E.C. No. 468

ESTIMATES COMMITTEE (1965-66)

NINETY-SIXTH REPORT

(THIRD LOK SABHA)

MINISTRY OF TRANSPORT

BOMBAY PORT

PART I

LOK SABHA SECRETARIAT
NEW DELHI
March, 1966/Phalguna 1887 (Saka)
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CORRIGENDA
To
Ninety-sixth Report of the Estimates Committee on the Ministry of Transport
Bombay Port (Part I).

....

Title page, for 'EC No.458' read 'EC No.457'.
Page 1, para 2, line 5, for 'MumbaiA' read 'Mumba Ai'.
Page 1, para 2, line 12, for 'bequoathed' read 'bequeathed'.
Page 6, para 12, line 14, for 'freeing' read 'freezing'.
Page 25, line 14, for 'of' read 'or'.
Page 27, line 3, add 'to' after 'rose' and before 'Rs.'.
Page 32, line 8, for 'Ministries' read 'Ministers'.
Page 41, para 57(b), line 3, for 'fall' read 'wall'.
Page 44, para 63, line 16, add 'lock' after 'single' and before 'involved'.
Page 50, para 71, line 3, for 'sisued' read 'issued'.
Page 53, para 74, line 1, for 'sinc' read 'since'.
Page 53, para 74, line 16, for 'Psthuma' read 'Posthuma'.
Page 53, para 74, line 21, for 'Accordigly' read 'Accordingly'.
Page 54, para 76, line 17, for 'modle of' read 'model in'.
Page 54, para 76, line 2 from bottom, for 'specialised' read 'specialist' and for 'Consultants' read 'Consultant'.
Page 55, para 77, line 4, add 'According to these estimates the Consulting Engineers' after 'engineers' and before 'will'.
Page 57, line 10, for 'varries' read 'various'.
Page 60, para 82, line 4, for 'flate' read 'flats
Page 61, para 84, line 3, for 'Urban' read 'Urab
Page 62, para 85, line 7, for 'industrial' read 'industries', and line 16, for 'iterim' read 'interim'.
Page 65, lines 1-2, for 'Agency' read 'Association'.
Page 69, para 90, line 2, for 'dradging' read 'dredging', and line 5, for 'here' read 'there'.
Page 74, lines 5 and 12, for 'charters' read 'charterers'.
Page 75, line 1, for 'bt' read be'.
Page 77, under Scheme 'B', line 7, for 'convoyours' read 'conveyers'.
Page 78, line 6 from bottom, for 'wolud' read 'would'.

(P.T.O.)

Page 85, lines 1 & 3 from bottom for 'lessens' read 'lessons and for 'rasons' read 'reasons'

Page 88, line 15 from bottom &or 'toward' read 'towards'

Page 90, line 17 for 'onstruction' read 'construction'

Page 92, line 5 for '3:5' read '3.5'

Page 93, para 115, col 2 of the table for '24' read '34'

Page 100, line 10, for 'shohuld' read 'should' and line 1 from bottom for 'here' read 'there'

Page 104 line 1, for '1979' read '1879'

Page 105, para 129 line 7, for 'correspodning' read 'corresponding' and for 'indioating' read 'indicating'

Page 115, Appx IV line 5, for 'follow' read 'follows'

Page 128, Appx. VIII in the Heading, col 1, for 'Referernce' read 'Reference' and in col 3, for 'Recommendtaons' read 'Recommendations'

Page 133, against para 11, col 3, line 3, for 'abondoned' read 'abandoned'

Page 140, col 1, for '24' read '34'

Page 144, line 6, for '3:5' read '3.5'

Page 149, line 2 from the bottom, for 'damage' read 'from damage'

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(1965-66)

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INTRODUCTION

I, the Chairman, Estimates Committee, having been authorised by the Committee to submit the Report on their behalf, present this Ninety-Sixth Report on the Ministry of Transport—Bombay Port—Part I.

2. The Committee took evidence of the representatives of the Ministry of Transport on 25th, 26th,, 27th and 29th November, 1965, The Committee wish to express their thanks to the Secretary, Ministry of Transport, Chairman, Bombay Port Trust and other officers of the Ministry for placing before them the material and information they wanted in connection with the examination of the estimates.

3. They also wish to express their thanks to the representatives of the Shipping Corporation of India, Indian National Steamship Owners' Association, Bombay Chamber of Commerce and Industry and Karmahom Conference, for giving evidence and making valuable suggestions to the Committee.

4. The Report was considered and adopted by the Committee on the 22nd March, 1966.

5. A statement showing the analysis of recommendations contained in the Report is also appended to the Report (Appendix IX).

NEW DELHI-1;
March 26, 1966.
Chaitra 5, 1888 (*Saka*).

ARUN CHANDRA GUHA,
Chairman,
Estimates Committee.

CHAPTER I

INTRODUCTORY

A. Early History

Bombay is the principal port of western India and capital of the State of Maharashtra. The approach by sea to the great city of Bombay is one of the most beautiful in the world. Bombay itself lies on an island, some 25 square miles in extent, (Latitude 18:54'N° Longitude 72:43'E°) connected by causeways to the mainland, which stands out from a coast dominated by a range of high hills. The harbour is studded with rocky islets and precipices.

2. The name Bombay was, for long, thought to be derived from the Portuguese 'Buon bahia'—good harbour, but it is now generally accepted that the derivation goes back to much earlier times and is to be found in the name of the patron deity of the Koli settlers, 'Mumba iA' the consort of Shiva. The modern island of Bombay originally consisted of a cluster of seven islets, which historians identify with Heptanesia, of the Alexandrian scientist Ptolemy (1st Century A.D.) of volcanic origin, their formation indicates that in some prehistoric era they were rent asunder from the mainland by a series of titanic disturbances which, after alternating epochs of eruption and subsidence, determined the configuration of India's western sea-coast and bequoathed to Bombay the spacious harbour.

For many centuries the Heptanesia, populated only by a handful of primitive fisher folk and husbandmen, slumbered undisturbed on the bosom of the Indian ocean while the fame of neighbouring ports—Broach, Sopara, Chaul, Janjira, Kalyan, Thana—spread throughout the east and attracted merchant adventurers from far and near. From the ninth to the middle of the thirteenth century, these coast ports continued to grow and flourish and colonisation proceeded apace.

3. About 1260 A.D. the ruler of the North Konkan, Bhima Raja, retreating before the Moslem invasion from Delhi, stayed his steps on the island of Mahim, the nothernmost of the seven islands of Bombay—established there a new capital and built himself a palace, with houses for his guests and retainers. This event heralded the colonisation and development of Bombay. Bhima Raja's followers spread over the neighbouring islands, traded, thrived and

multiplied. By the middle of the following century, however, the Moslem influx had surged over the islands and the Mohammedan Sultans of Gujarat held undisputed sway until the coming of the Portuguese in 1534 A.D.

