to which a pointed attention has been given, is the prospects for large coal exports. Haldia is ideally situated for large coal exports, particularly to Europe. The trial made at Paradip was only to test the market. We envisage increasing reliance on the facilities at Haldia for realizing the export potentialities. Haldia is also ideally situated with reference to iron ore mines. Depending upon the market ability of our products and the projections accordingly, at the moment we are studying the possibility of availing of the increasing facilities, particularly for coal, if necessary. Regarding other matters like iron ore and export of pig iron, figures have not been drawn up. Recently some kind of a programme has been announced by the Ministry of Steel for the production of iron and steel in the next few years. We will be in touch with them and will ensure that Haldia has a legitimate share in the facilities to be build up."

On the question of Haldia having been given a rather low place, as compared to some other ports, in the matter of export of iron ores in the Report of the Commission on Major Ports, the witness has clarified :

"The projections made in the report are really old and the position is always fluid. We have to study the programme as it is. A decision has been taken to develop it for export purposes. That is particularly related to development of iron ore in a particular belt. Similarly, Haldia Port is also marked for development. In the Iron Ore Board as well as in the Ministry of Steel and Mines, they have earmarked certain area for development. Considering the development to take place, as you have correctly pointed out, we will bear in mind the development of the Haldia Port. Its development is very much near to our heart and we will certainly see to it that it will get its due share in the future development."

1.10. Calcutta Port which was a premier port in the country for several decades came to lose its position of primacy because of two important developments since the Forties and the Fifties. The riverine channel leading to Calcutta Port started getting silted up with the result that even as

early 1943-44 the draft fell below 26 feet for as many as 285 days in a year. This naturally became a constraint for larger vessels requiring a draft of 26 feet or more to negotiate entry to the Calcutta Port. As is well known, a trend started soon after the World War of using larger vessels and tankers to carry cargo. While facilities for handling of larger vesseles and tankers were developed in other major ports of the country no comparable progress was made in Calcutta. Induction of head waters in the lean months through Farakka Barrage and canals which could have averted the deteriorating position of Calcutta Port took nearly two decades to be completed and commissioned in 1975. The Committee have dealt with this aspect at length in their 196th Report (5th Lok Sabha) on Farakka Barrage Project.

1.11. The cumulative effect of all these factors was that while there was progressive increase in the handling of traffic particularly bulk traffic in other major ports, the traffic handled at Calcutta Port, in fact, kept on falling. This would be evident from the fact that the traffic handled in Calcutta Port which was of the order of 1.1 million tonnes in 1964-65 fell to 0.63 million tonnes in 1973-74. It was in this background that the concept of Haldia Port Project was conceived in the Fifties. It is, however, a great pity that the importance and urgency of this Project were not fully realised with the result that it came to be sanctioned only in the Sixties and it has taken more than a decade to be completed and put into commission.

1.12. The Committee have elsewhere in the Report dealt at length with the facilities for handling of iron ore (4.0 million tonnes) and coal (3.5 million tonnes) which have been developed at the port at heavy capital expense. The Committee are greatly concerned to note that these facilities for bulk handling of cargo would be utilised even less than half of their capacity in the coming months. This underlines the need for initiative being taken at a higher level to coordinate and integrate the effort of the undertakings concerned in the public sector, viz. MMTC, Coal India, Port Trust Authorities etc. so as to ensure that the handling facilities at Haldia Port are pressed into service and put to effective use with the twin objectives of providing the requisite traffic load to Haldia to sustain its economic viability and to accelerate the development of mining and allied indnstries in the hinterland.

1.13. The Committee would like to be informed of the concerted measures taken by Government and the other authorities concerned in pursuance of the above recommendations and the results achieved to generate larger traffic at Haldia on a sustained basis.

1.14. The Committee are greatly conceredn to note that at present the draft in Haldia Port is of the order of 30 feet only but might increase to 35 feet. This would permit handling of vessels of 30,000 tonnage requiring displacement of 30 feet or below. The Committee feel that as larger vessels and tankers are normally in use in World trade, it is imperative that the draft in the Haldia port is developed to 35/40 feet at the earliest so as to provide the requisite facilities for the handling of larger cargo vessels and tankers.

CHAPTER II

FEATURES OF THE HALDIA DOCKS

(a) Lock Entrance and Dock System

2.1. Audit has mentioned that one of the important features of the Haldia Dock is the construction of the lock entrance which is the first of its kind in India. Details of four other lock entrances constructed elsewhere in the world during the last three decades are given below along with similar details about Haldia :

Not verified by Audit.

Period construction	Location	Size in cubic feet	Volume in cubic fee t
1965—1969	Leith, U.K.	849·52 × 109·88 × 49·86	46,93,570
1949—1954	Eastham, U.K.	806·88 × 100·04 × 59·70	47,99,440
1958—1962	Langton, Canada	823·28 × 131·20 × 59·04	63,16,910
1961—1967	Zandvliet, Antwerp.	1313·64 × 186·96 × 60·02	1,73,62,680
1968—1975	Haldia	1136·52 × 130·22 × 62·98	93,34,210

2.2. Other facilities now being provided in Haldia besides the Lock Entrance are 6 Bulk and 28 General Cargo Berths, and two Dry Docks. All the Berths will be equipped with high speed mechanical handling facilities. Unloading/loading capacity of Ore, Coal and Phosphate Berths would be respectively 5,000, 1,800 and 1,000 tonnes per hour The Finger Jetty would be equipped with a gantry crane and conveyor system to transhipp cargo from bigger ships to smaller ships or from a ship to a bargo or *vice versa*. The Dock would also have a heavy Lift-*cum*-Container Berth and a Marshalling Yard with storage space for 1,500 containers. The Oil Jetty would be able to handle 80,000 DWT Tankers and attend ships drawing a draft of 40 ft.

2.3. Dealing with the question of Lock Entrance, Audit has stated that the 130 feet wide lock entrance will be provided with three electrically operated sliding caisson type gates, which will divide it into two chambers having a clear length of 305 feet and 654 feet and 6 inches. The clear length between the two gates at the ends of the lock entrance at the river side and the dock side will be about 985 fact, sufficient for accommodating 930 feet long ships. This inner portion of the lock entrance which provides the water passage for the ships is the lock barrel. The lock entrance is made of massive walls, founded on concrete moneliths (24 on the river side and 42 on the land side), having three recesses (called cambers) in the land side wall for the three gates to remain when they are not in operation across the lock barrel. The camber on the river side is called outer camber, that in the dock side is called inner camber and the one in between is called the intermediate camber. The mouth of each camber can be closed by a gate (called stoplog) for pumping out water from the cambers for inspection and maintenance of the gates. The foundations on which the caisson gates move in or out of the cambers are called the sliding ways.

2.4. The floor level of the lock entrance is 33 feet below datum, *i.e.*, the level of an imaginary horizontal plane about 9 feet below the mean sea level as adopted by the Survey of India. The height of each monolith above the floor level is 33 feet while 44 feet to 55 feet of the monoliths are below floor level, *i.e.* 77 feet to 88 feet below detum. Of the 66 monoliths, sixty-one are 36 feet x 36 feet placed 12 feet 6 inches apart in the lock barrel and 9 feet 2 inches apart in the camber, while five (three at the inner and two at the outer camber) are of the size 90 feet x 36 feet. The inter-space between the monoliths is filled with 23 feet and 6 inches concrete going down upto 10 feet below the floor level at the lock barrel, *i.e.*, 43 feet below the detum and 17 feet below the floor level, *i.e.*, 50 feet below the detum at the cambers.

2.5. Through each of the two walls on both sides of the lock entrance runs a culvert of the size of 18 feet x 12 feet and 6 inches, which has been provided with openings at the river end as well as the dock basin. Each culvert has also 6 openings towards the lock barrel, each of which is provided with a gate called radial gate lowered or raised by radial movement for controlling flow of water in the culvert. The levelling culverts are also used for filling, or taking out water from, the lock barrel to bring the water level in the lock barrel to the water level in the dock basin or in the river as may be necessary. These are also used for letting in water from the river to the dock basin, when the river is in high flood. The size and level of the levelling culverts was decided in May 1969 after model tests at the Central Water Power Research Station, Poona.

Six openings have also been provided in each wall of the lock entrance for flushing out silts from the sliding ways to keep movement of the caisson gates smooth. The gates for these openings are called flushing pen-stocks; these are electrically operated and move vertically.

The pumps required for pumping in water in the basin through the culverts and/or lock barrel are called impounding pumps. Four such pumps of 50,000 gallons per minute capacity will be housed in a pump house.

2.6. The impounded dock will have a depth of about 45 feet. Before a ship is taken to the impounded dock it will be berthed in the river-side lead-in-jetty. The water level inside the lock barrel will then be brought to the river level by letting out water from, or letting in water to, the lock barrel as may be necessary. The outer gate will then be opened while the dock side gate will remain closed. The vessel will then be towed inside the lock barrel and the outer gate will be closed. Then the water level in the lock barrel would be brought to the dock basin level. The dock basin side gate will be opened thereafter and the vessel will be taken inside the impounded dock. Similarly, if a ship has to be taken out, first the water level in the lock barrel will be brought to the level of the dock basin. Thereafter, the dock basin side gate will be opened and the ship will be brought inside the lock barrel from the impounded dock. After the ship has entered the lock barrel the dock basin side gate will be closed. Water inside the lock barrel will then be brought to the level of the river. Thereafter, the outer lock will be opened and the ship will be taken out. Apart from the two gates at each end of the lock entrance, the additional caisson gate in between has been provided for handling smaller ships without operating the

entire lock barrel as bringing the water level to the river level and again to the level of the impounded dock is a costly operation.

2.7. The Haldia Dock System has been conceived keeping in view the modern concepts in cargo handling methods. With high speed mechanised cargo handling equipment and devices, it will be possible for ships to bring in full loads, lighten partially at Haldia and then proceed to Calcutta. On the outward voyage, they can load upto permissible draft at Calcutta and then top-up full load at Haldia, before sailing out of the Port.

2.8. Haldia Dock System will also provide for the first time in the country a container terminal with transtainer and pertrainer cranes capable of handling full container ships. Another modern concept of sea-transportation "LASH" has also been infused at Haldia and in fact, LASH ships are now regularly calling at Haldia. LASH stands for "lighter-abroad-ship". It is a vessel (mother ship) that transports loaded or empty lighters (barges) from port to port. The 60-feet barges are raised and lowered to and from the mother ship by means of either a shipboard crane or a stern elevator. LASH vessels can carry up to seventy 60-feet barges or a combination of barges and conventional containers.

The primary purpose of LASH ships is to convert inland shallow-water river ports into deep-sea terminals. Formerly, mid-continent importers and exporters had to move their cargoes (even containerized cargo) to and from an ocean port via railroad or truck. But the barge-carrier has given them an alternative, and also opened up new opportunities for river ports all over the world. Haldia is currently installing container facilities, and may be developed as a major Indian container shipping port.

2.10. The various components of the lock entrance, viz., caisson gates, impounding pumps, radial gates, etc. have been dealt with in succeeding chapters.

2.11. The Committee are anxious that the Haldia Docks which was conceived as an adjunct to Calcutta Port—threatened by lower draft conditions on account of siltation—should make an impressive start so that along with Calcutta it could play an effective role in the promotion of the trade of the entire eastern and north-eastern region of the country. It is only by rendering efficient handling facilities at most competitive rates that Haldia can attract larger quantities of bulk cargo meant for the eastern and north-eastern region of the country. There is no reason why with the heavy capital investment made and the latest and most modern equipment provided, it should not be possible to achieve this object of efficient and economic service which may set up a high example of smooth and efficient functioning to the other ports of the country as well.

The Committee would like to emphasise that however impressive be the achievement of the port authorities in the field of construction, a sense of complacency should not be allowed to develop and from now onwards the authorities should concentrate on preparing a perspective plan for the entire Haldia complex and efficient functioning of the operational facilities so that Haldia may play a meaningful part as a thriving and commercial entry port in the South East Asia.

(b) Administrative set-up of the Haldia Docks

2.12. The Haldia Docks being a part of the Calcutta Port, the Committee desired to know the administrative set-up sanctioned or proposed to be sanctioned for the Docks. The Committee have been informed that the management structure at Haldia Docks will be headed by the General Manager, comparable to the Deputy Chairman at Calcutta, and having full powers, control and authority over the activities of Haldia. While the Chairman, Calcutta Port Trust and the Board of Trustees will have the responsibility for policy making, the executive functions at the dock management level will vest in the General Manager.

The General Manager will be assisted by a Joint Manager (Admn) (responsible for service like fire-fighting, security, vigilance, medical services, public relations etc.), a Dy. General Manager (Operations) and a Dy. General Manager (Management & Services). The former Dy. General Manager will have four Managers under him to deal with Traffic, Cargo Handling, Plants & Equipment and Marine operations respectively. Similarly, the latter Dy. General Manager shall also be assisted by four Managers dealing with Finance, Personnel, Infra-structure & Civic Facilities and Marketing & Development respectively. So far, at the top level, only one post of General Manager and two posts of Dy. General Managers have been sanctioned by Government.

The written note furnished by the Ministry in this regard in January 1977 is reproduced in *Appendix I*.

2.13. In so far as the administrative set up of the Haldia Dock is concerned, the Committee note that the General Manager at Haldia has been given powers and control and authority over the activities at Haldia and his position is stated to be broadly comparable to that of the Deputy Chairman in Calcutta Port Trust. The Committee note that the intention of the planners is that larger vessels may use Haldia Port for lightening and proceed to Calcutta to discharge the goods at the terminal port. Similarly, on the outward journey, the vessels may start with a paying load from Calcutta Port and top up at Haldia.

2.14. The latest in transportation LASH (lighter abroad ship) further underlines the need for close coordination between the Haldia and Calcutta ports. The Committee stress that this integrated link between Haldia and Calcutta ports as conceived by the planners and as successfully maintained during the construction period, should be carried through to the operational stage in the larger interest of providing best handling facilities to the Eastern and Northeastern regions of the country and for preserving the economic viability and health of both Calcutta and Haldia Ports. The Committee are, however, anxious that the powers given to the General Manager at Haldia should be adequate and effective in all respects so that he is able to take decisions on the spot and thus look after the day-to-day function of the Docks without having to approach the authorities at Calcutta.

2.15. The Committee need hardly point out that adequate number of quarters and other supporting infra-structure facilities may be provided for the officers and staff posted in Haldia Port so that they are encouraged to settle down there in the inteerst of work.

(c) Acquisition of Tankers

Audit paragraph.

2.16. It was expected in August 1975 that the dock would be commissioned by the middle of 1976. Presently, draft in the river is 30 feet, which is expected to increase, by dredging, to 35 feet by the end of 1975 and to 40 feet by 1980. Even after the dock is commissioned, ships of 60,000 to 80,000 DWT will not be able to come to the dock till the river is dredged to provide sufficient draft for such ships.

In March 1972 Government approved purchase of four 87,500 DWT tankers by the Shipping Corporation of India at a cost of 5,000 million yens each (about Rs. 15 crores) from Japan for bringing imported crude to Bombay and Haldia (for the refineries at Barauni and Haldia). These four tankers were received by the Shipping Corporation of India between November 1973 and May 1974. Purchase of two more tankers (cost : 5,000 million yens each i.e., about Rs. 15 crores each) from Japan of the same capacity and for the same purpose was approved by Government in May 1972; one of these tankers was received in March 1975 and the other in October 1975. The draft of 30 feet presently available at Haldia is not sufficient for such tankers with full load. Even after the river is dredged to 40 feet draft by 1980, these tankers may not be able to come to Haldia with full load.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75, Union Government (Civil)— p. 133]

2.17. The Audit paragraph mentions about acquisition of 6 ships of 87,500 DWT, at a cost of Rs. 15 crores each, which fully loaded, would be unfit for the draft available at Haldia in the near future. The Committee accordingly desired to know the economic effect of short loaded ships being taken into Haldia. In reply, the Development Adviser (Ports) has stated during evidence :

> "There will be a loss of capacity of 13 to 14,000 tonnes if we use standard size 87,000 tonnes ship. This being a standard size vessel its purchase price is less. We can also build vessels of 80,000 tonnes capacity with 40' draft. But they will be non-standard vessels. They will cost more to buil; and they will cost more to operate. So, a view has to be taken as to which is the most economical parcel-size which can be carried to Haldia. That size was calculated to be about 70,000 tonnes. The. vessels of the size 87,000 tonnes, when short loaded, carry 70,000 tonnes. They have been proved commercially viable and workable for these drafts."

Secretary, Transport, has also explained the position regarding acquisition of the 87,500 DWT tankers, as follows :

> "Before we purchased these 87,500 DWT tankers and went into the market looking for suitable vessels, we had laid down the prescription of a 40 ft. draft so that the requirement of vessels carrying the total amount of crude that was to be brought to Haldia would be satisfied. On the basis of that, we went out and made enquiries as to what kind of vessel is suitable for this

purpose. After examination it was found that the most economical way was to take a standard vessel like the 87,500 DWT and bring it to the 40 ft. draft. In other words, economics were not in favour of our going in for a specially designed ship in order to deal with this kind of draft."

2.18. As to the possibility of bringing in bigger vessels to Haldia in the near future, the Chairman, Calcutta Port Trust, has stated during evidence :

"According to our plan, we would have a 35 ft. draft when we open up the Haldia Dock Systems and, thereafter, a one-feet increase in the draft every year. So we expect that by 1981 we would be able to have a 40 ft. draft and that would mean that we would be able to bring in roughly 75,000 to 80,000 tonners."

2.19. The Committee find that six tankers acquired by the Shipping Corporation of India at a cost of Rs. 15 crores each have a capacity of 87,500 DWT and a draft requirement of more than 40 feet. Having regard to the fact that Haldia dock system at present can accommodate only tankers with a draft of 30-35 feet it is evident that these tanker may not prove economic for being used for carrying crude to Haldia till the draft of 40 feet and more is achieved which at the present showing would be in 1981 or thereafter.

2.20. The Committee are not quite convinced with the Government's plea that they had taken a deliberate decision that a standard vessel of 87,500 DWT would be preferable to getting a tanker of less DWT which could ply in the available draft of about 35 feet in a port like Haldia.

The Committee would like the Government to examine the matter in depth in order to make sure that the six tankers of 87,500 DWT already acquired are put to full use in the best public interest to carry crude to other ports in the country and that suitable tankers are provided for carrying crude at most competitive and economic rates to the Refinery at Haldia.

2.21. The Committee have elsewhere in the Report stressed the need for deepening the draft to 40 feet and more at Haldia on a priority basis, keeping in view the economics of the project.

(d) Maintenance Dredging

2.22. The maintenance of proper draft in the river is of fundamental importance for proper functioning of the Haldia Docks. In reply to a question about the maintenance of the river, the Chairman, Calcutta Port Trust, has stated :

"There are four bars in which re-shealing takes place. Reshealing in a river is a constant phenomenon and a dredger has to be continuously kept there. There are two dredgers which are meant initially for capital dredging. After the purpose has been achieved, these will be deployed for the maintenance requirement of the Haldia channel. Dredging will have to be a continuous process. There will be no let up on that score. Of course, with the halp of training works—there are a large number of training works which are being planned for Haldia—the quantum of the total maintenance work will slowly come down.

* * * *

The effect of Farakka on Haldia is a long one."

Explaining the posiiton further, the witness has stated :

"In the area where Haldia is located, the tidal discharge is as much as 20 lakh cusecs whereas the headland water discharge which we are introducing is only 40,000 cusecs. The effect of this in increasing or decreasing speed of water which is flowing near Haldia or below Haldia is negligible. There is a very small possibility of deposition of silt which slowly moves from the river towards the sea near Haldia. It is expected to go into the deeper reaches of the sea and is not likely to affect the approaches to Haldia. There is another aspect of the problem. Previously for three months of the year we used to get headland water. About 1 lakh cusecs of water used to flow down. During these three months, the navigable channels in the river shifts to any one bank. When there is no headland water and there is only tidal influx, the channel orients itself in another location. During the monsoon period, in any one bar, the main discharge will be on the right bank and the channel will be on the right bank and during the non-monsoon period, it will be on the left bank. When the monsoon period is over, the channel starts shifting slowly again back to its position which was there during the non-monsoon period. During the transition period which is the worst period we do not get sufficient drafts.

With the help of the Farakka Barrage, we will be able to stabilise the channel on one bank. That means, it will not shift from that bank to the other bank during the non-monsoon period. It was observed over a number of bars that the channel was stable and it did not shift during the monsoon or after the monsoon of 1975-76, thus indicating that the improvement in the river has started. The apprehension that the improvement in the Calcutta region or in the bars which are upstream of Haldia will cause deterioration of the bars which are downstream of Haldia is not justified.

In non-tidal reaches of the Bhagirathi, when the water from the barrage starts, silt will come down and settle in the areas around Calcutta and would have caused further deterioration. To guard against that we have been doing what is known as sand-trap dredging. Upstream of Calcutta we have created sand-traps. Dredgers are working there continuously and removing the silt from the trap and pumping it ashore. The silt that comes down is trapped there and is pumped to the sides so that it does not flow downwards and create problems in the Calcutta region."

2.23. In reply to a question about the possibilities of re-siltation of sand and soil, the witness has added :

"The estimated quantities of dredging in the channel to Haldia were 69 million cubic metres of capital dredging. It was estimated at that stage that there would be 33 million cubic metres of re-siltation during the process when capital dredging is going

on which is worked out as 50 per cent re-shoaling in inner estuary and 50 per cent re-shoaling in outer estuary. Subsequently, during the actual dredging operations we found that in the inner estuary the re-shoaling is much 'more and it was as high as 100 per cent. to start with. But it is slowly diminishing as we keep on doing dredging and the channel is getting formed. In the outer estuary, as against 50% estimated it has been between only 15% and 25%. We consider that after the channel has been fully dredged, there will be an annual maintenance project requirement of 7 million to 8 million cubic metres. That is, against the 69 million cu.m. of total capital dredging, the maintenance dredging is around 7 million cu.m. which is around 10% per annum. This will be at the ultimate stage. Today the resiltation rate is very high, viz 25% in the outer estuary; and 100% in the inner estuary."

2.24. In reply to a further question about the adequacy of the measures to be taken in the river, the witness has stated :

"All our studies including the various kinds of model tests—analytical, mathematical and hydraulic show that once a channel has been developed, and the training works have been put into position, we will be able to maintain the channel by doing 7 million c.m. of maintenance dredging every year."

2.25. *Cost of maintenance Dredging* : The Audit Paragraph also mentions about the rising cost of maintenance dredging in the river Hooghly. This matter was gone into in detail by the Public Accounts Committee (5th Lok Sabha) in 1974-75 and again in 1975-76.

2.26. In paragraph 7.52 of their 196th Report (5th Lok Sabha) on Farakka Barrage Project, the Committee had observed as follows :

"In the matter of the operation of Dredgers at Calcutta Port, the public Accounts Committee had only last year, in their 175th Report on Calcutta Port Trust made their comments on the low utilisation of Dredgers, owned by the Port. Drawing attention to the reports of two Experts Committees on the subject, the Committee had pointed out that within the Dock system the hours worked by Dredgers during 1965-66 totalled only 6,788 as against the total time of 60,000 hours available for the dredging if the dredgers worked round the clock, and 20,000 hours an eight hour shift basis. Further it was not at all a happy situation that against a norm of 5,200 hours of working per annum by a dredger, as suggested by the Dredger Utilisation Committee (1972-73) the time worked by the River Dredgers at Calcutta Port ranged between 600 and 2,151 hours in 1973-74, the actual dredging time being between only 300 and 1,203 hours. Now that as a result of improvement on account of Farakka Waters flowing in, ships of bigger draughts are expected to be handled at Calcutta, with better provision of deep water near the Docks, the Committee trust that substantially better, if not full, utilisation will be made of the Dredgers operated by the Calcutta Port. The Committee desire that all the dredging requirements of not only Calcutta but also Haldia will be met by existing fleet of Dredgers without requiring any

addition to their number. Between Calcutta and Haldia the entire port complex, rejuvenated and renovated by the Farakka construction, should play the dynamic role expected of it in the context of our developing economy."

2.27. The Committee were informed in reply* by the Ministry of Shipping and Transport :

"The recommendations of the Committee have been noted by the Calcutta Port Trust for appropriate action.

It may, however, be mentioned that while it may be possible for the C.P.T. to meet the requirements of Dock dredging without any addition to their existing fleet, the requirement of river dredging, both below and above Haldia, will be dependent upon the Development and stabilisation of shipping channel, completion of all corrective works, quantum and pattern of headwater flows etc."

2.28. The Committee have noted with concern the rising cost of maintenance dredging at Calcutta/Haldia, which has gone up from Rs. 1.69 crores in 1964-65 to Rs. 4.95 crores in 1975-76. The Public Accounts Committee have stressed more than once* the need for optimum utilisation of the fleet of dredgers of the Calcutta Port Trust and for meeting all the requirements of Calcutta and Haldia without making any addition to their number. The Committee were informed in June 1976 that while it might be possible for the Calcutta Port Trust to meet the requirements of Dock dredging without any addition in their existing fleet, the requirement of river dredging, both below and above Haldia, would be dependent upon the development and stabilisation of shipping channel, completion of all corrective works, quantum and pattern of head-water flows, etc.

2.29. In view of the imperative need to keep the expenses on *dredging* as low as possible and of the likely improvement of the river as a result of Farakka water flowing in, leading to availability of deep water near the Haldia Docks, the Committee expect the Calcutta Port authorities to ensure that all dredging requirements of Calcutta and Haldia both Docks and river, are actually met from the existing fleet of dredgers without making any addition thereto. The Committee would await a categorical assurance from the Ministry in that regard.

---

*See Paragraphs 7·14 to 7·17 of 175th Report (5 L.S.) on Calcutta Port Trust and Paragraph 7·52 of 196th Report (5 L.S.) on Farakka Barrage Project (January, 1976).

CHAPTER III

DELAY IN COMPLETION OF THE PROJECT

Audit Paragraph

3.1. According to the schedule of work drawn up in August 1965, the first phase of the Haldia Dock Project was to be completed by January 1971. As mentioned subsequently, the riverside oil jetty was commissioned in August 1968. Rest of the first phase of the dock project is yet to be commissioned (August 1975). It has been stated in the Performance Budget of the Ministry of Shipping and Transport 1975-76 that the progress of this project has been delayed on account of :—

(i) Delays and difficulties in acquisition of land on account of injunctions, litigations and resistance of local people;

(ii) Non-availability of matching steel, shortage of wagons for movement of construction material and short supply of cement;

(iii) Political turmoil during certain periods in the State;

(iv) Technical problems, the most serious of which was unexpected sub-soil water conditions encountered at the lock entrance affecting other components of the project;

(v) Delay on the part of a number of contractors to fabricate and erect or supply equipment.

A steering committee presided over by the Secretary of the Ministry of Shipping and Transport and consisting of representatives of various departments of Government overseas the progress of the project. The first meeting of the steering Committee was held in January 1967 and the second meeting in February 1967 to discuss various problems for remedial measures. Thereafter, the committee usually met once in 3 to 12 months. The steering committee met altogether 18 times upto April 1975 in more than 8 years.

Issue of notices for acquisition of land was started in October 1962. Out of 9,092 acres of land required for the whole complex, about 7,279 acres were acquired by October 1975. The Port Trust stated (October 1975) that due to non-availability of sufficient, land for disposal of spoil, dredging was affected.

Mostly it was the responsibility of the contractors to procure steel. But on specific requests from the contractors the project authorities placed indents with the Joint Plant Committee for supply of steel. In the steering committee meeting held in May 1967, the representative of the Ministry of Iron and Steel assured that Haldia dock project would be given priority next to Defence in allotment of steel. Defence department is in category 'A' while power and atomic energy projects are in category 'B'. Haldia dock project was actually given 'C' category priority along with Central Public Works Department and other Government projects.

A few instances given below indicate how much steel was allotted for this project during different quarters against its indents :—

For the quarter	Quantity	
	Indented	Supplied
	(in tonnes)	
January 1971 to March 1971	11,948	2,010
January 1972 to March 1972	4,625	890
January 1973 to March 1973	11,778	297

In November 1970 the Ministry of Shipping and Transport had asked the Port Trust to assess its requirement of scarce categories of steel about one year in advance and place orders on the producers. Again in May 1972 the Ministry of Steel and Mines asked the Port Trust to make a projection of quarterwise requirement of steel for one year. From January 1974 the Haldia dock project is being treated as a 'core project' for allotment of steel ('Core projects' are given priority next to operational demands of Defence department and demands sponsored by the Engineering Export Promotion Council). Even thereafter, allotment of steel was far less than that indented as indicate below :—

For the quarter	Quantity	
	Indented	Supplied
	(in tonnes)	
January 1974 to March 1974	2,744	401
April 1974 to June 1974	8,154	885

As will be evident from the instance given below the number of wagons supplied was far less than those indented :—

indicated II	Number of wagons	
	Requisitioned	Supplied
April 1971 to March 1972	5,122	2,056

Construction of the oil jetty was started in June 1965 and completed in May 1968. Construction of the oil refinery of Indian Oil Corporation was started by the end of 1969 and it was commissioned in the latter part of 1974 for production of 2.5 million tonnes per annum in the first phase. Other major construction works were started in January 1968. Till December 1968, however, the railhead nearest to the project area was Panskura, about 72 kilometres away. Till then the project site was connected by a 64 kilometre long 16 feet wide road with Calcutta-Bombay national highway No. 6 at Mechada. The railway between Panskura and the project site was originally (1962-63) contemplated to be completed by 1965. However, as there was delay in starting works of the project, construction of the railway was slowed down for some time. The railway upto Durgachak, about 10 kilometres from the dock area, was completed in January 1969, after the Port Trust emphasised in January 1967 the need for early completion of the railway for carriage of construction materials. The remaining portion (about 10 kilometres) is expected to be completed by the

end of 1975. Apart from carriage of construction materials for the dock project and the fertilizer factory of the Fertiliser Corporation of India, which is due to be commissioned by the end of 1977, the railway is presently also used for haulage of oil tankers from the oil refinery.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974—75Union Government (Civil)—Pp. 111—113.

(a) Agency for execution and preesnt position

(i) *Consultants & Contractors.*

3.2. The Committee have been informed in evidence that M/s. Rendey Palmer and Tritton, a firm from United Kingdom were appointed to act as consultants for preparing the preliminary lay-out and providing the guidelines for master plan. The rest of the works were designed departmentally by the Calcutta Port Trust themselves and the consultants were kept for advising them on lock entrance gates.

In a written note furnished to the Committee, it was stated that for making engineering studies in connection with the preparation of the master plan, a total amount of Rs. 48.29 lakhs (including Rs. 35.81 lakhs in foreign currency) was paid to the consultants. In addition, certain other problems relating to civil works, estuarian dredger and upgrading of oil jetty and mooring Dolphins at Oil Jetty were also referred to them, for which an additional payment of Rs. 36.19 lakhs was made upto September 1976.

While part of the work relating to the Project was carried out departmentally by the Calcutta Port Trust, contractors were engaged by them for execution of many important works like Oil Jetty, Dredging of the dock basin, civil construction work, radial gates & penstocks, caisson gates, stoplogs, ore & coal-handling plants & fertilisers handling plant, etc. Among the important Public Sector undertakings to whom different works were allotted on contract, mention may be made of the Mining & Allied Machineries Corporation and Triveni Structurals Ld.

(ii) *Steering Committee*

3.3. As mentioned in the Audit paragraph a Steering Committee presided over by the Secretary of the Ministry of Shipping and Transport and consisting of representatives of various departments/Ministries was appointed to observe the progress of the Project. The Committee have been informed that during the nine years from January 1967 and January 1976, the Steering Committee held only 19 sittings in all.

During evidence, the Secretary Transport has stated that to attend to special problems, sectional meetings of the Committee were also held which were not called the meetings of the Steering Committee. The witness has added that between 13 May 1975 and 12 January 1976, five such sectional meetings were held which were useful for solving critical problems.

In reply to a question about infrequent meetings of the Steering Committee and the meetings of the Steering Committee being held only at Delhi, the witness has stated—

> "The purpose of the Steering Committee was really to sort out problems that they were not able to sort out at the local level. The

Chairman of the Calcutta Port Trust and the Officer-in-charge used to hold frequent meetings there to sort out those problems. If they were not able to sort out those problems, such problems were brought here. Then the heads of the Public Sector Undertakings were involved. Then we really used to take the assistance of the concerned Ministries, Managing Directors, officers of the Ministry of Heavy Industry and other bodies. There we used to discuss these problems threadbare. I would submit that between one Steering Committee's meeting and other, several things were done and monthly meetings and co-ordination meetings were held at the local level. They continuously used to see that the projects should make progress. The fact that a large number of people attended these meetings shows that somewhere you will find one organisation is represented by more than one person. This was really according to the necessity. The Ministry used to send particular people. But there were certain persons who were constantly attending these meetings. You kindly see that those persons were very important persons. I do recognise the fact that this is not the only correct method of solving the problems. Having meetings on special sectoral problems is also essential. We have been following that practice".

3.4. On the question of the Steering Committee meeting rather infrequently and only at Delhi, the following detailed written information was also furnished to the Committee after evidence :

"On 31st December, 1966, the Ministry of Transport constituted a Steering Committee for directing and guiding the work on the Haldia Dock Project with the following composition :—

1. Secretary,
   Transport and Aviation—Chairman

2. Secretary,
   Expenditure or his
   representative—Member

3. Secretary,
   Economic Affairs or
   his representative—Member

4. Secretary,
   Finance Coordination or
   his representative—Member

5. Secretary,
Technical Development
or his representative—Member

6. Chairman,
Calcutta Port
Commissioners—Member

The Committee was to meet regularly and be responsible for taking decisions on the progress of different items of work according to schedule, watch over and review the progress of the Project from time to time and devise measures to resolve bottlenecks well in time.

Subsequently, in July 1972, representative of the Government of West Bengal was also included in the Steering Committee.

2. The Steering Committee has so far met on 19 occasions as follows :—

1. 20-1-1967	11. 30-1-1971
2. 28-2-1967	12. 3-8-1971
3. 26-5-1967	13. 18-5-1972
4. 22-9-1967	14. 17-11-1972
5. 8-2-1968	15. 12-7-1973
6. 2-5-1968	16. 3-11-1973
7. 3-8-1968	17. 1-11-1974
8. 11-2-1969	18. 2-4-1975
9. 10-7-1969	
10 21-2-1970	19. 15-1-1976

As a high level inter-ministerial forum charged with the responsibility of guiding and directing the Project, the Steering Committee has from the beginning laid stress, on Policy matters which had to be jointly discussed and decided in consultation with the other Ministries. The first meeting of the Steering Committee dealt with such matters as procurement policy to be adopted for acquiring items of plant and machinery, the need for setting up a competent design cell in the Calcutta Port Trust, the comparative advantages of turn key contract vis-a-vis contracts for individual items of work, the financial and foreign exchange requirements of the Project etc.

3. During the course of the execution of the Project whenever any item came up which involved consultations with another Ministry not already represented on the Steering Committee, representatives of the Ministry concerned were specially invited to attend the meetings of the Steering Committee. For example, in the second meeting of the Steering Committee, the items discussed included the establishment of an oil refinery and a fertiliser factory in Haldia, the construction of a Silo and a fisheries harbour, provision of rail link to Haldia and the requirements of the Navy. Representatives from the Ministries concerned also attended the meeting.

4. The Steering Committee in the early stage of the Project were required to sit frequently e.g. in 1967, the Committee met four times, in 1968—three times. But after the roles of the various Ministries became fairly clearly defined and the occasion for inter-ministerial consultations in a common forum (as different from bilateral consultations with any particular Ministry concerned with a specific point) became less frequent. Steering Committee meetings came to be held at longer intervals. But the need to be have frequent consultations with other Ministries on specific problems were increasingly felt as the work progressed. It was found that these specific problems could be discussed at greater detail and with more satisfying results in bilateral meetings instead of within the Steering Committee itself. A number of meetings both within the Minstry and outside the Ministry, in Delhi as well as other places where the works were going on were held from time to time to discuss such matters and take speedy decisions. Particulars of such meetings held in the last few months are given below :

Date of Meeting	Name of Person in Chair	Purpose of Meeting
2-4-1975 . .	Joint Secretary, Ministry of Shipping and Transport (at New Delhi).	To consider escalation claims of contractor.
13-8-1975 . .	Secretary, Department of Heavy Industry (At New Delhi)	Review of MAMC's work.
18-8-1975 . .	Do.	Do.
22-8-1975 . .	Secretary, Ministry of Shipping and Transport (at Calcutta).	Review of Progress of Haldia Dock Project.
6-10-1975 . .	Development Adviser, Ministry of Shipping and Transport (at New Delhi).	Review of dredging in approach channel.
4—11 to 6-11-1975 .	Deputy Development Adviser, (at Calcutta and Haldia).	Review of work done by Port's Dredger "Mohana".
12-1-1976 . .	Development Adviser, Ministry of Shipping and Transport (at Durgapur).	Review of MAMC's contracts.
17-6-1976 . .	Deputy Development Adviser, Ministry of Shipping & Transport (at Calcutta).	Review of dredging in approach channel to Haldia.