The earliest recorded visit of the Portuguese to Bombay was in January 1509, when Francisco d' Almeida, the first Portuguese Viceroy of Goa, landed at Mahim en route from Cannanore to Diu to engage the fleet of Amir Hussain. During the next twenty-five years the Portuguese paid spasmodic visits to the islands and in 1532 the Governor of Goa, Nuno da Gunha, made the islands of Bombay and Mahim tributary to Portuguese suzerainty.

Bombay which then had a population of less than 10,000 remained Portuguese until 1661, when Charles II married Princes Catharine of Portugal. Part of her marriage dowry was Bombay, and so Bombay came under English rule. In 1688 King Charles transferred it to the East India Company.

4. What really started Bombay off as a big port was the disastrous famine in China in 1770. The Chinese Government ordered more land to be used for growing rice, to feed the starving people, and that meant that there was less land available in China for growing cotton which resulted in shortage of cloth there. Bombay seized the chance to add to its trade. The people set up thousands of handlooms in their houses to turn out cotton cloth. With the passage of years, textile industry has grown in Bombay.

5. In 1873, a Trust was created to administer the port. The decision to constitute the Trust to administer the affairs of the Port of Bombay originated in the apprehension of Government that the interests of trade were becoming seriously endangered by the monopoly acquired by private companies for the landing and shipping facilities of the port.

The Bombay Port Trust Act of 1873 provided for the creation of a corporation under the name and style of the Trustees of the Port of Bombay, in whom was vested the management of the properties acquired by Government, with powers to levy dues, at rates previously sanctioned by Government, on all goods passing over their wharves. The Act consolidated the existing laws relating to the harbour and foreshore and made further provision for the regulation and improvement of the port.

As soon as the new Port Trust was created, the task of providing adequate wet-dock accommodation was taken up with vigour

and as cargo and passenger vessels grew in size and draught, larger docks and more powerful equipment were added with commendable forethought for the growing and everchanging needs of trade.

6. It was in 1875 that the first enclosed wet dock was constructed. Prior to this date, the bulk of ships used to load and discharge in the stream, though there were a few open wharves and bunders along which light draught vessels could lie.

The Prince's Dock was opened in 1880, the Victoria Dock in 1888 and the Alexandra Dock was completed in 1914.

The Merewether Dry Dock was opened in 1891 and the Hughes Dry Dock in 1914.

There was also simultaneous development in regard to the provision of transit sheds and warehouses, installation of cranes, bulk oil depots, the establishment of a Port Trust Railway and large depots for cotton, grain and other products.

7. In the year 1944, when the War traffic was at its peak, a major disaster nearly crippled the port. On the 14th April, 1944, the s.s. 'Fort Stikine', loaded with explosives, caught fire at No. 1 Victoria Dock and caused disastrous explosions and fires, which resulted in the destruction of almost all the Transit Sheds and Warehouses in the Prince's and Victoria Docks and all the 20 Wharf Side Cranes. The port, however, carried on work as best as it could with the help of the military authorities who cleared the debris and reconstructed the sheds and other facilities for temporary use.

B. Jurisdiction of the Port Trust

Present Limits

8. The Limits of the Port of Bombay have been declared as follows under Section 5 of the Indian Ports Act 1908.

North: From the boundary pillar south-west of and near to the village of Trombay the shore of Trombay Island to Pir Pau thence the shore* of Trombay Island to the boundary pillar situated in Survey No. 42 of Anik village, and thence a line across the Mahul Creek to the boundary pillar situated on the south bank of Chandni Creek.

*Note : The word "shore" is intended to mean the high water mark as defined in the Indian Ports Act, 1908, Section 4(4), *i.e.* the highest point reached by ordinary spring tides at any season of the year. (Pol. Deptt. Notification No. 6204 of 6-6-1930, B.G.G. of 12-6-1930, Part I, p. 1438).

West: The eastern shore of the Island of Bombay from the boundary pillar situated on the south bank of the Chandni Creek to the southern extremity of Colaba point, thence the shore of Back Bay of Malabar Point, thence a line drawn to the Bombay Floating Light at a position approximately Lat. 18 15 N., Long. 72 44 E., and continued to the boundary pillar on the west point of Kundari (Kennery) Island and thence the western shore of the Island to the boundary pillar on the south point thereof.

South: A line drawn from the boundary pillar on the south point of Kundari (Kennery) pillar on the mainland south of the village of Navagam (Nevedar Navgaon).

East: From the boundary pillar situated south of Navagon (Nevedar Navgaon) the western and northern shore of the mainland to the boundary pillar north east of the Thull Knob Beacon, then a line across the Dharamtar Creek to the boundary pillar on the south end of the Island of Karanja thence the western shore of the Island of Karanja to the boundary pillar situated at the northernmost point of the Island, thence a straight line to the boundary pillar on the north-west point of Hog Island, thence the north shore of Hog Island to the boundary pillar at the north-east point of the Island and thence a line across the Thana Creek to the boundary pillar south-west of and near to Trombay village.

9. Port limits are extended to and include all water and land usually covered by water within the Prince's, Victoria and Alexandra Docks and any extension of the Docks.

It has been stated that the landward limits of the port have not been defined, but the area bounded by the boundary walls of the Alexandra Dock and the Prince's and Victoria Docks is regarded as the area to which the jurisdiction of the Bombay Port Trust, to the extent prescribed in the Bombay Port Trust Act and the Docks Bye-laws, applies. Similarly, the area to which the Bunders Bye-laws apply, is demarcated by iron pillars.

Apart from the Docks and Bunders, the Port Trust possesses large landed estates, most of which have been created by the extensive reclamations carried out from time to time in connection with the development of the port. These estates now total nearly 1900 acres inclusive of the Docks and Bunders, and about 1350 acres exclusive of the Docks and Bunders.

Proposed Limits

10. The Nhava-Sheva marine area, where it is proposed to construct a satellite port referred to in para 82 of this Report, is stated to be outside the existing limits of the Bombay Port. The Port Trust consider it necessary to extend their limits for the purposes of the satellite port because:

(i) the Port Trust Board is not empowered to carry out any construction outside the port limits except as may be necessary for the protection of the berths inside such limits;

(ii) to ensure that no one else would be able to carry out any construction therein to the detriment of the interests of the harbour;

(iii) it would be great advantage for the port authorities to gain control of effluents discharging into the harbour for purposes of effective conservancy.

11. The Committee have been given to understand that the Port Consulting Engineers have proposed that the limits of the port should be extended so as to include the coast line from Arnala Island south of Khanderi Island, part of Ulhas river, the whole of the Thana Creek, Panvel Creek, Dharmatar Creek and part of the Amba river. The Port Trust Engineers, however, do not feel that the port limits need be extended to include such a large area for purposes of effective conservancy of the marine area covered by the satellite port, as the silt brought by the rivers discharging into the Nhava-Sheva region is negligible. Besides, the extended port limits suggested by the Consulting Engineers, involve the inclusion, in the Port of Bombay, of 16 minor ports of the Maharashtra State which are in an undeveloped state and most of which are located at places far away from the main centres of activity of the port and are not accessible by port craft such as tugs and dredgers. For these reasons, the Port Trust Engineers feel that, for the present, it would be enough to extend the port limits towards the east and north-east so as to include the portion of the Thana creek up to about the Thana Creek bridge, the portion of the Panvel Creek up to somewhere near Belapur, the Sheva Island and the coast of Nhava. These limits could be extended still further later on, if the necessity arose.

The Consulting Engineers are stated to have been requested to reconsider the question in the light of the views expressed by Port Trust Engineers.

12. The Chairman of the Port Trust stated during evidence that "the Consulting Engineers have reconsidered their proposals regarding extension of the port limits after discussion with me. It has now been agreed that the port limits could be extended within the harbour area to cover the water-spread in the Thana Creek, Panvel Creek, Dharmatar Creek and the Uran Creek excluding the coastal area of the Arnala to Khanderi, as originally suggested by the Consulting Engineers. Proposals are being worked out which will come up before the Board of Trustees and will later be sent to Government for sanction for extending the port limits.... For land, we have worked out the requirements. We will send the proposal to the Government explaining what will be our land requirement on the other side. Then the Government will process it with the Government of Maharashtra for freeing and acquiring that particular area for the purpose of the port, so that no other development takes place there."

The Committee feel that with the proposed extension of the port operations beyond the existing port limits, and the proposed construction of a satellite port at Nhava-Sheva it is imperative that the port authorities should have administrative control over the actual area of its operations, both on the water and land, so that the port operations are carried out unhampered, by a single authority without any administrative or procedural difficulties.

They would suggest that Government may constitute a technical committee consisting of representatives of Ministries of Transport, Railways, Finance etc. and the representatives of State Government of Maharashtra to examine carefully the question of extending the jurisdiction of the port having regard to the plans for developing the satellite port of Nhava-Sheva and of ensuring efficient port operations.

CHAPTER II

TRAFFIC HANDLED AT THE PORT

A. Traffic of the Port

13. The volume of cargo, handled at the Docks and Bunders, together with the number of ships which visited the port, during each of the last ten years is given below:—

(D.W. Tonnes in thousan ls)

Year	No. of Ships	Imports	Exports	Total
1955-56	2621	6815	3656	10,471
1956-57	2640	8372	3800	12,172
1957-58	2840	9451	3869	13,320
1958-59	2917	8553	3387	11,940
1959-60	3051	9564	3793	13,357
1960-61	3239	10,795	3926	14,721
1961-62	3156	10,413	4135	14,548
1962-63	3346	11,077	4861	15,938
1963-64	3276	11,885	5464	17,349
1964-65	3135	12,133	5212	17,345

14. The tonnage of cargo handled at the Docks during the last four years is given below:—

(Figures in Tonnes)

	Imports	Exports	Total
1961-62	4,078,880	2,057,462	6,136,342
1962-63	4,446,342	2,458,138	6,904,480
1963-64	4,657,409	2,324,211	6,981,620
1964-65	5,017,241	2,308,974	7,326,215

The Cargo handled at the Bunders during the same period has been as under:—

(Figures in Tonnes)

	Imports	Exports	Total
1961-62	6,334,149	2,077,213	8,411,362
1962-63	6,630,739	2,403,247	9,033,986
1963-64	7,227,780	3,139,821	10,367,601
1964-65	7,115,759	2,903,026	10,018,785

The Committee are glad to note that the total traffic passing through the port has increased from 10.4 million tonnes in 1955-56 to 17.3 million tonnes in 1964-65, thereby registering a rise of about 66 per cent during the decade.

The Committee, however, note that whereas the rise in imports during the last ten years, has been of the order of about 78 per cent, exports have risen only by about 43 per cent during the same period.

The Committee consider that till such time as Dock Expansion Scheme is implemented there is need to find ways and means of affording relief to the congested Port of Bombay by diverting some of the import traffic to neighbouring ports. The Committee would like Government to consider in particular the question of diverting some of the inward cargo of foodgrains and fertilisers to other neighbouring ports like Kandla and Mormugao.

B. **Passenger Traffic**

15. The passenger traffic, exclusive of passengers by country craft and harbour ferries, during each of the last four years is as follows:—

		Inward	Out ward
1	2	3	4
1960-61	Overseas . . .	91,750	88,130
	Coastal . . .	356,530	382,721
1961-62	Overseas . . .	84,229	86,466
	Coastal . . .	322,875	365,667
1962-63	Overseas . . .	88,077	81,819
	Coastal . . .	368,247	393,965

1	2	3	4
1963-64	Overseas . . .	77,818	76,239
	Coastal . . .	354,361	369,490
1964-65	Overseas . .	76,192	53,343
	Coastal . . .	368,644	379,490

Passenger Terminal Building at Ballard Pier

16. The Ballard Pier is a 1,500 feet extension of the harbour wall on the west side of the Alexandra Dock entrance lock and is the arrival and departure berth for the foreign mail steamers and other large passenger liners. The berth is dredged to 32' L.O.S.T. so as to accommodate the largest steamer using the port at all states of the tide. The facilities at Ballard Pier for the reception and embarkation of passengers and their baggage consist of the station building with three platforms for tourists and other trains and a spacious baggage and customs hall.

17. It has been stated that a scheme for the construction of a new 'Passenger Terminal Building' at Ballard Pier, in place of the existing building was first included in the Second Plan. However, due to the Naval Dockyard Expansion Scheme, the Ministry of Defence took over from Port Trust, certain portion of land at Ballard Bunder and the western face of Ballard Pier and agreed in return, to build, for the Bombay Port Trust, a berth in extension of the Ballard Pier. It was, therefore, decided that instead of reconstructing the existing building, a new building to serve both the existing and the new berth should be constructed. As this could be done only after the Navy had completed the extension of the Ballard Pier, the work could not be proceeded with during the Second Plan. As the Navy did not start the work on the extension of Ballard Pier, negotiations were held with the Defence Ministry and it was agreed in 1961 that the Navy should pay a cash compensation to the Port Trust, who should themselves carry out the execution of the extended berth. It has been stated that the construction of the berth which involves marine construction, is proposed to be executed along with the Dock Expansion Scheme as a part of the same contract and is expected to be completed by June, 1969. The scheme which was originally estimated to cost Rs. 3:25 crores was included in the I.D.A. project. The revised cost of the scheme is now estimated at Rs. 4:69 crores with a foreign exchange component of Rs. 0·63 crores.

18. The Chairman of the Port Trust has stated during the course of evidence in November, 1965 that "the Consulting Engineers have modified the layout of the terminal building suitable to meet the requirements of the passengers' interests. The halls have been enlarged and provision has been made for a covered walk-way and conveyor tunnel for baggage and for escalators for the use of passengers embarking or disembarking from the present Ballard Pier. The estimated costs of these improvements are being worked out by consulting engineers."