It was also noticed that it would be advantageous to associate the top management of the Public Sector Undertakings to whom contracts were awarded in the deliberations of the Steering Committee. Then there were also the subcontractors appointed by the main contractors whose work was to be reviewed. Even by early 1971 it was observed that a large number of people had to attend meetings of the Steering Committee. (About 20 persons other than officers of Transport Ministry attended the Steering Committee meeting on 30th January, 1971). The 17th meeting of the Steering Committee held on 1st November, 1974 was attended by 48 persons (including officers of the Ministry), about 35 of them were from within Delhi. The last meeting of the Steering Committee on 15th January, 1976 was attended by 40 persons of which only about 10 were from outside Delhi. There would have been no special advantage in

holding meetings of the Steering Committee at Haldia especially when separate meetings with Ministries and Agencies concerned were held from time to time in Delhi as well as outside Delhi to sort out specific problems."

(iii) *Present Position* :

3.5. As mentioned in the Audit Paragraph, the first phase of the Haldia Dock Project was to be completed by 1971. It is only the Oil Jetty which was completed in May, 1968. The Audit Paragraph mentions about the expected commissioning of the Port in August, 1975. In June, 1976, the Committee were informed as under :

> "The civil construction works for the berths have been completed in all respects except for a small portion of the quay surface of the cargo berth. This remaining portion of the work is expected to be completed by September/October 1976.
>
> As regards Lead-in Jetty, a portion of the fender work, which lies on the alignment of the protective bund remains to be completed. This work will be done after outer dredging work is taken up to remove the bund after the outer caisson gates are completely diffed and tried."
>
> *"The Lock Entrance, the critical item of the Project, was completed after completion of under-water work on 26th March 1976. All the three caisson after completion at the Building Bay were taken inside the chambers by 1st June 1976 for further fitting out. It is expected that the caisson work will be completed by November/December 1976 and the Dock System commissioned thereafter in early 1977."

However, the present position (April 1977) is that the Haldia Dock System has been opened for trial shipment of iron ore and coal on 27th February, 1977. The Lock Entrance at Haldia and the Iron Ore and Coal Berths are now fully ready for operation. Approximately 1,40,000 tonnes of iron ore have already been stacked at the Ore Berth and trial shipment of ore is awaiting suitable ships being made available for the purpose by the M.M.T.C. of India Limited. It is understood that they are trying to nominate ore ships for the purpose.

The coal Berth with all its equipment has also been made ready and two ships have already been loaded at this Berth with coal consigned to the Indian Railways. A third vessel is expected shortly.

The civil construction of the Fertiliser Berth has been completed and installation of the mechanical handling arrangement including conveyor systems on the jetty is now in progress. The Berth is likely to become operational by April 1978.

The civil construction of the Finger Jetty has also been completed. Erection of the unloader crane is almost complete and this crane is likely to become operational in another 6/8 weeks time.

Civil construction of the general cargo-cum-container berths has been completed. Construction of the Transit Shed has also been completed. Manufacture, supply and erection of the mechanical cargo handling plant

*Not vetted by Audit.

viz., Container Crane and Container Yard Crane are now in progress. It is expected that these two cranes would become fully operational by December 1977. Meanwhile, the berth is ready for use by general cargo ships for loading/unloading of general cargo with their own gears.

(b) Main reasons for delay

3.6. Among the various reasons for delay in commissioning of the Project, the Audit Paragraph mentions about delay in acquisition of land, short supply of steel, shortage of wagons, political turmoil during certain periods, technical problems including unexpected sub-soil water conditions, and delays on the part of contractors to fabricate and erect or supply equipment.

While the problems relating to unexpected sub-oil conditions and delays on the part of contractors have been dealt with in detail under the respective works in Chapter VI of this Report, some of the other main features of delay in completion of the Project as a whole are discussed in the succeeding paragraphs.

(i) *Delay/difficulties in acquisition of land*

3.7. The Audit Paragraph mentions about the delay in acquisition of land as one of the features contributing to delay in the completion of the Project. The effect of delay in acquisition of land on dredging has been discussed in detail in the chapter of this Report relating to dredging.

During evidence the Committee desired to know whether the help of the Central Government in acquiring the land was obtained. In reply, Secretary, Transport has stated;

> "Land is a State subject. The land is acquired under the laws of the West Bengal Government. Then, we are talking of the years 1968-69 and at that time if somebody went to a court disputing his right you can understand how a thing can be held up. In spite of all the efforts of the West Bengal Government there have been some cases of hard litigation. And these really help up a few things."

Asked whether the Calcutta Port Trust had gone in appeal against injunctions issued by the courts of law, the Chairman, Port Trust has stated in evidence :

> "We went against every injunction; and I am glad to report that we have won in almost every one of them. There are only very few now remaining."

The Committee also desired to know whether any advantage was taken of the Ceiling Act in West Bengal, under which a much lower price was required to be paid on taking over the surplus land. In reply, the Chairman, Calcutta Port Trust has stated :

> "We actually acquired the land through the help of the State Government; and it is the State Government's Collector who actually does the necessary requisition. And he evaluates the actual compensation to be paid."

In a written note furnished to the Committee after evidence, it was stated :

> "The provisions relating to land ceiling under West Bengal Land Reforms Act 1955 (Act X of 1956) as well as under West Bengal Estates Acquisition Act 1953 were enforced in connection with the acquisition of lands for the Haldia Dock Project and the lands over the permitted ceiling which vested in the State Government were transferred to Calcutta Port Trust under Land Transfer Rules in terms which are still under mutual negotiations. Land retained by private individuals within the ceiling imposed by these Acts were acquired under the Land Acquisition Act of 1894."

(ii) *Shortage of Wagons for movement of material*

3.8. The Audit Paragraph mentions that the number of wagons supplied during the period April 1971 to March 1972 was 2056 as against requisition for 5122.

During evidence, the reasons for this short supply were explained by the representative of the Ministry of Railways in the following terms :

> "I would like to bring a reminder to august Committee on the situation we had in 1971 when the Railways did have a definite difficulty in meeting all the demands that were placed on us in the eastern sector, not only for Haldia Project but also for the movement of coal to steel plants, coal to power houses, particularly situated in eastern parts of the country, and also other priority commodities like cement. We had a very bad spell of period on the eastern side.
>
> We had a lot of movement problem there. There was an acute shortage of wagons. Particularly in 1971, for about 6 to 7 months, we did not meet fully the demands placed on us. But thereafter the movement was good. It went on very well till August, 1973. Again, between August, 1973 and 1974, we had in all about 300 major and minor strikes, go-slow agitations, suspension of work and things like that. Ultimately, we had the All India strike in May. Again, we had a very bad spell when the supplies were not regular and the construction material was not reaching Haldia as quickly as it should have been. From May onwards, the things not only improved but improved considerably. We had no problems any more on this."

3.9. After evidence, the Committee desired to know the role played by the Steering Committee in ensuring adequate supplies of wagons and the follow-up action taken by the Port authorities/Ministry and the result of such efforts. The Committee were informed in a written reply as follows :—

> "*Supply of wagons*
>
> At the Steering Committee meeting held on 22-5-1967, it was suggested that the Railway Board should issue appropriate instructions to the South-Eastern Railway regarding priority

allocation of wagons to the Haldia Dock Project for the movement of rail borne materials to Haldia. The matter was taken up with the Railway Board, but in September, 1967, they said that the rail movement is likely to start from October-November and that as far as could be foreseen, no difficulty was anticipated.

The next time the matter was raised before the Steering Committee at their 13th meeting which was held on 18-5-1972 when the Port Trust reported that the priority allocation of Railway wagons during the period April, 1971 to March 1972 was less than 50% of the requirements. The contractors engaged in construction work had indented for a total number of 3748 wagons of various categories from various stations. Against this, the actual supply was 1755 wagons. The matter was taken up with the Railway Board and on 17-6-1972 they issued telegraphic instructions to the South-Eastern Railway, Calcutta that the Haldia Project required 3 full rakes on a permanent basis and that the wagons should be supplied to the Project on a preferential basis.

Even thereafter when the position did not improve, the matter was once again taken up with the Railway Board (in July 1972). But the Railway Board indicated that the shortfall was purely a temporary one due to the heat wave in the country and that full supply was expected to be given soon.

In August, 1972, CPT indicated that the position had improved slightly but was still far from satisfactory. He suggested that the matter should be taken up with the Railway Board."

After getting information about the supply of wagons etc., the Secretary (Transport) took up the matter with the Chairman, Railway Board in September, 1972. The Member-Traffic, Railway Board in his letter dated 2-11-72 gave the following reply :

"South-Eastern Railway stepped up loading of gravel and stone for Haldia Project appreciably after the meeting of the Haldia Project Steering Committee held in May, 1972. Necessary instructions have been issued to both Eastern and South-Eastern Railways to meet the demand for gravel and stone for the Project in full. The Project Authorities may please get in touch with the Eastern and South-Eastern Railways for any further assistance."

The position was reviewed at the Steering Committee meeting held on 17-11-72. It was indicated that during the period 1-4-72 to 30-6-72, the different contractors had placed indents for 775 wagons from the different stations. Against this, the actual supply was 105 wagons. Overall receipt of wagons till then was only 25% of the requirement but there was some improvement after May 1972. During the period May to September 1972, 1977 wagons were allotted by South-Eastern Railway and outstanding indents at the end of September were only 50 wagons. Eastern Railways had also allotted 483 wagons during this period. It was indicated at the meeting that the demand for wagons was likely to go up in the coming dry season and that unless special measures for priority allocation of wagons were taken, the project work would suffer.

In December 1972, the Port Trust again reported the difficulty regarding the movement of wagons. In January, 1972, Minister of Transport took up the matter with the Minister of Railways who said that "Necessary instructions have again been issued to the South-Eastern Railway Administration to meet the demands for gravel for the Project in full."

When in March 1973, CPT reported that there has been no improvement in the receipt of wagons, Minister of Transport once again sought the help of Minister of Railways as follows :

> "The target date for completion of this project is December 1973. One of the points causing us serious concern is the non-availability of requisite number of railways wagons for transporting construction materials, particularly gravel, for the Haldia Dock Project.
>
> My Ministry has taken up the matter with your Ministry on several occasions and I had also written to your predecessor Shri Pai about this problem. Though Shri Pai wrote to me that necessary instructions have been issued to the South-Eastern and Eastern Railway Administrations to meet the demands of the Project for gravel in full, it has ben reported by Calcutta Port Commissioners that no improvement has been noticed in this regard and that unless the position improves, it will be very difficult for us to adhere to the schedule of completion. . . ."

In May, 1973, Ministry of Railways replied that "Instructions have again been issued to the General Manager, Eastern and South Eastern Railways to meet the demand for stone and gravel for the project in full."

The matter was reviewed in the Steering Committee meeting held on 12-7-73 when CPT indicated that the supply of wagons continued to be unsatisfactory.

On 31st July, 1973 Secretary (Transport) once again addressed the Chairman of the Railway Board, mentioning specifically that the principal contractors have received only about 45% and 35% respectively of their total monthly requirements of wagons for stone and gravel movement while overall placement of the wagons were only 24% and 22% respectively during the months of May and June against their cumulative demand. Secretary-Transport said that inadequate supply of wagons is one of the most important factors "seriously jeopardizing the timely completion of the project as per Schedule". Member-Traffic, Railway Board replied in August, 1973 that he has reiterated his instructions to the General Manager, Eastern and South-Eastern Railways to assist in the expeditious clearance of traffic meant for the construction of Haldia Dock Project. He, however, suggested that perhaps adequate indents are not being registered with the Railways and that close contact between Project Authorities and the Railways might help. Suitable instructions were accordingly issued to the CPT.

The matter was discussed at the meeting of the Steering Committee on 3-11-73, when the representative of the Ministry of Railway said that according to his figures, there was no problem of non-availability of wagons for the movement of gravel to Haldia. In fact, adequate indents

were not being received despite the fact that the railways have placed a number of wagons and necessary locomotives for this traffic and these were lying unused. At Dalbhumghar, 309 wagons had been supplied leaving outstanding of only 5 at the end of the month. Similarly, in September, 273 were supplied against 293 indented. At Chakuria Pakur only 30 wagons were outstanding while a minimum of 50 wagons were required to form a rake as such there could be no complaint of non-availability of wagons. The Chairman, Port Trust, on the other hand, said that despite indents, the wagons were not being supplied. It was decided that he would check up the position and send a detailed report.

In December, 1973, the Port Trust informed the Ministry that there were serious short-falls in the allotment of rakes and that "owing to labour trouble, the Railways are unable to move trains. For want of materials, HCC are going to lay-off labourers which will cause great set back to the Project works". The matter was taken up with the Railway Board on 31-12-1973.

The matter was also taken up with the Member-Traffic (on 11-1-1974) since a lay-off by the main contractor would have serious repurcussions on the Project work. About the same time, a meeting was called by the Chief Operating Superintendent, South-Eastern Railway at Calcutta (on 9-1-74) to discuss matters with the officers of the Port Trust and a representative of M/s HCC. During the discussions, the COPS indicated that from the month of August, 1973, unrest among the workmen of the South-Eastern Railway had primarily affected the movement of gravel. He, however, assured that the Railways would make all endeavours to step up the supply. Even after the meeting, the supply of wagons was not satisfactory, e.g. during Jan. 1974, only 5 rakes were received by CPC though, at the Railway meeting at Calcutta on 9-1-74, the Railway has promised one rake a day. This was taken up with the Member Traffic, Railway Board on 18-2-74 and again on 2-3-74. In the absence of any response from the Railway Board, Minister (Transport) took up the matter with Minister of Railways on 18-3-74. The Minister of Railways was reminded on 30-4-1974 and again on 6th June, 1974 after the Railway strike was called off. When not a single rake was made available for the Project in the whole of June, 1974 (up to 20-6-74), Minister of Transport once again wrote to the Minister of Railways on 27th July, 1974. Railway Minister replied in July, 1974 that "necessary arrangements have been made by the South-Eastern Railway Administration to clear this traffic as per programme."

(iii) *Construction of Railway Line*

3.10. The Audit Paragraph mentions that the portion of the railway line (about 10 K.M.) from Durgachak to the Dock area had not yet been completed and was expected to be completed by the end of 1975. During evidence, the representative of the Ministry of Railways has informed the Committee that—

> "In 1973-74, we started construction of the railway line. We started work of the urgency certificate and we made a reasonable rate of progress. But the Haldia Port Project was not sanctioned till 1968. After two years' progress, we made a review and thought that it was not worthwhile spending any money. Then in the Steering Committee's meeting in 1967, it was emphasised

that the work should be undertaken in right earnestness and that they were going to start the work. In October 1968, the contractor wanted to start the work. At that time, it was desired by the Ministry of Shipping that we should complete this Project by October 1969. We were in a position to take the material. We had completed the other work. There was some problem about the acquisition of land which came in the way. Some of the lands on which houses were standing were not acquired. In spite of the best efforts, we were not able to complete the work in January 1969. However, if there was any difficulty felt by the contractor, it was only for three months."

Asked as to what extent the non-availability of railway line was responsible for the delay in completion of the Project, the Chairman, Calcutta Port Trust has stated :

"As far as the railway line is concerned, as I have already mentioned, we got the use of the railway line from January 1969. So from that point of view, the project actually suffered only for one year. The Hindustan Construction Co. started work in January 1968 and they could use the railway line only in 1969. During that period, they were using the road system for bringing the material."

On this matter, the representative of the Ministry of Railways nas stated :

"The contract to the Hindustan Construction Co. was awarded in January 1968. But they were planning to start the work in 1968-69 session, that is, after the rains of 1968 that is, in October. So, the work suffered only for about 8 months, not full one year."

As regards the 10 K.M. route from Durgachak to Haldia, the Chairman, Calcutta Port Trust, has clarified during evidence that the same was laid down and used for goods traffic through the Marshalling Yard of the Project from 1969 onwards and that the delay referred to in the Audit Paragraph related only to the passenger line connecting the Project with Durgachak.

3.11. The Committee have been informed in a written note that the Haldia-Durgachak passenger line had since been completed by the Railways and the passenger trains started operating with effect from 1 June, 1976.

(iv) *Short supply of steel*

3.12. The Audit Paragraph has indicated some instances relating to the years 1971—74 when actual supplies of steel made to the Haldia Project fell very considerably short of the quantities indented for by the Project.

3.13. During evidence, the Chairman, Calcutta Port Trust has informed the Committee that :

"Prior to October 1970, we were not entirely controlled in respect of plates and sheets, but after October 1970, right up to January or March 1974, we were entirely controlled by the Steel Priority Committee. Every three months we submitted our

requirements to the Steel Priority Committee and we got allocation by the SPC to the extent of 15,000 tons from January 1971 to June 1974 as against our total requirement of 35,000 tons."

x x x x

"We went out into the market through the help of the Steel Controller in Calcutta and, through that process, we got from the Iron & Steel Controller, through the local stockists something like 5,000 tons during the period—ie from 1971 to 1974."

Asked about the extra cost involved in the process, the witness has replied :

"For the steel we got from the stockyards we paid Rs. 200/- per ton extra."

3.14. During evidence, the Committee also asked the representative of the Department of Steel to explain the reasons for short supply of steel to Haldia and the position was explained thus by the witness :

"As is pointed out in the note, it has been mentioned that the assurance was given sometime in 1967. As to what happened in 1967 to 1969, the situation was a little better so far as supply of steel is concerned. The shortage arose again at the end of 1969. Then, the Steel Priority Committee took over the distribution of most items of steel. The SPC used to meet every three months to allocate steel to various sponsoring agencies. The simple issue at that time was that there was too little availability of steel and too much of demand. Everywhere, we used to be faced with multiple numbers of demands as against non-availability of steel. So, it had to be cut somewhere."

Asked about the procedure followed for allotment of priorities, the witness replied :

"The priority No. 1 is given to defence operations; priority No. 1.5 is given to defence, engineering export promotion council and energy and priority No. 2 is given to the Ministry of Transport and other governmental departments. It is a fact that it was not given the top priority at that time. But, as I said, it was a question of seeing what was more important. Even at that time, if I am not mistaken, there were quite a few projects which were under execution as far as the Ministry of Transport is concerned.."

In reply to a further question, the witness has stated that it was up to 1974 that Haldia was given a lower priority in the matter of allotment of steel.

3.15. The Committee also desired to know the procedure followed for fixation of price and the overall position in the country at that time in respect of demand and supply of steel. In reply, the representative of the Department of Steel has stated :

"....steel is supplied from the plant itself at what is called the JPC Column Price. This price is the same for the items which come from the integrated steel plants.

About the point mentioned by Chairman, CPT, some stock is taken to the stock-yards. When allocation is made by the Steel Priority Committee and certain items are not lifted by certain people, the items get stocked in the stock-yards. Therefore, as has already been mentioned, their price is slightly higher then the JPC column price or the plant price. This price goes to the integrated steel plants; it does not go to the capitalists or anybody else. It goes to the recognised stock-yards of the integrated steel plants.

Coming to the question of allocation, it may be useful to know the extent to which the demand can be met. Once it is known that there is shortage, there is a sudden tendency to hold stocks and the demands on the JPC get terribly inflated. I will give you the figures of demand and availability. From January to March 1971, the total availability was .42 million tons whereas the demand was 1.4 million tons. Again, from January to March 1972, the demand, was 3.92 million tons against the availability of .48 million tons. In January to March 1973 the demand was 3.8 million tons against the availability of .41 million tons. It becomes very bed in subsequent years. From January to March 1974 the total demand was 5.42 million tons against the availability of .66 million tons, which is nearly nine times. It becomes even worse in the next year when the demand was 4.88 million tons against the availability of only .47 million tons, which is about ten times. Everybody asked for more. We would be happy if the demand is projected correctly. It was not possible to cater the requirements fully. Some people got hurt in the bargain and it was inevitable."

3.16. In a written note furnished to the Committee by the Ministry of Shipping and Transport after evidence, it was stated that :

"(a) According to the terms of the contracts in case of all major works of Haldia Dock Project, the procurement of steel materials was the responsibility of the Contractors. Prior to the period October 1970 to December 1970, SPC used to accord priority for the distribution of scarce categories of steel *viz.* plates and sheets only. The Contractors could directly apply for the allocation of these. The other categories of steel materials were freely available from the producers at controlled rates. During the period prior to October-December 1970 all steel requirements excepting plates for piles were met by the Contractors themselves by direct procurement from the producer at controlled rates. No steel was required to be procured by the C.P.T. In respect of plates, however, necessary assistance was given to the Contractors for obtaining necessary allocation.

From the priority period January 1971 to March 1971, some of the Contractors like MAMC, TSL etc. procured their requirements directly but some other contractors processed their indents through C.P.T.

From the period March, 1971 to June, 1974, the indents of contractors were processed through C.P.T. Assessed requirement of steel materials for this period (*i.e.* January 1971 to June

1974) was of the order of 35,000 M.T. Procurement was made from the following sources :

1. Main producers.
2. Main producers' stock yards.
3. Billet Re-rollers' Committee.
4. Import.
5. Free market through dealers on the basis of open quotations.

From July, 1974 to June 1976, a total of 5,000 MT was procured by C.P.T.

In spite of the best efforts to procure steel materials from main producers, Billet Re-rollers' Committee and main producers' stock yards, C.P.T. could not obtain all their requirements from these sources. So, at times, to avoid serious hold-ups in the work under execution, the purchase of minimum quantities of matching steel from the free market had to be made as a last resort. This was done as per terms of Contract by calling for quotations from the dealers. Such purchases were decided upon and approved by the Engineer in terms of the Contract, who is either the Chief Engineer, the Additional Chief Engineer or the Dy. Chief Engineer.

(b) Extra cost involved in the purchase of steel by the Contractors from free market is about Rs. 35.16 lakhs."

3.17. As regards the role played by the Steering Committee to ensure adequate supply of steel for Haldia, the Committee have been informed in a written note furnished to them after evidence as follows :

"*Supply of Steel*

The question of allotment of sufficient quantity of steel and Railway Wagons for the Project had engaged the attention of the Committee right from the beginning. The first two meetings of the Steering Committee were concerned with the broad policy matters but at the meeting held on 26-5-67, the supply of steel to the project was considered. Till October 1970, the Steel Priority Committee used to allot only scarce categories of steel, namely, plates and sheets. This was done directly to the contractors on receiving applications from them. The contracts with the various contractors also envisaged their procuring all the materials they needed (including steel) directly and not through the Port.

Regarding availability of steel, the representative of Steel Ministry said at the Steering Committee meeting held on 26-5-67 that "The Ministry of Iron and Steel could give the highest priority for Haldia requirements next to the Defence requirements". He suggested that a complete list of the requirements of the various categories of steel for Haldia Project should be sent by the Port Commissioners to the Joint Plant Committee at Calcutta and indents should be placed on them to enable the Committee to do advanced planning. At the next meeting on 22-9-67, it was, however, found that no priority could be accorded for steel the period October to March 1967, as the requirements

were not covered by necessary orders. Hence, it was decided that the Port should contact the contractors and ask them to place firm indents on the Joint Plant Committee.

This was done by October, 1967 when H.C.C. placed an indent for 3000 T of plates on S.P.C. But the Iron & Steel Controller informed C.P.T. that no supply could be made before April, 1968. The matter was taken up with Secretary, Ministry of Steel who in January 1968 wrote to C.P.T. that he would give CPT's demands the fullest consideration. But when the Steel Priority Committee met in March 1968, they agreed to sponsor priority allocation for only 25% of the steel requirements of the Project during the period April, 1968 to September, 1968 and that the balance requirements would have to be imported. It was decided at the Steering Committee meeting held on 2.5.68 that the question of import can be considered in the light of the type of steel required, the production plans of the various steel mills and allied matters.

By the time the Steering Committee met next on 3-8-68, the requirements of about 10530 tonnes of steel had been forwarded to the Department of Steel for allocation on a priority basis. But no priority could be given for the allocation period October, 1968 to March '69 in the absence of details of work orders placed on particular steel plants. Steel Ministry's representative explained that allocation of priority was made only on receipt of information about the work orders placed on production units. In respect of steel requirements of an urgent nature, however, he suggested that even if they have not been covered by work orders, a special dispensation should be sought from the Ministry of Steel so that at the next meeting of Steel Priority Committee, the Steel Ministry could see whether this can be met out of the reserve quota at the disposal of the Iron & Steel Controller. It was also indicated that the Railway Board has agreed to release about 1200 tonnes of steel plates of different sizes from their surplus stock but they demanded current JPC Prices or purchase prices whichever is higher plus freight plus 12½% supervision charges. In a letter dated 8-11-69, the Railways also agreed to waive the supervision charges. Matters were further pursued with all concerned and when the Steering Committee met on 10-7-69, Calcutta Port Trust were able to report that steel requirements for the period April-September planned on the producers and the necessary producers' work orders have been obtained and the Ministry of Transport has already taken up follow up action with the Ministry of Steel.

When the Committee met on 21st February, 1970, CPT mentioned that despite priority allocations, steel of certain categories were not forthcoming probably because there is acute shortage or because they were not in the production schedules of the steel mills. Import was felt to be the only solution in such a situation but a decision on this was to be taken only after getting a clearance from the Ministry of Steel. This was done and permission for the import of 1379 m.t. of steel was accorded by JPC.

In October 1970, CPT wrote to the Ministry of Steel asking for allotment of 16000 tonnes of steel required by Hindustan Construction Company out of the bulk purchase being made by the Hindustan Steel Ltd. as the position regarding supply of indigenous steel was critical. Secretary, Ministry of Steel, however, replied (in November 1970) to the CPT that they were not in a position to make any special arrangements for meeting the requirements indigenous. The alternative would be to import and steel out of the bulk import made by HSL was being issued only to individual consumers who would otherwise have been given users licence by Government for import in the normal course. The Port was advised to clear their requirement of import through normal procedures.

The progress made in the meanwhile was reviewed in the meeting of 30th January 1971 when the CPT stated that as against their demand of 12000 tonnes of steel for the period January to March 1971, priority had been allocated for only 4000 tonnes. While shortage might be made good by import, the Ministry of Steel were requested to agree priority for atleast 50% of the demand for the quarter April to June 1971 in order to minimise the foreign exchange expenditure. It was also reported that two cases relating to import of steel of M/s. Jessops (629 tonnes) and M/s. H.C.C. (750 tonnes) have already been cleared by the Government. At this meeting, the Ministry of Steel were asked whether they could indicate any definite quantity that they could allocate for CPT, as done in the case of Visakhapatnam Outer Harbour Project. The Ministry of Steel said that this may not be possible though it was very likely that the Port would get every quarter mere or less the same quantity allocated for priority during January 1971 to March 1971. The Port Trust were, therefore, asked to import so as to meet the shortfall. The best way of doing the import—whether in bulk through HSL or whether directly by the contractors concerned or whether by CPT on behalf of the contractors was also discussed at the meeting. It transpired that the practice of contractors submitting applications for allocation directly to the Steel Priority Committee have been stopped from October 1970. It was now necessary for the Port as users to submit the applications. The SPC had also taken over distribution of all categories of steel from October 1970 onwards.

The Steering Committee met on 3-8-1971 when CPT were able to report that they had been regularly receiving steel of various categories (3627 tonnes in the 1st quarter of 1971 and 2483 tonnes in the 2nd quarter) but the supply was still short of their requirements. The Port urgently required about 1070 tonnes of different categories of steel. It was mentioned that though the import of about 1400 tonnes of steel had already been arranged through HSL and the foreign exchange released as early as October 1970, there was about 6 months' delay in obtaining the import licences. Some delay also took place on account of change in the country of import. As regards the minimum requirements for steel, the Port were advised to contact Cochin Port Trust or Bokaro, Steel Plant. This was done, but without result. The requirements of special kind of steel

of individual contractors like MAMC, TRF, Braithwaite etc. and the steel requirements for the Port Railways were also discussed at the meeting. The general feeling was that to conserve scarce foreign exchange import should be resorted to only if all indigenous sources fail. Though the contracts executed by the CPT by various contractors had stipulated that the contractors would make their own arrangements for steel, it was felt that in the conditions prevailing in the country at the time, it would not be realistic to expect the contractors to do so. The pros and cons of importing steel from West Germany or from United States and the availability of foreign credit or free foreign exchange was also discussed. The representative of the Department of Expenditure said that it would be very unlikely that there would be enough free foreign exchange to meet the huge import requirements of the various Ministeries. But about 750 tonnes of steel could be imported by CPT during this quarter (July to September 1971) to supplement the 2731 tonnes of steel allocated by SPC/BRC and an open market purchase of 30 tonnes by contractors.

The requirements of steel were discussed in the meeting of the Steering Committee on 18-5-1972 as well as in the next meeting on 17-11-1972. The point made at these meetings was that the allocation was considerably short of the actual requirements (around 1772 tonnes against requirement of 9288 tonnes in October-December 1971). Ways of getting different varieties of steel, rods, rails, billets etc. from sources like MMTC (from their imports), Bhilai Steel Plant, TISCO etc. were also discussed. In the meeting held on 12-7-1973, the problem which were discussed was regarding the availability of M. S. rounds of different kinds and rails. It was felt that these could be made available from indigenous sources.

By the time the Steering Committee met on 3-11-1973, the Haldia Project had already been included as a Core Project but even so M. S. rounds and torsteel continued to be in short supply. The representative of the Ministry of Steel said that rails and M. S. plates could be made available in the quarter January 1974 to March 1974 by including these in the rolling programmes of the steel mills. As regards pig iron for castings (around 1020 tonnes), it was suggested that Ministry of Steel should be approached.

Even after Haldia Project was declared a Core Project shortage of steel of specific varieties continued to be felt. Though, at the Steering Committee meeting, on 3-11-1973, the Ministry of Steel has said that there should not be difficulty about MS rounds and torsteel for the quarter January 1974 to March 1974, the actual allocation of 645 tonnes fell considerably short of the requirement of around 2744 tonnes. In January 1974, the matter was taken up with the Ministry of Steel but the allocation for the second quarter of 1974 again was unsatisfactory about 3541 tonnes against a requirement of 8154 tonnes. In the next two months, efforts were made to get enhanced allocation from the Ministry of Steel.

In May 1974, the Ministry of Steel said that about 4900 tonnes of steel could be made available, provided CPT could move it by road. The Port agreed to this and were allotted about 2197 tonnes of steel for the quarter April-June 1974. This was in addition to an allocation of about 1344 T of steel made by SPC/BRC for the same quarter.

After the project was declared a Core Project, the position regarding supply of steel eased. Though the allocations on main producers were not satisfactory, the Regional Iron & Steel Controller helped in procuring the steel material from stockyard and also from surplus stocks lying with the consumers.

In May 1975, the position has eased to such an extent that only the distribution of plates (including Coils) and foreign quality steels were left with SPC, the remaining qualities being decontrolled. In December 1975, 2 varieties were also taken out of the purview of the SPC and were made available to consumers directly by the producers."

(c) Overall effect of delay in commissioning of the Docks.

3.18. During evidence, the Committee desired to know whether it was possible to quantify the loss that accrued to Haldia on account of delay on the part of various contractors (including Public Sector Undertakings) in completion of the various important works of the Project. While admitting that the overall delay in completion of the Project had resulted in loss of revenue or loss of earning from the Port to Haldia, the Development Adviser (Ports) has explained the position thus :

"In the lock entrance, stoplocks, redial gates, water problems, deeper foundations, coffer dam, ceisson gates, all these relate to lock entrance), we had to put each of the items on a CPM chart and fit them into a sequence in which they must be done. Before we can flood the lock entrance all the underwater fittings must be completed.

Each one of them, as you have been bringing out, due to their peculiar problems were delayed. So, it is not possible to quantify what has been the extra expenditure incurred by Haldia because of the delay of one item out of these. The overall effect has been that Haldia commissioning has been upset. This has resulted in the loss of revenue or loss of earning from the port of Haldia. This calculation is a feasible proposition but that cannot be attributed to a particular item unless there is only one feature which has caused delay. If we can say that this is an item which had held up progress of all other work, then the entire delay is due to that. But if all these items got delayed because of various reasons, it is very difficult to quantify what is the contribution of Jessops, TSL, HCC, Bird & Co., to the total delay that has taken place."

3.19. As mentioned elsewhere in this Report, the estimated cost of the Project rose from Rs. 40 crores to about Rs. 135 crores. This apart. Haldia will have to bear a burden of about Rs. 48 crores on account of capitalised interest.

3.20. During discussions with a Study Group of the Committee which visited Haldia in December 1976, the Port authorities submitted that the delay in the construction of the Project should not be viewed merely in terms of time and cost but should be viewed in the larger context of the country's determination to achieve self-reliance. In this context, the Study Group were informed that Government was keen to see that this project was built without any foreign help by harnessing the indigenous sources and making use of whatever technology was available in India. It was in pursuance of this spirit of self-reliance that the Cabinet had taken a decision that all orders for machinery be placed with the Mining and Allied Machineries Corporation. This decision, it was asserted, was in the best interest of the country and execution of the Project had given a new experience in self-reliance. It was added that the World Bank was keen to finance this project in a big way if only India agreed to the entire job being done by foreign consultants. As a matter of fact, it was only when negotiations for a loan from World Bank had reached concluding stage that the authorities had a second thought and felt that such aid with strings would be deogatory to the country's dignity and hence should not be accepted. Instead, it was felt that it would be better to go ahead with whatever know-how was available in the country. Now that the Project had been completed. India could legitimately take pride in the fact that whatever the cost in terms of money and time, the experiment had accelerated the process of indigenous manufacture. It was stated that in a Project costing about Rs. 135 crores, they had spent only a modest amount of Rs. 84.48 lakhs on consultancy work.

3.20. Notwithstanding the bottlenecks which upset the calculations, both with regard to execution and costs, the first phase of the Haldia Pro-Project, initially scheduled to be completed by January 1971, reached its climacteric with the formal commissioning of the Dock in February 1977. The successful completion of the project would no doubt be an occasion of national rejoicing, but the costs and the time and labour involved, in fact the whole gamut of experiences, should not be overlooked if any meaningful lessons are to be larnt from the operations that Haldia Project signified and symbolised. For the purpose of planning and execution of the first phase of the Haldia Dock Project, a sort of tripartite machinery was thought of. While M/s. Randel Palmer and Tritten acted as Consultants, the Calcutta Port Trust and the contractors, including some public sector undertakings engaged by the Trust functioned as the body responsible for executing the plans and the designs. At the top, there was a Steering Committee presided over by the Secretary, Ministry of Shipping and Transport, and consisting of representatives of various Ministries/Departments to oversee the progress of the project.

3.21. That there was an unfortunate delay in the commissioning of the project cannot be gainsaid and, as a matter of introspetion, Government should consider whether for executing a project of this dimension, which called for meticulous coordination with different authorities, expedition advance planning and forethought, a body like this Steering Committee was adequate. It is on record that the Steering Committee had held only 19 sitting during the long period of nine years between January 1967 and January 1976. It is also on reord that sittings of the Steering Committee were very often crowded with as many as 40 representatives besides the members.

3.22. The Committee feel convinced that the circumstances needed the creation of a compact body clothed with adequate powers to take and enforce decisions, if need be, by making "on-the-spot" visits and studying the problems as they arose from close quarters. Such a body should have comprised not only representatives of the Ministries of Shipping and Transport and Finance but also of Industry, Steel, Railways, etc. and Government of West Bengal who had to play an important role in arranging and transporting materials, equipment etc. required for the execution of the Project.

3.23. Among the important reasons which were advanced for delay in the completion of the project are difficulties in acquisition of land, shortage of steel, shortage of wagons and unexpected sub-soil conditions which resulted in considerable delay in commencement of the difficult work of the lock entrances.

3.24. As regards acquisition of land, the Committee have been informed during evidence that land being a State subject, the land for Haldia Dock was acquired under the laws by the West Bengal Government. The period 1968-69 was, particularly, a difficult one and a number of injunctions were issued by the Courts of Law. The Committee note that the Calcutta Port Trust went in appeal successfully against every injunction issued by the Courts of Law and they won in almost every case and only a few are outstanding.

3.25. As regards steel, the Committee note that the supply was sporadic and fell far short of the demand. It was only after January 1974 when Haldia Project was treated as a core project (a priority given next to operational demands of Defence Department) that there was a perceptible improvement in the supply of steel. During the period January 1971 to January 1974 there was a steep fall in supply—in fact against an indent of 35,000 tons, an allotment of 15,000 tons was made—and the project authorities had to go into the market with the help of the Steel Controller of India and had to pay an extra price of Rs. 200/- per ton, the total financial implication of which has been stated to be of the order of Rs. 35.16 lakhs. The Committee cannot but express their unhappiness that a project of national importance like Haldia was denied priority as for a core sector project till 1974 in the matter of allotment of steel to which it was clearly entitled. That a Government organisation like the Port Trust, constructing a big project like Haldia, should be asked to go into the open market and get steel at a price higher than the control price, is a matter of great concern. The Committee feel that there should be a standing direction to treat such projects of national importance as core projects in the matter of allocation of steel and other scarce materials.