He added that the execution of the passenger building which is estimated to cost over Rs. 25 lakhs, is susceptible to review in the light of instructions* issued by Government to review all construction projects costing more than Rs. 25 lakhs.

Asked about the prospects of the passenger traffic the representative of the Port Trust stated that "we have been assured by the Passengers Interests that the traffic will not decrease below the mark it has reached so far. In future, even if these people travel by air, there will be some people in any case travelling by sea. Even if we do not expect any appreciable increase in the present figures of passengers, yet, at least, we may be sure that there cannot be appreciable decrease either. Therefore, on that basis, the new passenger terminal would be warranted."

The Committee regret to note that the scheme for the extension of the Ballard Pier and the construction of a new passenger terminal building which was included in the Second Plan, has not yet made much headway.

The Committee consider that passenger amenities at Ballard Pier need improvement to bring them in line with international standards as that would go a long way in attracting overseas passenger traffic, particularly the foreign tourists.

The Committee would like passenger amenities at Ballard Pier to be such as to attract ships carrying tourists on World cruise as this is bound to help the country in earning some valuable foreign exchange.

The Committee have no doubt, that in deciding the scale and standard of amenities to be provided at Ballard Pier, Government will make a careful study of the requirements of passenger traffic over

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*Government have stated in reply to SQ No. 45 on the 4th November, 1965 that "a detailed review of the current year's budget provision has been undertaken in order to effect economies. This includes particularly a review of all construction projects costing more than Rs. 25 lakhs to decide which of them need not be proceeded with."

the next 15—20 years as also the passenger amenities which have been provided in other countries *e.g.* Italy, Spain, Lebenon etc. for attracting tourist traffic.

C. Congestion in the Port

19. It has been represented by a leading Chamber of Commerce of Bombay that "there has been acute and unabated congestion in the Port of Bombay since 1962. The proportions of this may be gauged from the fact that between April, 1964 and March, 1965 as many as 5,000 ship-days were lost by vessels having to wait outside in stream for the berth. When the standing expense of a vessel is considered to be in the region of Rs. 8,000 per day the cost to ship-owners can be visualised. A critical bottle-neck, therefore, has been created at this major port, which to our mind affects the whole national economy as this situation is bound to result in a rise in freight rates and delays in the execution of projects. This state of affairs is particularly evident during the monsoon periods."

Detention of vessels

20. The table below indicates the period of detention to vessels at the port prior to obtaining berths in the docks during each of the last three years:—

Year	General Cargo Ships		
	No. of ships	Ship-days lost	Average loss per ship
1962-63 . . .	607	2317	3·8
1963-64 . . .	472	1878	4·0
1964-65 . . .	577	3844	6·6
1965-66 . . . (15-3-1966)	374	2089	5·6

Foodgrains Ships			Total Ships		
No. of ships	Ship-days lost	Average loss per ship	No. of ships	Ship-days lost	Average loss per ship
75	662	9	682	2979	4·4
61	361	6	533	2239	4·2
79	1072	13	656	4916	7·5
97	545	5·6	471	2634	5·6

The highest number of vessels on a day waiting at anchorage for berths in Bombay Docks during the last three years is indicated below:—

Year	Date	No. of ships waiting
1962-63 . . .	11-7-1962	27
1963-64 . . .	16-8-1963	22
1964-65 . . .	14-7-1964	44
1965-66 . . .	23-7-1965	23

As to the expenditure incurred on the detention of ships, it has been stated that it is not possible to estimate such cost. It is, however, well known that the freight rate structure of Liner Companies usually provides for an element of infructuous expenditure that arises from possible delay to vessels in turn-round.

The main reasons stated by the port authorities for the loss in ship-days are—

(i) the number of berths for cargo operations in the three docks are not sufficient to meet the demand for berthing the increasing number of ships that are now visiting the port. Since the Prince's Victoria and the Alexandra Docks were constructed in 1880, 1888 and 1914, respectively, there has not been a single addition to the number of berths originally provided in these three docks, whereas the number of ships visiting the port for cargo operations in any year over the last five years has increased by about 50 per cent.

(ii) since the termination of World War II the average length of ships berthing at the Alexandra Dock has increased from 420 feet to 500 feet.

(iii) the volume of dry cargoes handled at the docks has increased from 4·1 million tons in 1955-56 to 7 million tons in 1964-65, indicating an increase of about 72 per cent.

Another contributory factor in the detention to ships is the delay in the clearance of the cargo landed in the transit sheds.

Measures for reducing detention to Ships

21. The following measures have been taken or are proposed to be taken to reduce the detention period of vessels:

(i) Since November 1964, a system of registration of vessels has been introduced, under which vessels visiting Bombay for cargo operations can register their turn for berths based on their date of arrival at Bombay. On such registration, a vessel can go to other Indian ports instead of waiting in the stream for berth at Bombay Port, complete its operations at other ports and come back to Bombay for berthing.

(ii) Measures have been taken in conjunction with customs for the speedy clearance of goods from the port premises. (For details please *see* para 123).

(iii) The berthing capacity of the port will be increased by—

(a) The Dock Expansion Scheme, which will result in the addition of 4 deep (31') berths in the Alexandra Dock basin, 3 medium deep (26') berths along the Alexandra Dock harbour wall and one berth at Ballard Pier. The resultant increase in cargo handling capacity is estimated at 1.5 to 2 million tonnes per annum.

(b) Construction of a Satellite Port in the Nhava Sheva region, across the harbour the first phase of which consists of the construction of six new berths, of which four are expected to be ready by the end of the Fourth Plan period. Two of these berths will be specially equipped for handling bulk cargoes such as foodgrains, sugar, fertilisers, cement, salt, sulphur, rock phosphate etc. A suitable site for establishing a silo of 50,000 to 60,000 tons capacity for foodgrains at Sheva Island is also being explored. [For greater details regarding (a) and (b) above, please *see* paras 60 and 82].

(iv) Additional mechanical cargo handling equipment such as mobile cranes and forklifts are being purchased for speedy handling of goods.

Detention Money Paid

22. Comparative figures showing despatch money earned demurrage incurred on foodgrain ships berthed at Bombay Port during the years 1961—64 are given below:—

(Figures in 000 rupees)

Despatch earned				Total despatch earned	Demurrage incurred				Total demurrage incurred
1961	1962	1963	1964		1961	1962	1963	1964	
549·8	229·9	451·3	638·3	1869·3	347·5	1854·2	649·1	3339	6189·8

23. It has been stated that the above figures represent the estimated amount and do not represent despatch money actually received or demurrage actually paid. The bulk of our foodgrain are received against PL-480 and we are required to carry fifty per cent of these foodgrains in U.S. flag ships. Their Charter Parties stipulate reversibility of laydays and, therefore, excess discharge time, if any, at the Indian ports is adjustable against time saved at the loading ports. This results in considerable reduction in the actual amount payable as demurrage. Likewise despatch earned at our ports also some times gets adjusted in the case of U.S. flag ships against demurrage incurred at the loading port. The latter cases are, however, quite rare as generally despatch is earned at the loading ports.