3.26. As regards the laying of railway line and supply of wagons, the Audit para mentions that 2056 wagons were supplied by the Railways during the period April 1971 to March 1972 as against a requisition of 5122 wagons. The representative of the Ministry of Railways during evidence has conveyed the impression that there were genuine difficulties for the Railways in 1971 in the eastern sector in the matter of placement of wagons. But the Committee find from the material before them that even during the years 1972, 1973 and 1974 the position regarding supply of wagons to the Port Trust was far from satisfactory. During the period 1st April 1972 to 30th June 1972, only 105 wagons were supplied against indents for 775 wagons made by the different contractors. Despite high level discussions

and instructions by the Railway Board to the General Managers, Eastern and South-Eastern Railways in May 1973 to meet the demand for stone and gravel for the project in full, the supply of wagons continued to be unsatisfactory, the actual supply being only 45% and 35% respectively of the total monthly requirements of wagons for stone and gravel movement. The position in January 1974 was no better. During the month, only 5 rakes were received by the Calcutta Port Trust in spite of the fact that at a meeting held on 9 January 1974 at Calcutta the Railways had promised to supply one rake per day. That such a situation should have prevailed despite inter-ministerial discussions at a high level is a mater which Government should seriously take note of so as to obviate repetitions of such lapses in future. The Committee would, thereofre, urge that proper arrangements should be made for an effective coordination between the Railways and other concerned authorities while executing big national projects like Haldia.

3.27. As to the overall effect of delay in completion of the project the Committee have been informed that while it is a feasible proposition to make calculation of the total financial loss to the Port on acount of loss of revenue/earnings caused by the long delay in commissioning of the Port, it is difficult to quantify the contribution to this loss caused by delays on the part of different contractors in executing the respective works allotted to them. The Committee are not convinced with this argument. They feel that an exercise could and should be made to identify the contribution of each agency to the delay in the execution of the project and then quantify the loss sustained as a result of the default on the part of each agency. The Committe would like the Government to re-examine the matter in depth.

3.28. Despite the delay in the commissioning of the project and the escalation of costs, the Committee cannot be oblivious of the fact that the Haldia Project was a challenge to the ingenuities, technical skills and capabilities of Indian engineers and technicians alike. The Committee are glad that by executing the project without depending on foreign expertise, the Indian engineers and workmen have achieved and demonstrated a high degree of self-reliance in a crucial sector like construction of a new major port and shown what dedicated and determined efforts can achieve. The Committee have no doubt that the successful commissioning of the Haldia Dock Project has consecrated the emergence of Indian engineers and technicians on the world scene as having the expertise and know-how for construction of major ports and development of related infrastracture facilities. This indeed is a proud achievement.

CHAPTER IV

VARIATIONS IN ESTIMATES OF THE PROJECT AND ECONOMIC VIABILITY

Audit Paragraph

4.1. A team set up by Government in 1964 to make a study of the proposed dock project at Haldia stated in its report in August 1965 that setting up of a subsidiary port at Haldia was economically justified with investment of Rs. 40 crores (foreign exchange : Rs. 14 crores). The estimate for the first phase of the dock project, providing for one riverside oil jetty, 5 berths for coal, ore, fertiliser, general cargo and containers and one finger jetty prepared initially in April 1962 and reframed in 1965-66 was for Rs. 36.92 crores (foreign exchange : 4.40 crores). A Committee appointed by Government in January 1966 to examine the estimate recommended this in April 1966. The first phase of the project was approved by the Central Government in November 1966. In the meantime, consequent on devaluation of the rupee the estimated cost rose to Rs. 40 crores (Rs. 7 crores in foreign exchange). According to the estimate of 1965, the dock was expected to handle ships of 40,000 to 60,000 DWT. In February 1968 it was decided that the dock should provide facilities for handling ships up to 20,000 DWT. Consequent on this decision the estimate was revised in March 1969 to Rs. 53.83 crores (foreign exchange: Rs. 5.09 crores). The estimate was further revised in April 1972 to Rs. 90.40 crores (foreign exchange : Rs. 9.05 crores). None of the estimates has yet been sanctioned (August 1975). Actual expenditure on the first phase of the dock project up to March 1975 was Rs. 116.19 crores. The following table shows the break-up of the estimate of April 1972 by major items of expenditure as compared to earlier two estimates and the actual expenditure up to March 1975 :—

	Break up of original and revised estimates			Expenditure upto 31-3-75
	1965 estimate (Rs. in lakhs)	1969 estimate (Rs. in lakhs)	1972 estimate (Rs. in lakhs)	(Rs. in lakhs)
1	2	3	4	5
Land acquisition	200·00	435·00	435·00	520·58
Land excavation, dredging and reclamation	325·00	539·00	740·00	757·85
Dock construction	1,233·00	1,957·00	2,855·00	2,950·98
Reverside construction	221·00	314·00	376·00	309·54
Mechanical equipment for berths including oil jetty	637·00	800·00	1,540·00	1,218·31
Permanent way work in railway line, marshalling yard etc.	60·00	109·00	240·00	360·74
Floating crafts	323·00	396·00	407·00	285·73
Construction of office and workshop buildings, residential quarters, social amenities and internal services	515·00	573·00	1,061·00	1,286·73
Esturian dredger	—	—	950·00	591·40
	3,514·00	5,123·00	8,604·00	8,281·86

1	2	3	4	5
Percentage charges	177·80	260·00	435·36	—
Establishment (including travalling allowance)	—	—	—	605·62
Debt charges	—	—	—	2,356·29
Other expenditure	—	—	—	374·86
	*3,691·80	5,383·00	9,039·36	11,618·63

*Increased to Rs. 40·00 crores due to devaluation.

[Paragraph 33 of the Report of the C&Ar. G. of India for the year 1974-75—Union Government (Civil)—Pp. 109—110].

(a) Estimates and Sanctions

4.2. From the information given in the Audit Paragraph and the data subsequently furnished to the Committee, the following picture emerges in respect of the changes from time to time in the Estimates of expenditure for the project as a whole :—

Year	Total estimated cost	Foreign Exchange Element	Brief reasons for increase.
	(Rs. in crores)		
1965-66 . . . . . (April, 1966)	36·92	4·40	—
November, 1966 . . . . (Original Estimate)	40·00	7·00	Due to devaluation of the Indian Rupee.
March, 1969 . . . . . (First revised Estimate)	53·83	5·09	Decision to provide facilities for ships of 80,000 DWT as against 40,000 to 60,000 DWT decided earlier.
April, 1972 . . . . . (Second Revised Estimate)	90·40	9·05	Earlier estimates were not based on detailed designs; changes in scope of works; steep escalation in cost and prices.
As per CPT letter dated 10-7-1974 .	124·84	(Not indicated)	Impact of price rise after, 1972.
October, 1975 . . . . . (Third Revised Estimate)	127·00	Do.	Up-dating of estimates.
June, 1976 . . . . . (latest expectation of actual expenditure)	135·00	Do.	—

4.3. The Committee were informed in a written note furnished to them in September, 1976 that the revised estimate of Rs. 127 crores was sent to the Ministry of Finance in December, 1975, that scrutiny thereof had been completed and that action was being taken to obtain the Government sanction thereto. It was added that delay in the sanction of the consolidated estimate for the Project as a whole, did not hold up the construction of

works which were sanctioned separately from time to time in normal way after calling for tenders, etc.

I another note furnished to the Committee, in June 1976 it was stated that the Project was estimated to cost Rs. 135 crores and that the sanction for the same was being processed and a note for the Public Investment Board was being finalised for the purpose.

4.4. As regards according of sanction to the estimates of the Project, the Transport Secretary has informed the Committee during evidence :

> "The sanction that now exist is for Rs. 40 crores, which was originally estimated in 1965."

The Committee desired to know the reasons for the revised project estimates having not been sanctioned so far. In reply, the Financial Adviser has summed up the position during evidence as follows :

> "The original estimate for Rs. 40 crores was approved sometime in 1966. This was based on the 1965 prices. A detailed estimate was prepared in 1969 for Rs. 53.83 crores. Actually this estimate was approved by the Finance Ministry in August 1971. Since it exceeded 20% of the original approved estimate, it had to go to the higher authority—the Cabinet approval had to be taken. But before this could be done, an indication was given that the estimate itself might go up to Rs. 73 crores. So, the Calcutta Port Commissioner was asked to prepare a revised estimate—the second estimate revised for Rs. 90 crores came sometime in August, 1972. This also had been examined by us and we had asked for some clarifications and ultimately when we were in the process of approving the estimate for Rs. 90 crores, an indication was given by the Port Trust that this might also go up to Rs. 126 crores. At this stage, we advised the Ministry that there was no point in taking this to the public investment board for their approval of the deviated estimate and so we asked them to come up with their revised estimates.
>
> In the meantime, we had to issue individual sanctions and, actually, in each case of the contract, the Finance Ministry was consulted and actually individual sanctions in respect of various contracts have been awarded for about Rs. 78 or 79 crores."

4.5. Asked as to whether it was the usual practice of the Government to issue sanctions on a year to year basis and not sanction the entire estimate all at one time, the Secretary, Transport has replied :

> "Normally speaking one really sanctions revised estimates. But if there are practical difficulties, the procedure is adopted by Government, and there are other cases also."

On this point, the Financial Adviser has stated :

> "The normal instructions are that when you come up with the revised estimate for approval, there should be some finality about it there should be some firmness about the estimates. But, when we found that at the stage when the estimates were given there

was a substantial increase in them from Rs. 20 crores to Rs. 30 crores, there was no point in going for the approval of these estimates."

(b) Economic Viability

4.6. From the information furnished to them, the Committee find hat the economic viability of the Project has been based on a total cost of Rs. 221.30 crores (including cost of capitalised interest, Estuarian Dredgers and Channel Dredging). The life of the various items of equipment, presumed for the purpose, varies from 15 to 50 years. The annual traffic generation has been assessed at 15 million tonnes four or five years after commissioning of the Docks, as follows :

Commodity	Quantum of traffic (in million tonnes)
Ore	4·0
Coal	3·5
Oil	3·0
Foodgrains	2·0
Fertilizers	1·5
Container & General Cargo	0·08
Salt	0·2
TOTAL	15·0

4.7. The Committee have also been informed that Central subsidy to the extent of 80% of the expenditure on river dredging and maintenance was approved for the Calcutta Port by the Cabinet up to 31 March 1976. The period and question of its continuance beyond this date has still to be decided. As such, no dredging subsidy has been assumed in the calculations relating to the economic viability of the Project.

(c) Actual Expenditure

4.8. As mentioned in the Audit Paragraph, the actual expenditure on the Project, exclusive of debt charges, was Rs. 92.63 crores (viz. Rs. 116.19 crores minus Rs. 23.56 crores) upto March 1975. The Committee have been informed that a further expenditure of Rs. 16.20 crores was incurred during 1975-76, thus bringing the total expenditure up to March 1976 (exclusive of debt charges) to Rs. 108.83 crores.

According to Press Reports, the total expenditure on the Project is expected to be of the order of Rs. 127 crores, out of which the foreign exchange element will be about Rs. 9 crores. The Committee have, however, been informed by Government that the Project was estimated to cost Rs. 135 crores.

(d) Reasons for increase in cost

4.9. During evidence, the Chairman, Calcutta Port Trust, has informed the Committee that one of the reasons for increase in the cost of the Project (from Rs. 40 crores to Rs. 135 crores) was that whereas the original estimate was estimated on the basis of 9 sq. miles of land, it was afterwards decided to increase it to 14 sq. miles. The cost of acquisition of

land at the time of original estimate was something like Rs. 4,000 per acre but the same when actually acquired went up to Rs. 10,000 per acre and thereafter to Rs. 17,000 to 20,000 per acre.

The other reasons for increase in cost, as stated by the Transport Secretary during evidence, are :

1. Under-estimation in quantity; specific quantity of work not known at the time of estimate but when actual details were made, escalation had taken place.
2. Changes in the scope of works and new works.
3. Increase due to prices escalation.

4.10. The Committee also called for a list of the new items of work included over those in the original estimate of Rs. 40 crores, and the amount involved in each case. The information furnished by the Ministry in this regard is briefly tabulated below :

S. No.	Brief description of new work	Amount involved (Rs. in lakhs)
1.	Barge Jetty	60
2.	Signalling & Inter-locking of the CPT Railway Yards	18
3.	Transit Storage & Conveyer system for Salt	100
4.	Railway Siding to Industrial land	16
5.	Access to Industrial areas and internal feeder roads to industrial areas	20
6.	Estuarian Dredger	950
7.	Two additional outer dolphins at the Oil Jetty	60
	TOTAL	Rs. 1224 lakhs (or Rs. 12·24 crores)

As against the above mentioned new items, the following works were altogether dropped from the original estimate of Rs. 40 crores :—

1.	One General Cargo Berth	Rs. 73·75 lakhs
2.	One Transit Shed	Rs. 9500 lakhs
3.	One Warehouse	
	TOTAL	Rs. 168·75 lakhs (or Rs. 1·69 crores).

It would be seen from the above that the net effect of the new items (after adjusting the items dropped) on the cost of the Project was of the order of Rs. 10.55 crores only.

4.11. As regards the changes in designs, the Chairman, Calcutta Port Trust has informed the Committee during evidence that—

"....the basic features of the design and the structural features were not changed. The changes took place only in two items,

the culvert and the changes due to the length and the deepening of the lock entrance. In no other respect, we changed the drawings or the structure.

There were studies and preliminary investigations and surveys and they were all taken into account before we submitted our proposal to Government. The only difference is that the study contemplated that we should go only up to a certain draft and we designed the lock entrances, on that basis, but afterwards we decided that we should have deeper ships and so we increased the size."

4.12. The Committee are greatly concerned at the disquieting picture that has emerged in regard to planning for the Haldia Project. While the estimate for the first phase of the Dock Project providing for one riverside oil jetty, 5 berths for coal, ore, fertiliser, general cargo and containers and one finger jetty prepared initially in April 1962 and reframed in 1965-66 was for Rs. 36.92 crores (foreign exchange : Rs. 4.40 crores), the figure swelled up to Rs. 40 crores on account of devaluation of the rupee in November, 1966. As per later decision to provide for facilities for ships of 80,000 DWT as against 40,000 to 60,000 DWT decided earlier, the project estimate was escalated to Rs. 53.83 crores in March, 1969. It is revealing that the Port authorities had themselves admitted that the earlier estimates were not based on detailed designs and the changes in scope of works accompanied by steep rise in costs and prices necessitated an upward revision of the estimates to Rs. 90.40 crores in April, 1972. There was, however, no finality to the estimates and the Committee have been informed in October, 1975 that the estimate would be in the region of Rs. 127 crores. The latest estimate, as furnished by the representative of the Ministry during evidence, is around Rs. 135 crores.

As to the justification for preparing estimates on a year to year basis instead of drawing up a consolidated estimate for the project as a whole, the representative of the Ministry has adduced an argument, which is hardly convincing that "Normally speaking one really sanctions revised estimates. But if there are practical difficulties, the procedue is adopted by Government, and there are other cases also". No satisfactory explanation has been given by the representative of the Ministry as to why the final estimates could not be put up before the Government and their approval obtained. As matters stand, there has been a three and a half fold increase from the original estimate of Rs. 40 crores to Rs. 135 crores, notwithstanding the fact that the new items included in the project accounted for an increase of Rs. 11 crores only.

The Committee come to the inescapable conlusion that there has been an almost laconic approach in the matter of preparation of project estimates and the processing thereof. In the opinion of the Committee, such a situation is fraught with inherent danger in so far as the economy of the Port as a whole is concerned. Not only does it upset the planning of the Port but it also affects the ways and means position of the Government. The Committee would, therefore, urge that the Ministry of Finance should observe stricter financial control over the projects and should insist on definite and realistic estimates of cost. The Ministry should satisfy itself at all stages why a revision of the original estimates is necessary, and whether the reasons adduced in support of revision are conlusive and do not give any scope for unnecessary expenditure. The Committee need hardly stress that prelimi-

nary and consequential steps in respect of a project which is decided to be taken up for execution e.g. the acquisition of lands, placing orders for the purchase of plant, machinery, etc. should be taken in time and in proper sequence so that the original estimates do not become out of date because of efflux of time and escalation in costs. Complete details of the estimated cost of a project together with its economics and financial implications should be placed before Parliament when submitting a demand for its approval, and whenever these estimates are revised full reasons therfor and the effect thereof on the economics of the Project should be given to enable Parliament to understand the full implications before voting the funds.

The Committee suggest that in the present case Government should finalise the estimates of Haldia Project without further delay and include them wtih supporting data and financial and economic implications in the Demands for Grants to be placed before Parliament.

4.13. On the question of expenditure on river dredging and maintenance, the Committee note that subsidy to the extent of 80% was approved for the Calcutta Port by the Cabinet only up to 31-3-76. Keeping in view the fact that every new Port at the initial stages is bound to face difficulties likely to upset their calculations and expectations, the Committee recommend that the Central Subsidy for river dredging and maintenance for Haldia Docks should be favourably considered by the Central Government and such subsidy continued for atleast period of five years after the commissioning of the Haldia Docks.

4.14. The Committee commend the fruitful efforts of Government at indigenisation which are evident from the fact that in a big Project like Haldia, the foreign exchange element will be only about Rs. 9 crores, viz. 6 to 7 per cent of the total anticipated expenditure of Rs. 135 crores. The Committee have noted that the expectations of traffic 4 to 5 years after the commissioning of the Docks, on which the economic viability of the project has been based, are 15 million tons per year, consisting of ore, coal, iron, foodgrains, fertilizers, container and general cargo and salt. Out of these, the only commodity on which actual performance in the past few years is available relates to oil traffic since the berths for other items of traffic have either not yet been commissioned or commissioned only in 1977. In respect of oil, which is being handled at the Oil Jetty, commissioned in 1968-69, the Committee find that starting from a traffic of 0.28 lakh tonnes in 1968-69, the same reached a level of 14.35 lakh tons in 1974-75 and 21.71 lakh tonnes in 1975-76. In the matter of revenue from the Oil Jetty, the Committee find that as against expectations of Rs. 210 lakhs per year, the actual revenue in 1974-75 was Rs. 203.49 lakhs. It was only in 1975-76 as per information given to the Committee during evidence, that the revenue from the Oil Jetty rose to Rs. 427 lahks.* The Committee trust that the opening of the Haldia Port would give a fillip to a larger inflow of cargo so that the expectations of achieving 15 million tons of cargo, on which the economic viability has been worked out, would be fulfilled.

---

*Kindly see Chapter V (Para 5.6) on Oil Jetty at page 101 of this Report.

CHAPTER V

RIVERSIDE OIL JETTY

Audit Paragraph

5.1. *Construction of Berths* : Global tenders were called for in March 1964 for construction of the riverside oil jetty capable of handling ships of 875 feet requiring draft of about 34 feet. Only two offers of Rs. 153.76 lakhs and Rs. 163.84 lakhs were received in June, 1964. These offers were rejected (August 1964) as the prices quoted were considered to be very high. In October 1964 fresh quotations were called for from 7 selected firms. Offers were received from three of then in December 1964. The offers were as follows :—

	(Rs. in lakhs)
Lowest offer	126·81
Second lowest offer	134·66
Highest offer	153·76

The first and the second lowest offers were on the basis of tenderers' own drawings, which were not acceptable to the committee, consisting of the Development Adviser (Ports) Ministry of Shipping and Transport, and the Chief Engineer and the Financial Adviser and Chief Accounts Officer of the Calcutta Port Trust, set up (March 1965) for considering the offers. As the prices offered were considered high, the committee decided (March 1965) to conduct negotiations. During the negotiations the tenderers indicated that their offers would be about Rs. 146.81 lakhs and Rs. 144.66 lakhs respectipely for making these technically acceptable. After negotiations the work was allotted to 'A', the highest tenderer, for Rs. 139.76 lakhs (foreign exchange 60 per cent) in June 1965 for completion by May 1967. The work was actually completed one year later in May 1968. 'A' was supplied electricity at the subsidised rate of 10 paise per unit. Subsidy on this account was Rs. 5 lakhs making the total negotiated price Rs. 144.76 lakhs, which was a little higher than the revised offer of the second lowest tenderer. The second lowest tenderer had offered to complete the work in about 30 months, *i.e.*, by the end of 1967 as against 36 months taken by 'A'. Besides, the second lowest tenderer had wanted payment of Rs. 20 lakhs only in foreign exchange, whereas out of Rs. 139.76 lakhs payable to 'A', the foreign exchange element was as much as Rs. 83.86 lakhs (60 per cent), the foreign exchange element was stated to be available for exports against bilateral trade agreement with the country to which 'A' belonged. Due to devaluation of the Indian currency the total payment (including the rupee equivalent of foreign exchange portion) to 'A' was about Rs. 187.52 lakhs. The Port Trust stated (September 1975) that the "devaluation of the Indian currency in June 1966 could not possibly have been anticipated at the time of tender evaluation in 1965 and the additional involvement on this account is an unforeseen contingency".

The Project report had estimated that the oil jetty would earn revenue of Rs. 210 lakhs per year. The actual revenue of the oil jetty was as follows :—

	Traffic (in lakh tonnes)	Revenue (Rupees in lakhs)
1968-69	0·28	5·67
1969-70	1·77	36·71
1970-71	2·04	34·07
1971-72	5·99	84·19
1972-73	7·08	104·62
1973-74	7·12	96·31
1974-75	14·35	203·49

As mentioned below, the civil construction work of the berths inside the impounded dock, the lead-in-jetty and the lock entrance was allotted to 'B' in August 1967. The berths inside the impounded dock were to be completed in 40 months and the lead-in-jetty in 45 months. According to the progress status report of the dock project as on 1st August 1975, construction of the lead-in-jetty and the berths within the impounded dock was completed except a few fixtures.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—pp. 114—116.]

(a) Award of contract for oil jetty

5.2. The Secretary, Ministry of Shipping and Transport has informed the Committee during evidence that the three firms whose offers were considered after December, 1964, were :

1. Steelcrete Foundation Ltd.
2. Hochtief-modern-essen
3. Ivan Milutinovic—PIM (Firm 'A')

In regard to the question of technical acceptability of the offers of the above mentioned firms, the Chairman, Calcutta Port Trust, has stated during evidence :

"This point was considered by the Tender Committee. May I read from the report—

'The Tender Committee felt that this firm Steelcrete had lack of experience in this particular field. Still when this firm came out with an offer of an estimate to Rs. 20 lakhs in order to comply with our tender specification, the Committee asked them to explain how they arrived at Rs. 20 lakhs. On that the Committee said—

'The Committee, however, was unable to estimate the exact price of this tender and 20 lakhs of rupees was stated only as an approximate figure'.

In the case of the other firm the offer was of Rs. 126.81 lakhs.

In the case of the second tenderer the whole method of work was different which was not acceptable to the Committee because it involved risks. Still detailed discussions were held with the contractor's representative and it was established—that too generally conformed to the tender specification—the price would be increased by purely an approximate figure given by the firm as Rs. 10 lakhs. The tender price would be of the order of Rs. 144 lakhs. This could not be accepted by the Tender Tender Committee because that was also a certain way of giving a figure possibly to compete with the Yugoslav firm, as their quotation of Rs. 153 lakhs was known to them."

5.3. From the information given in the Audit Paragraph and the above quoted information furnished during evidence, the following picture emerges in respect of the tenders of the three firms after they had been made to comply, to some extent, to the technical requirements of the work in question :—

Name of firm	Value of Tender (Rs.)
Steelcrete Foundation	Rs. 126·81 lakhs + 20 lakhs = Rs. 146·81 lakhs.
Hochtief -modern-essen	Rs. 134·68 lakhs + 10 lakhs = 144·68 lakhs.
Ivan Mulutinovic—PIM	Rs. 153·76 lakhs.

As mentioned in the Audit Paragraph, after negotiations with firm 'A' (M/s. Ivan Mulutinovic), the contract was awarded to them for Rs. 139.76 lakhs (foreign exchange 60%). They were also given some subsidy by way of cheap electricity, the total value of which has been assessed at Rs. 5 lakhs.

Asked about the extent of the subsidy per unit, the Chairman, Calcutta Port Trust stated during evidence :

"The Port was to realise 10 paise per unit if it supplied electricity. x x x At that time we were experting elertricity from the State Electricity Board and the rough estimate was that we would have to bear 24 paise per unit".

5.4. The Audit Paragraph also mentions that the firm Hochtief-modern-essen had wanted payment of only Rs. 20 lakhs in foreign exchange (*viz.* about 15%), whereas in the case of M/s Ivan Mulutinovic—PIM to whom the contract was awarded, the foreign exchange element was as much as Rs. 83.86 lakhs (*viz.* about 60%) which was stated to be available for exports against bilateral trade agreement with the country to which the firm belonged (*viz.* Yugoslavia).

Mention has also been made about the effect of devaluation of the Indian currency in June 1966 due to which the total payment due to the firm went up to Rs. 187.52 lakhs.

The Committee have been informed during evidence that the scope of the work got reduced and the firm had been paid Rs. 146.19 eventually.

5.5. Asked if the decision to award the contract to the Ylgoslavian firm was influenced by the fact that the Indian Government had a trade and payment agreement with Yugoslavia, the Chairman Calcutta Port Trust stated during evidence :—

> "That part of the consideration... came only subsequently, but not in the beginning. In the beginning from the port point of view and from the port interest, we studied the tender purely from the technical angle first and when we were satisfied that we could not accept the other tenders technically, we decided that we could only consider the third tender—*i.e.* Yugoslav tender. But still we considered Rs. 153 lakhs to be very high and, therefore, we undertook negotiations with them and while negotiating, naturally, the second part also played its role...."

(b) Traffic & revenue from the oil jetty

5.6. The Committee find that the traffic at the oil jetty, on the basis of which the economic viability was drawn up, was put at 3 million tonnes per year.

As stated in the Audit Paragraph, the traffic at the oil jetty had reached 1.43 million tonnes in 1974-75 yielding a revenue of Rs. 203.49 lakhs as against the estimated revenue of Rs. 210 lakhs per year as per the Project Report. The Committee have been informed during evidence that in 1975-76, the traffic at the oil jetty rose to 2.17 million tonnes yielding a revenue of Rs. 427 lakhs.

The Committee desired to know the actual capacity of the oil jetty at Haldia and whether the jetty could be put to any alternative use. The position was thus explained during evidence by the Development Adviser (Ports) :—

> "The oil jetty is in the river whereas all the other berths have been put into a dock with a lock entrance. Oil jetty is specially designed for oil traffic and it would not be used for any other purpose except for some liquid traffic. The capacity of the berth varies with the size of the vessels, the rate at which they can pump and also the number of days that the berths should be occupied in a year.
>
> The rate at which the pumps can pump also depends upon the pipelines which are leading from the jetty to the refinery and the tankerage capacity of the refinery. For example, if this particular jetty is used by small tankers of 20,000 or 22,000 tonnes which have a capacity of pumping at the rate of only 200 to 500 tonnes per hour, the capacity of that jetty will fall considerably as compared to the capacity of the same jetty when used by, let us say, 50,000 tonnes tankers or 80,000 tonnes tankers with a pumping rate of 1,750 tonnes or 3,500 tonnes per hour.

So, when we talk of the capacity of the jetty, it has got to be related to the requirements at the refinery, its storage capacity, the types of ships that will be calling at that particular jetty, the pumping rate of the ships that are calling at the jetty. It may vary from 2.5 to 3 million tonnes or 8 million tonnes depending upon their requirement".

From the published documents relating to the Calcutta/Haldia Port, the Committee find that the traffic projections in respect of P.O.L. at Haldia Docks for the Fifth Five Year Plan were put at—

Year	Anticipated traffic) (in million tonnes)	Remarks
1975-76	2·5	(As stated above, the actual materialisation was 2·17 million tonnes).
1976-77	4·05	—
1977-78	4·20	—
1978-79	4·70	—

5.7. The position has, however, since changed and the future projections of oil traffic at Haldia are 3 million tonnes by 1980-81. The position in this regard thus described during evidence by the representative of the Ministry of Petroleum :

"....towards the middle of 1965, a refinery of 2.5 mls. tonnes capacity was planned at Haldia. Construction of this started towards the end of 1972, but there was delay of 2 years. It was ready for commissioning only in December, 1974. Traffic forecast for Haldia was then based on supply of 2.5 mil. tonnes of crude to this refinery plus some movement of refined products. The third stage was in 1972 when two other factors were taken into account in revising the forecasts. One was the possibility of moving crude from Haldia to Barauni because it was then felt that Assam crude supplies would not be adequate to meet Barauni's requirements. Secondly, it was anticipated that Haldia will ultimately have to be expanded by 1977-78 to 3.5 mil. tonnes capacity. Thus in 1972 traffic forecast was given on the basis of these factors.

These last two expectations have not materialised as a result of the oil crisis. Because of increased crude production from Assam fields, crude movement from Haldia to Barauni refinery has now stopped and is not now anticipated anymore. Expansion of Haldia Refinery has also not materialised because of the reduced demand particularly in the eastern sector after the oil crisis.

* * * * *

Haldia Refinery's present capacity is of 2.5 million tonnes. And we expect the total oil traffic at the Haldia berth to go up to

3 million tonnes by 1980-81. Apart from the crude for the refinery we also have to move some refined products into the Calcutta area to meet the demands of that area. So, we expect the traffic to go up by 1980-81 to the level of three million tonnes per annum."

5.8 The Committee note that the contract for construction of riverside oil jetty at Haldia was awarded to the Yugoslav firm (Ivam Mulutinovic-PIM) after bringing down, through negotiations, the price of their tender from Rs. 153.76 lakhs to Rs. 139.76 lakhs foreign exchange 60%), which was lower than the offers of the other two tenderers made in conformity to the technical requirements of the work. The firm was also given subsidy by way of cheap electricity, the total value of which was Rs. 5 lakhs. However, an important factor, namely the foreign exchange element of the price of the contract of M/s. Ivan Milutinovic-PIM being 60%, as against only 15% in the case of another tenderer (M/s. Hochtief-modern essen) does not seem to have been given the consideration while awarding the contract. It appears that more weightage was given to the fact that the firm belonged to a country with which our country had a trade and payments agreement.

The Committee suggest that standing instructions may be issued that while awarding contracts of this dimension, among other things, consideration should invariably also be given to the component of foreign exchange that would have to be expended.

5.9 In regard to the traffic at the oil Jetty, the Committee find that the actual materialisation in 1975-76 was only 2.17 million tonnes as against the expectation of 2.5 million tonnes for that year. So far as future projections are concerned, it is disturbing to note that as against the earlier expectation of 4.7 million tonnes for 1978-79, it is no expected, as stated by the representative of the Ministry of Petroleum during evidence, that the traffic will go up to the level of 3 million tonnes per annum only (the quantum on which the economic viability was based) by 1980-81. While noting that the capacity of the oil jetty provided at Haldia is related to the size of ships calling at the jetty, the pumping rate of those ships, and requirements/storage capacity of the Refinery, the Committee would stress that there should be optimum utilisation of the facilities created at heavy capital expense at Haldia for handling of POL traffic.

CHAPTER VI

IMPORTANT WORKS OF THE PROJECT

(1) Civil Construction work

Audit Paragraph

6.1. Tenders were invited in July 1966 for civil construction work of the lock entrance, lead-in-jetty and berths in the impounded dock basin. The tenders were received in December 1966. Civil construction work of all these was allotted to 'B' in August 1967 for Rs. 16.69 crores, subject to variation under the escalation clause etc. Civil construction work of the lock entrance was to be completed in 45 months, *i.e.* by May 1972.

Before, however, 'B' could start work on the lock entrance, the Port Trust was to get an earthen bund constructed between the river and the site of work, to protect the latter from river water. Tenders were invited for this work in November 1965. The tenders were opened in December 1965 and work orders were issued in March 1966 on 'X' for completion of one portion of the bund by October 1966, and in May 1966 on 'Y' for another portion to be completed by September 1966. Total cost of construction of the bund was about Rs. 8 lakhs. The bund was completed in all respects on 22nd January 1968. As a result, 'B' could start work on the lock entrance only in January 1968. In December 1971, 'B' pointed out that the earthen dam was not sufficient to protect the site of the work. Another protective coffer dam made of sheet piles was constructed in mid 1973 at a cost of about Rs. 23 lakhs. The Port Trust stated (September 1975) that in the outer camber "the face of which is very much close to the river, the sheet pile coffer dam for the portion was necessary, as sufficient safe gradient required as safe slope for deep excavation in the area could not be ensured for lack of space. The coffer dam was, therefore, constructed with the opinion of the consultants".

When tenders for the civil construction work of the lock entrance, lead-in-jetty and the berths were called in July 1966, only preliminary drawings were ready just to give an idea of the nature of the work; they were not based on detailed design work. The detailed design work was done after the notice inviting tenders was issued (July 1966). Final working drawings were issued as the work progressed. According to the final drawings, the work had become more complex and time consuming as compared to the tender drawings, particularly because of —

(a) the size and details of construction of the culverts running along the two walls of the entrance lock with its intricately shaped inlets and outlets decided in July 1969 after model tests at the Central Water and Power Research Station, Poona.

(b) the complicated and precision work necessary in the foundation for installation of radial gates and pen stocks, and

(c) provision of five huge 90 feet×36 feet monoliths at the two ends of the lock entrance found necessary because of changes in the designs of the lock culverts.

Besides, subsequent to acceptance of the tender when the contractor was about to commence work, it was decided (early 1968) to increase the length of the lock entrance by 48 feet width by 5 feet and depth by 2 feet. The increased depth of the lock by 2 feet involved sinking of all the sixtysix monopoliths deeper by 2 feet. Because of these changes 'B' pointed out in April 1971 that "the actual work being carried out is entirely different and much more intricate and complicated compared to the drawings given to us at the time of tender" and also complained to the Port Trust that "the final drawings and instructions from your end were not forthcoming and there were considerable delays at every stage". "B" also stated that the time for completion of the work should be extended minimum up to December 1974 and that too subject to the conditions *inter alia* that (i) no further alternations would be made in the drawings which had already been given to it, (ii) other drawings necessary would be given to it immediately and (iii) it would be allowed to do de-watering constantly. The Port Trust stated (September 1975) that the tender drawings "as is usual in such contracts envisaged general arrangements in an overall manner based on the designed specification and data. Detailed working drawings for stage to stage work in the required sequence of work necessarily are prepared in the course of execution of the related stages of the work".

When the tender committee had considered the tenders for construction of the lock entrance, it had assumed that, as the soil, was impervious, the cost of de-watering would be negligible. The cost of de-watering necessary for the work was fixed at Rs. 1.50 per horse-power hour of pumping. As pointed out by 'B' in April 1971, while executing the work constant de-watering was necessary to keep water pressure in the water bearing strata below the floor level of the entrance lock, which was also the founding strata for the monoliths at a safe level in a stabilisized state during the operations. 'B' also pointed out that work had slowed down in some areas where de-watering was not done. It was eventually decided in October 1971 by the Port Trust in consultation with its consultants and company 'C', and after extensive investigation and experiments, that deep tubewells should be sunk all-round the lock entrance 20 feet to 40 feet apart for pumping round-the-clock, to keep the water pressure to the desired level so that work could proceed safely in the excavated area. For round-the-clock pumping, provision had to be made for stand-by power, pumping sets, tubewells etc. In December 1971, 'B' pointed out that de-watering alone would retard the progress of work by about 3 years. Apart from the delay, this involved expenditure of Rs. 23.24 lakhs on installation of pumps, while de-watering expenses were about Rs. 4 crores up to March 1975. The Port Trust stated (September 1975) that "prior to issue of tender documents, soil investigation by preliminary borings at places selected at random was carried out. Such investigation was again confirmed through confirmatory boring before and after commencement of the work. Such initial investigation failed to establish any adverse sub-soil condition till the work had progressed substantially when only such condition revealed itself."