The Committee are glad to note that the total number of ship-days lost for general cargo ships which had risen to 3844 in 1964-65 has come down to 2089 in 1965-66 and that similarly the number of ship-days lost for foodgrain ships in 1965-66 has come down by nearly 50 per cent *i.e.* from 1072 in 1964-65 to 545 in 1965-66. The Committee would like the port authorities to intensify their efforts so as to achieve a still better turn-round of ships as it has an intimate impact not only on the detention money paid but also indirectly on the freight charges levied by the Conference Lines. This has also an impact on our critical foreign exchange position as almost the entire extra charges for detention of ships have to be paid in foreign exchange.

CHAPTER III

FIVE YEAR PLANS

A. Outlays of the Three Plans

2A. The table below gives briefly the outlays, expenditures, etc. of the projects* provided for and executed by the Bombay Port Trust during the First, Second and Third Five Year Plan periods:—

	Provision	Actual expenditure	Shortfalls	Percentage of shortfall	Schemes		
					Spill-overs	New Schemes	Total Schemes
	(Rs. in crores)						
First Plan	15·52	11·008	4·512	29		6	6
Second Plan	25·18	4·97	20·21	81	5	18	23
Third Plan	25·54	17·50	8·04	31	18	17	35

*The Major Port Development Schemes *viz.* Minimum Scheme, Modernisation Scheme and Dock Expansion Scheme have been discussed in detail in Chapter IV.

B. Shortfalls in the three Plans

25. It will be seen from the foregoing para that compared to the Plan provisions there have been shortfalls in the expenditure during each of the Plan period. The reasons for shortfalls in respect of certain important schemes during each of the Plan periods as furnished to the Committee are briefly given below:—

First Plan (1951-52 *to* 1955-56)

26. The detailed reasons for the shortfalls in the First Plan are given in Appendix I.

The position in brief is as follows:

(i) *Minimum Scheme of Development of Prince's and Victoria Docks*—

Provision	..	Rs. 4.30 crores
Expenditure	..	Rs. 0.004 crores.

There was delay in arriving at a decision on the scope of work to be undertaken.

(ii) *Reorganisation of the Electrical Distribution*—

Provision	..	Rs. 0.80 crores
Expenditure	..	Rs. 0.004 crores.

The delay was due to the time taken by Messrs. Tatas in furnishing the data relevant on the design of the projected works.

(iii) *Electrification of Cranes in Alexandra Docks*—

Provision	..	Rs. 1.542 crores
Expenditure	..	Rs. 0.900 crores

Orders were placed only for a part of the requirements on account of the difficult supply position and uncertainty of obtaining sufficient electric power from Tatas. Delay was also due to shortage of steel.

(iv) *Reconstruction of Transit Sheds*—

Provision	..	Rs. 2.110 crores
Expenditure	..	Rs. 1.720 crores

The anticipated achievements could not be reached due to shortage of steel.

(v) *Labour Housing Scheme—*

Provision	..	Rs. 1.400 crores
Expenditure	..	Rs. 0.420 crores

Due to shortage of steel and other scarce materials, the scheme programme could not be kept up to the schedule.

Second Plan (1956-57 *to* 1960-61)

27. The following are the reasons for the shortfalls:

(i) *Minimum Scheme of Prince's and Victoria Docks—*

Provision	..	Rs. 5.00 crores
Expenditure	..	..

For the reasons stated in respect of the First Plan, the scheme could not be proceeded with and was ultimately dropped. The whole provision remained unused.

(ii) *Reorganisation of electrical distribution system—*

Provision	..	Rs. 0.19 crores
Expenditure	..	Rs. 0.15 crores

The work commenced late in 1957 and physically completed in October, 1960. However, pending settlements of some bills, the expenditure on the scheme was not booked and, therefore, the shortfall of Rs. 0.04 crores.

(iii) *Labour Housing Scheme—*

Provision	..	Rs. 0.26 crores
Expenditure	..	Rs. 0.23 crores

Quarters under Stage V could not be taken in hand as the site was not released by the Defence authorities. There was a shortfall of Rs. 0.0267 crores in expenditure.

(iv) *Extension of Hughes Dru Dock*—

Provision .. Rs. 0.46 crores

Expenditure .. ..

It was decided not to go ahead with the scheme and therefore, the Plan provision remained unused.

(v) *Passenger Terminal Building at Ballard Pier*—

Provision .. Rs. 0.47 crores

Expenditure .. ..

The inner face of the existing Ballard Pier was handed over to the Government for the Navy's Dock Expansion Scheme. In return, the Navy undertook to extend the Ballard Pier and hand over the same on a *quid pro quo* basis to the port administration. However, the negotiations were not finalised and, therefore, the terminal building could not be constructed. The Plan provision remained unspent.

(vi) *Repairs to berths in Prince's and Victoria Docks*—

Provision .. Rs. 2.25 crores

Expenditure .. ..

The scheme could not be proceeded with pending a decision on the Dock Development Scheme.

(vii) *Dredging the Main Harbour Channel*—

Provision .. Rs. 5. crores

Expenditure .. Rs. 0.10 crores

Only model studies and surveys could be undertaken.

(viii) *Electrification of 54 cranes in Alexandra Dock*—

Provision .. Rs. 1.90 crores

Expenditure .. Rs. 0.23 crores

About 60 per cent. of the work was physically completed during the plan period but as the contractors were to be paid only on delivery of completed cranes, even the expenditure for the completed work was not fully booked during the Plan period. Hence shortfall in expenditure by Rs. 1.67 crores.

[please also *see* para 6 of Part II]

(ix) *Housing Scheme for clerical and non-scheduled staff—*

Provision .. Rs. 3.75 crores

Expenditure .. Rs. 0.56 crores

Due to non-release of plots by military authorities and non-approval of plans by Bombay Municipality in time, the construction programme was delayed. Out of 4,102 units, work was fully completed on 190 units while work on 264 units was completed 75 per cent. An amount of Rs. 3.19 crores remained un-utilised.

(x) *Bombay Port Trust Hospital—*

Provision .. Rs. 0.40 crores

Expenditure .. ..

The revision of the scheme twice delayed the sanctioning of the final size of the hospital. The plan provision could not be utilised.

[Please also *see* para 105 of Part II].

Third Plan (1961-62 *to* 1965-66)

28 The following tables give the particulars of the schemes which have been provided in the Third Plan. For the sake of convenience, the tables have been divided into two parts. Part 'A' deals with aided schemes (I.D.A. Credit, West German and Yen Credit) while Part 'B' covers non-credit schemes:

PART 'A'

Aided Schemes (I.D.A. Credit, West German and Yen Credit)

Schemes included in the Plan	Government approved provision in the Plan	Approximate expenditure
1	2	3
I. *Spill over items from Second Plan*	(Rs. in crores)	
1. Dock Expansion Scheme (1962) .	6·00	2·19
2. Dredging of the Main Harbour Channel	4·00	2·86
3. Drag Suction Dredger 'Vikaram' with hopper cap 2000 tons	0·62	0·80

1	2	3
4. Port Trust Hospital and equipment .	0·83	0·35
5. Chain Testing Machine . . .	..	0·04
6. Purchase of one Twin Screw diesel propelled anchor hoy-*cum*-slavage and water boat to replace S.A.H. Panwel .	..	0·10
7. Ballard Pier Extension including new Terminal Building	3·25	0·89
8. Reorganisation of the electrical distribution system	0·15	0·17
9. Electrification of 54 cranes (West German Credit)	..	0·04
10. 125 Ton Floating Crane—(Yen Credit—Japan)	0·37	0·25
II. *New Schemes*		
11. Replacement of two grab dredger units	0·55	0·05
12. One Dock and 6 Harbour Tugs . .	1·75	0·50
13. Four Launches	0·05	0·05
14. Purchase of 10 Diesel Locos . .	..	..
15. Electrification of Hughes Dry Dock .	0·33	0·05
16. Electrification of hoists and capstans in Alexandra Dock	0 25	0 05
17. Reorganisation of electrical distribution system for two works (15 and 16 above)	0·18	..
18. Light buoys	..	..
19. Spare Lock Gate	..	..
20. Mechanical Cargo Handling and Equipment	..	0·17
21. Improvements to oil handling facilities .	0·25	0·03
Total	18·86	8·59

PART 'B'

Non-aided Schemes

Schemes included in the Plan	Government approved provision in the plan	Approximate Expenditure
1	2	3
	(Rs. in crores)]	
I. *Spill over items from Second Plan*		
1. Marine Oil Terminal	..	0·34
2. Reconstruction of Transit Shed in Prince's and Victoria Docks, 'F' Shed, Prince's Dock	—	—
3. Purchase of new self propelling dredger in replacement of H.G.D. 'Chelura'—'Vikas'	..	0·04
4. Purchase of a new Diesel Pilot-*cum*-air-sea-Rescue vessel in replacement of S.P.V. Kennery—'Venu' . .	—	0·14
5. Reorganisation of electrical distribution system	..	..
6. Electrification of 54 cranes in Alexandra Dock	1·56	2·28
7. Housing and Labour Housing Scheme .	3·00	1·97
8. 125 Ton Floating Crane . . .	..	0·04
II. *New Schemes*		
9. Replacement of 4 Docks and 1 Harbour Tug	..	0·22
10. Purchase of 10 Nos. Diesel Locos .	0·40	0·34
11. Rim Bascula Bridge	0·36	0·48
12. Two flat barges	0·15	..
13. Extension to the Administrative Offices Building	0·26	0·26
14. Minor Capital Renewals and Replacement Works	0·95	2·80
	6·68	8·91
TOTAL Part 'A' . . .	18·86	8·59
Part 'B' . . .	6·68	8·91
GRAND TOTAL . . .	25·54	17·50

29. It has been stated that of the above schemes, work on twenty-one projects is proposed to be carried forward to the Fourth Five Year Plan. The physical progress (as on 15th February, 1966) of these items is indicated in the statement at Appendix II.

30. As regards the shortfalls in the Plan expenditure, the Committee have been furnished with the following reasons:—

"(i) The schemes under the Third Five Year Plan included major works like the Dock Expansion Scheme, dredging of the main harbour channel, extension of Ballard Pier, purchase of flotilla etc. all of which required a substantial amount of foreign exchange, equivalent to about Rs. 8·5 crores. As free foreign exchange was not available, it became necessary to negotiate with the I.D.A. for funds to cover the foreign exchange requirements. Discussion, had therefore, to be held with the I.D.A. authorities and their appraisal teams which visited this port on two occasions. A credit from the I.D.A. amounting to Rs. 8.57 crores could be arranged only towards the end of 1962, *viz.* more than 1½ years after commencement of the Plan period. Pending completion of definite arrangements for meeting the foreign exchange requirements, work on the various schemes could not be put in hand during the early part of the Plan period, as originally contemplated and the delay nearly of 1½ years has naturally resulted in a set back in the schedule of expenditure.

(ii) The agreement for I.D.A. credit has entailed compliance with certain stipulations made by the I.D.A. These pertain to global tenders for major items of works costing Rs. 5 lakhs and above and obtaining prior approval of the I.D.A. to the tender documents, as also to the analysis of bids and selection of the tenderer before placing the order. These requirements took up a considerably long time than would be the case if normal procedure of inviting local tenders only was followed. Due to the necessity of having to go through all the required procedure, the contract for the main civil engineering work for the Dock Expansion Scheme and the Ballard Pier Extension which could normally have been placed by October, 1964 could not be finalised till March, 1965. Thereafter, several months were lost in

obtaining clear customs clearance permits required for the import of the contractors' plant and equipment. All this is stated to have resulted in a delay of nearly a year. Some time has been similarly lost in complying with the procedural requirements in respect of the tenders for tugs, launches etc. Thus owing to the longer time taken in finalising the orders for the major works, the progress on the works has fallen behind schedule.

Apart from the above main factors, the progress of the works is also stated to have been slowed down due to reasons like delays in receipt of import licences, municipal approvals, difficulties in procurement of essential materials like cement and steel, and in some cases due to a revision of modification of the scope of the works."

C. Provisions in the Fourth Plan

31. A detailed statement showing the particulars of the new schemes to be provided for in the Fourth Five Year Plan, together with their total estimated cost and the estimated expenditure during the plan period, is given at Appendix III. It will be seen from the statement that apart from the spill over schemes from the Third Plan, referred to in para 29, there are 22 new schemes which are proposed to be included in the Fourth Plan. For the sake of ready reference, the total estimated cost of the schemes and the provisions proposed in the Plan are indicated below:—

(Rs. in lakhs)

Total capital cost of the new schemes . .	3808·5
Total foreign exchange cost . .	882·5
Estimated expenditure during the Fourth Plan . .	2308·5
Estimated foreign exchange for the Fourth Plan . .	678·0

32. Out of the new schemes, the following will be covered in the formulation of the Master Plan for the future development of the Port:—

(i) Development of Port facilities on the east side of the Harbour; and

(ii) Construction of dry docks.

It has been stated that a Design Cell has been set up to carry out preliminary investigations and preparation of designs in respect of the following four schemes:—

(i) Extending Pir Pau Pier;

(ii) Impounding of Frere Basin;

(iii) Impounding of Clarke Basin; and

(iv) Construction of a bridge to carry the oil pipe line from Butcher Island to Trombay.

It is further stated that a contract has been awarded for marine and land borings required for these investigations. Necessary hydrographic surveys including soundings, probings and current observations have been carried out departmentally and preliminary model studies have also been put in hand at the Central Power and Water Research Station at Khadakvasla. The expenditure incurred on the preliminary investigations by the design cell so far amounts to Rs. 80,000 approximately, which has not been allocated scheme-wise separately.