The portion of the floor through which each caisson gate will move in and out of its camber (resting place) is to be lined with machinable iron castings of special composition. The sides of the two walls of the lock entrance where the gate will remain fixed when in operation, for stopping water from entering the lock entrance or going out of it, are also to be

lined with such iron castings of special composition. Such linings with iron castings of special composition make the movements of the gates smooth and prevent seepage of water. Fixing of the iron castings is a high precision work. Such iron castings patented by a foreign company are called mechanite castings and are manufactured in India by Company 'D' holding licence for producing the castings under the brand name. Of the 2,115 castings necessary, drawings for 1,983 castings were received from the consultants in the middle of 1968. Orders were placed by 'B' with the approval of the Port Trust, on company 'D' in May 1969 for 1,533 castings for supply by October 1970. In this order there was no stipulation for inspection of the castings by Lloyds. When subsequently in October 1969 company 'D' was told by 'B', at the instance of the Port Trust, that the castings would have to be got inspected by Lloyds, it refused (October 1969) to produce such certificate without extra payment. The order was, therefore, cancelled in May 1970. Fresh orders were placed by 'B' on another company 'E' in November 1969 for 450 castings and in June 1970 for 1,533 more castings. 'E' did not have licence to produce the castings under the brand name, but the Port Trust expected that there would be no difficulty in getting mechanite type castings from 'E' according to specifications. In the order placed in June 1970 no specific date of completion was mentioned. The drawings for the remaining 132 castings were received from the consultants by the end of 1973 and orders were placed for these castings on 'E' in January 1974. Out of 2,115 mechanite castings required, only 1,803 had been despatched to site till the end of July 1975.

According to the progress report of the project as on 1st August 1975 prepared by the Port Trust, civil construction work of the entrance lock was expected to be completed by the end of September 1975.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil—Pp. 120-123.]

(a) Changes in Designs

6.2. The Audit paragraph refers to the civil construction works of the lock entrance, lead-in-jetty and berths in the impounded dock basin. The tenders for these works were called in July 1966 when only preliminary drawings were ready to give an idea of the nature of the work. The detailed design work was done after the notice, inviting the tenders, was issued in July 1966.

The contract was awarded to Hindustan Construction Company Limited (firm 'B') in August 1967 and was to be completed by May 1972. However, due to subsequent changes in the designs, *viz.* change in size of culverts, provision of five huge monoliths (stabilisers for walls), complicated and precision work necessary in the foundation for installation of radial gates and pen stocks, increase in the length of dock entrance, etc., the contractor claimed that there had been major changes and that the actual work to be carried out was entirely different and much more intricate and complicated as compared to the drawings given to him at the time of the tender. Accordingly, the contractor wanted that the time for completion of the work should be extended up to December 1974.

The Committee were informed in June 1976, that the under-water works of the entrance lock were completed and the lock flooded on 26-3-1976.

6.3. During evidence the Chairman, Calcutta Port Trust has stated that "it is not true to state that lock entrance work was changed considerably from the tender drawings. The basic design and the constructional feature remained unaltered even today." The Chairman, Calcutta Port Trust further stated during evidence that "the changes took place only in two items, the culvert and the changes due to the length and the deepening of the lock entrance. In no other respect we changed the drawings or the structure."

Asked whether it was not possible to foresee the above-mentioned two changes and incorporate the same in the original design, the Transport Secretary has stated during evidence :

> "....One item is based on the results obtained by the test in the Poona Institute. These tests generally take time. This could not be completed by the time the tenders were awarded. The second point about these changes is in the measurement of the lock entrance itself to provide for ships with the larger draught. As I explained in the beginning, they found that the depth in the river was such that they could provide for higher draught ships. Therefore, in order to cope with the lock entrance in the dock, the draught was put on an equal level with the river. This was the design. This is also a discovery that was made at a later point. This also could not be anticipated."

6.4. The Chairman, Calcutta Port Trust, has in evidence clarified the position thus :

> "We have been investigating the river through the assistance of the Poona Research Station. Now, of course, the Calcutta Port have also their own research facilities as far as the river is concerned. The river research is a continuous process. The actual behaviour of the estuary and the river was taken up when the Farakka Barriage project was decided upon and construction started. With the Farakka Barrage project construction starting, it gave us a new impetus, a new thought, as to what will be the situation. Those researches took a few years and the hydraulic experts at Poona and in the Calcutta Port came to a conclusion, in 1967 or 1968, that there was a great possibility of improvement in the estuary further.
>
> It was purely an indigenous effort We did not depend on or ask for the opinion of the Consulting Engineers. It was purely an internal matter. When we were told by both Poona and our own hydraulic experts that there was a possibility of deepening the river entrance channel to Haldia, then we decided how far it can be deepened and fixed the new norms. But by that time, unfortunately, the contract with the HCC was already settled That was in August 1967. We came to this conclusion towards the early part of 1968. That is as far as the draft is concerned.
>
> With regard to the question of lock entrance, it is not at all possible to have a model test carried out until and unless the design in all its respects is complete. Poona Research Station cannot built a model of the lock entrance unless they are given the entire design of the lock entrance. The lock entrance could

only be designed in all its respects when the contract has been settled, when the outlines have been settled, and the designers start designing the lock entrance. After the designers have designed the lock entrance and the contractors have started the preliminary work then only we can approach Poona Research Station saying,

'Here is a design. Can you make a model of this ? We want it to be tested'. Then, they started making the entire model of the lock entrance true to the scale as it should be and they made all the experiments, the effect of the culverts on a ship, etc. and then they gave us the conclusions on what should be done and we did accordingly."

6.5. The Audit paragraph also mentions about the complaint of the contractor that the final drawings and instructions from the side of the Port Trust were not forthcoming and that there was considerable delays at every stage. The representative of the Port Trust has, however, denied during evidence that there was any major delay because of any delay in the supply to the contractor of detailed drawings in time. The representative of the Port Trust has claimed that at every stage of work the drawings were supplied and that the drawings were naturally made as the work continued.

6.6. From the material made available to them, the Committee come to the inescapable conclusion that the Port Trust Authorities did not bestow the proper care and attention which they should have in the planning of designs before awarding the contract for civil construction work of the lock entrance, lead-in-jetty and berths in the impounded dock basin of Haldia. According to the statement of the Chairman, Calcutta Port Trust, investigations into the behaviour of the river Hoogly have been going on for a long period since river research is a continuous process. The Committee, therefore, fail to understand why necessary tests ould not be conducted by the Calcutta Port Trust or the Poona Research Station before the award of the contract to the Hindustan Construction Ltd. in August 1967. The Port Trust Authorities should have undertaken all the necessary tests germane to the work of this magnitude. As a result of the dilatory processes involved in getting technical clearance for the project, there has been not only undue delay in the completion of the civil construction works but also escalation of the costs. The Committee are not happy over the fact that the Port Trust Authorities instead of accepting the Audit point have sought to justify the delay, which, in the opinion of the Committee, is wholly uncalled for. The Committee would, therefore, urge that the matter should be looked into in greater detail with a view to fix responsibility for the lapses. Further, procedures should be drawn up for working out the details of the operations well before the award of contracts of this nature. There should be proper coordination among the different authorities so as to obviate delays in the execution of the works.

(b) Earthen Bund/Coffer Dam

6.7. The Audit paragraph also mentions about the necessity for construction of an Earthen Bund between the river and the site of the work, before the contractor could start work on the lock entrance so as to protect the site of the work from the river water. Two important points have been raised in connection with the construction of the said bund, namely :

(i) the construction of the bund, at a cost of Rs. 8 lakhs was due to be completed by October 1966, but it was actually completed on 22-1-1968. As a result of this delay, the commence-

ment of the work of lock entrance which was due to be started by the contractor in August, 1967 was also delayed to January, 1968;

(ii) in December, 1971 the contrator himself had to point out that the Earthen Bund was insufficient to protect the site of the work, and as a result another Coffer Dam had to be put up in May, 1973 at a cost of Rs. 23 lakhs.

6.8. So far as the delay in completion of the bund is concerned, the representative of the Ministry has stated in evidence as follows :

> 'They were asked to commence the work on the lock bund so as to prevent the water from finding its way to the construction area. Such a work involved construction of a bund and isolating that area from the river side. From March onwards till almost September, it is very difficult to work in that part of the area. There are heavy wings—heavy cyclonic weather conditions from that period. So, the contractor really started the work in October 1966—not in March or May. They could start the work in October, 1966 and in April there was another cyclone weather and, as a result, a part of the bund was breached. In April, 1967 this breach was repaired. But, again by about September, 1967, as there was another cyclone weather, we could really complete the work thereafter only. From October we took two to three months to strengthen this because it was very important that before we started the work, we must be sure that this bund was in order. The Hindustan Construction was awarded the contract in August, 1967. They also took three or four months time to establish the site organisation and so there was really no appreciable delay in starting the work because of this bund."

6.9. As regards the need for another Coffer Dam, due to the alleged inadequacy of the Earthen Bund, the representative of the Port Trust has stated in evidence :

> "This earthen dam was built to protect the area and to isolate it from the river and it did that function admirably well and in the eight years or so, not a single time, any such complaint had been brought to the notice in spite of so many cyclones. So, the story of coffer dam is different. Its construction was necessary because of the fact that as the mouth of the lock entrance the river was very close and so we wanted to excavate 70 feet below the ground level. To excavate in an open way, it would have required another space of 400 feet which is not so close to the river mouth of the lock entrance, and which we could not get. The bund and this mouth of the entrance was close together and neither could bund be shifted nor aligned differently. Therefore, this construction was necessity."

The Development Adviser (Ports) has further clarified the position during evidence as follows :

> "The protective bund encloses a very large area and protects that complete area from the river. It covers the complete outer

face of lock entrance and also protects the basin from the river water. If this protective bund is not there then the whole basin which is now kept at a fixed water level with the help of the lock will become tidal. With this protected area, the whole of the lock entrance was to be constructed. If we keep this very wide then the bund has to go into deeper water and the cost becomes more. It may also lead to erosion and siltation. Therefore, we want to keep the bund as close to the bank but at the same time enclose as much area as possible.

The coffer dam is also nothing else but a protective bund. It can be earthen coffer dam or a sheet pile coffer dam. It is a name given to protective work which is meant for isolating an area from water. The outer camber side of the lock is nearest to the river. For its protection the earthen bund had to be taken far into the river thus encroaching on the river region. To keep the size of the bund small, we tried to use sheet piles."

6.10. Claiming that the construction of the dam did not contribute to delay from the point of view of the Project, the Chairman, Calcutta Port Trust, has stated in evidence :

" ...This particular construction of the dam did not contribute to the delay from the point of view of the project, the reason being that this coffer dam was only needed when we reached a stage of doing the flooring work of the outer camber. Hindustan Construction were not ready till 1972-73 season for this work and, therefore, we did not do it before. We were prepared for it. We took the steps and the decision that it was necessary. So, we waited for the time when the flooring of the outer camber would be done and when Hindustan Construction were ready to do the job we asked them to do the coffer dam."

6.11. As to the need for the Coffer Dam, it was also stated in evidence by the Development Adviser (Ports) that if the soil had been normal as originally envisaged and if the soil had behaved in the way it was originally expected to behave, there was no necessity for a coffer dam. Explaining the need for the Coffer Dam, the Development Adviser has added :

"....Coffer dam came in because it was realised that at the level of minus-90 or minus-96 where the foundations of these monoliths were laid, there was a perched water table or artesian condition which was putting upward pressures over the site; and it was felt that there was a likelihood of that soil bursting. If there had been an open excavation, there would have been a problem. There was need for taking certain measures to meet exigencies. So we had the coffer dam."

6.12. The Committee find that there is a letter on record written on the 23 February, 1972 by the contractor (M/s. Hindustan Construction Company Ltd.) to the Chief Engineer of the Haldia Project in which it has been clearly stated that the consulting engineers of the Project should have envisaged the relieving of the hydrostatic pressure in the sandy strata near the outer camber much before the invitation of the tender. The letter goes on to state that both these features were visualised by the contractor themselves and even after pointing out the same to the Project authorities, the

Department took months to decide these issues which resulted in inordinate delays in construction.

The representative of the Project has, however, claimed during evidence that the above-mentioned letter was intended to pass on the contractor's responsibility to the Project. He has claimed that it was the contractor's duty to communicate as to how they would do the work and the scheme they had in their view.

6.13. The decision to construct a coffer dam after it was found that the earthen dam was insufficient to protect the site of the work is another instance of defective planning on the part of the Port Trust Authorities. As pointed out by Audit, the contractor himself had to point out in December, 1971 about the inadequacy of the earthen dam to protect the site area. While the Port Trust Authorities have admitted that the construction of the coffer dam was necessary "because of the fact that at the mouth of the lock-entrance the river was very close and so we wanted to excavate 70 feet below the ground level", the argument advanced by them that the "Hindustan Construction were not ready till 1972-73 season for this work and, therefore, we did not do it before", seems to be far-fetched. The Port Trust Authorities should have envisaged all the details of the work to be executed well before the award of the contrat. Due to lack of coordination between the contractor on the one hand and the project authorities on the other, there was not only delay in the construction but increase in the overall cost of the bund. As has been pointed out by Audit, the coffar dam cost the exchequer an amount of Rs. 23 lakhs. The Committee, therefore, cannot too strongly emphasise the need for proper planning, preparation of project estimates will in time and coordination with different authorities charged with the execution of the project.

(c) Defective sub-soil investigations

6.14. The Audit paragraph also mentions about the sub-soil conditions having been found to be different from the conditions (*viz.* impervious soil) that had been assumed at the time of consideration of tenders for the construction of the lock entrance. This difference in soil conditions was pointed out by the contractor 'B' (M/s. Hindustan Construction Company Limited) in April, 1971. Further extensive sub-soil investigations had therefore to be done, as a result of which deep tube wells (122 in number as per Press Reports) had to be sunk at a distance of 20-40 feet from each other all-round the lock entrance, apart from pumping round the clock, to keep the water pressure to the desired level so that work could proceed safely in the excavated area. The contractor had pointed out that this additional de-watering was likely to considerably retard the progress of work. It also involved an additional expenditure of Rs. 23.24 lakhs on installation of pumps, the de-watering expenses being about Rs. 4 crores up to March, 1975.

6.15. In the written information furnished to the Committee, it has been stated that the sub-soil investigations were carried out in two stages—first in 1960-61 at a cost of Rs. 1.88 lakhs and again in 1963 by making additional bores, at a cost of Rs. 4.39 lakhs. On both occasions, the work was entrusted to M/s Cementation Company on the basis of competitive global tendering. Nine bore holes were actually sunk against the first contract and 12 bore holes against the second. The scope of work stipulated in the tenders were meant to find adequate information on the engineering properties of the soil for the purpose of planning and designing the structures. It has been added that the report of M/s Cementation ompany contained

all the data asked for, but it did not fully reveal and bring out those hydraulic characteristics of the sub-soil which later on gave rise to the constructional difficulties associated with the features of the lock structures and the open deep excavation to 50 ft. below Haldia datum for constructing the sliding ways, etc. and the report was not up to the mark to that extent. A Committee appointed in August, 1971, under the Chairmanship of the then Development Adviser (Ports) in the Ministry of Shipping and Transport, had expressed the following opinions on the report of M/s. Cementation Co :

> "The Committee would like to record that at the conceptual stage the seriousness of the hydraulic problem was not fully revealed. It was on the basis of the then available data that designs were prepared. With more data becoming available either during the confirmatory monolith borings or later during the actual sinking of the monoliths, the gravity of the problem was fully appreciated."

The above-mentioned Committee, however, did not find any gross inadequacy in the report, so as to warrant any action against the firm.

6.16. During evidence, the Chairman, Calcutta Port Trust has admitted :

> "Looking into the project and the technical problems that we have encountered, I think I should admit that the Cementation Company's analysis work in 1964 was not up to the mark. That means that they did not analyse to the extent of guiding us about the pitfalls that we eventually came across."

6.17. The Committee are unhappy that adequate sub-soil investigations for deep work had not been apparently done before beginning the work of look entrence. As pointed out in the Audit paragraph the rate for de-watering necessary for the work was fixed at Rs. 1.50 per horse power hour of pumping at the time of considering the tenders for the constructions of the low entrance on the assumption that the soil was impervious. In the opinion of the Committee this was obviously a very rough and ready method of assessing the difficulties of the situation. No adequate attention was paid to the matter. The Committee would have expected that knowing the nature of the area and the river bed, both the Port Authorities and their Consultants should have made a perspective planning which unfortunately they did not do. The Committee are constrained to note that it was the contractor who had to discover and point out the sub-soil conditions, which in fact was the responsibility of the Port Trust to do.

6.18. The Committee need hardly remind the Ministry that M/s. Cementation Company, to whom the work of soil investigations was awarded, have already come in for adverse notice of the Committee in the case of their performance on soil analysis work at Naval Dockyard, Bombay and again at Mormugao Port.* The Committee feel that there is need for a detailed review in regard to the performance of this company in the various contracts of soil analysis work awarded to them from time to time by the Government of India. The capacity and capabilities of this firm should be taken into account before awarding any further contracts to them.

**See* 230th Report of PAC—Fifth Lok Sabha—P. 85.

(d) Mehanite castings

6.19. The Audit paragraph refers to the manufacture and fitting of some machinable iron castings of special composition (known as Mehanite Castings) in the camber (resting place) and in the sides of the two walls of the lock entrance where the gate will remain fixed when in operation, for stopping water from entering the lock entrance or going out of it. The order for these castings was placed on firm 'D' (M/s. Binnys Engineering Co.) by the contracter (firm 'B'—M/s. Hindustan Construction Company Ltd.) with the approval of the Port Trust, in May 1969 for supply by October 1970, without stipulation for inspection of castings of Lloyds. Ultimately in May 1970, the order had to be cancelled as the firm 'D' had refused in October 1969 to subject their product to inspection by experts (M/s. Lloyds) which inspection was considered absolutely necessary in view of the important function of the castings. In June 1970, the contract had to be awarded to another firm (firm 'E'—Bird & Co.) who had no licence for producing the castings. This change or order meant an additional expenditure of about Rs. 1.80 lakhs. Unfortunately there were difficulties even with Bird & Company in respect of the supply of these castings, as a result of which the Project was badly delayed. Asked as to why no stipulation was made about the inspection by Lloyds in the orders placed on firm 'D', the Ministry have stated in a written note furnished to the Committee that the specification for quality, grade and workmanship for the castings were clearly laid down and it was implicit that the buyer, *i.e.* the Port Trust would satisfy themselves that the plates manufactured by the contractor would conform to the specification stipulated in the order. The Ministry have further stated that the name of the authority who would be responsible for inspection is normally not stated in the orders or in the specification and that this was a case where the main contractor (M/s. Hindustan Construction Co. Ltd.) had placed an order on the sub-contractor (firm 'D') and all the stipulations of the main contract were applicable.

6.20. The Ministry have contended that the agency to be employed for inspection and supervision is purely the business of the Calcutta Port Trust and no concern of the contractor, particularly so because the cost of inspection by Lloyds was to be borne by the Calcutta Port Trust themselves. In view of this position, the Ministry could not accept any enhancement in price which was demanded by M/s. Binnys if Lloyds inspection was imposed. M/s. Binny Engineering Works Co. had also stated that there would be delay in the supply of castings in case of inspection by Lloyds, and, therefore, the main contractor (M/s. Hindustan Construction Co.) were advised to cancel their order on Binnys.

Asked as to why no specific date for supplying of casting was mentioned in the order placed on Birds in June 1970, the Chairman, Calcutta Port Trust has stated during evidence :

> "Bird & Co. did mention specific dates. They were to supply 90 metric tonnes per month. This is after 8 weeks commencing and there was specific date given by the firm. Everything was completed by February 1976."

The Chairman, Calcutta Port Trust has, however, admitted that there were difficuties with the Bird & Co. also in supply of the castings, which very badly delayed the execution of the Project. He stated :

"It is a fact that the project had been very badly delayed, particularly during the course of the last 18 months, due to difficulties that we faced with Bird & Co. in respect of the supply of a little over 2,000 castings which were to be machined under precision tolerances. Bird & Co. could not keep to their delivery schedule. But, however, they were ready with the castings—some in 1973, some in 1974 and also a small number thereafter. But the main bottleneck that was faced by Bird & Co. was how to get these castings machined, and to the tolerances that we demanded. As already mentioned ... all these castings were under thorough inspection, not only by our own inspector, but by Lloyds. Bird & Co. were not in a position to machine all of them and to deliver them in time, because they had only very few suitable machines, which could do these particular castings, in their own workshops They did utilise these machines in their workshop on the basis of 3 shifts. The first problem faced in their workshops was there due to power rationng; and they had to close down for two days a week. That was overcome because of the fact that we approached the State Government and the State Government did allow Bird & Co. to work on Haldia Dock Project even on those two days which were supposed to be closed for power rationing. But the number of castings was so large that they had to be distributed; and they were distributed for machining purposes to as many as 9 or 10 firms near about Calcutta right up to Durgapur. For these castings, we also approached such firms as the Heavy Engineering Corporation at Ranchi. After taking all these steps, all the firms were engaged, about 10 of them, in machining; but still we faced delay, because of heavy rejection. Our inspections of these castings were rather heavy and precise; and Lloyds would not accept any deviation and therefore very often the number passed was something like 25% to 33% and the rest were rejected. These were the primary reasons. Every time it was discussed at the steering committee, Bird & Co's representatives at the highest level were brought before the steering committee and they were asked to take all actions to expedite things. At various stages they did make promises, buf they could not keep them."

Asked as to whether there would have been any advantage in getting the castings from M/s. Binny's as compared to their procurement from M/s. Bird & Co.. the Chairman, Calcutta Port Trust stated :

"I do not think so, because in regard to machining, I am absolutely certain that Binny's would have faced the same problem. I feel it is easier to get the machining facilities in Calcutta area than somewhere near Madras."

The Committee also find that some of the castings brought by M/s. Bird & Co. were found to need some rectification. The question was discussed at the sitting of the steering committee held on the 16 June 1976 where the representative of M/s. Bird & Co. undertook to have the rectification is stated to have been completed by the end of January 1976 and the castings were fixed by main contractor (M/s. Hindustan Construction Co. Ltd.) by the end of February 1976.

6.21. The whole transactions relating to the award of contract for mechanite castings, the subsequent cancellation and its eventual farming out to another party presents certain disquieting feature which the Committee have noted with great concern. First, the contract for the supply of castings was placed on firm 'D' (M/s. Binny Engineering Co.) without specific imposition of the condition regarding inspection by Lloyds.. Secondly, the contract was cancelled when the firm declined to subject itself to Lloyds inspection. Thirdly, the same contract were given to another firm 'E' (M/s. Bird & Co.) who had no licence to produce the casting and fewer facilities to get the castings machined. In this process not only was there an additional expenditure to the tune of Rs. 1.80 lakhs but there was also, as has been admitted by the Port Trust Authorities, inordinate delay in the execution of the Project. There was thus no benefit derived by the Project authorities in cancelling the contract of M/s. Binny Engineering Company and awarding the same to M/s. Bird & Company. The object behind cancellation of the contract of M/s. Binny Engineering Company and awarding the same to M/s. Bird & Company was fully defeated which leaves no doubt that instead of straightaway cancelling the contract, the Port Trust Authorities should have persuaded the firm, namely, M/s. Binny Engineering Company, to improve the quality of their product and agree to have inspection by Lloyds on payment of some additional amount. The Committee trust that in all future cases of cancellation of contracts and their awarding to new contracts, the Calcutta Port Trust shall keep in view the technical capabilities of the new contractor and satisfy themselves fully that the new contractor shall be able to execute the job satisfactorily both in regard to technical requiremens and timely execution.

(2) Radial Gates & Penstocks

Audit paragraph

6.22. Tenders for fabrication and installation of 12 radial gates and 18 penstocks were invited in March 1969. The tenders were opened in May 1969. The offer (Rs. 17.47 lakhs) of 'F', a public sector undertaking, was the lowest. The second lowest offer of 'G' was for Rs. 28.47 lakhs for completion of the work in 25 months. A letter of intent was issued on 'F' in October 1969 for supply and installation of the radial gates and penstocks by December 1970. Final order was issued in June 1970.

The first set of drawings of radial gates prepared by 'F' were received by the Port Trust in May 1970. The consultants of the Port Trust, however, did not find (June 1970) the drawing acceptable as they did not conform to the specifications indicated in the notice inviting tender. In July 1970, 'F' informed the Port Trust that the radial gates according to revised drawings would cost Rs. 5.21 lakhs more and till this demand was accepted the work would not be started. 'F' was assured in September 1970 by the Port Trust that its extra claim would be recommended to Government, if justified. On 31 October approved in principle by the engineers of the Port Trust on 22 December 1970.

The first set of drawings for penstocks were submitted by 'F' between 9 January 1970 and 29 March 1970. These were also not acceptable to the consulting engineers of the Port Trust. After several meetings, on 29 January 1971, 'F' submitted revised drawings which were approved in principle on 18 February 1971. Even at that stage detailed drawings were not

submitted by 'F'. As they delay in submitting the detailed drawings was going to affect progress of civil works, a series of reminders were issued to 'F'. Detailed drawings were thereafter received from 'F' on 27 May 1971.

On the basis of the drawings subsequently approved, 'F' demanded higher prices. It was decided in inter-ministerial meetings held on 15 January 1972 and 24 November 1973 that 'F' would be paid Rs. 44.96 lakhs against its original quotation of Rs. 17.47 lakhs.

z According to the progress report of the project as on 1 August 1975, the radial gates and the penstocks were expected to be completed by the end of August 1975.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75, Union Government (Civil), pp. 123-124].

6.23. In the written information furnished to the Committee in June 1976, it was clarified that the completion date of 'end of August 1975' referred to in the Audit para, was in respect of under-water works of the flushing penstocks and 12 sections of radial valves. All works were completed by June 1975, except 6 penstocks gates which were also completed by January 1976.

The Committee have also been informed in a written note that the contract was awarded in favour of the Public Undertaking firm 'F' (M/s. Triveni Structurals Ltd.) because the firm had during discussions categorically stated that the work would be executed as per the Trustee's tender specifications and drawings, because their tender was the lowest and because, on inspections of their workshops, the Chief Mechanical Engineer and other Senior Engineers of the Port Trust were satisfied with the facilities available and with the technical personnel of the firm having the requisite know-how and experiences of undertaking similar works of hydraulic structures abroad.

6.24. In regard to the delay on the part of Messers Triveni Structurals Limited in submitting the revised drawings of penstocks (from March 1970 to February 1971), the representative of the Department of Heavy Industry informed the Committee during evidence :

> "I would invite attention to the fact that Triveni Structurals were in a nascent state in their operations. They had gone into operation only recently. They had to have close consultation with their Austrian collaborator. After the requisite consultation they prepared the design according to international standards. They had to consult the foreign collaborator as this was the first time they were taking up a job of this nature."

Asked whether the Department of Heavy Industry knew about the delay and took any steps to have the matter expedited, the witness stated :

> "As far as the delay in the furnishing of detailed drawings is concerned, the matter was not in the knowledge of the Ministry of Heavy Industry."

During evidence the Committee also desired to know the reasons for delay from the representative of M/s. Triveni Structurals Ltd., who has stated in reply :

"The drawings were required to be submitted for the various items required. Our Company gave the alternative designs on the continental standards. That was permitted according to the tender documents. These were not approved presumably because the permissible stresses according to the U.K. standards did not conform to them. Therefore, there was continuous dialogue in getting these drawings passed. This was probably the first time that we were as a Company tendering for sophisticated radial gates and penstock gates. The delay was inherent in a situation of this nature in which we had to develop our experience and expertise."

Asked whether the Ministry of Shipping and Transport or the Calcutta Port Trust had made any effort to refer the matter to the Department of Heavy Industry when Triveni Structurals delayed the submission of drawings, the Development Adviser (Ports) informed the Committee during evidence :

"As has been indicated by Triveni Structurals earlier, this type of work was very difficult. Both sides were not sure of exact requirement and they were working it out as they went along. At one stage, both of them came to a halt. Then I was deputed from the Ministry of Transport. I went to Allahabad. We had a long meeting there. We met their consultants from abroad. I also met the General Manager and the Deputy Chief Engineer CPT and there on the spot we resolved most of the difficult problems that were put forward at that time. We agreed to certain drawings which were signed by both the parties on the spot. After that the fabrication the construction work started."

6.26. Summing up the position, the Secretary, Ministry of Shipping and Transport has stated during evidence :

"I can only say, it is rather unfortunate that there has been delay in a case like this. My friends of the Heavy Industry Ministry have explained the reasons why the delays have taken place. I do not think it is anybody's case that delays were desirable. But unfortunately that happened. We have tried, at every stage, to check up and get the things sorted out with the Ministry representatives also. If you persue the proceedings of the steering committee, every time, this question came up, we discussed it. Also, subsequently, at a certain stage, the Development Adviser went over to the factory to discuss with the local people and help in seeing that the problems got sorted out. Sometimes, those problems could not be sorted out. This was the first time that they were going into this kind of business. Whatever was possible was done. But unfortunately, delays have taken place."

6.27. The Committee are surprised to find that while the Ministry of Shipping and Transport have categorically stated that one of the considerations for awarding the contract for radial gates and penstocks to M/s. Triveni Structurals Ltd. was that the engineers of the Calcutta Port Trust were, on inspection, satisfied with the technical personnel of the firm and their having requisite knowhow and experience of taking similar work of hydraulic structure abroad, the representative of M/s. Triveni Structurals and the Department of Heavy Industry have stated that this was the first time the firm were

taking up a job of this nature.. According to the Ministry of Shipping and Transport the firm had during discussions undertaken to execute the entire work in conformity with the Calcutta Port Trust tender specification and drawings. But later due to the changes made in the drawings, the undertaking asked for higher prices. At the inter-ministerial meetings held on the 15th January, 1972 and 24th November, 1973 it was finally decided to pay the firm an amount of Rs. 44.96 lakhs which was about 2½ times the amount of their original quotation of Rs. 17.47 lakhs. The Committee would like Govrenment to review the position and ensure that the Haldia project is not saddled with high capital cost as appears to have happened in this instance.

6.28. The Committee are also unhappy that no satisfactory arrangements exist in respect of coordination between the Ministries concerned for sorting out the difficulties coming in the way of such public undertakings in timely completion of the work allotted to them. The fact that even the delay on the part of M/s. Triveni Structurals Ltd. is furnishing revised drawings of penstocks was not brought to the notice of the Department of Heavy Industry, is a pointer to the imperative need for creation of some sort of a standing arrangement whereunder all cases of difficulties experienced by public undertakings, particularly in dealing with essential works of core projects like Haldia, are brought to the notice of the administrative Ministries concerned for being resolved.

(3) Caisson Gates

Audit Paragraph

6.29. Each caisson gate is 24 feet wide, 141 feet and 6 inches long and 61 feet and 7½ inches high and need about 1,000 tonnes of steel. The gate is a hollow box-like structure having six horizontal decks. The caisson gates will be filled with water. They are provided with inlets and outlets for water for the purposes of floatation, sinking and manoeuvrability. Normally, such caisson gates are fabricated in a horizontal position outside the entrance lock. It was, however, decided in the case of this project that the gates would be fabricated vertically in the respective cambers in the entrance lock.. Tenders were called for in August 1968 for such vertical fabrication and the work was awarded to 'H' in December 1968 (firm order was issued in May 1969) at a cost of Rs. 1.44 crores. The three gates were to be completed by January 1971. For fabrication of the gates, the cambers were to be made available to 'H' by April 1970, July 1970, and October 1970 respectively. As mentioned earlier, civil works lagged behind the schedule. As a result the Port Trust realised in late 1970 that the cambers would not be ready for at least another year. It was, therefore, decided that the gates should be fabricated under horizontal method away from the entrance lock. 'H' opposed (October 1970)this as it would necessitate complete replanning of its work entailing extra expenditure. 'H' also stated (April 1971) that it was not equipped to tow the gates over the lagoon to the lock entrance and uprighting them to vertical position for installation. After a series of discussions, 'H' agreed in April 1971 to the revised method of fabrication but demanded Rs. 35.90 lakhs more. On the bank of the lagoon a site, at a distance of about 1.5 kilometres from the entrance lock, was made available to 'H' for fabrication of the three gates simultaneously. The due date for completion was fixed as September 1972. The Port Trust agreed (February 1974) to bear the additional expenditure in fabricating the gates in horizontal position away from the lock entrance and asked 'H' to appoint qualified naval architects for towing and uprighting the gates. The Port Trust stated (September 1975) that "designing of the scheme for floatation and model studies has already been undertaken and almost completed by a qualified naval architect. The final work is yet to be undertaken.... (H)'s extra claim on this account for Rs. 35.90 lakhs is under negotiation".

According to a review made by the Chief Engineer of the project in January 1973, 'H' had received by the middle of 1971 the bulk of the steel to commence work but it "went on putting one excuse or the other for not starting the work in right earnest.....".

According to the agreement, the steel could be cleaned by sand blasting either before or after welding, the latter being preferred. But the blast cleaned surface was to be painted with primer within 3 hours of sand blasting. The question whether sand blasting and painting would be done before or after welding remained under consideration for quite sometime. In July 1972, 'H' agreed that painting after welding would be the best, but pointed out that it would affect progress of work as the capacity of its main factory at another place (Dum Dum) for sand blasting was 300 tonnes per month against fabrication requirement of 600/700 tonnes per month. The Port Trust agreed in July 1972 that steel in excess of 300 tonnes would be sand blasted by 'H' at the site of the work and extra expenditure for that would be borne by the Port Trust. In December 1972 the Port Trust agreed to pay a lump sum amount of Rs. 5 lakhs for this purpose. The Port Trust

stated (September 1975) that in the revised method of erection "the quantum of welding work at site considerably increased from what was envisaged in the vertical method of erection and hence preference had to be given to blast cleaning being done after fabrication at site assembly shop as was envisaged in the contract specification".

Against 1,000 tonnes of steel structurals for each gate, the progress of fabrication at the end of July, 1975 was as follows :

	Caisson gate for		
	Outer camber	Intermediate camber	Inner camber
	(In tonnes)		
Materials fabricated and finally assembled on main stallage at site	876	824	879
Materials finally welded	706	641	721

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil) —pp. 124-126].

6.30. The order for the caisson gates, to be constructed in vertical position inside cambers, was placed on M/s. Jessop and Company in May, 1969, with completion date of January, 1971. The following three points emerge out of the subsequent developments mentioned in the Audit Paragraph :

(i) change in the method of fabrication from "vertical position at place of fixture" to "horizontal position at a place about 1.5 km away from the place of fixture and then towing and uprighting the gates at the place of fixture". This change resulted in additional cost;

(ii) delay on the part of Jessop & Co. in starting the fabrication work, resulting in extra expenditure due to escalation, and also having effect of delay on the completion of the project; and

(iii) delay in deciding the question whether sand blasting and painting of caisson gates should be done before or after welding.

6.31. So far as the change in the method of fabrication is concerned, the representative of Jessop & Co. has stated in evidence that the delivery in 1971 was contingent upon the cambers being made available by 1970. As stated in the Audit Paragraph, the position in May, 1970 was that the cambers would not be ready for at least another year.

The Port Trust have attributed this delay to the late discovery of the sub-soil water table conditions. It was at the instance of the Port Trust themselves that the method of fabrication was changed to horizontal position so that the work of the gates "could proceed simultaneously with substantial saving of time, as otherwise subsequent installation of the gates after completion of the cambers would have entailed further delays". For this reason the Port Trust felt that the decision was taken properly and correctly.

6.32. As regards the demand for an extra amount of Rs. 35.90 lakhs by M/s. Jessop & Co. for this change in the method of fabrication, the representative of M/s. Jessop & Co. has explained during evidence :

"The company did not agree to the suggestion because it was completely contrary to the original methods contemplated and also

because it did not have experience in towing and uprighting such large vessels but, realising the difficulties of the Port Trust, the company ultimately agreed in April 1971 to undertake this method of fabrication on the clear understanding that the extra expenses involved would be compensated by the Port Trust and that the Port Trust would also assist the company in the towing of the gates...."

The Committee desired to know whether the Port Trust were aware of the fact that the horizontal method of fabrication would mean replanning the whole thing as indicated by Jessops and Co. and the cost was also likely to be escalated. They also wanted to know the rationale for adopting the expensive alternative of horizontal method of fabrication. To this query of the Committee, the Chairman of the Calcutta Port Trust has stated as under:

"When we placed the order with Jessops, they offered site construction in the form of vertical gates and, on that basis, the contract was given to them. But it was also a tender condition that we would accept either vertical or horizontal ones. So, it was known to us that it is possible to construct a gate in the horizontal position and then upright it, but we accepted Jossop's offer of vertical construction because we felt that by the end of 1970 we would be able to have at least one camber ready and Jessops would be able to start the assembling in the vertical position in that camber....The horizontal construction became more expensive in view of the fact that we had already accepted Jessops tender which was for vertical construction and they planned to have a major portion of their fabrications done at their Dum-Dum workshops and carry the heavy sections to Haldia after the assembly, whereas, when we asked them to do it horizontally, it meant some type of dry-docking system where they would have to assemble in smaller bits and move them to the site rather than have the work done at Dum Dum. Therefore, Jessops did not agree to it at first but when we explained to them the necessity and said that we could wait for the cambers to be ready once they must go ahead with the fabrication, they agreed to it."

6.33. The Committee have been informed in a written note furnished to them by the Ministry in September, 1976, that as against the original tender price of Rs. 144.01 lakhs plus escalation and extras (for vertical fabrication), the upward revision of price so far accepted comes to Rs. 195.25 lakhs plus wages and steel escalation and extras. Thus, the addition in cost itself has gone up from Rs. 35.90 lakhs to more than 51 lakhs.