D. Government's attitude towards shortfalls

33. A leading ship-owners' Association has represented to the Committee that "developmental work in Bombay Port during the first three five years plan periods has not been commensurate with the requirements of the traffic and results to be achieved. The total trade of the port has risen from 7.6 million tonnes dead-weight in 1951-52 to 17.3 million tonnes dead-weight in 1963-64. Barring reconstruction of some cargo sheds and installation of new electric cranes in Alexandra Docks, there has been no improvement either in berthing capacity of the port or in the matter of transit sheds etc."

The Committee desired to know whether the Ministry of Transport took note of the persistent shortfalls in the Plan expenditure and if so what remedial measures were taken by them to check this trend. In a written note furnished to the Committee, it has been stated that the Ministry "have always been alive to the need for checking shortfalls in plan expenditure. The inclusion of an item in the Five Year Plan signified the intention in principle to execute particular scheme. The actual execution of schemes depends on finalisation of technical details and designs and locating foreign exchange resources where big amounts of foreign exchange resources are involved. Port projects require the utmost care in the designing stage as they involve study of bed conditions, littoral drifts, siltation problems, wind directions, wave action, storm effects, tide direction, size of ships and the nature of traffic to mention some of the complicated features to be patiently analysed. Also bottlenecks to the execution of major plan schemes such as the non-availability of steel, cement and other controlled materials have to be solved".

The Committee are constrained to observe that the shortfall in Plan expenditure which was Rs. 4·5 crores (29 per cent) during the First Plan period rose Rs. 20·2 crores (81 per cent) in the Second Plan period. The main reason for this shortfall in the planned expenditure was the failure of the port authorities and Government to take a firm decision about the developmental schemes* for the port with the result that during the first two Plan periods no concrete steps were taken to increase the much needed berthing capacity in Bombay Port. It was only in 1962, the second year of the Third Plan, that Dock Expansion Scheme was finalised and credit from I.D.A. was arranged.

The Committee are unhappy that the port authorities and Government have taken as many as two years to call for global tenders and place orders for the execution of the Dock Expansion Scheme, 1962. The leisurely manner of dealing with the matter shows that the port authorities and Government were not actuated by any urgent desire to undertake timely execution of the Plan Scheme. The net result is that the Dock Expansion Scheme has commenced in right earnest only in the last year (1965-66) of the Third Five Year Plan and it is therefore, no wonder that there would again be a shortfall to the extent of Rs. 8.04 crores (31 per cent) during the Third Plan period. The Dock Expansion Scheme is now expected to be completed by 1969-70, that is almost towards the end of the Fourth Plan period, and for all these years the much-needed berthing capacity would remain short of requirements.

The Committee would like Government to undertake a study of the inordinate delay which has taken place in the implementation of the Dock Development Scheme so as to draw lessons for future and take remedial measures such as advance planning, tying up in advance arrangements for foreign aid, streamlining of the procedure for calling global tenders and placing of orders so that the Plan schemes ar implemented as per scheduled programme.

The Committee would also like to draw pointed attention to the shortfalls under the heading of dredging of main harbour channel. A provision of Rs. 5 crores and Rs. 4 crores was made in the Second and Third Five Year Plans for capital dredging but the expenditure incurred was only Rs. 0·1 crores and Rs. 2·86 crores respectively. These shortfalls are particularly unfortunate as these must have adversely affected the operational efficiency of Bombay Port. The

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*Please see also Chapter IV, where developmental schemes have been discussed in detail.

Committee hope that necessary steps would be taken to ensure that the harbour channels are kept properly and efficiently dredged.

The Committee find that the provision made for Ballard Pier in the Second Plan for Rs. 0·47 crores and under the Third Plan for Rs. 3·25 crores has been utilised only to the extent of Rs. 0·89 crores due to prolonged and inconclusive discussions with the Navy. The Committee consider that the Port Trust authorities and Government should have finalised arrangements for extension of Ballard Pier* with greater urgency as these facilities were badly required to augment amenities in order to attract passenger and tourist traffic.

The Committee would urge that necessary investigations about the new schemes, included in the Fourth Plan, should be taken in hand and blueprints prepared in good time so that the execution thereof can be undertaken as per scheduled programme. As regards the continuing schemes the Committee would like Government to review the factors which have hampered progress in the past and to devise necessary measures to complete the schemes without delay.

E. Design Cell

34. As stated earlier, a small Design Cell was created in April, 1964 with a view to taking advance action on the proposals to be included in the Fourth Five Year Plan. It has been stated that the Cell has been built up in stages according to the requirements of the work.

The strength of the Design Cell, as sanctioned and as operated, is as under:—

Sl. No.	Designation	No. of posts sanctioned	No. of posts operated during (1964-65)	No. of posts operated in 1965-66 (so far)
1	2	3	4	5
1	Executive Engineer . .	1	Nil	1
2	Jr. Asstt. Engineer . . .	1	1	1
3	Asstt. Officer-in-charge, Design .	1	..	..
4	Sub-Engineers . . .	3	..	2

* also see Para 17 of the Report.

1	2	3	4	5
5	Marine Surveyor .	1	1	1
6	Asstt. Marine Surveyors . .	2	2	2
7	Draftsman 1st Grade . .	1	..	..
8	Draftsman 2nd Grade . .	1	..	..
9	Clerk 'A' Scale . . .	1	..	1
10	Clerk 'B' Scale . . .	1	..	1
11	Typist . . .	1	..	1
12	Peons	5	1	1
13	Launch Guide . . .	1	1	1
14	Jolly Boat Tindals . . .	2	2	2
15	Lascars, 1st Grade . . .	4	4	4
16	Lascars, 2nd Grade . . .	4	4	4

It has been stated that the expenditure on the staff during 1964-65 has been Rs. 51,000 approximately and during 1965-66 it is anticipated at Rs. 80,000.

The Committee hope that the Design Cell would be suitably manned so that it can undertake all work relating to the preparation of detailed project reports, and designs and specifications in respect of the scheme to be executed by the port authorities in future.

CHAPTER IV

PORT DEVELOPMENT AND MODERNISATION

35. Bombay Port consists of three docks, *viz.* the Prince's, the Victoria and the Alexandra Docks. The Alexandra Dock, which is the newest of the three, was commissioned in 1914. The need for a further expansion of port facilities was also felt at that time and a number of schemes for the provision of additional dock capacity were mooted. However, the world depression of the 1930's and the Second World War which followed it stood in the way of execution of all schemes for further development. Certain emergency measures mainly in the shape of increased mechanisation of cargo handling were, however, taken to increase port capacity during the last War.

Among the most important schemes drawn up after the Independence of India for the development of dry cargo facilities at Bombay Port were the Minimum Scheme (1951), the Dock Modernisation Scheme (1959) and the Dock Expansion Scheme (1962).