The Committee have also been informed that the gates were placed inside cambers on 1st June, 1976.

6.34. As regards the delay on the part of Jessop & Co., in starting the fabrication work, in spite of steel supplies being made to them, the representative of Jessop & Co. has informed the Committee during evidence that :

"At that time we were doing the job for the Farakka Barrage and we had a workshop at Farakka and the intention was to shift that workshop by November 1971 to Haldia to get on with this work. Now, in fact, from November 1971 onwards we could not move the materials from Farakka on account of the border problems and the railway lines were entirely choked with defence

movements and it was in fact only in November 1972 that the workshop was in position in Haldia. This was one aspect of the serious delay. The other problem was, x x x concerning steel. It is true that the bulk of the steel was received by the middle of 1971 but this job is of all weld construction involving thick plates and the steel received from Rourkela steel plant was of laminated construction and defective and we had to resort to import directly by the Jessop and we also managed to get some steel from some other sources also. But the matching steel in fact was not available in the Jessops works till December 1972. Then we had the serious problems in West Bengal of power shortage and for doing the job of allweld construction involving very high power requirements, even small variations of power are not permitted, as it may lead to stoppage of work. These are the contributory factors which delayed the execution of the job."

6.35. As regards the result of delay on the part of Jessop & Co., the Ministry have in written note stated as follows :

"No work suffered on account of delay of the caisson gates as the civil work for the construction of the Entrance Lock was not ready and the lock could only be flooded on the 26th March, 1976. Had the caisson gates been completed in time, C.P.T. would have saved to the extent of at least Rs 28 lakhs, approx. on acount of escalations but the project would have still suffered as there was delay in completion of civil works."

6.36. On the question of delay in deciding the time of sand-blasting and paintings, the representative of Jessop & Co. has stated during evidence :

"Sand-blasting is a form of protection against corrosion and it is always better in any fabrication to do sand-blasting as the last operation. In a fabricating work it is not always possible to sand-blast after fabrication. Normally it is sand-blasted at the raw material stage and then assembled. In this case since the work was being done at Haldia which has a seaside atmosphere that is highly corrosive, we suggested to the port that it will be more advisable to sand-blast after the welding was completed to remove all the exide quoting on the steel."

6.37. As for the additional lump-sum payment of Rs. 5 lakhs agreed to be paid to Jessop & Co. on account of blasting in December, 1972, the Port Trust informed Audit in September, 1975 that :

"The extra cost of Rs. 5 lakhs has been arrived at after taking into consideration the expenditure that Jessop would have incurred, if the blasting, cleaning and application of paint were to be carried out at their Dum Dum workshops. Besides, the extra cost includes the cost of setting up a blast cleaning and painting workshop at site, not originally provided for in Jessop's tender."

6.38. The Committee note that the decision taken by the Calcutta Port Trust in 1970 for changing the method of construction of Caisson gates from "vertical position" to "horizontal position" was based on the anticipated delay in completion of the cambers where these gates were to be installed, and was primarily intended to effect a saving in time likely to be spent in fabrication of gates after the cambers become available. The fact that the intended saving in time could not be achieved and the change in the method

of fabrication ultimately resulted in an extra expenditure of more than Rs. 51 lakhs, are, in the opinion of the Committee indicative of lack of planning and coordination on the part of the Project authorities and their Consultants. This is one of the instances, where expenditure has proved to be deceptive or in other words led to bad judgement. The position was made worse by the contracting firm (M/s.. Jessop & Co.) delaying the completion of the work according to the new method from the stipulated date of September, 1972, to June, 1976, which resulted in an additional expenditure of Rs. 28 lakhs due to escalation. No action seems to have been taken against the firm on account of this delay.

The Committee cannot but express their unhappiness over the delay and resultant escalation in cost.

(4) Stoplogs

Audit Paragraph

6.39. Initially, the intention was to have three stoplogs for each of the three cambers. The number was reduced to two in March 1973. When it was decided that the caisson gates would be fabricated under horizontal method and not under vertical method within the cambers, the stoplogs assumed added importance as after the gates are brought to the lock barrel by floating them in water it would be necessary to de-water the cambers for fixing the gates. According to the decision taken in October 1970, installation of the caisson gates was to be completed by September 1972. Tenders for fabrication and installation of the stoplogs were invited in May 1972. The response being poor, fresh tenders were invited in August 1972. The lowest tenderer did not quote for all the items of work and hence it was rejected. The second lowest offer of 'F' for three stoplogs was for Rs. 21.18 lakhs; its delivery period was however, dependent on availability of steel as it had no steel in its stock. The second lowest offer was not, therefore, accepted and an order for supply of two stoplogs at a cost of Rs. 15.78 lakhs was placed on 'F' in June 1973 on the expectation that the required steel would be available with 'F' and both the stoplogs would be ready by March 1974. 'F', however, failed to manufacture the stoplogs by the due date. Installation of the stoplogs was expected to be completed by the end of August 1975.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—P 126]

6.40. In an earlier paragraph relating to Caisson Gates, references have been made to the delay in making the cambers available for fitting the caisson gates.

On the question of delaying the issue of tenders for the stoplogs up to May, 1972, when it was known in October, 1970 that installation of caisson gates was to be completed by September, 1972, the Secretary, Ministry of Shipping and Transport, has stated during evidence :

> "If one of the items is delayed, the manufacturer of another item related to that says what is the urgency of manufacturing it because the other item is not yet ready. This kind of argument was presented to us. Why give a stoplog now when it cannot be fitted, or when the gate is not ready.
>
> Our attitude in the Steering Committee has been to ask the manufacturer concerned to keep to the dates and expedite these works with reference to the progress made elsewhere.

x x x x x If certain things arrive which cannot be fitted, those have to be stored. We have to proceed in such a way that there is synchronisation. We have to see consistent set of dates in respect of all the items."

6.41. The Audit Paragraph also mentions about delay in the supply of stoplogs by the contractor firm 'F' (M/s. Triveni Structurals—a Public Undertaking from the stipulated month of March, 1974 to the new expected date of completion, *viz.* August, 1975. The Committee have been informed that the stoplogs were finally fitted at the site only by May, 1976.

6.42. Explaining the reasons for delay, the representative of the Ministry of Heavy Industry has stated during evidence :

"There were orders for two Nos. of stoplogs with M/s. Triveni Structurals, Ltd. Admittedly the General Manager, TSL, at a meeting held on 1st November, 1974, indicated that both stoplogs would be ready by December, 1974. These stoplogs, in pursuance of the commitment, were assembled at the works of M/s. TSL by the end of December, 1974. After the assembly, it required a certain amount of epoxy-grouting with a view to making this equipment water tight. One of the premier companies in the country, namely CIBA, was engaged for carrying out this work. CIBA failed to carry out this job of epoxy-according to required standards and satisfactorily. Therefore, TSL throught that some alternative to this process had to be found out. M/s. TSL felt that this equipment should be machined and accordingly machining of this equipment was taken up in consultation with the Calcutta Port Trust. The machine operations proved to be a time consuming process and hence it was only in August 1975 that they were able to despatch this equipment to the site which was erected in May 1976. The second stoplog was despatched in November 1975 and was also erected in May 1976".

6.43. Explaining the importance of epoxy in the process of making the gates water-tight, the Chairman, Caucutta Port Trust, has stated in evidence :

"The stoplog gates are sections of steel plates which come one after another and they form a kind of a barrier. It is put inside the groove. Now each layer of steel plate comes into contact with the next layer of steel plate. Now this contact must be as perfect as practicable in order to make them leakproof. That is why something is necessary in between either the machining should be perfect or steel to steel contract should be such that there should be no leakage. So, this method of epoxy is there to make it watertight."

The witness has added—

"Epoxy grouting is a chemical. It is a petro-chemical which they manufacture in CIBA."

The Secretary, Ministry of Transport has stated in evidence :

"They manufacture araldite which is their trade name which is made up of resin and hardener. They mix the two together. In that context it was examined how to utilise this resin in the context of epoxy-grouting."

Asked about the amount paid to CIBA & Co., the witness stated. "Nothing. x x x They were proving the quality of their product."

6.44. The representative of M/s. Triveni Structurals Ltd., has stated during evidence :

> "This stoplogs gate was our first attempt at the size of gates. We did try to bring in reputed company—CIBA & Co."

The witness has further stated :

> "Epoxy-grouting x x is a difficult operation. It requires araldite and other things. We tried our own experiments in our workshop and we found it was not possible to give them the tolerance necessary. They were willing to demonstrate. It was suggested by CPT that we could get this demonstrated by them free of charge. They were not able to do it. We did it by machining."

6.45. The Committee have also looked through the minutes of the three consecutive meetings of the Steering Committee held on the 1st November, 1974, the 2nd April, 1975 and the 15th January, 1976, and find that the discussions relating to Stoplogs were recorded therein as follows :

"*Minutes dated* 1-11-1974 :

> Shri Khanna, G. M. Triveni Structurals Ltd. indicated that they would deliver both the stoplogs (and complete all underwater works of radial valves and pen stocks gates) by end of December, 1974.

Minutes dated 2-4-1975 :

> Shri Khanna TSL said x x x As regards the 2 sets of camber stoplogs, all the six units of the first set have been fabricated and completed for machining. The units of the second set have been assembled and three units have been machined. Shri Khanna said that all the units will be delivered at Haldia by 15-6-1975.

Minutes dated 15-1-1976 :

> *Radial Valves, Penstock & Stoplogs (TSL)*
>
> No problem anticipated. The first of the stoplogs should be ready by the middle of February, 1976 and the second immediately thereafter within a week or 10 days."

6.45. The Committee are unhappy that the installation of stoplogs was delayed for more than two years from March, 1974 to May, 1976. The representative of M/s. Triveni Structurals Ltd., to whom this work was allotted, has told the Committee in evidence that this was their first attempt of that size of gates and that they also tried to bring in a reputed company—CIBA & Co. for purposes of epoxy grouting. On the question of this delay, the representative of the Ministry of Heavy Industry has informed the Committee during evidence that when the experiment of epoxy-grouting by the private company (CIBA) failed, the alternative of machining was taken up which proved to be a time-consuming process. It is a matter of concern to the Committee that a private firm (CIBA) was allowed to demonstrate their method of epoxy-grouting and as a result of this mere experimentation, which ultimately failed, avoidable delay was caused in the installation of the stoplogs.

6.47. Surprisingly enough, the Committee also do not find any mention of the difficulties experienced by M/s. Triveni Structurals in selection of a proper method to make the equipment water-tight, in the minutes of the three consecutive meetings of the Steering Committee held on the 1st November, 1974, 2nd April, 1975 and 15th January, 1976.

In one of their earlier recommendations relating to radial gates and penstocks also supplied by M/s. Triveni Structurals, the Committee have suggested the setting up of some machinery to ensure that whenever any difficulty is experienced by any public undertaking, particularly in dealing with essential works of core projects like Haldia, the administrative Ministry concerned should immediately be brought into the picture and the difficulties sorted out without delay. The present case of delay in the installation of stoplogs is another instance which lends support to the said recommendation of the Committee. The Committee hope the Government would be more vigilant in these matters and take suitable steps to achieve better coordination between the Ministries/Departments and the Public Undertakings concerned with a view to ensure a more efficient performance on the part of Public Undertakings to whom government works are awarded.

(5) Additional Culvert and pump house for impounding pumps

Audit Paragraph

6.48. After extensive hydraulic studies, the consultants of the Port Trust reported in July 1969 that a separate culvert at 14 feet below datum connecting the river and the dock basin, and also with connections to the culvert in the land side wall of the lock entrance at different points would be necessary. Tenders were invited in September 1970 for construction of this culvert and the pump house for the impounding pumps. Only two offers were received. The Chief Engineer of the Project recommended (January 1971) the lowest offer of 'K' for acceptance by the Port Trust. The Chief Engineer reported that 'K' was a reputed firm which had done several important works of a State Government and had machinery to do the above works. These works were entrusted to 'K' in November 1971 at a cost of Rs. 79.05 lakhs for completion in 18 months. By then 'K' had failed to complete in time several works awarded by a State Government and one work of Farakka Barrage Project. Construction of the culvert and the pump house was suspended by 'K' at the end of 1973 after doing only a small portion of the work. It was decided in August 1975 to terminate the contract and have the work executed by some other agency. The work has not yet been awarded to any other contractor (July 1975).

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—P. 127]

6.49. During evidence the Committee desired to know the reasons for delay of about 14 months in inviting the tenders after the consultant's Report that a separate culvert would be necessary. The representative of the Port Trust stated in reply :

"This is a non-critical item and the design had to be prepared after the decision was taken."

6.50. The Committee have been informed in a written note that after cancellation of the contract with firm 'K' (M/s Chanda Engineers), it was decided to negotiate with M/s Hindustan Construction Co. Ltd., working contractors at site, for completion of the balance work of additional culvert

and pumps house. The quotation given by M/s Hindustan Construction Co. Ltd. was, however, higher. Meanwhile, M/s United Commercial Bank, a Nationalised Bank, approached the Trustees for reviving the contract with 'K' and the Bank agreed to give financial assistance to the Contractors and also indicated to furnish additional performance guarantee to the extent or 5% of the contractual value of the work. Furthermore, 'K' had also obtained assurance from M/s Continental Construction Pvt., Ltd., a contracting firm of repute, that they would carry out this work on their behalf. Hence the contract with firm 'K' was revived, giving completion period of 14 months, *i.e.* 31-5-1977.

The Committee have also been informed that the work was suspended by the contractor for the reason that financial difficulties were experienced by them and though an advance of Rs. 6 lakhs was given to them by the Calcutta Port Trust in October, 1974, they did not show any better performance.

6.51. During evidence, the Committee desired to know whether any enquiries were made about the bank balance of M/s Chanda Engineers (India) Ltd. before awarding the contract to them in 1971. In reply the Chairman, Calcutta Port Trust stated :

> "As far as I can recollect, we did not particularly go into their financial position. We gave them the contract at that time on the basis of the reputation of the firm and because their offer was probably the lowest."

6.52. The Audit Paragraph states that "by then (November, 1971) 'K' had failed to complete in time several works awarded by a State Government and one work of Farakka Barrage Project."

The Committee, however, find that in the letter dated 30th January, 1971 recommending award of original contract to M/s Chanda Engineers, the Chief Engineer of the Project had observed as follows :

> "M/s Chanda Engineers (India) Ltd. is a reputable and a well known firm and have carried a number of civil engineer works under the State Government. They have the necessary machinery required to execute the work as required by us."

The Chairman, Calcutta Port, during evidence has also informed the Committee :

> "M/s Chanda Engineers quoted for this job in 1971 and at the time we were doing the contract, we did understand from the State Government and from other sources that there was nothing against that firm. As a matter of fact, their record previous to that was quite satisfactory in various fields."

Asked as to when the deficiencies of firm 'K' were brought to his notice, the witness stated :

> "Their work at Farakka was brought to my notice because I am also connected with Farakka and I am also a Member of the Farakka Control Board. It was discussed there and that was in 1974."

6.53. From the papers furnished to the Committee it is also seen that after the termination of the contract of M/s Chanda Engineers (India) Limited, the Calcutta Port Trust had recommended to the Ministry the

setting up of a Committee under the Chairmanship of the Development Adviser (Ports) to negotiate reasonable rates with Hindustan Construction Co. Ltd. on the basis of which a fresh contract could be awarded to them.

The Ministry had agreed to setting up of such a Committee under the Chairmanship of the Deputy Development Adviser (Ports). During evidence, the Committee desired to know as to why the Port Trust did not wait for the report of the above-mentioned Committee before re-awarding the contract of M/s Chanda Engineers (India) Ltd. The Chairman, Calcutta Port Trust stated in reply :

> "The Committee was set up to negotiate with other contractors, particularly, Hindustan Construction, in order to arrive at a settlement on, the assumption that the Chanda Engineers contract stood cancelled. When the Trustees decided not to cancel the Chanda Engineers contract but rather to revive the old contract under the old term and old escalation clauses and old prices, there was no necessity for the new committee to meet because we were no longer going to negotiate with the Hindustan Construction."

As to the reason or the decision to re-award the contract to the same contractor again, the Chairman, Calcutta Port Trust has stated in evidence :

> "When we cancelled the contract, one of the nationalised banks United Commercial Bank, came forward who had been advancing money to Chanda Engineering and requested us to reopen the issue. They came forward to guarantee the finance. We told the nationalised bank that this particular firm would not be able to deliver the goods because they did not have proper technical supervision. It was the United Commercial Bank, which brought forward the Continental Construction Co. to help Chanda, not the Port. It was a suggestion of the United Commercial Bank that they would request Continental Construction Co. to assist Chanda Engg. in their work if we would give them a chance. They gave an additional bank guarantee of 5%. On that basis, we decided to go through it again. In the meantime, we negotiated with Hindustan Construction Co. for the same job and when we found that they would cost us an extra amount to the extent of 18%, we thought that it would be better to give another chance to Chanda Engineering when their main difficulty was financed and a bank had come forward to assist them."

Asked as to whether this arrangement had the approval of the Ministry of Shipping and Transport, the witness replied that the Ministry had been kept informed. The Transport Secretary has also stated in evidence that :

> "When we received the information, we accepted the position."

6.54. In regard to the progress made by Chanda Engineers (India) Ltd. after revival of their contract, the Committee were informed in a written note furnished to them in March, 1977 that :—

> "The contract with Chanda Engineers (India) Ltd. in respect of the subject work was revived on 3-3-1976.

As per terms of revival of the contract Chanda Engineers (India) Ltd. furnished a programme indicating the completion of work by the end of April, 1977.

The Firm restarted the work in March, 1976 and considering the initial organisational time and mobilisation of men and machinery required, the progress of work up to the short period of dry months available before the onset of the monsoon *viz.* about 15-6-76 was considered satisfactory.

In view of the nature of the work involving deep excavation up to 35' below the ground level the execution of the work was naturally affected due to the monsoon condition. In spite of the same the progress achieved during this period was encouraging.

Since October, 1976 the progress got retarded due to obstruction met underground while sinking the 90 ft. dia. monolith and various ways and means had to be adopted to sink the well up to the desired level. However, in the process about 3 months' time has been lost which is expected to have a definite repercussion on the ultimate completion date *viz.* end April, 1977, as the sinking of the well will have to be completed before the adjoining culverts can be constructed and connected with the same. The firm in recent discussions had indicated that they will make every effort to complete the work before the onset of monsoon *viz.* June/July, 197 and a revised programme is being prepared by them.

In order to expedite the work, meetings have been held with Bank, Chanda Engineers (India) Ltd. and the Continental Construction Co. Ltd., and they have assured that the revised schedule agreed upon will be adhered to. The matter is being pursued vigorously and the progress of work kept under strict watch. It is proposed to have a further discussion with them in March, 1977 to review the position of the work."

6.55. The Committee note that the work relating to additional culvert and pump house was initially awarded to M/s. Chanda Engineers in 1971 but, since the firm had failed to execute the work despite an advance of Rs. 6 lakhs given to them by the Calcutta Port Trust in October, 1974, the contract with them was terminated in August 1975. The Committee are unhappy that no enquiry as to the financial position of the firm was made before awarding the contract to them.

6.56. In order to get the residual items of work executed, the Port Trust started negotiations with M/s. Hindsutan Construction Co., the working contractors at the site, and a committee was in fact appointed to negotiate reasonable rates with M/s. Hindustan Construction Co. Ltd. The Committee are surprised that before the departmental committee could proceed with the job assigned to them, the Calcutta Port Trust authorities decided to re-award the contract to M/s. Chanda Engineers on the recommendation of a nationalised bank (United Commercial Bank) who were stated to have agreed to extend financial assistance to the contractors and also to furnish additional performance guarantee to the extent of 5% of the contractual value of the work. The Bank had also obtained an assurance from M/s. Continental Construction Pvt. Ltd., a contracting firm of repute, to the effect that they would carry out the work

on behalf of Chanda Engineers Ltd. The Committee are somewhat perplexed by this whole exercise. Without awaiting the results of the efforts of the departmental committee appointed to negotiate reasonable rates with M/s. Hindustan Construction Co. the port Trust had extended a favour to M/s. Chanda Engineers Ltd. which, on the basis of their past experience, should not have been done.

6.57. From the latest information received by the Committee (March, 1977) in respect of actual performance of M/s. Chanda Engineers after re-award of contract to them, the Committee find that the ultimate date of completion, viz. **end of April 1977, is not going to be adhered to inasmuch as the firm later indicated that they will make every effort to complete the work before the onset of monsoon,** viz. **June/July, 1977. The main reason for this slippage of about three months has been stated to be the obstruction met underground while sinking the 90 ft. diameter monolith up to the desired level, which is necessary before the adjoining culverts can be constructed and connected with the same. The Committee cannot but express their unhappiness over the fact that in spite of assurances by the firm and their bankers, the firm have not been able to adhere to the ultimate date of completion as agreed upon in the re-awarded contract. The Committee desire that the Port Authorities should keep a vigilant watch over the completion of the work. This, of course, is without prejudice to the imposition of penalty etc. for delay in execution of the project.**

(6) Dredging

Audit Paragraph

6.58. The impounded dock basin covers about 170 acres with a turning circle of 1,800 feet diameter. The dock basin is about 5,000 feet long and 970 feet broad. A contract for dredging (i) about 65 lakh cubic metres in the dock basin for providing 34 feet draft (depth 38 feet) and (ii) 24.10 lakh cubic metres in the river basin was awarded to 'A' in November 1966. The dredging was to be completed in 36 months, *i.e.*, by October 1969. It was subsequently intimated in 1973 to 'A' that it would not be required to dredge the river basin as that would be taken up by the Port Trust as part of its river training programme. Completion of dredging was dependent on civil construction work of the berths in the impounded dock. The civil construction work of the berths started only in January 1968. The Port Trust permitted 'A' in February 1968 to withdraw its dredger and use it for a naval project, as it would not be possible to continue dredging in the dock basin after March 1968 till the understructures of the berths were ready. This permission was subject to the condition that the dredger would be brought back for recommencing dredging from September 1969. By the time the dredger was withdrawn in March 1968, 'A' had dredged about 45 lakh cubic metres in the dock basin. Consequent on the decision (February 1968) that the dock project should provide facilities for handling larger ships upto 80,000 DWT instead of up to 60,000 DWT additional dredging of about 25 lakh cubic metres became necessary for providing draft of about 40 feet (depth 45 feet). Including the left-over portion of the work awarded to 'A' about 45 lakh cubic metres more, therefore, were to be dredged in the dock basin.

'A' did not resume dredging in September 1969. In February 1970 Calcutta Port Trust asked 'A' to resume work. Despite reminders, 'A' did not do so. In August 1971 the Port Trust requested the Ministry of Shipping and Transport to use its good offices to persuade 'A' to recommence work by December 1971 at the latest. In December 1972 the Port Trust,

however, informed the Ministry of Shipping and Transport that the dock basin was ready for recommencing dredging from the beginning of 1972 only. The Port Trust further stated (December 1972) that dredging was taken up in December 1966 far in advance of the civil engineering work "in order to take advantage of a very low rate of Rs. 3 per cubic metre" offered by 'A'.

The Port Trust had proposed to 'A' that it should dredge the additional 25 lakh cubic metres in the dock basin in lieu of the dredging of 24.10 lakh cubic metres to be done by it in the river basin according to the agreement of November 1966.

In December 1971 the Development Adviser of the Ministry of Shipping and Transport was asked to discuss the matter with 'A'. After discussions the development adviser recommended the proposal of the contractor for dredging of 45 lakh cubic metres at the rate of Rs. 5.06 per cubic metre and payment of Rs. 37.50 lakhs towards mobilisation and demobilisation charges (cost of towage of dredger, insurance charges, charges for tug etc.). The question of re-inviting tenders and the possibility of getting the work done by Ministry of Transport dredger were also considered. In view of the prevailing dredging rates elsewhere, the Ministry was of the opinion (April 1973) that the cost of dredging would go up to about Rs. 8 per cubic metre if fresh tenders were invited and valuable time of about one year would be lost in inviting tenders and finalising them and mobilisation of equipment by the selected contractor. It was also not considered practicable to use a MOT dredger due to planning already made and the tight time schedule of the Haldia dock project. A negotiation committee was formed in January 1973 to have further negotiations with 'A'. In course of negotiations on 1st February 1973 the representative of 'A' was asked what would be the mobilisation charges if one of its dredgers in Mormugao was brought to Haldia, instead of bringing a new dredger from abroad. The representative of 'A' said that a dredger from Mormugao would not be available before the end of May 1973 and the mobilisation charges for it would be at least Rs. 24.50 lakhs. It was pointed out to the representative of 'A' that mobilisation charges of Rs. 24.50 lakhs demanded for a dredger available in India was very high compared to Rs. 37.50 lakhs demanded for a dredger to be brought from abroad. It was agreed in that day's meeting that 'A' would consider this aspect and give its rates next day. On the next day the representative of 'A' reduced the rate for dredging to Rs. 4.85 per cubic metre but demanded the mobilisation charge of Rs. 37.50 lakhs. As compared to the rate of Rs. 5.06 per cubic metre, the cost of dredging 45 lakh cubic metres was less by Rs. 9.45 lakhs. The mobilisation charge was, however, higher by Rs. 13 lakhs than that indicated in the meeting of 1st February 1973 for a dredger expected to be available by May 1973.

In April 1973 Government agreed to the rate of Rs. 4.85 per cubic metre and mobilisation and demobilisation charges of Rs. 37.50 lakhs on the basis of recommendations of the negotiation committee. At that time it was expected that the contractor would bring the dredger to Haldia in September 1973 and would complete dredging of 45 lakh cubic metres by about the middle of 1975. The dredger working in Haldia was brought from Mormugao. According to the progress report of the project as on 1st August 1973, dredging is expected to be completed by the end of October 1975.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—pp. 127—129]

6.59. For a proper appreciation and consideration of the points raised by Audit, the work allotted to the Dredging Contractor (Firm 'A'—I. van Milutinovic-PIM—A Yugoslav Firm), may be divided into two distinct sections as follows :—

(a) Dredging work in the Dock Basin area

Dredging work for 65 lakh cubic metres (depth 38 ft.) in the dock basin was awarded in November, 1966, to be completed within 3 years at a rate of Rs. 3/- per cu.m.

By January-February, 1968, the Contractor had dredged about 45 lakh cu.m., but the work could not be continued further as the same was dependent upon civil construction work of the berths which could be started only in January, 1968. Accordingly, the Contractor was permitted by the Port Trust to withdraw the Dredger from the area utilisation elsewhere, on the condition that it would be brought back by the Contractor by September, 1969.

6.60. The Audit Paragraph mentions that the resumption of work was not done by the Contractor, who was reminded about the same in February, 1970. The Development Adviser (Ports) in the Ministry of Shipping and Transport has, however, confirmed during evidence a later statement in the Audit Paragraph that the dock basin would be ready for recommencing dredging from the beginning of 1972 only. He said :

> "The position was that according to their agreement when they went away in 1968, they promised to come back and start the work in 1969. But in fact as has been brought out the Port Trust were not ready for the work till 1972."

6.61. By the time the Contractor was allowed to withdraw the Dredger in 1968, it had also been decided that the depth to be dredged should be increased to 45 ft., as a result of which another 25 lakh cu.m. of dredging work was required to be done in the area.

6.62. The Development Adviser (Ports) has informed the Committee during evidence that when the question of rates for the increased work was discussed with the Contractor (in December 1971) he demanded higher rates which were paid to him. To quote the witness :—

> "Yugoslav said this is now much more than the time we had allowed for in our earlier estimates. The cost and everything has escalated and they, in fact, said we consider that the previous contract is closed because of the time interval when we stopped our first contract and the time you want us to start. But they were prepared to negotiate if suitable escalations of costs are given to them. They were given 5% per annum escalation and Rs. 3/- got escalated over 4-5 years to round about Rs. 3.80 paise. Further, the work that was got to be done by them was not only the left over work but some additional work was added to it. ..... They indicated that the additional work cannot be considered as part of the old contract and, therefore, for this fresh rates must be fixed. At that stage whatever was the current market rate for dredging in the country was assumed for that particular quantity and then a total was worked out for both the balance quantity and the fresh quantity and that rate was accepted to be given to them, that is, Rs. 4.95."

6.63. As stated in the Audit paragraph, the Contractor had also demanded a payment of Rs. 37.50 lakhs towards the dredger mobilisation and

demobilisation charges. The question of inviting fresh tenders was also considered, but the Ministry felt that in that case the cost of dredging would go up to about Rs. 8/- per cu.m. and valuable time would be lost in inviting and finalising tenders. Following negotiations with the Contractor by a negotiating committee formed in January 1973, the Ministry ultimately agreed to pay to the Contractor a sum of Rs. 37.50 lakhs for bringing the Dredger from Mormugao, instead of bringing it from abroad, and the Development Adviser (Ports) has during evidence, explained the position thus—

> "This dredger which was working in Mormugao was removed from Mormugao and brought to Haldia because of urgency of work in Haldia after they were not able to use it in Goa. There was an agreement with Yugoslavas that when they resume work at Mormugao they will bring the dredger from overseas for which no mobilisation charges will be paid. They brought the dredger for Mormugao later on and the situation is the same as if they imported a dredger from overseas for Haldia."

As to the reasonableness of the mobilisation charges, the witness has added—

> "They wanted Rs. 75 lakhs to bring the dredger from the overseas. Then that was reduced to this amount. ..... It is not a very high charge. This size of dredger approximately costs Rs. 80,000 or Rs. 90,000 per day. .... So, I consider that it is not considered to be a high charge for the imported dredger. That is why we accepted the position.

6.64. The dredger was ultimately brought from Mormugao in September, 1973 and the work was then expected to be completed by middle of May, 1975. The Committee have been informed in a written note that the work was actually completed on 13th December, 1975.

As stated in the Audit Paragraph, it was not considered practicable to use the Ministry of Transport Dredger due to planning already made and the tight time schedule of the Haldia Dock Project.

The Committee were also told during evidence (June, 1976) that the Estuarian Dredger, which was due to be delivered from Garden Reach Workshop by then, had not yet been delivered.

(b) Dredging work in the River Basin

6.65. At the time of awarding the contract in November, 1966, 24.10 lakh cu.m. of dredging work in the river basin was also given to the Contractor at a rate of Rs. 3/- per cu.m. This work was ultimately taken away from the Contractor to be done by the Port Trust themselves. The Audit Paragraph mentions that the Port Trust had made a proposal to the Contractor to undertake the dredging work of additional 25 lakh cu.m. in the dock basin *i.e.* of 24.10 lakh cu.m. dredging work to be done by the Port Trust. The Committee have, however, been informed that the Ministry had informed Audit in February, 1976 as follows :—

> "The Calcutta Port Trust have reported that during discussions by the (late) Chief Engineer Haldia Dock Project, with the representative of M/s. Ivan Milutinovic—PIM held on the 24th April, 1971 for recommencing the dredging work, the question of dredging the additional quantity in lieu of dredging in the river provided for in the contract of 1966 was possibly discussed. However, no record of discussion is available with CPT."

6.66. The Committee find that in the General Conditions of Contract with the Contractor, the clause relating to 'Alterations, Additions and Omissions', provided as follows :

"The Engineer shall make any variation in the form, quality or quantity of the works or any part thereof that in his opinion be necessary and for that purpose or if for any other reason it shall in his opinion be desirable shall have power to order the Contractor to do and the contractor shall do any of the following :—

(a) Increase or decrease the quantity of any work included in the Contract.

(b) Omit any such work.

(c) Change the character or quality or kind of any such work.

(d) Change the levels, lines, position and dimensions of any part of the works.

(e) Execute additional work of any kind necessary for the completion of the works.

No such variation shall in any way vitiate or invalidate the Contract but the value (if any) of all such variations shall be taken into account in ascertaining the amount of the Contract Price."

6.67. The Committee note that after completion of 45 lakh cubic metres of dredging work in the dock basin area at Haldia the Dredging Contractor had to suspend the dredging operations in February, 1968, as the civil construction work of the berths, on which the residual dredging of 20 lakh cubic metres was dependent, had not been done. From the material before the Committee, it is apparent that the resumption of dredging work, normally due in September, 1969, was delayed much further as the Port Trust themselves were not ready for the work till January, 1972. This long interval enabled the Dredging Contractor to put forward a demand to treat the contract as closed or, in the alternative, to negotiate suitable escalation in the contracted rate of dredging of Rs. 3/- per cubic metre.

The long delay in completion of the civil construction work of the berths apart, a further period of about 21 months was lost in coming to terms with the Dredging Contractor, with the result that the dredging operations could be resumed only in September, 1973, and completed in Decembr, 1975, as against the originally stipulated date of October, 1969. In the process, the dredging contractor had to be paid at a higher rate of Rs. 3.80 per cubic metre for the residual work of 20 lakh cubic metres, and at the current market rate of dredging for the additional work of 25 lakh cubic metres that had become necessary due to the increased depth of dredging in the area, viz. an average dredging rate of Rs. 4.8 per cubic metre for the entire work of 45 lakh cubic metres. In addition, the project authorities had also to agree to payment of a sum of Rs. 37.50 lakhs to the Dredging Contractor by way of charges for bringing a dredger from Mormugao, which were equal to the charges for bringing a dredger from abroad. The explanations offered for this during evidence are that the dredger was removed from Mormugao because of urgency of work in Haldia and that no mobilisation charges were paid to the contractor for bringing a dredger later on for Mormugao from abroad.

6.68. The Committee feel concerned about the inordinate delay in completion of the civil construction work of berths in the dock basin area,

which held up the resumption of dredging work. It is evident that there was no advance planning whatsoever and no attempt was made to synchronise the two operations. The consequent escalation in the contracted rate of dredging from Rs. 3 to Rs. 3.80 per cubic metres cost the exchequer an additional sum of Rs. 16 lakhs. The Committee are surprised that after delaying matters from 1969 to 1972 and further spending considerable time of negotiations with the Dredging Contractor, the project authorities put themselves in an unenviable position where they had to pay Rs. 37.50 lakhs for bringing a dredger from Mormugao to Haldia on grounds of urgency. In the opinion of the Committee, such helplessness on the part of the project authorities is a sad reflection on the dredger position in the country. This is borne out from the statement in the Audit paragraph to the effect that it was not considered practicable to use a Ministry of Transport dredger due to planning already made. Further, from the information furnished to the Committee during evidence it is noted that the estuarian dredger, which was to be delivered from Garden Reach workshops by June, 1976 had not been delivered. The Committee would urge that immediate steps should be taken by the Government to improve their dredger position in order to save themselves from situations where the dredger contractors can dictate their own terms to them.

6.69. As regards the dredging work of 24.10 lakh cubic metres in the river basin which was awarded to the same contractor (Yugoslav firm) in November, 1966, the Committee note that the same was subsequently taken away from the contractor to be done departmentally. There is no record to show that any serious efforts were made by the project authorities to persuade the dredging contractor to undertake in lieu of this work the additional dredging work of 25 lakh cubic metres in the dock basin area at the originally contracted rate of Rs. 3 per cubic metre plus escalation. On the other hand, the project authorities had to agree to the treatment of the above mentioned work in the dock basin area as new work to be paid for at the current market rates of dredging in 1972-73. The total additional financial burden on this account works out to Rs. 47.25 lakhs viz. the difference between the contracted rate (after escalation) of Rs. 3.80 per cubic metre and the average rate of Rs. 4.85 per cubic metre actually paid to the contractor for the entire work of 45 lakh cubic metres (including 20 lakh cubic metres of left over work). In this connection, the Committee find that in terms of clause 83 in the General Conditions of Work with the contractor the project authorities had the power to increase the quantity of any work included in the contract and to ask the contractor to execute the additional work of any kind after taking into account the value of such variations. The Committee have no doubt that if the project authorities had seriously pressed their claim under this clause, there was every possibility of the contractor agreeing to undertake the additional work of 25 lakh cubic metres in the dock basin area (in lieu of 24.10 lakh cubic metres of dredging work in the river basin) at Rs. 3.80 per cubic metre, viz., the original contracted rate of Rs. 3 per cubic metre plus escalation. The Committee suggest that this aspect of the matter should be probed into further and responsibility fixed with a view to take suitable corrective measures for the future.

(7) Ore & Coal handling plants

Audit Paragraph

6.70. In May 1968 an order was placed on 'L', a public sector undertaking, for designing, fabricating and installing one ore-loading and one coal-

loading mechanical handling plant at an estimated cost of Rs. 4.20 crores. The ore and coal handling plants were of rated capacity of 6,000 tonnes and 3,000 tonnes per hour respectively and were to be installed by December 1970. The progress of work by 'L' was, however, slow. It was, therefore, decided in June 1968 that, for the sake of timely completion of the project, some of the major items should be off-loaded to other suppliers. Accordingly global tenders were invited by the public sector undertaking in December 1968 and orders were placed on company 'M' in January 1969 for the following equipment :—

(a) Four wagon tipplers—two for ore handling plant and two for coal handling plant.

(b) Two ship loaders and four stackers-*cum*-reclaimers for ore.

'L' decided (January 1969) to manufacture two stackers-*cum*-reclaimers and two ship loaders for the coal plant on the basis of design and expertise to be obtained from a foreign company.

After the order was placed on 'L' in May 1968, there were substantial changes in the design and capacities of some of the equipments. Because of these, 'L' demanded Rs. 12.76 crores in October 1970. In May 1972 the steering Committee of the Ministry asked the Port Trust to prepare a self-contained note on the claim of 'L' indicating its views about enhancement of the cost of the plants. The Port Trust recommended in June 1972 enhancement of the cost from Rs. 4.20 crores to Rs. 7.81 crores. In an inter-ministerial meeting held on 3rd July 1972 it was decided that the Development Adviser of the Ministry of Shipping and Transport would examine the various items of the claim of the public sector undertaking ('L') and make his recommendations to Government. According to another decision taken in that meeting, 'L' was asked to substantiate its claim itemwise with detailed justifications and documentary evidence. Instead of doing so, 'L' increased its claim in July 1972 to Rs. 16.84 crores. The Development Adviser recommended on 1st November 1972 payment of Rs. 9.95 crores subject to escalation and verification of certain facts. The matter remained under consideration for quite sometime, and in the meeting of the steering committee on 2nd August 1973 the Port Trust was asked to submit a memorandum of settlement jointly with 'L'. Accordingly, a memorandum of settlement was submitted on 14th August 1973 for increase in value of the work to Rs. 15.30 crores. Government accepted this in December 1973. In the meantime, Government authorised the Port Trust to pay, over and above the original contract value of Rs. 4.20 crores, Rs. 2 crores in April 1973 and Rs. 0.75 crore in November 1973 in view of the tight financial position of 'L'.

While agreeing to the increased amount of Rs. 15.30 crores, the Ministry of Finance observed (December 1973) that the rise in cost was due to lack of experience of the Port Trust and of 'L' in designing, and installation of plants. The increased cost was approved as this was a pioneering effort and the transaction was between two units in the public sector.

According to the progress report as on 1st August 1975, the handling plants are expected to be completed by the end of December 1975.

Reinforced cement concrete (RCC) foundations for wagon tipplers were to be got constructed by the Port Trust. In August 1967, 'L' had given tender designs showing RCC foundations up to a depth of 30 feet. According to the final drawings given by 'L' (from May 1969 onwards) the depth of the foundations was increased from 30 feet to 49 feet. The increase in

the depth was stated (December 1969) to be necessary due to change in the type of wagon tippler for saving foreign exchange.

This increased the cost of the foundations by about Rs. 60 lakhs. Contract for construction of foundations for wagon tipplers was awarded to 'N' in June 1970, the stipulated time of completion being June 1971. The foundations (43 feet) for the wagon tipplers for the ore handling plant were completed in February 1974, while the foundations (49 feet) for the wagon tipplers of the coal handling plant were likely to be completed by the end of October, 1975.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—pp. 129—131].

(a) Award of contract

6.71. The Committee have been informed in a written note that the Government of India appointed a Committee in January, 1966 to examine the feasibility of executing the Haldia Dock Project without the assistance of World Bank loan and in this context to examine in detail the availability and suitability of indigenous resources, particularly for the execution of the Ore and Coal Handling Plants. This Committee in its Report of April 1966 came to the conclusion that although the public undertaking 'L' (MAMC) could not claim experience of having manufactured such plants as required by the Calcutta Port Trust, they had unutilised capacity and would be in a position to undertake manufacture and erection of the plants with the assistance of foreign experts from Poland who would supervise and check their design of the plants as a whole and also of the individual equipments. It was in this context that the order in respect of the Ore and Coal Loading/Handling Plants was placed on MAMC.

The Chairman, Calcutta Port Trust has informed the Committee during evidence that "... these equipments were sophisticated and now they are also being manufactured here for the first time and particularly by MAMC. They have never done this job before."

(b) Changes in design and reasons for delay

6.72. In written information furnished to the Committee, it has been stated that immediately on receipt of the order in May, 1968, MAMC engaged Polish experts, finalised the layout and basic requirements and design of the individual equipment by March, 1969. They also recommended substantial changes in designs and capacities of some of the major equipments.

6.73. During evidence, the Committee desired to know as to who made the changes with reasons therefor and the changes recommended and eventually made in the designs and layout of the said plants. In reply, the Chairman, Calcutta Port Trust, stated :

"MAMC submitted their offer on the specifications that were drawn up by the CPT, giving the major design data and capacities and thereafter an order was placed with the MAMC on the basis of pure negotiation, as that was one of the directives of the Government at that time. One of the stipulations of the MAMC tender was—and which was accepted by the Port Trust Authority—that on receipt of order they would engage the Consultants to draw out the layout of the Ore and coal berths. As we have mentioned earlier these equipments were sophisticated and how they are also being manufactured here for the first time

and particularly by MAMC. They have never done this job before. So, the contract actually stipulated that the layout would be prepared by the consultants at the drawing office of MAMC in Durgapur, which would be examined by the Port Trust and accepted. This was done; and by January-February 1969, that was completed. At the time of the preparation of the layout, certain changes were made in order to suit the requirements and the efficiency that was necessary for proper material handling at these berths. The changes were primarily in certain capacities. In our tender specification in regard to ore, we specified a certain capacity; but thereafter when it was also known that we could bring in large ore carriers, it was felt that the capacities of those conveyor beltings should be increased. So, from 2250 tonnes per hour it was raised to 3,000 tonnes per hour. The Polish consultants also asked us to have a proper efficiency factor. Our design should be of the higher order. It should be rated at a higher tonnage, so that we can get the average efficiency as we desired. Considering those factors, there were certain changes in the capacities and also changes made in certain equipments. Those equipments, we specified particularly in our tender documents *viz.* stackers and reclaimers separately; and they were quoted for by MAMC, whereas after consulting the Polish consultants, it was decided to go in for combined stacker-reclaimers. These were the reasons for which changes were made."

6.74. In regard to the delay in manufacture and erection of the Plant, the Committee have been informed in a written note that during the period that the changes in designs were being finalised, the MAMC came to the conclusion that they would not be able to fulfil the contract within the reasonable time unless they off-loaded certain major equipment to the private industries. Accordingly, off-loading of ore and coal tipplers, ore stacker-cum-reclaimer and Ore Shiploaders was done by MAMC in April, 1969. Till this period almost no progress could be made with regard to manufacture and fabrication excepting procurement of steel. It has been added that it was in February, 1971 that MAMC started normal erection at site after receipt of very small quantity of structural steel from their works. Till 1974 the progress with regard to both manufacture and fabrication of materials and erection at site thereafter was erratic in nature primarily due to their lack of expertise, suitable know-how for coordination of various agencies for uninterrupted progress and also lack of appreciation of the site conditions in a virgin land. It is from middle of 1974 onwards that appreciable progress could be made by MAMC.

In June, 1976, the Committee were informed that work was being done in separate circuits and was expected to be completed by September 1976.

A Study Group of the Committee visited Haldia in the first week of December, 1976. The Study Group found that the coal handling plant was practically ready but the coal stacking had not yet commenced. The reason stated was that actual contracts about movement of coal had not yet been finalised. The Study Group gathered an impression that even after commissioning of the Haldia Docks, actual movement of coal might be delayed.

As regards the ore-handling plant, the Study Group found that the same was practically ready for operation. Stock piling of iron ore had also commenced but the stocks were not impressive.

6.75. On the question of delay due to inexperience of the MAMC, the Study Group were assured by the Port authorities that after Haldia, MAMC had become rich in experience and their supplies to other Ports like Madras and Vizag had been more regular than had been the case with supplies to Haldia.

(c) *Escalation in cost*

6.76. As regards escalation in cost, the Chairman, Calcutta Port Trust, has stated in evidence :

> "As the specifications, layout and other things were actually drafted under our guidance and we did approve of the layout, we could not agree with regard to the increase in price. As such, we requested the Development Adviser to go into the matter and effect a compromise on this."

In a written note furnished to the Committee after evidence, it was stated that :

> "According to the recommendation of the Development Adviser, M.O.T., the memorandum of settlement was signed on 14.8.73 wherein the lump sum contract on turn-key basis was enhanced to Rs. 995.21 lakhs. This amount was exclusive of the extra expenditure which may be incurred after verification of actual tonnage of certain items of work as well as for the few other items to be paid on actuals for broughtout plus 10% as overhead estimated to an amount of Rs. 328.63 lakhs. The lump sum amount was also exclusive of any extra payment due to further escalation on labour and materials, customs and excise duties, rate of exchange and sales tax if payable estimated to an amount of Rs. 206 lakhs. The total estimated amount was, therefore, computed to be Rs. 15.30 crores.
>
> The contract is still in operation and as such final payment is yet to be done. However, it is expected that the project will be completed within the said estimated amount.
>
> In his recommendation for upward revision of prices, the Development Adviser, M.O.T. *inter alia* stated that "there have also been some changes, in some cases quite substantial, in the design and capacities of some of the equipments after placement of orders of MAMC, in order to achieve the designed loading rate of both the plants. This has resulted in increasing the quantum of MAMC's work both in design and steel work. Due to MAMC's inability to adhere, in some cases, to original arrangements, CPC's own share of work has also gone up."

6.77. The Committee also find that when the case relating to enhancement of cost was submitted for the orders of the Finance Minister, he recorded the following minute :—

> "This was discussed with Secretary (E). It is clear that rise in cost of the plant has been due to inexperience of both CPC and MAMC in matter of designing, supply and installation of plant. Secretary (E) felt that though there has been increase of 300% in the initial contract price, considering that this was a pioneering effort and that the transaction is between the two units in the public sector, the revised estimates should be approved. We are increasing the role of public sector in an overall economic activity and it is necessary to avoid such pitfalls at least in future.

In view of the reasons given in the above notes, I approve the revised estimates reluctantly."

(d) *Effect of delay on traffic*

(i) *Iron Ore Traffic*

6.78. The Iron Ore berth provided at Haldia can handle 4 million tonnes of ore per year.

The Committee find from the Minutes of the 18th meeting of the Steering Committee held on 2nd April, 1975 that the MMTC were required from August, 1975 onwards to furnish to the Japanese the monthwise projections of ore likely to be exported. During evidence, the Committee desired to know as to what extent the export of iron ore to Japan had suffered due to non-completion of the Haldia Project at that time.

The Secretary, Transport stated in reply :

"I should place the matter in the correct perspective. We have to depend upon the market conditions. So, MMTC, in fact, allocated ore to different ports, according to the available port facilities. Before we make a statement on loss, we should know whether a certain quantity of ore has not been exported simply because the Port is not ready. We have to take into account the compensatory movement also."

Asked whether the delay had led to the loss of certain exports which could have taken place, the witness stated "in that sense you are right".

As regards the future projections of iron ore exports through Haldia, the representative of the MMTC informed the Committee during evidence in June 1976 that :

"This year the ore which we are planning to export via Haldia is .4 million tonnes, provided it will be ready by January 1977. In the subsequent year, we are planning to export on the whole 23 million tonnes of ore and out of the total programme of ore, 3 million tonnes will go via Haldia. Similarly in 1978-79, which is the end of the Plan, we expect to export 24.5 million tonnes of which 4 million tonnes will go via Haldia."

The Study Group of the Committee which visited Haldia in December, 1976, were informed that the estimated ore traffic at Haldia during 1977-78 was 1.5 million tonnes

(ii) *Coal Traffic*

6.79. As regards the coal traffic the berth being provided is designed to handle 3.5 million tonnes per year, which can be stepped up to 5.00 million tonnes per annum with additional investment on reclaimers etc. The Committee find that the following projections of traffic were made by the Calcutta Port Trust in respect of the Fifth Five Year Plan (up to 1978-79) :—

Year	Calcutta Port	Haldia Docks	Total
1975-76	·80	·80	1·60
1976-77	—	2·50	2·50
1977-78	—	3·00	3·00*
1978-79	—	3·50	3·50

*(The Study Group of the Committee which visited Haldia in December, 1976, were informed that coal traffic at Haldia Port during 1977-78 was now estimated to be 1·5 million tonnes.)

The Committee were informed in May, 1977 that the Department of Coal had set up a Working Group to arrive at a firm indication in regard to the actual quantum of annual coal traffic expected to materialise during the next ten years, and that the recommendations of the Group were awaited.

6.80. The Committee also called for the actual coal traffic handled at Calcutta during the year 1975-76. According to the information furnished by the Ministry, about .92 million tonnes of coal traffic was handled at Calcutta Port in that year, which comes to only about 67% of the total projection made for that year. As regards the extent of utilisation of the existing coal handling plant at Calcutta, the Committee have been informed that as against the working capacity of 2500 m.t. per shift of 8 hours, the actual use of the plant in 1975-76 was 1950 m.t. per day. The reasons for this short utilisation of installed handling capacity there have been stated to be shortage of open four wheeler wagons, non-availability of suitable ships for loading coal in properly phased manner and irregular arrival of coal.

As regards the future fate of this plant at Calcutta, the Committee have been informed in May, 1977 that the same is not proposed to be utilised till such time as the throughput of coal at Haldia Coal Berths has reached its maximum capacity. This plant will be kept only a standby to be used at short notice in cases of emergency or in the event of very small ships (mini bulk carriers) being utilised for loading coal which may not be possible or economical at Haldia Coal Berths.

It has been added that the question of distribution of future coal traffic between Haldia and Calcutta shall be decided after the recommendations of the Working Group about coal traffic forecasts are received.

6.81. The Committee note that the work of designing, fabricating and installing of sophisticated equipments of ore and coal handling plants at Haldia was allotted to M.A.M.C., a public sector undertaking, which according to Ministry's own statement, had never done this work before, on the recommendation of a committee appointed by the Government of India in 1966 to examine the availability and suitability of indigenous resources The plants were originally scheduled to be installed by December, 1970, but even after off-loading some of the items, M.A.M.C. was able to start making some progress only from the middle of 1974 and when the Committee took evidence in June, 1976, the work was yet to be completed. The reasons for delay have been stated to be changes in designs and capacities of some of the major equipments and lack of expertise and suitable know-how with M.A.M.C. The cost of the plants also rose from the initial contract price of Rs. 4.20 crores to Rs. 15.30 crores.

6.82. The need for encouraging indigenous resources notwithstanding, the Committee consider the pitfalls, both in respect of long delay of six years and more than three-fold increase in cost, as unfortunate. This aspect of the matter was brought to the notice of the Finance Ministry, who, as pointed out in para 6.77 of this Report, had stressed the urgency of avoiding such pitfalls in future. The Committee note that after Haldia, the M.A.M.C. has gained in experience nad their supplies to other Ports like Madras and Vishakhapatnam are stated to be more regular than was the case with supplies to Haldia. The Committee hope that the expertise that has been achieved at great cost and effort would be further developed and perfected.

6.83. Another matter of concern to the Committee is the flow of sufficient traffic in iron ore and in coal to ensure full and complete utilisation of the capacity created at Haldia for handling these commodities. As it is,

for creating facilities for handling about 20 lakh tonnes (16 lakh tonnes of raw materials for fertiliser production and about 3 to 5 lakh tonnes of finished fertiliser) with two unloaders, storage shed and bagging and stitching equipment. It was estimated in January 1971 that the total traffic of fertiliser would be about 11.47 lakh tonnes per annum by 1978-79 (1.97 lakh tonnes of finished fertiliser and 9.50 lakh tonnes raw materials for fertiliser production). The steering committee decided in that month that two unloaders (with total handling capacity of 20 lakh tonnes per annum) proposed by the Port Trust would be necessary. The question of purchasing the unloading from 'P' under this estimate remained under consideration for some time, but was dropped in November 1971 as 'P' did not have licence for manufacture of unloading equipment. The estimate for Rs. 329 lakhs was revised by the Port Trust in January 1972 to Rs. 331.39 lakhs. This estimate was approved by Government in March 1972. The traffic at the end of the Fifth Plan was then estimated to be 13 lakh tonnes. The loan assistance from the foreign country was subject to appointment of consultants for the work from that country, and for this the foreign country agreed to pay as grant the entire amount payable as fees to the consultants. The estimated approved by Government in March 1972 for Rs. 331.39 lakhs (including foreign exchange of Rs. 100.34 lakhs) was revised in May 1972 to Rs. 348.72 lakhs (foreign exchange of Rs. 133.95 lakhs) mainly to include the fees for consultants. The estimate was further revised in January 1973 to Rs. 525.25 lakh (excluding Rs. 26.25 lakhs payable as fees to consultants to be reimbursed as grant by the foreign country) on the basis of quoted prices, consequent on price rise. It was estimated by the Calcutta Port Trust in August 1974 that the actual cost of the handling facilities would be about Rs. 953.94 lakhs (foreign exchange : Rs. 133 lakhs). In February 1975 it was estimated that the actual cost might be about Rs. 1,395 lakhs. The amount of loan sanctioned by the foreign country is Canadian $ 19 lakhs (about Rs. 142.50 lakhs). According to the conditions of the loan sanctioned by the foreign country, import of all the items not available indigenously will have to be made from that country. Order for two unloaders was placed on 'H' in August 1974. Tender for bagging and stitching plant was received in October 1974 and tenders for supply, delivery, erection and commissioning of the fertiliser handling equipment were received in June 1975; these tenders were under consideration (August 1975). The mechanical handling facilities are expected (August 1975) to be available by December 1976.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—pp. 131—133]

(a) Revision of Estimates

6.86. The table below indicates the increases in cost from time to time of the mechanical handling facilities provided at Haldia for about 20 lakh tonnes of fertilisers per annum :—

Year	Expected cost	Brief details of Equipment to be provided
1	2	3
1965	Rs. 42 lakhs	Two ship unloaders (without storage sheds and bagging/stitching equipment).
1968	Rs. 55 lakhs	Do.
1969 (Dec.)	Rs. 106 lakhs	One ship unloader (without storage sheds and bagging/stitching equipment).
After receipt of recommendation of Canadian Expert Team.	Rs. 329 lakhs	Two ship unloaders (plus storage sheds plus bagging/stitching equipment).

for creating facilities for handling about 20 lakh tonnes (15 lakh tonnes of raw materials for fertiliser production and about 3 to 5 lakh tonnes of finished fertiliser) with two unloaders, storage shed and bagging and stitching equipment. It was estimated in January 1971 that the total traffic of fertiliser would be about 11.47 lakh tonnes per annum by 1978-79 (1.97 lakh tonnes of finished fertiliser and 9.50 lakh tonnes raw materials for fertiliser production). The steering committee decided in that month that two unloaders (with total handling capacity of 20 lakh tonnes per annum) proposed by the Port Trust would be necessary. The question of purchasing the unloading from 'P' under this estimate remained under consideration for some time, but was dropped in November 1971 as 'P' did not have licence for manufacture of unloading equipment. The estimate for Rs. 329 lakhs was revised by the Port Trust in January 1972 to Rs. 331.39 lakhs. This estimate was approved by Government in March 1972. The traffic at the end of the Fifth Plan was then estimated to be 13 lakh tonnes. The loan assistance from the foreign country was subject to appointment of consultants for the work from that country, and for this the foreign country agreed to pay as grant the entire amount payable as fees to the consultants. The estimated approved by Government in March 1972 for Rs. 331.39 lakhs (including foreign exchange of Rs. 100.34 lakhs) was revised in May 1972 to Rs. 348.72 lakhs (foreign exchange of Rs. 133.95 lakhs) mainly to include the fees for consultants. The estimate was further revised in January 1973 to Rs. 525.25 lakh (excluding Rs. 26.25 lakhs payable as fees to consultants to be reimbursed as grant by the foreign country) on the basis of quoted prices, consequent on price rise. It was estimated by the Calcutta Port Trust in August 1974 that the actual cost of the handling facilities would be about Rs. 953.94 lakhs (foreign exchange : Rs. 133 lakhs). In February 1975 it was estimated that the actual cost might be about Rs. 1,395 lakhs. The amount of loan sanctioned by the foreign country is Canadian $ 19 lakhs (about Rs. 142.50 lakhs). According to the conditions of the loan sanctioned by the foreign country, import of all the items not available indigenously will have to be made from that country. Order for two unloaders was placed on 'H' in August 1974. Tender for bagging and stitching plant was received in October 1974 and tenders for supply, delivery, erection and commissioning of the fertiliser handling equipment were received in June 1975; these tenders were under consideration (August 1975). The mechanical handling facilities are expected (August 1975) to be available by December 1976.

[Paragraph 33 of the Report of the Comptroller and Auditor General of India for the year 1974-75—Union Government (Civil)—pp. 131—133]

(a) Revision of Estimates

6.86. The table below indicates the increases in cost from time to time of the mechanical handling facilities provided at Haldia for about 20 lakh tonnes of fertilisers per annum :—

Year	Expected cost	Brief details of Equipment to be provided
1	2	3
1965	Rs. 42 lakhs	Two ship unloaders (without storage sheds and bagging/stitching equipment).
1968	Rs. 55 lakhs	Do.
1969 (Dec.)	Rs. 106 lakhs	One ship unloader (without storage sheds and bagging/stitching equipment).
After receipt of recommendation of Canadian Expert Team.	Rs. 329 lakhs	Two ship unloaders (plus storage sheds plus bagging/stitching equipment).

1	2	3
1972 (January)	Rs. 331·39 lakhs (including foreign exchange of Rs. 100·34 lakhs)	Two ship unloaders (plus storage sheds plus bagging/stitching equipment).
1972 (May)	Rs. 348·72 lakhs (including f.e. of Rs. 133·95 lakhs)	Do.
1973 (January)	Rs. 525·25 lakhs (including f.e. of Rs. 133·95 lakhs)	Do.
1974 (August)	Rs. 953·94 lakhs (including f.e. of Rs. 133 lakhs)	Do.
1975 (January)	Rs. 1,395 lakhs (including f.e. of Rs. 133 lakhs)	Do.

6.87. The Committe have been informed that the entire foreign exchange element will be met from the Canadian loan of 1.90 million C.S. (Rs. 142.50 lakhs) for the Project.

The Committee have also been informed that no amount has been paid to the foreign consultants, their fees having been paid by the Canadian International Development Agency as out-right grant.

The following reasons have been furnished to the Committee for revision of estimates from time to time :—

"(i) After the finalisation of the detailed scheme with the canadian Consultants in March 1973 it was found necessary as a result of detailed investigation and also to accommodate Fertiliser Corporation of India's special requirement to modify the scheme to certain extent without altering the basic scope of the project.

(ii) There being lack of expertise on the manufacture of handling equipment necessary for the scheme, the itemised price estimation could not be done accurately. Hence it was indicated at each instance that actual cost will be known only after tendering.

(iii) Extensive price rise in the country after 1972."

The Chairman, Calcutta Port Trust, has informed the Committee during evidence that :—

"Now, it is estimated that apart from handling fertiliser raw material that is required by the Fertiliser Corporation, we will also be handling fertiliser raw materials for other organisations, such as, the Hindustan Lever and other firms and we have also to cater for a large amount of import of finished fertilisers. The detailed lay-out design was prepared through the help of Canadian consulting engineers appointed by the Canadian Government through their organisation. This lay-out has been approved by us and we are following that. In this particular scheme, the Agriculture Ministry is also co-operating with regard to the import of the finished fertilisers and the lay-out includes complete automatic bagging and stitching of fertilisers."

6.88. Asked to explain reasons for the spurt of the original estimate of Rs. 42 lakhs in 1965 to Rs. 1,395 lakhs in 1975 in respect of the mechanical handling facilities for fertilisers, the Ministry of Shipping and Transport

have in a written note dated 26 March 1977,* stated as under :

"The original estimate of Rs. 42 lakhs for mechanical handling facilities for fertiliser prepared in 1965 was merely for the provision of an unloader to be installed on the fertiliser berth. This scheme included neither any mechanical transit facilities nor storage from the berth but contemplated transhipment of cargo either directly by barge loading or by wagons.

The scope of this project had to undergo a radical change to cater to the needs of the Fertiliser Corporation of India and the revised scheme involving the direct participation of the Ministry of Agriculture envisages incorporation of an extensive conveying system, storage facilities, and provision of automatic bagging and stitching equipment for raw materials. An estimate amounting to Rs. 331.39 lakhs covering the said provisions was first sanctioned in 1972. This estimate therefore should be considered as basic and original estimate for the project, which has been revised to Rs. 1,395 lakhs in 1975. Therefore, the increase in the estimated cost for the fertiliser plant is to be compared with the estimate as sanctioned.

With the enlargement of the scope of the project as indicated in all foregoing paragraph, it was estimated by the Foreign Consultants that the overall designed capacity will be in the region of 1.68 million tonnes per year. Taking into account operational limitations, the berth with its mechanised system will be able to achieve the annual throughout of 1.5 to 1.8 million tonnes. The fertiliser traffic projected for a period 3-4 years beyond the commissioning of the project is 1.5 million tonnes per annum and the project would be economically viable at this throughput."

6.89. The Study Group of the Committee which visited Haldia in December 1976 understood that the fertiliser berth was practically ready. The berth was being connected directly with the fertiliser plant under construction by the Fertiliser Corporation of India at Haldia. The berth also provides for automatic bagging and stitching for imported finished fertiliser. The Study Group, however, noticed that the adjoining space had yet to be cleared of construction materials and if that was not synchronised, the operation of the berth might be somewhat delayed beyond the commissioning of the Docks.

In a note furnished to the Committee in April 1977, it was stated that the civil construction work of the Fertiliser Berths had been completed and installation of the mechanical handling arrangement including conveyer system on the jetty was in progress. It was added that the berth was likely to become operational in April 1978.

(b) Anticipations of traffic vis-a-vis handling capacity provided

6.90. As mentioned in the Audit paragraph, the facilities being provided can handle 20 lakh tonnes of fertilisers per annum.

The traffic to be handled at the plan will consist of raw materials for fertilisers and finished fertilisers.

*Not Vetted by Audit.

So far as raw materials are concerned, the representative of the Ministry of Fertilisers and Chemicals has informed the Committee during evidence :

> "In so far as the fertiliser raw material is concerned, besides the Fertiliser Corporation of India, we have also some super phosphate units which will require imported rock phospate. These units are already operating. In addition, the Fertiliser Corporation of India is setting up two plants, one at Sindri and the other at Haldia. The Sindri plant is expected to be in operation by early 1978. When the facilities for handling fertiliser raw materials are ready, that is in 1978-79, we anticipate that the fertiliser raw materials to be handled at the port of Haldia would be of the order of 7 lakh tonnes and in the subsequent year, it would increase to 860,000 tonnes and in 1980-81 and thereafter it would be 950,000 tonnes."

In regard to finished fertilisers, the representative of the Ministry of Agriculture has stated during evidence :

> "As far as the Ministry of Agriculture is concerned, in 1970 when we were first consulted about the capacity of the mechanical handling plant, we estimated what part of the imported fertilisers could be handled through this port and, for that, we took into account not merely the total imports which might be made in 1970 and later years but also what the hinterland of Haldia Port would require which is mainly North-Eastern Assam, Bihar, West Bengal, Orissa and the Eastern part of U.P. We had then made the estimate that, taking into account the indigenous production also, which is likely to serve this area, we would possibly be able to bring in nearly 1.97 lakh tons of imported material from the Haldia Port. The present estimate for 1978-79 is slightly higher for two reasons. One is that the indigenous production which we had estimated would come up in this area, would not be coming up in this period. So, we would have to import a little more for the hinterland. The second reason is that, at the time we made the estimate, the consumption of fertilisers in these eastern States, apart from being very low in absolute terms, was also very erratic; it was 40,000 tonnes in one year, 25,000 in the the next, etc. So, we would require more fertilisers to serve this area. That the estimate of finished fertiliser imports which would be brought into Haldia to serve the hinterland would now go up to 3.6 lakh tonnes as against the original estimate of 1.49 lakh tonnes."

The total anticipated fertiliser traffic (both, raw materials and finished fertilisers) through Haldia from 1980-81 and thereafter would thus come to about 13.10 lakh tonnes per annum.

(c) Loan by Canadian International Development Agency

6.91. As mentioned in the Audit paragraph, a loan of Rs. 142.50 lakhs by the Canadian firm had a condition tagged to it that import of all the items not available indigenously would have to be made from that country. During evidence, the Committee desired to know whether this kind of condition was there in the loans from all western countries. In reply, the Secretary (Transport) stated :

> "So far as I know, such conditions are usual when bilateral loans are prescribed."

6.92. In a note furnished to the Committee in May 1977, it has been clarified that 'tied loans' from other countries are not uncommon and that such tying is of two categories, namely 'project tying' (*viz.* the proceeds of the loan can be used only for the specific projects or uses) and 'country-tying' (*viz.* tied to procurement from the donor country). It has been added that in the present case, the country concerned was Canada and the relevant loan agreement contained the following provision :

> "Except as may otherwise be specifically agreed to by Canada, the proceeds of the loan shall be used by India exclusively for the purchase in Canada of equipment for the fertiliser bulk handling facility for ports in India."

The Ministry have stated that it should not be construed as a stipulation that all equipment required to be imported for the project would necessarily have to come from Canada. Purchases from other sources against payments to be made out of our own resources or under some other sources of financing available to us are not precluded.

The full text of the note received from the Ministry is reproduced in Appendix II.

6.93. The Committee note that after finalisation of the detailed scheme regarding mechanical handling facilities for fertilisers at Haldia with the Canadian Consultants in March 1973, the Project authorities found it necessary to modify the same to accommodate the Fertiliser Corporation of India's speical requirement. There was, however, no change in the handling capacity of the equipment which remained at 20 lakh tonnes per annum and, as stated by the Ministry, the modifications also were only 'to some extent without altering the basic scope of the project'. In the light of this position, the Committee are unable to understand the 33 fold increase in the cost of the equipment from Rs. 42 lakhs in 1965 to Rs. 1395 lakhs in 1975. The figures speak for themselves.

6.94. In a note furnished to the Committee in March 1977, it has been contended that since the first estimate for the project actually sanctioned in 1972 was for Rs. 331.39 lakhs, the comparison should be between this sanctioned estimate (Rs. 331.39 lakhs) and the revised (1975) estimate of Rs. 1395 lakhs. Even on that comparison, there has been a four-fold increase. In the opinion of the Committee, it is a moot point whether the estimations were realistically made on the basis of sound projections and handling cost implications or they were simply escalated upwards to fit in within the framework of the prospective offer of a Canadian loan. In any case, one very vital factor seems to have been lost sight of, namely, the question of capacity created vis-a-vis requirements. As mentioned in the Audit paragraph, Government's own anticipations of traffic in fertilisers at Haldia for 1978-79 were assesed in January 1971 at 11.47 lakh tonnes and in January/March 1972 at 13 lakh tonnes. The latest calculations in this regard as placed before the Committee during evidence are 13.10 lakh tonnes per annum (both raw materials and finished fertilisers) from 1980-81 and thereafter. It is, therefore, obvious that by providing mechanical handling facilities for 20 lakh tonnes per year, an excessive handling capacity of about 7 lakh tonnes per year has been created at heavy cost which is likely to remain unutilised on the present showing. The extra expenditure involved in the creation of this capacity is also bound to have its impact on the Port's charges for handling fertilisers which will in turn make

the imported fertilisers more costly. The Committee, therefore, suggest that the matter should be looked into by a team of experts including a costing expert with a view to optimise the use of the handling capacity created at the fertiliser berth of Haldia Docks. The Committee will like to be informed of the action taken in this regard within three months of the presentation of the Report.

CHAPTER VII

HALDIA URBAN COMPLEX

(a) Development of Industries

7.1. The importance of a port depends on the area and development potential of the hinerland it commands. A large population with agricultural wealth to sustain it, the bountiful supply of mineral and natural resources and an efficient transport and communication system enhance the prosperity of the hinterland and contribute to the growth of traffic. Haldia, Calcutta Ports have a hinterland extending over almost half a million sq. miles which abound in agricultural, mineral and industrial resources.

It would be recalled that Calcutta port, in its heyday when it did not suffer from the the handicap of shallow draft, had been responsible for bringing about development of industrial and commercial activities around it. Now that Haldia port with a deep draft has been established, it is but appropriate that industrial and commercial activities should be developed around Haldia to make the best use of the modern handling facilities which exist there.

7.2. Development and Planning (T&CP) Department, Government of West Bengal, prepared in January 1975 an Outline Development Plan for Haldia Industrial Urban Complex. This integrated plan prepared in consultation with the authorities of the Calcutta Port Trust and the West Bengal Industrial Infrastructure Development Corporation envisages the growth of population to about 3,50,000 by 1990-91, and it covers the whole area under the control of the Port Trust as also about 10,830 acres outside such control. The plan indicates the optimum land use pattern for the entire area over a period of twenty years in the perspective of the expected growth and development of trade, commerce, industry, transportation and social services.

7.3. The Committee find from the Outline Development Plan for Haldia Industrial Urban Complex, that the Haldia Port has, from an early period, been associated with proposals of new industries of both public and private sectors involving an aggregate outlay of over Rs. 475 crores. It has been, *inter alia*, stated in the said plan, that—

> "Three Public Sector Projects involving a total investment of Rs. 285 crores were planned for development during the Fourth Plan period. Of these three projects, the Haldia Refinery Project has already been constructed, the Haldia Dock Project is nearing completion and the Haldia Fertiliser Project is still under construction. Five other Public Sector Projects involving a total investment of Rs. 142.41 crores have also been proposed by the Government of West Bengal for location in the Haldia Region. Three Joint Sector Projects involving a total investment of Rs. 3.83 crores have already been approved and are in the process of implementation. Eight Private Sector Projects involving a total investment of Rs. 42.85 crores have already been approved by the Government of India for location in the Haldia Region. These projects are also in the process of implementation. One more project involving an investment of

Rs. 85 lakhs is awaiting clearance of the Government of India. That apart, four infrastructure development projects of Industries Department, mostly to support the development of industries have been planned in Haldia at a total investment of Rs. 7.70 crores."

Details of these projects are given below :—

S. No.	Name of the Project	Total investment (Rs. in lakhs)	Employment envisaged	Remarks
1	2	3	4	5
1.	Calcitta Port Commissioners	90,00·00	2,000	The work is in progress
2.	Indian Oil Corporation	70,00·00	500	Trial production, started
3.	Fertiliser Corporation of India (Soda Ash) . .	1,25,00·00	1,600	The work is in progress.
4.	Messers Eureka Chemicals Pvt. Ltd. . . .	42·00	173	Do.
5.	Messers Allied Aromatics Ltd. (Maleic Anhydride) .	2,22·30	126	Do.
6.	Messers Petro-Carbon and Chemicals Ltd. (Calcined Petroleim Coke) . .	1,18·60	141	Do.
7.	Messers Hindustan Lever Ltd. (STPP)	15,00.00	500	Do.
8.	Messers Hindustan Lever Ltd. (Caustic Soda)	11,00.00	800	Feasibility report is under preparation.
9.	Messers Delhi Cloth and General Mills Co. Ltd. (Processed Marine Products)	2,50·00	1,000	Do.
10.	Messers India Tobacco Co. Ltd. (Processed Marine Products) . . .	2,50·00	1,000	Do.
11.	Messers EMC Steel Ltd. (Transmission Tower Projects)	40·00	645	Do.
12.	Messers Bengal Coal Co. Ltd. (Cresole, Sodium Sulphate)	1,19·00	145	Do.
13.	Messers Bharat Guage and Tools (Gauge Tools) .	5,00·00	1,500	Do.
14.	Shri K. K. Kar (Caustic Soda)	5,26·00	1,000	Do.
15.	Refinery Expansion from 2·5 million tonnes to 3·5 million tonnes per annum	16,00·00	100	The West Bengal Govt. have written to Central Government in the matter.
16.	Messers Andrew Yule and Co. (Detergent Alkalyate) .	21,00·00	440	Do.
17.	Messers Industrial Containers (Mild Steel Barrel-drums)	41·00	154	Idustries Commissioner has to move the Government of India.

1	2	3	4	5
18.	Haldia Ship Yard . .	75,00·00	5,000	The West Bengal Government have written to to Central Government in the matter.
19.	Messers India Drugs and Pharmaceuticals Ltd. (3rd Unit)	30,00·00	1,000	Do.
20.	Messers Rallies India Ltd. (Processed Marine Products)	85·00	290	
	TOTAL . . .	4,74,93·90 (Say Rs. 475 crores)	18,114	persons

7.4. The Outline Plan covers about 17 sq. miles of area, in addition to 9 sq. miles acquired by the Port Trust. The 17 sq. miles of land is spread out as a dumbell with additional industries on the edge of one of the knobs representing Durgachak. The two knobs of the dumbell are two townships : one at Durgachak and other at Haldia linked by an arterial road running parallel to the Port Town. In Durgachak two ribbons of highly urbanised land, one-half mile in depth, are proposed to be developed along either side of Durgachak Road starting from the entrance of the Port town. Haldi township, on the other hand, would be defined by Haldi river on the South and National Highway 41 on the North. Here also development would start from the entrance of the Port town and expand along the National Highway. The land and development cost of the complex has been estimated at Rs. 176.57 crores spread over a period of 29 years. Additionally, it has been proposed to conserve more or less 22 sq. miles for agricultural purposes so that it provides a green belt to the township for supply of fresh vegetable, dairy products etc.

The Outline Plan for Haldia was revised in July 1975 by the Union Ministry of Works and Housing who suggested a programme of land development of 2500 acres over a period of 10 years and identified Rs. 5.5 crores as seed capital requirement. Out of this the Central Government would consider providing Rs. 3 crores as the matching contribution. During the financial year 1975-76 the Central Government actually advanced Rs. 50 lakhs as loan for acquisition and development of 250 acres of land at Durgachak.

7.5. 200 acres of land have been kept earmarked within the Port Trust area in Haldia for setting up of an Export Processing Zone consisting of small and medium scale industries. It has been claimed that the EP Zone, consisting of a balanced mixture of engineering, chemical, electronic, fertiliser by-products, hides and skins, fish and fish-based industries will ensure against fluctuations in the fortunes of individual lines of industry and is sure to be a flourishing success.

7.6. A Study Group of the Committee which visited Haldia in December 1976 were told during informal discussions with the representatives of the State Government of West Bengal that Haldia was one out of eight "growth centres" to be set up by the State Government for encouraging industrial and economic activities. In 1975, the State Government had reorganised the West Bengal Development Corporation into a full-fledged

industrial promotional agency. Industries were offered a package of incentives for setting up industries at Haldia. It was added that the State Government attached so much importance to the development of Haldia that an apex policy making body *viz.* Haldia Development Board had been set up by the State Government with the Chief Minister, West Bengal, as its Chairman and representatives of concerned Ministries of Government of India as Members. A high-powered Haldia Development Authority was to be set up by the beginning of 1977 to be incharge of all development activities in Haldia. It was added that apart from the three industries to whom licences had been issued, the State Government had about 20 pending applications for land for industries. It was added that the State Industries Department had submitted project reports in respect of petro-chemical industries to the Central Government but the proposals were still pending Central Government's decision.

It was also added that Hindustan Lever was the only big house which had been given land for setting up an industry there. No multi-national concern had been allowed to set up any industry at Haldia. Further, the experience of the State Government with Joint Sector enterprises was not a happy one and it was the policy of the State Government to encourage small and medium industrialists also. It was stated that some programmes requiring priority for development of Haldia were awaiting a decision from the Central Government. For example, the question of setting up of a Naptha-based petro-chemical complex at Haldia was under consideration of the Central Government since 1964. It was added that considering the vastly improved availability of naptha in the country and prospects of Bombay High, there was a strong case for locating a petro-chemical complex at Haldia in the interest of employment, production and development of downstream small scale units.

The Study Group gathered an impression that development of industries in the Haldia region was not being handled with the priority it deserved.

(b) Other important features of development

7.7. The Study Group also discussed with the representatives of the West Bengal Government some of the important features relating to development of the area. These are discussed in the succeeding paragraphs.

(i) *Resettlement of displaced persons*

7.8. The Study Group were informed that about 1500 families had been displaced. They were given the option to either claim cash compensation or apply for allotment of rehabilitation sites. Only 700 families applied for allotment of rehabilitation sites and the others wanted compensation. So far 500 families had been rehabilitated and the Study Group were informed that the remaining families would be rehabilitated by April 1977. Besides, Calcutta Port Trust had also offered one job per family to mitigate hardship of the uprooted families.

The Committee find from the Outline Development Plan for the Haldia Industrial Urban Complex that on a close approximation, realistic number of persons likely to be displaced due to development activities now undertaken would be about 27,300.

(ii) *Employment Potential*

7.9. The Study Group were informed that the employment potential from the Haldia Docks was expected to be of the order of 5,000. The Committee were also informed that taking into account the employment probabilities with the shipping agents, industries etc., the total number of persons likely to be employed was 26,500.

(iii) *Supply of Electricity*

7.10. The Study Group were informed that the West Bengal State Electricity Board had already constructed a sub-station near the WBIIDC land, for supply of electricity to Haldia, the Industries and the Township, from where transmission lines would be extended to the contemplated Durgachak and Haldi Townships. The State Electricity Board had prepared a plan to meet future power requirements of not only the existing industries but also of industries to be set up in future.

7.11. The Committee find that the position in respect of power was indicated in the Outline Development Plan for Haldia Industrial Urban Complex (January 1975) as follows:

> "The West Bengal State Electricity Board have extended their power grid to Haldia and are now supplying power to the Dock Project, Refinery, Fertiliser factory as well as other industries from their 33 KV power line. The West Bengal State Electricity Board will supply all the future power need for the port and industries to be located in this region through high tension power lines. There is already an existing 132 KV transmission line which ends at a sub-station at Haldia. The State Electricity Board is contemplating to add another 132/220 KV transmission line in the near future. A few additional sub-stations will have to be constructed from where high tension line of 33/11 KV will criss cross the entire industrial complex and supply power to the industries, trade and commerce and domestic consumers. In order to meet the demand of Haldia region beyond 100 KVA as well as the demand for rural electrification of the region the State Electricity Board has taken up the construction of a thermal generating station at Kolaghat and the project is expected to be completed within the next five years."

(iv) *Road Development*

7.12. Asked to state if the Project had been integrated with railway and road transport systems, the Study Group were informed that Haldia will be linked to Kolaghat by National Highway No. 41. In addition, extensive network of internal roads to serve the port facilities, the township and the various industrial esablishments had also been built.

7.13. The Committee asked the Roads Wing of the Ministry of Shipping and Transport to furnish information relating to the progress made in construction of the National Highway No. 41 and the information furnished

by them in January 1977*, is reproduced below :

"The length of the National Highway leading to Haldia Port is about 32 miles. The estimates for land acquisition and road construction were sanctioned in January 1968 and July 1969 respectively. Physical possession of land was not made available initially by the land-owners which hampered the progress of construction in the first few years and the work proceeded with in different lengths as possession became available. The land acquisition having been completed, the construction of the road which is underway is likely to be completed by the end of 1978 with an adequate augmented pavement structure. There are also two over-bridges which have to be constructed by the Railways as deposit works for which Railways have been paid the entire cost of construction during the year 1975-76. The probable date of construction of these over-bridges is also by the end of 1978.

For transportation of materials to Haldia Port under construction, the existing State Road was improved under the Central Aid Programme of State Roads for Inter-State or Economic Importance. The present day traffic to the Haldia Port is moving on this road.

With the establishment of the Port at Haldia, quite a large volume of traffic is expected to generate, the main items being coal, ore, minerals, rock phosphate, petroleum and general cargo such as salt, sugar, foodgrains, gunnies etc. Some petro-chemical industries are also likely to come up in and around Haldia which will produce, among other things, heavy chemicals, fertilisers, synthetic, plastics, rubber, fibres, chemicals, solvents, detergents etc. With the development of all these, the volume of daily traffic is expected to be pretty high neglecting seasonal variations. Besides, a township having a population of 3,00,000 is being planned for the Haldia Port area. The supply and services to this development would also account for further traffic. Heavy and light vehicles carrying all this traffic to and from the port area are expected to run at high speed and should be spared even the minimum interruption enroute so as to reach the different destinations far and near speedily.

The N.H. 41 after completion along with the rail link would cater for such heavy and fast moving traffic and serve a major port besides N.H. 41 also connecting the proposed port with the N.H. 6 along the shortest length."

(v) *Shortage of drinking water*

7.14. In regard to supply of water to Haldia complex, the Committee were informed by the Chairman, Calcutta Port Trust during evidence in June 1976 :

"From the long-term point of view water is a problem as far as Haldia is concerned and the State Government is actually seized of this problem. At the CM's meeting this was discussed in detail. The State Government has taken up a scheme for tubewells and pipelines which would lead to Haldia and

*Not vetted by Audit.

that would be ready in 1977. For long-term measure, there is a scheme for bringing in water from the nearest point of the river. That is to be decided after going into some research work. We can draw water from Subarnarekha and lead it to Haldia, we can have a canal from the dam. There is the other proposal of having pipeline from Rupnarain. The Chief Minister has asked the Public Health Engineering Department of the State Government to submit to him specific proposals in this regard."

The Study Group of the Committee which visited Haldia in December 1976 were informed by the State Government authorities that water supply to residents of Haldia from the 53 existing and planned tubewells was insufficient and that representations had already been received about the trouble being given by the existing tubewells which were not able to ensure uninterrupted supply of water for drinking and industrial purposes. It was admitted that inadequate water supply was one of the main constraints in the industrial development in that area. The Government of India had also appointed a study team to investigate the water supply problem. The scheme of water works at Geokhali had both advantages and disadvantages. But with the completion of Farakka the latest view was that water works can be started. Meanwhile the State Government proposed to augment the supply of water by setting up a 10.5 mgd. water works project at Geokhali at a cost of Rs. 7 crores. This project, when completed will meet the water requirement of Haldia region upto 1991. The State authorities felt that it would not be possible for the State Government to undertake a costly venture like Geokhali Project without financial assistance from the Central Government.

7.15. The Committee note that the "Outline Development Plan for Haldia Industrial Complex" brought out by the Government of West Bengal in January 1975 envisages the setting up of a number of industries, both in the public and private sectors, involving an outlay of over Rs. 475 crores. Out of the three public sector projects, two, viz. Haldia Refinery Project and the Haldia Dock Project have been completed or are nearing completion. The third project, viz. Haldia Fertiliser Project, is taking shape. It is a matter of satisfaction that the Haldia would be one of the eight growth centres to be set up by the State Government of West Bengal for encouraging industrial and economic activities. That Haldia is being given the importance that it richly deserves is evident fro mthe fact that industries are now being offered a package of incentives besides other infrastructural facilities. A proposal to set up a high-powered Haldia Development Authority is also on the anvil. The Committee are confident that given the necessary facilities and the wherewithal for acceleration of promotional activities envisaged under he Outline Plan, the contours of Haldia would rapidly undergo a change and in not too distant a future the Complex would pulsate with diverse activities, industrial as well as economic, giving employment opportunities to large segments of the population. The Committee would like that a definitive plan for industrial development should be drawn up for the gainful absorption of an estimated 27,300 persons displaced as a result of the project and for the employment of other unemployed persons during the next five to seven years.

7.16. In view of the fact that the people of the region had set high hopes on the development of Haldia and on the vast employment opportunities likely to be generated, the Committee would like that concerted

steps should be taken to encourage early setting up of the industries for which licences have been given or are proposed to be given in the near future. All factors inhibiting the growth of industries should be identified and remedial steps taken. The Committee would like to mention in this connection a few of the constraints which have hampered the creation of an appropriate climate for growth.

7.17. It It was stated before a Study Group of the Committee which visited Haldia in December 1976 that inadequate water supply was one of the main constraints in the industrial development in that area. The State Government had planned the setting up of 10.5 mgd. water works project at Geokhali at a cost of Rs. 7 crores but it was apprehended that the State Government might not be able to undertake it without financial assistance from the Central Government. The Committee would urge that the Central Government should extend full cooperation to the State Government in solving this problem of water supply which is a basic necessity for the residents of the area.

7.18. As regards power, the Committee note that the West Bengal State Electricity Board have extended their power grid to Haldia and are now supplying power to the Dock Project, Refinery, Fertiliser factory as well as other industries from their 33 KV power line. The State Electricity Board are contemplating addition of certain transmission lines and substations. However, for meeting the demand of Haldia region beyond 100 MVA and the demand for rural electrification of the region, the State Electricity Board will have to construct a thermal generating station at Kolaghat which has been taken in hand and is expected to be completed within the next 5 years. The Committee need hardly stress that power is an essential pre-requisite for industrial development and any delay in meeting the power requirements of the area in time is bound to have an adverse effect not only on the overall devlopment of the region but also on proper utilisation of the industrial and other machinery installed at heavy cost. The Committee stress that the Central and State authorities should see that adequate power for industrial and developmental use is provided in time.

7.19. The Committee note that the National Highway No. 41 which is under construction shall connect the Haldia Port with National Highway No. 6 along the shortest length. The 32 mile length of the National Highway No. 41 leading to Haldia is expected to be completed by the end of 1978. There are two overbridges which have to be constructed by the Railways as deposit works for which the Railways have been paid the entire cost of construction during the year 1975-76. Keeping in view the expected generation of heavy and fast moving traffic on commissioning of the Haldia Docks, there is an imperative need for speeding up the completion of National Highway No. 41. The Committee, therefore, stress that in the matter of development of road communications as also other infrastructural facilities, there should be close coordination between the Port, Union Government and State authorities so as to ensure integrated and timely development.

7.20. Another aspect which causes concern to the Committee is the impression that they gathered during their visit to Haldia and informal discussions with the State authorities concerned that the Master Plan for

development of Haldia as an industrial and chemical complex which constituted an essential part of the Haldia Project as conceived is not making much headway. The Committee stress that there should be closer coordination between the Central, State and Port authorities in the interest of accelerating the pace of development of industrial and chemiacl complex at Haldia.

The Committee would like to be informed of the concerted measures taken by Government and the other authorities concerned in pursuance of the above recommendations and the results achieved to generate larger traffic at Haldia on a sustained basis.

NEW DELHI;
November, 1977
Kartika, 1899(s)

C. M. STEPHEN,
Chairman
Public Accounts Committee.

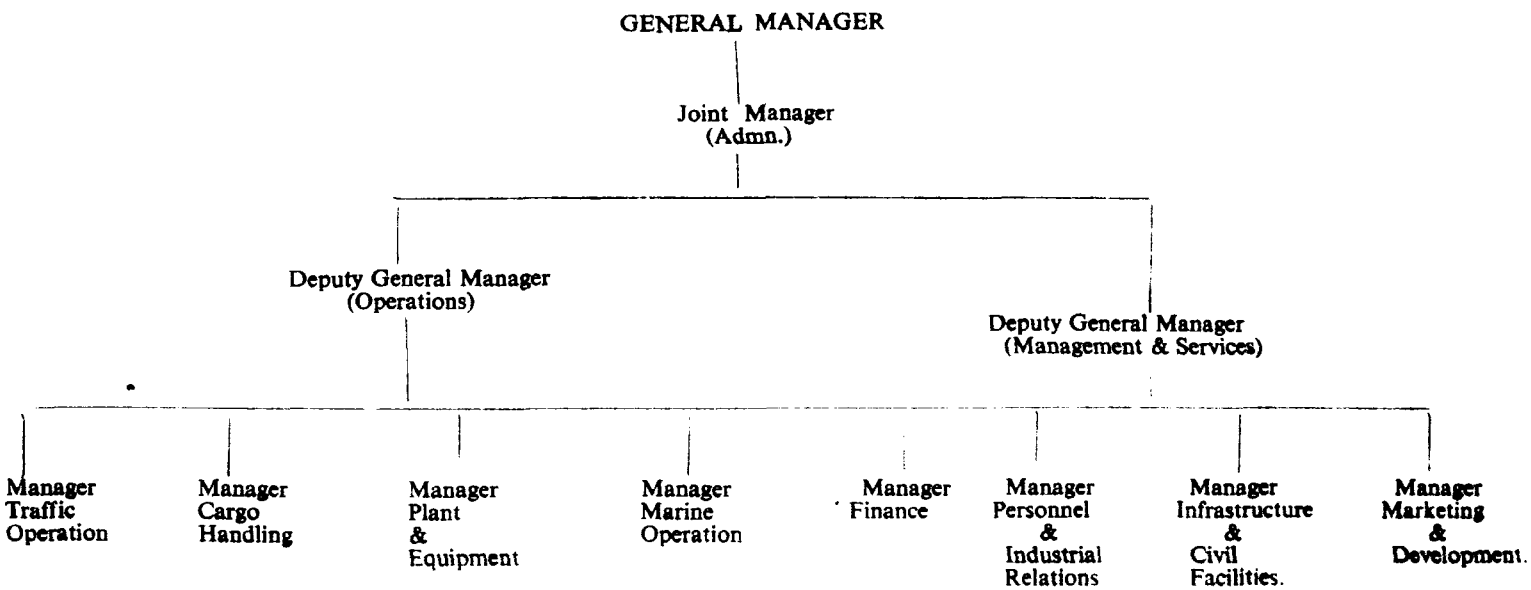
APPENDIX I

(*Vide* para 2·12)

Note showing the administrative set up sanctioned or proposed to be sanctioned for the Haldia Dock.

"The management structure and set up for Haldia was considered by the Government in consultation with the mechanised facilities available in the new Dock complex, it was considered necessary to have a compact staff structure with minimum number of personnel. Unlike conventional set up, it would be task oriented and integrated in its approach and would proved for a work oriented task force, to a great extent self-sufficient without inter-depending on other divisions/ units and provide for greater speed and efficiency in operations.

2. The management structure at Haldia will be as follows :



3. The General Manager has full powers and control and authority over the activities at Haldia and is comparable to the Deputy Chairman in Calcutta. He is answerable to the Chairman for the operational and commercial efficiency and the financial stability of the Dock Complex and for harmonious industrial relations at Haldia. While the Chairman, Calcutta Port Trust and the Board of Trustees will have the responsibility for policy making, the executive functions at the dock management level would vest in the General Manager. In keeping with modern result-oriented management practices, Haldia will have only two departments viz., "Operations" and "Management and Services", each headed by a Deputy General Manager answerable directly to the General Manager.

4. The Operational Services Department under the charge of Deputy General Manager (Operations) will supervise cargo handling activities both on board and ashore, railway transportation, maintenance and running of plant and equipment, maintenance of civil works in the Dock area, marine operations and supply of water and bunkers to ships. He will have four Managers under him for this purpose who will be assisted by Deputy Managers and Joint Managers.

5. The Management and Services Department under the Deputy General Manager (Management and Services) will look after matters relating to finance, personnel and industrial relations, *infra-structure* and civic facilities and marketing development. Each of these will be headed by a Manager directly answerable to the Deputy General Manager.

6. The General Manager will be assisted in the administrative work of his office by a Joint Manager, who will also be responsible for attending to such residual functions and services as fire fighting, security, vigilance medical services, public relations etc.

7. The following top level posts have been sanctioned by Government so far :—

	Rs.
(1) General Manager (Haldia)	— 2500-125/2-2750.
(2) Deputy General Manager (Operations).	— 2100-2450.
(3) Deputy General Manager (Services)	— 2100-2450.

Besides this, the required number of posts of Joint Manager, Deputy Manager etc. have also been sanctioned by the Central Government as recommended by the Board of Trustees for the Port of Calcutta. The post of General Manager was filled up by Government on 24th Feb., 1976. Necessary action to fill up the posts of Deputy General Manager has also been taken by the Government. The Chairman, who is the appointing authority in respect of the other posts, has taken/is taking necessary action to fill up the other posts."

APPENDIX II

(*Vide* paragraph 6.92)

Note on "tied aid" furnished by the Ministry in May, 1977.

The Report of the Comptroller and Auditor General for the year 1974-75—Union Government (Civil)—Para 33 regarding handling facilities at Haldia states, among other things, "according to the conditions of the loan sanctioned by the foreign country, import of all the items not available indigenously will have to be made from that country." The Lok Sabha Secretariat have enquired whether such conditions are usually incorporated when bilateral loans are prescribed and the justification for agreeing to such conditions. The country concerned in this case was Canada and the correct position is that the loan agreement for Haldia project only contained the following provision :

> "Except as may otherwise be specifically agreed to by Canada, the proceeds of the loan shall be used by India exclusively for the purchase in Canada of equipment for the fertilizer bulk handling facility for ports in India."

This should not be construed as a stipulation that all equipments requiring to be imported for the project would necessarily have to come from Canada Purchases from other sources against payments to be made out of our own resources or under some other sources of financing available to us are not precluded. All that this clause conveys is that if the equipment and related services are to be procured from Canada, these can be financed under the Canadian loan.

2.1. This type of condition (*i.e.* that purchase out of the loan will have to be made from the donor country) is not uncommon. Such loans are generally known as "tied loans". The loans can be tied in two ways. Firstly these may be tied to specific projects or uses, in terms of which the proceeds of the loans can be used only for the specified projects or uses. This may be termed as project tying. The loans may also be tied in another sense in that these may be tied to procurement from the donor country which may be called country-tying. The loans from the World Bank and IDA have always been united in the sense that purchases out of the loans from those institutions can be made from a wide range of eligible sources on the basis of lowest technically suitable offers. Even so, they are project-tied in the sense that they can be used only for specified purposes and projects. Loans from individual donor countries, on the other hand, have been largely tied to the country of the donor. Of late, however, some donor countries have united their aid in regard to source of procurement. It would nevertheless be broadly correct to state that loans from individual donor countries, with a few exceptions, are "tied" in one or both of the senses mentioned above.

3.1. While it may broadly be conceded that donors give assistance to economically less developed nations on altruistic considerations arising out of a sense of responsibility for raising the living standards in these countries, such other considerations as helping their own export-oriented

industries and providing employment to their own people through greater industrial activity generated through these exports also play their part. The donor countries may keep their own balance of payments position in view while trying to fulfil their aid obligations so that their own balance of payments position is not affected by their said operations.

3.2. It is also necessary to explain, in this context, the considerations that have been prompting us to seek aid from other countries. Two of the important considerations are (i) the objective of faster economic development through larger investments in various fields which may not be possible in the context of low levels of income and consequently savings; and (ii) these aid receipts help us to tide over our foreign exchange difficulties by enabling us to import much needed capital and other goods from abroad without straining our foreign exchange resources. Without prejudice to the objective of self-reliance, the justification for external assistance during the intervening period is that it helps to accelerate the pace of growth and development till such time as the country can on its own support and adequate level of investment.

3.3. Given the need for aid in the early stages of development of a developing country and the compulsions that weigh with the donor, it is to our advantage to accept aid in spite of its being tied to a particular country. These foreign loans are given on soft terms and the softness is measured through the grant element. The grant element arises from the fact that these loans are repayable over long periods, with long grace periods and with low or no rates of interest. The grant element is broadly conceived as the difference between the face (present) value of the loan and the present value of all future repayment (amortisation and interest payments) calculated by applying a discount factor at an appropriate rate. It has been calculated for instance, that the loans from Canada, which are interest-free and repayable over a period of 40 years after an additional grace period of 10 years, have a grant element of about 92% if a discount factor of 10% is supplied. Thus, the aid is a convenient device through which resources are transferred from a donor to a recipient consistent with the needs on the part of the recipient and with the parameters of the donor.

Another aspect which requires to be emphasized in this context, is that certain factors do operate in practice which can minimise the adverse effects of "tied" aid. When recipent countries receive assistance from a number of sources including united sources, as our country does, and can operate to some extent with their own resources, the choice available to the recipient expands and the effects of tied aid will get mitigated. Further, in the case of project aid, before a project is posed to any particular donor for aid coverage, necessary preliminary studies are undertaken to determine the extent and types of technology/know-how available for the purpose in the concerned countries, their comparative merits and our preferences based on the right technology and comparative costs of know-how and the equipment likely to be available from various sources. After assessing these relevant factors, a view is taken as to the country whom we should approach for assistance for a particular project. In other words, because of multiplicity of donors with offers of project aid in various fields, it is in practice possible to locate the sources of assistance which is not

only technologically suitable but also the most competitive. The donors themselves generally stipulate calling of tenders at least within their boundaries, which ensures supplies at the best possible price within that country. In the case of tied loans for commodities like fertiliser, food, newsprint etc., on the other hand, it is our experience that there is a certain international level of prices and that the price of a commodity in a particular country at a point of time is seldom more than marginally above this international level.

There is not denying that tied aid has certain shortcomings and the ideal situation would be that aid, untied to the donor country and to the purpose, is made available to the full extent needed. However, since such an adeal situation does not exist, the next best alternative is to accept aid even if it is tied because of our developmental needs and foreign exchange compulsions and the large element of grant in them, and to operate the aid programme in the most advantageous manner possible in the given circumstances.

The Lok Sabha Secretariat have also desired that note may also indicate "the procedure prescribed for negotiating and concluding bilateral agreements in respect of loans from foreign countries". At the outset it may be pointed out that there is no "prescribed" procedure as such for negotiating and concluding loan agreements. However, the general practice obtaining in this regard is briefly indicated below. The responsibility for negotating and concluding loan agreements rests with the Department of Economic Affairs. The annual foreign exchange requirements and aid needs are worked out, taking into account the country's balance of payment position and the projected foreign exchange requirements for normal maintenance imports, debt servicing obligations and the developmental programmes. The aim is to cover the "gap" through consolidated picture is given to the Aid India Consortium at their annual meetings. At these meetings the member countries pledge their assistance for each year. After the assistance has been pledged, detailed bilateral negotiations are held with the countries concerned with a view to converting the pledge into specific agreements. In respect of non-Consortium countries, the import requirements to be covered are posed from time to time as and when considered necessary. The donor countries indicate how much aid they would extend for non-project purposes including debt relief and how much for project type uses. The agreements for non-project uses including debt relief are signed on a regular periodical basis, whereas project type agreements follow the specific procedures of appraisal etc.

In the case of capital projects, after technical studies are completed. and the need for a project is established, the question of finance, including foreign exchange, is taken up. The Administrative Ministries indicate their preferred sources of the equipment etc. (after taking into account the factors mentioned in para 4) and consult the Department of Economic Affairs. On the basis of the information with the Department of Economic Affairs about the aid available or pledged by different countries, the DEA may indicate the sources after consulting a donor country. Alternatively, the Department of Economic Affairs may advise the Administrative Ministry that tenders may be invited either globally or from those counries which are preferred from technological angle and from

which aid is available or likely to be available. After the tenders are evaluated, purchase decisions are taken on the basis of the most advantageous sources of supply in terms of suitability and price and on the basis of sources of financing of the purchases. The selection of the supply source is thus based on an assessment of the alternatives available from technological and financial angles. Thereafter the aid for the project is negotiated with a donor country following the prescribed procedures for project report documentation, appraisal etc. and a loan agreement is concluded with the donor country by the Department of Economic Affairs.

APPENDIX III

Consolidated Statements of main Conclusions/Recommendations

Sl. No.	Para No.	Ministry/ Department Concerned	Conclusions Recommendations
1	2	3	4
1.	1·10	Ministry of Shipping & Transport	Calcutta Port which was a premier port in the country for several decades came to lose its position of primacy because of two important developments since the Forties and the Fifties. The riverine channel leading to Calcutta Port started getting silted up with the result that even as early as 1943-44 the draft fell below 26 feet for as many as 285 days in a year. This naturally became a constraint for larger vessels requiring a draft of 26 feet or more to negotiate entry to the Calcutta Port. As is well known, a trend started soon after the World War of using larger vessels and tankers to carry cargo. While facilities for handling of larger vessels and tankers were developed in other major ports of the country no comparable progress was made in Calcutta. Induction of head waters in the lean months through Farakka Barrage and canals which could have averted the deteriorating position of Calcutta Port took nearly two decades to be completed and commissioned in 1975. The Committee have dealt with this aspect at length in their 196th Report (5th Lok Sabha) on Farakka Barrage Project.
2.	1.11	—Do.—	The cumulative effect of all these factors was that while there was progressive increase in the handling of traffic particularly bulk traffic in other major ports, the traffic handled at Calcutta Port, in fact, kept on falling. This would be evident from the fact that the traffic handled in Calcutta Port which was of the order of 1.1 million tonnes in 1964-65 fell to 0.63 million tonnes in 1973-74. It was in this background that the concept of Haldia

			Port Project was conceived in the Fifties. It is, however, a great pity that the importance and urgency of this Project were not fully realised with the result that it came to be sanctioned only in the Sixties and it has taken more than a decade to be completed and put into commission.
3	1.12	—Do.—	The Committee have elsewhere in the Report dealt at length with the facilities for handling of iron ore (4.0 million tonnes) and coal (3.5 million tonnes) which have been developed at the port at heavy capital expense. The Committee are greatly concerned to note that these facilities for bulk handling of cargo would be utilised even less than half of their capacity in the coming months. This underlines the need for initiative being taken at a higher level to coordinate and integrate the effort of the undertakings concerned in the public sector, *viz.* MMTC, Coal India, Port Trust Authorities etc. so as to ensure that the handling facilities at Haldia Port are pressed into service and put to effective use with the twin objectives of providing the requisite traffic load to Haldia to sustain its economic viability and to accelerate the development of mining and allied industries in the hinterland.
4	1.13	—Do.—	The Committee would like to be informed of the concerted measures taken by Government and the other authorities concerned in pursuance of the above recommendations and the results achieved to generate larger traffic at Haldia on a sustained basis.
5	1.14	—Do.—	The Committee are greatly concerned to note that at present the draft in Haldia Port is of the order of 30 feet only but might increase to 35 feet. This would permit handling of vessels of 30,000 tonnage requiring displacement of 30 feet or below. The Committee feel that as larger vessels and tankers are normally in use in World trade, it is imperative that the draft in the Haldia port is developed to 35/40 feet at the earliest so as to provide the requisite facilities for the handling of larger cargo vessels and tankers.
6	2.11	—Do.—	The Committee are anxious that the Haldia Docks which was conceived as an adjunct to Calcutta Port—threatened by lower draft conditions on account of siltation—should make an impressive start so that along with

1	2	3	4
			Calcutta it could play an effective role in the promotion of the trade of the entire eastern and north-eastern region of the country. It is only by rendering efficient handling facilities at most competitive rates that Haldia can attract larger quantities of bulk cargo meant for the eastern and north-eastern region of the country. There is no reason why with the heavy capital investment made and the latest and most modern equipment provided, it should not be possible to achieve this object of efficient and economic service which may set up a high example of smooth and efficient functioning to the other ports of the country as well. The Committee would like to emphasise that however impressive be the achievement of the port authorities in the field of construction, a sense of complacency should not be allowed to develop and from now onwards the authorities should concentrate on preparing a perspective plan for the entire Haldia complex and efficient functioning of the operational facilities so that Haldia may play a meaningful part as a thriving and commercial entry port in the South East Asia.
7	2.13	Ministry of Shipping and Transport	In so far as the administrative set up of the Haldia Dock is concerned, the Committee note that the General Manager at Haldia has been given powers and control and authority over the activities at Haldia and his position is stated to be broadly comparable to that of the Deputy Chairman in Calcutta Port Trust. The Committee note that the intention of the planners is that larger vessels may use Haldia Port for lightening and proceed to Calcutta to discharge the goods at the terminal port. Similarly, on the outward journey, the vessels may start with a paying load from Calcutta Port and top up at Haldia.
		82.14 —do.—	The latest in transportation LASH (lighter aboard ship) further underlines the need for close coordination between the Haldia and Calcutta ports. The Committee stress that this integrated link between Haldia and Calcutta ports as conceived by the planners and as successfully maintained during the

			construction period, should be carried through to the operational stage in the larger interest of providing best handling facilities to the Eastern and North-eastern regions of the country and for preserving the economic viability and health of both Calcutta and Haldia Ports. The Committee are, however, anxious that the powers given to the General Manager at Haldia should be adequate and effective in all respects so that he is able to take decision on the spot and thus look after the day-to-day functioning of the Docks without having to approach the authorities at Calcutta.
9	2.15	—do.—	The Committee need hardly point out that adequate number of quarters and other supporting infra-structure facilities may be provided for the officers and staff posted in Haldia Port so that they are encouraged to settle down there in the interest of work.
10	2.19	—do.—	The Committee find that six tankers acquired by the Shipping Corporation of India at a cost of Rs. 15 crores each have a capacity of 87,500 DWT and a draft requirement of more than 40 feet. Having regard to the fact that Haldia dock system at present can accommodate only tankers with a draft of 30-35 feet it is evident that these tankers may not prove economic for being used for carrying crude to Haldia till the draft of 40 feet and more is achieved which at the present showing would be in 1981 or thereafter.
11	2.20	—do.—	The Committee are not quite convinced with the Government's plea that they had taken a deliberate decision that a standard vessel of 87,500 DWT would be preferable to getting a tanker of less DWT which could ply in the available draft of about 35 feet in a port like Haldia. The Committee would like the Government to examine the matter in depth in order to make sure that the six tankers of 27,500 DWT already acquired are put to full use in the best public interest to carry crude to other ports in the country and that suitable tankers are provided for carrying crude at most competitive and economic rates to the Refinery at Haldia.
12	2.21	—do.—	The Committee have elsewhere in the Report stressed the need for deepening the draft to 40 feet and more at Haldia on a priority basis, keeping in view the economics of the project.

1	2	3	4
13	2.28	Ministry of Shipping and Transport	The Committee have noted with concern the rising cost of maintenance dredging at Calcutta/Haldia, which has gone up from Rs. 1.69 crores in 1964-65 to Rs. 4.95 crores in 1975-76. The Public Accounts Committee have stressed more than once* the need for optimum utilisation of the fleet of dredgers of the Calcutta Port Trust and for meeting all the requirements of Calcutta and Haldia without making any addition to their number. The Committee were informed in June 1976 that while it might be possible for the Calcutta Port Trust to meet the requirements of Dock dredging without any addition in their existing fleet, the requirement of river dredging, both below and above Haldia, would be dependent upon the development and stablisation of shipping channel, completion of all corrective works, quantum and pattern of head-water flows, etc.
14	2.29	—do—	In view of the impetrative need to keep the expenses on dredging as low as possible and of the likely improvement of the river as a result of Farakka water flowing in, leading to availability of deep water near the Haldia Docks, the Committee expect the Calcutta Port authorities to ensure that all dredging requirements of Calcutta and Haldia, both Docks and river, are actually met from the existing fleet of dredgers without making any addition thereto. The Committee would await a categorical assurance from the Ministry in that regard.
15	3.20	—do—	Notwithstanding the bottlenecks which upset the calculations, both with regard to execution and costs, the first phase of the Haldia Project, initially scheduled to be completed by January 1971, reached its climacteric with the formal commissioning of the Dock in February 1977. The successful completion of the project would no doubt be an occasion of national rejoicing, but the costs and the time and labour involved, in fact the whole gamut of experiences, should not be overlooked if any meaningful lessons are to be learnt from the operations that Haldia Project signified and symbolised. For the purpose of planning and execution of the first phase of

			the Haldia Dock Project, a sort of tripartite machinery was thought of. While M/s. Randel Palmer and Tritton acted as Consultants, the Calcutta Port Trust and the contractors, including some public sector undertakings engaged by the Trust functioned as the body responsible for executing the plans and the designs. At the top, there was a Steering Committee presided over by the Secretary, Ministry of Shipping and Transport, and consisting of representatives of various Ministries/Departments to oversee the progress of the project.
16	3.21	—do—	That there was an unfortunate delay in the commissioning of the project cannot be gain said and, as a matter of introspection, Government should consider whether for executing a project of this dimension, which called for meticulous coordination with different authorities, expedition, advance planning and forethought, a body like this Steering Committee was adequate. It is on record that the Steering Committee had held only 19 sittings during the long period of nine years between January 1967 and January 1976. It is also on record that sittings of the Steering Committee were very often crowded with as many as 40 representatives besides the members.
17	3.32	Ministry of Shipping and Transport, Finance, Industry Steel and Railways	The Committee feel convinced that the circumstances needed the creation of a compact body clothed with adequate powers to take and enforce decisions, if need be, by making "on-the-spot" visits and studying the problems as they arose from close quarters. Such a body should have comprised not only representatives of the Ministries of Shipping and Transport and Finance but also of Industry, Steel, Railways, etc. and Government of West Bengal who had to play an important role in arranging and transporting materials, equipment etc. required for the execution of the Project.
18	3.23	Ministry of Shipping and Transport	Among the important reasons which were advanced for delay in the completion of the project are difficulties in acquisition of land, shortage of steel, shortage of wagons and unexpected sub-soil conditions which resulted in considerable delay in commencement of the difficult work of the lock entrances.

*(See Paragraphs 7.14 to 7.17 of 175th Report (5.25) on Calcutta Port Trust and paragroph 7·52 of 196th Report (5 LS) on Farakha Barrage Project (January, 1976.)

1	2	3	4
19	3.24	Ministry of Shipping and Transport	As regards acquisition of land, the Committee have been informed during evidence that land, being a State subject, the land for Haldia Dock was acquired under the laws by the West Bengal Government. The period 1968-69 was, particularly, a difficult one and a number of injunctions were issued by the Courts of Law. The Committee note that the Calcutta Port Trust went in appeal successfully against every injunction issued by the Courts of Law and they won in almost every case and only a few are outstanding.
20	3.25	Ministry of Steel	As regards steel, the Committee note that the supply was sporadic and fell far short of the demand. It was only after January 1974 when Haldia Project was treated as a core project (a priority given next to operational demands of Defence Department) that there was a perceptible improvement in the supply of steel. During the period January 1971 to January 1974 there was a steep fall in supply—in fact against an indent of 35,000 tons, an allotment of 15,000 tons was made—and the project authorities had to go into the market with the help of the Steel Controller of India and had to pay an extra price of Rs. 200/- per ton, the total financial implication of which has been stated to be of the order of Rs. 35.16 lakhs. The Committee cannot but express their unhappiness that a project of national importance like Haldia was denied priority as for a core sector project till 1974 in the matter of allotment of steel to which it was clearly entitled. That a Government organisation like the Port Trust, constructing a big project like Haldia, should be asked to go into the open market and get steel at a price higher than the control price, is a matter of great concern. The Committee feel that there should be a standing direction to treat such projects of national importance as core projects in the matter of allocation of steel and other scarce materials.
21	3.26	Ministry of Railways	As regards the laying of railway line and supply of wagons, the Audit para mentions that 2056 wagons were supplied by the Railways during the period April 1971 to March 1972 as against a requisition of 5122

wagons. The representative of the Ministry of Railways during evidence has conveyed the impression that there were genuine difficulties for the Railways in 1971 in the eastern sector in the matter of placement of wagons. But the Committee find from the material before them that even during the years 1972, 1973 and 1974 the position regarding supply of wagons to the Port Trust was far from satisfactory. During the period 1st April 1972 to 30 June 1972, only 105 wagons were supplied as against indents for 775 wagons made by the different contractors. Despite high level discussions and instructions by the Railway Board to the General Managers, Eastern and South-Eastern Railways in May 1973 to meet the demand for stone and gravel for the project in full, the supply of wagons, continued to be unsatisfactory, the actual supply being only 45% and 35% respectively of the total monthly requirements of wagons for stone and gravel movement. The position in January 1974 was no better. During that month, only 5 rakes were received by the Calcutta Port Trust in spite of the fact that at a meeting held on 9 January 1974 at Calcutta the Railways had promised to supply one rake per day. That such a situation should have prevailed despite inter-ministerial discussions at a high level is a matter which Government should seriously take note of so as to obviate repetitions of such lapses in future. The Committee would, therefore, urge that proper arrangements should be made for an effective coordination between the Railways and other concerned authorities while executing big national projects like Haldia.

22. 3.27 Ministry of Shipping and Transport

As to the overall effect of delay in completion of the project, the Committee have been informed that while it is a feasible proposition to make a calculation of the total financial loss to the Port on account of loss of revenue/earnings caused by the long delay in commissioning of the Port, it is difficult to quantify the contribution to this loss caused by delays on the part of different contractors in executing the respective works allotted to them. The Committee are not convinced with this argument. They feel that an exercise could and should be made to identify the contribution of each agency to the delay in the execution of the project and then quantify the loss sustained as a result of the default on the part of each agency.

1	2	3	4
23	3.28	Ministry of Shipping and Transport	The Committee would like the Government to re-examine the matter in depth. Despite the delay in the commissioning of the project and the oscalation of costs, the Committee cannot be oblivious of the fact that the Haldia Project was a challenge to the ingenuitions. technical skills and capabilities of Indian engineers and technicians alike. The Committee are glad that by executing the project without depending on foreign expertise, the Indian engineers and workmen have achieved and demonstrated a high degree of self-reliance in a crucial sector like construction of a new major port and shown what dedicated and determined efforts can achieve. The Committee have no doubt that the successful commissioning of the Haldia Dock Project has consecrated the emergence of Indian engineers and technicians on the world scene as having the expertise and know-how for construction of major ports and development of related infrastructure facilities. This indeed is a proud achievement.
24	4.12	—do—	The Committee are greatly concerned at the disquieting picture that has emerged in regard to planning for the Haldia Project. While the estimate for the first phase of the Dock Project providing for one riverside oil jetty, 5 berths for coal, ore, fertiliser, general cargo and containers and one finger jetty prepared initially in April 1962 and reframed in 1965-66 was for Rs. 36.92 crores (foreign exchange : Rs. 4.40 crores), the figure swelled up to Rs. 40 crores on account of devaluation of the rupee in November, 1966. As per later decision to provide for facilities for ships of 80,000 DWT as against 40,000 to 60,000 DWT decided earlier, the project estimate was escalated to Rs. 53.83 crores in March, 1969. It is revealing that the Port authorities had themselves admitted that the earlier estimates were not based on detailed designs and the changes in scope of works accompanied by steep rise in costs and prices necessitated an upward rivision of the estimates to Rs. 90.40 crores in April, 1972. There was, however, no finality to the estimates and the Committee have been informed in

October, 1975 that the estimate would be in the region of Rs. 127 crores. The latest estimate, as furnished by the representative of the Ministry during evidence, is around Rs. 135 crores.

As to the justification for preparing estimates on a year to year basis instead of drawing up a consolidated estimate for the project as a whole, the representative of the Ministry has adduced an argument, which is hardly convincing that "Normally speaking one really sanctions revised estimates. But if there are practical difficulties, the procedure is adopted by Government, and there are other cases also". No satisfactory explanation has been given by the representative of the Ministry as to why the final estimates could not be put up before the Government and their approval obtained. As matters stand, there has been a three and a half fold increase from the original estimate of Rs. 40 crores to Rs. 135 crores, notwithstanding the fact that the new items included in the project accounted for an increase of Rs. 11 crores only.

The Committee come to the inescapable conclusion that there has been an almost laconic approach in the matter of preparation of project estimates and the processing thereof. In the opinion of the Committee, such a situation is fraught with inherent danger in so far as the economy of the Port as a whole is concerned. Not only does it upset the planning of the Port but it also affects the ways and means position of the Government. The Committee would, therefore, urge that the Ministry of Finance should observe stricter financial control over the projects and should insist on definite and realistic estimates of cost. The Ministry should satisfy itself at all stages why a revision of the original estimates is necessary, and whether the reasons adduced in support of revision are conclusive and do not give any scope for unnecessary expenditure. The Committee need hardly stress that preliminary and consequential steps in respect of a project which is decided to be taken up for execution *e.g.* the acquisition of lands, placing orders for the purchase of plant, machinery, etc should be taken in time and in proper sequence so that the original estimates do not become out of date because of efflux of time and escalation in costs. Complete details

1	2	3	4
			of the estimated cost of a project together with its economics and financial implications should be placed before Parliament when submitting a demand for its approval, and whenever these estimates are revised full reasons therefor and the effect thereof on the economics of the Project should be given to enable Parliament to understand the full implications before voting the funds. The Committee suggest that in the present case Government should finalise the estimates of Haldia Project without further delay and include them with supporting data and financial and economic implications in the Demands for Grants to be placed before Parliament.
25	4.13	Ministry of Shipping and Transport	On the question of expenditure on river dredging and maintenance, the Committee note that subsidy to the extent of 80% was approved for the Calcutta Port by the Cabinet only up to 31-3-76. Keeping in view the fact that every new Port at the initial stages is bound to face difficulties likely to upset their calculations and expectations, the Committee recommend that the Central subsidy for river dredging and maintenance for Haldia Docks should be favourably consdiered by the Central Government and such subsidy continued for atleast a period of five years after the commissioning of the Haldia Docks.
26	4.14	Ministry of Shipping & Transport/Finance	The Committee commend the fruitful efforts of Government at indigenisation which are evident from the fact that in a big Project like Haldia, the foreign exchange element will be only about Rs. 9 crores, *viz.* 6 to 7 per cent of the total anticipated expenditure of Rs. 135 crores. The Committee have noted that the expectations of traffic 4 to 5 years after the commissioning of the Docks, on which th eeconomic viability of the project has been based, are 15 million tons per year, consisting of ore, coal, iron, foodgrains, fertilizers, container and general cargo and salt. Out of these, the only commodity on which actual performance in the past few years is available relates to oil traffic since the berths for other items of

			traffic have either not yet been commissioned or commissioned only in 1977. In respect of oil, which is being handled at the Oil Jetty, commissioned in 1968-69, the Committee find that starting from a traffic of 0.28 lakh tonnes in 1968-69, the same reached a level of 14.35 lakh tons in 1974-75 and 21.71 lakh tonnes in 1975-76. In the matter of revenue from the Oil Jetty, the Committee find that as against expectations of Rs. 210 lakhs per year, the actual revenue in 1974-75 was Rs. 203.49 lakhs. It was only in 1975-76 as per information given to the Committee during evidence, that the revenue from the Oil Jetty rose to Rs. 427 lakhs*. The Committee trust that the opening of the Haldia Port would give a fillip to a larger inflow of cargo so that the expectations of achieving 15 million tons of cargo, on which the economic viability has been worked out, would be fulfilled.
27.	5.8	Do.	The Committee note that the contract for construction of riverside oil jetty at Haldia was awarded to the Yugoslav firm (Ivam Milutinovic-PIM) after bringing down, through negotiations, the price of their tender from Rs. 153.76 lakhs to Rs. 139.76 lakhs (foreign exchange 60%), which was lower than the offers of the other two tenderers made in conformity to the technical requirements of the work. The firm was also given subsidy by way of cheap electricity, the total value of which was Rs. 5 lakhs. However, an important factor, namely the foreign exchange element of the price of the contract of M/s. Ivan Milutinovic-PIM being 60%, as against only 15% in the case of another tenderer (M/s. Hochtief-modern-essen) does not seem to have been given the consideration while awarding the contract. It appears that more weightage was given to the fact that the firm belonged to a country with which our country had a trade and payments agreement. The Committee suggest that standing instructions may be issued that while awarding contracts of this dimension, among other things, consideration should invariably also be given to the component of foreign exchange that would have to be expended.

*Kindly See Chapter V (Para 5-6) on oil Jelly at page 101 of this Report.

1	2	3	4
28.	5.9	Ministry of Petroleum	In regard to the traffic at the oil jetty the Committee find that the actual materialisations in 1975-76 was only 2.17 million tonnes as against the expectation of 2.5 million tonnes for that year. So far as future projections are concerned, it is disturbing to note that as against the earlier expectation of 4.7 million tonnes for 1978-79, it is now expected, as stated by the representative of the Ministry of Petroleum during evidence, that the traffic will go up to the level of 3 million tonnes per annum only (the quantum on which the economic viability was based) by 1980-81. While noting that the capacity of the oil jetty provided at Haldia is related to the size of ships calling at the jetty, the pumping rate of those ships, and requirements/storage capacity of the Refinery, the Committee would stress that there should be optimum utilisation of the facilities created at heavy capital expense at Haldia for handling of POL traffic.
29.	6.6	Ministry of Shipping and Transport	From the material made available to them, the Committee come to the inescapable conclusion that the Port Trust Authorities did not bestow the proper care and attention which they should have in the planning of designs before awarding the contract for civil construction work of the lock entrance, lead-in-jetty and berths in the impounded dock basin of Haldia. According to the statement of the Chairman, Calcutta Port Trust, investigations into the behaviour of the river Hoogly have been going on for a long period since river research is a continuous process. The Committee, therefore, fail to understand why necessary tests could not be conducted by the Calcutta Port Trust or the Poona Research Station before the award of the contract to the Hindustan Construction Ltd. in August 1967. The Port Trust Authorities should have undertaken all the necessary tests germane to the work of this magnitude. As a result of the dilatory processes involved in getting technical clearance for the project, there has been not only undue delay in the completion of the civil construction works but also escalation of the costs. The Committee are not happy over the fact that the Port Trust Authorities instead of accepting

			the Audit point have sought to justify the delay, which, in the opinion of the Committee, is wholly uncalled for. The Committee would, therefore, urge that the matter should be looked into in greater detail with a view to fix responsibility for the lapses. Further, procedures should be drawn up for working out the details of the operations well before the award of contracts of this nature. There should be proper coordination among the different authorities so as to obviate delays in the execution of the works.
30.	6.13	—Do.—	The decision to construct a coffer dam after it was found that the earthen dam was insufficient to protect the site of the work is another instance of defective planning on the part of the Port Trust Authorities. As pointed out by Audit, the contractor himself had to point out in December, 1971 about the inadequacy of the earthen dam to protect the site area. While the Port Trust Authorities have admitted that the construction of the coffer dam was necessary "because of the fact that at the mouth of the lock-entrance the river was very close and so we wanted to excavate 70 feet below the ground level", the argument advanced by them that the "Hindustan Construction were not ready till 1972-73 season for this work and, therefore, we did not do it before" seems to be far-fetched. The Port Trust Authorities should have envisaged all the details of the work to be executed well before the award of the contract. Due to lack of coordination between the contractor on the one hand and the project authorities on the other, there was not only delay in the construction but increase in the overall cost of the bund. As has been pointed out by Audit, the coffer dam cost the exchequer an amount of Rs. 23 lakhs. The Committee, therefore, cannot too strongly emphasise the need for proper planning, preparation of project estimates well in time and coordination with different authorities charged with the execution of the project.
31.	6.17	—Do.—	The Committee are unhappily that adequate sub-soil investigations for deep work had not been apparaently done before beginning the work of lock entrance. As pointed out in the Audit paragraph the rate for dewatering necessary for the work was fixed at Rs. 1.50 per horse power

1	2	3	4
			hour of pumping at the time of considering the tenders for the construction of the lock entrance on the assumption that the soil was impervious. In the opinion of the Committee this was obviously a very rough and ready method of assessing the difficulties of the situation. No adequate attention was paid to the matter. The Committee would have expected that knowing the nature of the area and the river bed, both the Port authorities and their Consultants should have made a perspective planning which unfortunately they did not do. The Committee are constrained to note that it was the contractor who had to discover and point out the sub-soil conditions, which in fact was the responsibility of the Port Trust to do.
32.	6.18	Min. of Shipping & Transport	The Committee need hardly remind the Ministry that M/s Cementation Company, to whom the work of soil investigations was awarded, have already come in for adverse notice of the Committee in the case of their performance on soil analysis work at Naval Dockyard, Bombay and again at Mormugao Port*. The Committee feel that there is need for a detailed review in regard to the performance of this company in the various contracts of soil analysis work awarded to them from time to time by the Government of India. The capacity and capabilities of this firm should be taken into account before awarding any further contracts to them.
33.	6.21	—Do.—	The whole transaction relating to the award of contract for mechanite castings, its subsequent cancellantion and its eventual farming out to another party presents certain disquiting features which the Committee have noted with great concern. First, the contract for the supply of castings was placed on firm 'D' (M/s. Binny Engineering Co.) without specific imposition of the condition regarding inspection by Lloyds. Secondly, the contract was cancelled when the firm declined to subject itself to Lloyds inspection. Thirdly, the same contract was given to another firm 'E' (M/s. Bird & Co.) who had no licence to produce the castings and fewer facilities to get the castings machined. In this process not only was there an additional expenditure to the time of Rs. 1.80 lakhs but there was also, as has been admitted by the Port Trust Authorities, inordinate delay in the execution

			of the Project. There was thus no benefit derived by the Project authorities in cancelling the contract of M/s Binny Engineering Company and awarding the same to M/s Bird & Company. The object behind cancellation of the contract of M/s Binny Engineering Company and awarding the same to M/s Bird & Company was fully defeated which leaves no doubt that instead of straightaway cancelling the contract, the Port Trust Authorities should have persuaded the firm, namely, M/s Binny Engineering Company, to improve the quality of their product and agree to have inspection by Lloyds on payment of some additional amount. The Committee trust that in all future cases of cancellation of contracts and their awarding to new contractors, the Calcutta Port Trust shall keep in view the technical capabilities of the new contractor and satisfy themselves fully that the new contractor shall be able to execute the job satisfactorily both in regard to technical requirements and timely execution.
34.	6.27	Min. of Shipping & Transport/ Heavy Industry	The Committee are surprised to find that while the Ministry of Shipping and Transport have categorically stated that one of the considerations for awarding the contract for radial gates and penstocks to M/s Triveni Structurals Ltd. was that the engineers of the Calcutta Port Trust were, on inspection, satisfied with the technical personnel of the firm and their having requisite knowhow and experience of taking similar work of hydraulic structure abroad, the representative of M/s Triveni Structurals and the Department of Heavy Industry have stated that this was the first time the firm were taking up a job of this nature. According to the Ministry of Shipping and Transport the firm had during discussions undertaken to execute the entire work in conformity with the Calcutta Port Trust tender specification and drawings. But later due to the changes made in the drawings, the undertaking asked for higher prices. At the inter-ministerial meetings held on the 15th January, 1972 and 24th November, 1973 it was finally decided to pay the firm an amount of Rs. 44.96 lakhs which was about 2½ times the amount of their original quotation of Rs. 17.47 lakhs. The Committee would like Government to review the position and ensure that the Haldia project is not saddled with high capital cost as appears to have happened in this instance.

*See 230th Report of P.A.C.—Fifth Lok Sabha—P.85

1	2	3	4
35.	6.28	Min. of Shipping & Transport/ Heavy Industry	The Committtee are also unhappy that no satisfactory arrangements exist in respect of coordination between the Ministries concerned for sorting out the difficulties coming in the way of such public undertakings in timely completion of the work allotted to them. The fact that even the delay on the part of M/s. Triveni Structurals Ltd. in furnishing revised drawings of penstocks was not brought to the notice of the Department of Heavy Industry, is a pointer to the imperative need for creation of some sort of a standing arrangement whereunder all cases of difficulties experienced by public undertakings, particularly in dealing with essential works of core projects like Haldia, are brought to the notice of the administrative Ministries concerned for being resolved.
36.	6.38	Min. of Shipping & Transport	The Committee note that the decision taken by the Calcutta Port Trust in 1970 for changing the method of construction of Caisson gates from "vertical position" to "horizontal position" was based on the anticipated delay in completion of the cambers where these gates were to be installed, and was primarily intended to effect a saving in time likely to be spent in fabrication of gates after the cambers become available. The fact that the intended saving in time could not be achieved and the change in the method of fabrication ultimately resulted in an extra expenditure of more than Rs. 51 lakhs, are, in the opinion of the Committee indicative of lack of planning and coordination on the part of the Project authorities and their Consultants. This is one of the instances, where expenditure has proved to be deceptive or in other words led to bad judgement. The position was made worse by the contracting firm (M/s. Jessop & Co.) delaying the completion of the work according to the new method from the stipulated date of September, 1972, to June, 1976, which resulted in an additional expenditure of Rs. 28 lakhs due to escalation. No action seems to have been taken against the firm on account of this delay. The Committee cannot but express their unhappiness over the delay and resultant escalation in cost.

37.	6.46	Min. of Heavy Industry	The Committee are unhappy that the installation of stoplogs was delayed for more than two years from March, 1974 to May, 1976. The representative of M/s. Triveni Structurals Ltd., to whom this work was allotted, has told the Committee in evidence that this was their first attempt of that size of gates and that they also tried to bring in a reputed company—CIBA & Co. for punrposes of epoxy grouting. On the question of this delay, the representative of the Ministry of Heavy Industry has informed the Committee during evidence that when the experiment of epoxy-grouting by the private company (CIBA) failed, the alternative of machining was taken up which proved to be a time-consuming process. It is a matter of concern to the Committee that a private firm (CIBA) was allowed to demonstrate their method of epoxy-grouting and as a result of this mere experimentation, which ultimately failed, avoidable delay was caused in the installation of the stoplogs.
38.	6.47	Min. of Shipping & Transport	Surprisingly enough, the Committee also do not find any mention of the difficulties experienced by M/s. Triveni Structurals in selection of a proper method to make the equipment water-tight, in the minutes of the three consecutive meetings of the Steering Committee held on the 1st November, 1974, 2nd April, 1975 and 15th January, 1976. In one of their earlier recommendations relating to radial gates and penstocks also supplied by M/s. Triveni Structurals, the Committee have suggested the setting up of some machinery to ensure that whenever any difficulty is experienced by any public undertaking, particularly in dealing with essential works of core projects like Haldia, the administrative Ministry concerned should immediately be brought into the picture and the difficulties sorted out without delay. The present case of delay in the installation of stoplogs is another instance which lends support to the said recommendation of the Committee. The Committee hope the Government would be more vigilant in these matters and take suitable steps to achieve better coordination between the Ministries/Departments and the

1	2	3	4
			Public Undertakings concerned with a view to ensure a more efficient performance on the part of Public Undertakings to whom government works are awarded.
39	6.55	Min. of Shipping & Transport	The Committee note that the work relating to additional culvert and pump house was initially awarded to M/s. Chanda Engineers in 1971 but, since the firm had failed to execute the work despite an advance of Rs. 6 lakhs given to them by the Calcutta Port Trust in October, 1974, the contract with them was terminated in August, 1975. The Committee are unhappy that no enquiry as to the financial position of the firm was made before awarding the contract to them.
40	6.56	—do—	In order to get the residual items of work executed, the Port Trust started negotiations with M/s. Hindustan Construction Co., the working contractors at the site, and a committee was in fact appointed to negotiate reasonable rates with M/s. Hindustan Construction Co. Ltd. The Committee are suprised that before the departmental committee could proceed with the job assigned to them, the Calcutta Port Trust authorities decided to re-award the contract to M/s. Chanda Engineers on the recommendation of a nationalised bank (United Commercial Bank) who were stated to have agreed to extend financial assistance to the contractors and also to furnish additional performance guarantee to the extent of 5% of the contractual value of the work. The Bank had also obtained an assurance from M/s. Continental Construction Pvt. Ltd., a contracting firm of repute, to the effect that they would carry out the work on behalf of Chanda Engineers Ltd. The Committee are somewhat preplexed by this whole exercise. Without awaiting the results of the efforts of the departmental committee appointed to negotiate reasonable rates with M/s. Hindustan Construction Co. the Port Trust had extended a favour to M/s. Chanda Engineers Ltd. which, on the basis of their past experience, should not have been done.

41	6.57	—do—	From the latest information received by the Committee (March, 1977) in respect of actual performance of M/s. Chanda Engineers after re-award of contract to them, the Committee find that the ultimate date of completion, viz. end of April, 1977, is not going to be adhered to inasmuch as the firm later indicated that they will make every effort to complete the work before the onset of monsoon, viz. June/July, 1977. The main reason for this slippage of about three months has been stated to be the obstruction met underground while sinking the 90 ft. diameter monolith up to the desired level, which is necessary before the adjoining culverts can be constructed and connected with the same. The Committee cannot but express their unhappiness over the fact that in spite of assurances by the firm and their bankers, the firm have not been able to adhere to the ultimate date of completion as agreed upon in the re-awarded contract. The Committee desire that the Port Authorities should keep a vigilant watch over the completion of the work. This, of course, is without prejudice to the imposition of penalty etc. for delay in execution of the project.
42	6.67	—do—	The Committee note that after completion of 45 lakh cubic metres of dredging work in the dock basin area at Haldia the Dredging Contractor had to suspend the dredging operations in February, 1968, as the civil construction work of the berths, on which the residual dredging of 20 lakh cubic metres was dependent, had not been done. From the material before the Committee, it is apparent that the resumption of dredging work, normally due in September, 1969, was delayed much further as the Port Trust themselves were not ready for the work till January, 1972. This long interval enabled the Dredging Contractor to put forward a demand to treat the contract as closed or, in the alternative, to negotiate suitable escalation in the contracted rate of dredging of Rs. 3/- per cubic metre. The long delay in completion of the civil construction work of the berths apart, a further period of about 21 months was lost in coming to terms with the Dredging Contractor, with the result that the dredging operations could be resumed only in September, 1973, and completed in December, 1975, as against the originally stipulated date of October, 1969. In the

1	2	3	4
			process, the dredging contractor had to be paid at a higher rate of Rs. 3.80 per cubic metre for the residual work of 20 lakh cubic metres, and at the current market rate of dredging for the additional work of 25 lakh cubic metres that had become necessary due to the increased depth of dredging in the area, *viz.* an average dredging rate of Rs. 4.85 per cubic metre for the entire work of 45 lakh cubic metres. In addition, the project authorities had also to agree to payment of a sum of Rs. 37.50 lakhs to the Dredging Contractor by way of charges for bringing a dredger from Mormugao, which were equal to the charges for bringing a dredger from abroad. The explanations offered for this during evidence are that the dredger was removed from Mormugao because of urgency of work in Haldia and that no mobilisation charges were paid to the contractor for bringing a dredger later on for Mormugao from abroad.
43.	6.68	Ministry of Shipping & Transport	The Committee feel concerned about the inordinate delay in completion of the civil construction work of berths in the dock basin area, which held up the resumption of dredging work. It is evident that there was no advance planning whatsoever and no attempt was made to synchronise the two operations. The consequent escalation in the contracted rate of dredging from Rs. 3 to Rs. 3.80 per cubic metres cost of exchequer an additional sum of Rs. 16 lakhs. The Committee are surprised that after delaying matters from 1969 to 1972 and further spending considerable time of negotiations with the Dredging Contractor, the project authorities put themselves in an unenviable position where they had to pay Rs. 37.50 lakhs for bringing a dredger from Mormugao to Haldia on grounds of urgency. In the opinion of the Committee, such helplessness on the part of the project authorities is a sad reflection on the dredger position in the country. This is borne out from the statement in the Audit paragraph to the effect that it was not considered practicable to use a Ministry of Transport dredger due to planning already made. Further, from the information furnished to the Committee during evidence it is noted that the estuarian dredger, which was

			to be delivered from Garden Reach workshops by June, 1976 had not been delivered. The Committee would urge that immediate steps should be taken by the Government to improve their dredger position in order to save themselves from situations where the dredger contractors can dictate their own terms to them.
44.	6.69	—do—	As regards the dredging work of 24.10 lakh cubic metres in the river basin which was awarded to the same contractor (Yugoslav firm) in November, 1966, the Committee note that the same was subsequently taken away from the contractor to be done departmentally. There is no record to show that any serious efforts were made by the project authorities to persuade the dredging contractor to undertake in lieu of this work the additional dredging work of 25 lakh cubic metres in the dock basin area at the originally contracted rate of Rs. 3 per cubic metre plus escalation. On the other hand, the project authorities had to agree to the treatment of the above mentioned work in the dock basin area as new work to be paid for at the current market rates of dredging in 1972-73. The total additional financial burden on this account works out to Rs. 47.25 lakhs *viz.* the difference between the contracted rate (after escalation) of Rs. 3.80 per cubic metre and the average rate of Rs. 4.85 per cubic metre actually paid to the contractor for the entire work of 45 lakh cubic metres (including 20 lakh cubic metres of left over work). In this connection, the Committee find that in terms of clause 83 in the General Conditions of work with the contractor the project authorities had the power to increase the quantity of any work included in the contract and to ask the contractor to execute the additional work of any kind after taking into account the value of such variations. The Committee have no doubt that if the project authorities had seriously pressed their claim under this clause, there was every possibility of the contractor agreeing to undertake the additional work of 25 lakh cubic metres in the dock basin area (in lieu of 24.10 lakh cubic metres of dredging work in the river basin) at Rs. 3.80 per cubic metre, *viz.*, the original contracted rate of Rs. 3 per cubic metre plus escalation. The Committee suggest that this aspect of the matter should be probed into further and responsibility fixed with a view to take suitable corrective measures for the future.

1	2	3	4
45.	6·81	Ministry of Shipping & Transport	The Committee not that the work of designing fabricating and installing of sophisticated equipments of ore and coal handling plants at Haldia was allotted to M.A.M.C., a public sector undertaking, which according to Ministry's own statement, had never done this work before, on the recommendation of a committee appointed by the Government of India in 1966 to examine the availability and suitability of indigenous resources. The plants were originally scheduled to be installed by December, 1970, but even after off-loading some of the items, M.A.M.C. was able to start making some progress only from the middle of 1974 and when the Committee took evidence in June, 1976, the work was yet to be completed. The reasons for delay have been stated to be changes in designs and capacities of some of the major equipment and lack of expertise and suitable know-how with M.A.M.C. The cost of the plants also rose from the initial contract price of Rs. 4.20 crores to Rs. 15.30 crores.
46.	6·82	—do—	The need for encouraging indigenous resources notwithstanding, the Committee consider the pitfalls, both in respect of long delay of six years and more than three-fold increase in cost, as unfortunate. This aspect of the matter was brought to the notice of the Finance Ministry, who, as pointed out in para 6.77 of this Report, had stressed the urgency of avoiding such pitfalls in future. The Committee note that after Haldia, the M.A.M.C. has gained in experience and their supplies to other Ports like Madras and Vishakhapatnam are stated to be more regular than was the case with supplies to Haldia. The Committee hope that the expertise that has been achieved at great cost and effort would be further developed and perfected.
47.	6 83	—do—	Another matter of concern to the Committee is the flow of sufficient traffic in iron ore and in coal to ensure full and complete utilisation of the capacity created at Haldia for handling these commodities. As it is, the berth being provided at Haldia can handle 4 million tonnes per year of iron ore. As against this handling capacity, the port's expectations of movement during 1977-78 are 1.5 million tonnes which is only half of the figure of 3 million

tonnes planned by the MMTC for movement through Haldia in that year. Unless concerted efforts are made, the target of exporting 4 million tonnes of iron ore through Haldia during 1978-79 may not materialise.

Similarly, in regard to the traffic in coal, while the berth at Haldia has been initially designed to handle 3.5 million tonnes per year, the estimated traffic during 1977-78 is now expected to be only 1.5 million tonnes which again is only 50% of the estimate for this year as originally prepared by the Port authorities. For 1978-79, the original estimate of the Calcutta Port Trust is 3.5 million tonnes of coal traffic but it is a moot point whether this traffic would actually materialise during that year because the actual contracts about movement of coal are yet to be finalised.

As a matter of fact, Government themselves are not sure about the firm forecasts of coal traffic and the Department of coal are stated to have set up a Working Group to arrive at a firm indication in regard to the actual quantum of annual coal traffic expected to materialise during the next ten years. Such a position is indicative of the fact that there has been complete lack of coordination between the Ministries/Departments concerned. The Committee apprehend that the mechanical coal-handling capacity has been provided at Haldia without any firm indication about materialisation of traffic in the years to come.

48.	6.84	-do-	The Committee cannot but express their grave concern over the fact that the facilities for bulk handling of iron ore and coal, provided at Haldia at heavy capital expense, would be utilised even less than half of their capacity in the coming months. In regard to coal, even the firm indications of expected traffic during the next ten years are yet to be worked out. As already stated in paragraph 1.12 of this Report, this situation calls for speedy remedial action at a higher level so as to ensure sufficient traffic load for an economic utilisation of the capacity being provided for handling of iron ore and coal at Haldia.

1	2	3	4
49.	6·93	Ministry of Shipping & Transport	The Committee note that after finalisation of the detailed scheme regarding mechanical handling facilities for fertilisers at Haldia with the Canadian Consultants in March 1973, the Project authorities found it necessary to modify the same to accommodate the Fertiliser Corporation of India's special requirement. There was, however, no change in the handling capacity of the equipment which remained at 20 lakh tonnes per annum and, as stated by the Ministry, the modifications also were only 'to some extent without altering the basic scope of the project'. In the light of this position. the Committee are unable to understand the 33 fold increase in the cost of the equipment from Rs. 42 lakhs in 1965 to Rs. 1395 lakhs in 1975. The figures speak for themselves.
50.	6·94	-do-	In a note furnished to the Committee in March 1977, it has been contended that since the first estimate for the project actually sanctioned in 1972 was for Rs. 331.39 lakhs, the comparison should be between this sanctioned estimate (Rs. 331.39 lakhs) and the revised (1975) estimate of Rs. 1395 lakhs. Even on that comparison, there has been a four-fold increase. In the opinion of the Committee, it is a moot point whether the estimations were realistically made on the basis of sound projections and handling cost implications or they were simply escalated upwards to fit in within the framework of the prospective offer of a Canadian loan. In any case, one very vital factor seems to have been lost sight of, namely, the question of capacity created *vis-a-vis* requirements. As mentioned in the Audit paragraph, Government's own anticipations of traffic in fertilisers at Haldia for 1978-79 were assessed in January 1971 at 11.47 lakh tonnes and in January/March 1972 at 13 lakh tonnes. The latest calculations in this regard as placed before the Committee during evidence are 13.10 lakh tonnes per annum (both raw materials and finished fertilisers) from 1980-81 and thereafter. It is, therefore, obvious that by providing mechanical handling facilities for 20 lakh tonnes per year, an excessive handling capacity of about 7 lakh tonnes per year has been created at heavy cost which is likely to remain

			unutilised on the present showing. The extra expenditure involved in the creation of this capacity is also bound to have its impact on the Port's charges for handling fertilisers which will in turn make the imported fertilisers more costly. The Committee, therefore, suggest that the matter should be looked into by a term of experts including a costing expert with a view to optimise the use of the handling capacity created at the fertiliser berth of Haldia Docks. The Committee will like to be informed of the action taken in this regard within three months of the presentation of the Report.
51.	7·15	-do-	The Committee note that the "Outline Development Plan for Haldia Industrial Complex" brought out by the Government of West Bengal in January 1975 envisages the setting up of a number of industries, both in the public and private sectors, involving an outlay of over Rs. 475 crores. Out of the three public sector projects, two *viz.* Haldia Refinery Project and the Haldia Dock Project have been completed or are nearing completion. The third project, *viz.* Haldia Fertiliser Project, is taking shape. It is a matter of satisfaction that the Haldia would be one of the eight growth centres to be set up by the State Government of West Bengal for encouraging industrial and economic activities. That Haldia is being given the importance that it richly deserves is evident from the fact that industries are now being offered a package of incentives besides other infrastructural facilities. A proposal to set up a high-powered Haldia Development Authority is also on the anvil. The Committee are confident that given the necessary facilities and the wherewithal for acceleration of promotional activities envisaged under the Outline Plan, the contours of Haldia would rapidly undergo a change and in not too distant a future the Complex would pulsate with diverse activities, industrial as well as economic, giving employment opportunities to large segments of the population. The Committee would like that a definitive plan for industrial development should be drawn up for the gainful absorption of an estimated 27,300 persons displaced as a result of the project and for the employment of other unemployed persons during the next five to seven years.
52.	7·16	Ministry of Heavy Industry	In view of the fact that the people of the region had set high hopes on the development of Haldia and on the vast employment opportunities

1	2	3	4
			likely to be generated, the Committee would like that concerted steps should be taken to encourage early setting up of the industries for which licences have been given or are proposed to be given in the near future. All factors inhibiting the growth of industries should be identified and remedial steps taken. The Committee would like to mention in this connection a few of the constraints which have hampered the creation of an appropriate climate for growth.
53.	7·17	Ministry of Shipping & Transport/Heavy Industry	It was stated before a Study Group of the Committee which visited Haldia in December 1976 that inadequate water supply was one of the main constraints in the industrial development in that area. The State Government had planned the setting up of a 10.5 mgd. water works project at Geokhali at a cost of Rs. 7 crores but it was apprehended that the State Government might not be able to undertake it without financial assistance from the Central Government. The Committee would urge that the Central Government should extend full cooperation to the State Government in solving this problem of water supply which is a basic necessity for the residence of the area.
54.	7·18	—do—	As regards power, the Committee note that the West Bengal State Electricity Board have extended their power grid to Haldia and are now supplying power to the Dock Project, Refinery, Fertiliser factory as well as other industries from their 33 KV power line. The State Electricity Board are contemplating addition of certain transmission lines and substations. However, for meeting the demand of Haldia region beyond 100 MVA and the demand for rural electrification of the region, the State Electricity Board will have to construct a thermal generating station at Kolaghat which has been taken in hand and is expected to be completed within the next 5 years. The Committee need hardly stress that power is an essential pre-requisite for industrial development and any delay in meeting the power requirements of the area in time is bound to have an adverse effect not only on the overall development of the region but also on proper

			utilisation of the industrial and other machinery installed at heavy cost. The Committee stress that the Central and State authorities should see that adequate power for industrial and developmental use is provided in time.
55.	7·19	Ministry of Shipping & Transport	The Committee note that the National Highway No. 41 which is under construction shall connect the Haldia Port with National Highway No. 6 along the shortest length. The 32 mile length of the National Highway No. 41 leading to Haldia is expected to be completed by the end of 1978. There are two over-bridges which have to be constructed by the Railways as deposit works for which the Railways have been paid the entire cost of construction during the year 1975-76. Keeping in view the expected generation of heavy and fast moving traffic on commissioning of the Haldia Docks, there is an imperative need for speeding up the completion of National Highway No. 41. The Committee, therefore, stress that in the matter of development of road communications as also other infrastructural facilities, there should be close coordination between the Port, Union Government and State authorities so as to ensured integrated and timely development.
56	7·20	—do—	Another aspect which causes concern to the Committee is the impression that they gathered during their visit to Haldia and informal discussions with the State authorities concerned that the Master Plan for development of Haldia as an industrial and chemical complex which constituted an esential part of the Haldia Project as conceived is not making much headway. The Committee stress that there should be closer coordination between the Central, State and Port authorities in the interest of accelerating the pace of development of industrial and chemical complex at Haldia. The Committee would like to be informed of the concerted measures taken by Government and the other authorities concerned in pursuance of the above recommendations and the results achieved to generate larger traffic at Haldia on a sustained basis.

818LSS 77—GIPE