A. Minimum Scheme

36. The Board of Trustees decided on the 8th February, 1949 that a project for the development of the Port of Bombay, including the modernisation of the Prince's and Victoria Docks, should be prepared. The Port Trust Chief Engineer prepared the Project Report and submitted it in May, 1950. The Chairman of the Port Trust framed a list of certain essential works from the Project Report, which was called the "Minimum Scheme" for the development of Prince's and Victoria Docks. The expenditure incurred on the preparation of the Minimum Scheme was Rs. 1·99 lakhs.

Salient Features of the Scheme

37. The salient features of the Minimum Scheme were:—

(i) the conversion of the Prince's and Victoria Docks from a tidal to a non-tidal system by the substitution of an Entrance Lock for the two existing single gates, one into Prince's Dock and the other into Victoria Dock;

(ii) the creation of a new approach channel;

(iii) the extension of the short arm berths in the Victoria Dock; and

(iv) widening of the communication passage between the two Docks with a view to making the larger turning circle in the Prince's Dock readily accessible to the longer ships.

Reference to Consulting Engineers

38. The Port Trust approved the scheme in principle in January 1951 and desired that it should be referred for technical scrutiny and advice to two firms of Consulting Engineers, *viz.* The Port Trust Consulting Engineers, Sir Bruce White, Wolfe Berry & Partners and Messrs Rendel, Palmer and Tritton. The Scheme was accordingly referred by the Port Trust simultaneously to both the firms of Consulting Engineers. Sir Bruce White, Wolfe Barry and Partners advised on the entire scheme while Messrs. Rendell, Palmer and Tritton limited their advice to the sitting of the new dry dock, which they recommended should be located to the east of the lock, whereas Sir Bruce White, Wolfe Barry and Partners suggested that the dry dock should be on the west of the lock.

After considering the merits of the two proposals, the Port Trust accepted the recommendation of Messrs. Randell, Palmer and Tritton with some modifications to suit the local navigational requirements.

Sir Bruce White, Wolfe Barry and Partners were paid a fee of 750 guineas and Messrs. Rendell, Palmer and Tritton a fee of 250 guineas.

Cost of the Scheme

39. The cost of the Minimum Scheme as originally drawn up was estimated in 1951 at Rs. 4·30 crores. However, the Consulting Engineers recommended that the harbour wall of the Prince's and Victoria Docks should be developed eastwards so as to bring it in line with the harbour wall of the Alexandra Dock. This raised the cost of the Scheme to about Rs. 8·50 crores.

The Scheme, together with the Consulting Engineers' report was considered by the Trustees on the 5th May, 1953 and it was decided to go in for the enlarged scheme called "New Minimum Scheme"

as recommended by the Consulting Engineers. The Trustees also felt that in view of the national importance, not only from the economic but also from the defence point of view, of the development of the Bombay Port, Government should make an outright grant to meet half the expenditure involved and accordingly decided to send a deputation, consisting of the Chairman and two Trustees representing commercial interests on the Board, to wait on the Transport and Finance Ministries and urge upon them the need for financial assistance for the implementation of the Scheme on favourable terms.

Reference to Ministry of Transport

40. The Scheme was referred to the Ministry of Transport in May, 1953. In September, 1953 the Ministry advised that, on financial considerations, the Trustees should go ahead only with the original Minimum Scheme, as slightly modified, which was estimated to cost about Rs. 4·50 crores. They also offered loan assistance to the extent of Rs. 4·17 crores towards the cost of the Schemes included in the First Five Year Plan of which the Minimum Scheme was one.

In December, 1953 the Trustees reiterated their view that the enlarged version of the Minimum Scheme should be implemented and once again requested Government to receive a deputation of the Trustees. In February, 1954 Government advised that the Ministers of Transport and Finance saw no advantage in receiving a deputation of the Trustees to discuss the question of financial assistance by Government.

Execution of the Scheme

41. After considering the reply of Government, the Trustees decided on the 27th July, 1954 to undertake the "Minimum Scheme" as suggested by Government. Tenders for the work were accordingly invited. It was found that the cost of the Scheme, based on the lowest acceptable tender, would be about Rs. 11·61 crores.

The Trustees thereafter appointed a Committee consisting of the Chief Engineers of Bombay and Calcutta Ports and the Administrative Officers, Vishakhapatnam Port to examine the Scheme. After taking into account their Report, the Trustees decided to have an estimate prepared for the execution of certain items of the Scheme only. This estimate came to Rs. 6·90 crores. After full consideration of the matter, the Trustees decided to add certain works which

raised the cost of the Scheme to about Rs. 12 to 14 crores. They decided that they would execute the Scheme, if Government bore half the cost of the Scheme and also granted a loan for the balance, half the loan being on concessional terms and the other half on commercial terms.

42. The Committee are informed that the proposition did not prove attractive to the Government for the following reasons:—

"(i) the percentage—about 20—of deep drafted ships using the dock system was not so high as to call for the conversion of all the berths in the port to deep draft berths;

(ii) a certain number of shallow berths would always be required for coasting steamers and for the harbour craft of the port;

(iii) though the port would certainly benefit by the addition of some deep draft berths, this might be secured not by deepening the Prince's and Victoria Docks but by providing deep draft berths elsewhere on the general lines indicated in the alternative scheme prepared by the Development Adviser to the Ministry of Transport and Communications; and

(iv) the estimated outlay on the scheme was so high that, if the project was executed, the Port Trust would be saddled with a recurring financial liability which would not be compensated by additional revenues, since the scheme did not provide for additional berthing capacity."

43. The Committee are further informed that "It was, however, made clear to the Port Trust that if they wanted to go ahead with the Minimum Scheme, in spite of all these objections, Government would not stand in the way but the Port Trust would have to find the resources themselves. The Port Trust were also told that the pattern of Central Government assistance to major ports for port development under the Five Year Plans consisted only of grant of loans on certain concessional terms and did not envisage the making of free grants to any Port Trust for undertaking its development works. The willingness of a Port Trust to pay for a scheme in its entirety if necessary by raising the port charges or by such other means as might be open to it under the statute was an important consideration for Government to take into account while considering whether a scheme should be considered essential and sanctioned or not. In the case of the Minimum Scheme, however, while the Port

Trust considered this scheme as essential, it did not agree to pay the whole of its cost and made it conditional on a grant-in-aid from Central Government particularly when the port finances were in a good condition."

44. The proposals made by Government were considered by the Trustees and by their Resolution No. 508 dated the 17th May, 1957, the Trustees decided to inform the Government that they were not in favour of accepting these proposals and that if Government were not prepared to render financial assistance on the scale and in the manner sought by the Trustees, they would be reluctantly compelled to abandon the scheme.

45. The Port Trust authorities requested the Government again in November, 1957 to receive a deputation to discuss the implementation of the Minimum Scheme. The deputation eventually met the Minister of Transport on the 27th February, 1959 when the Trustees were advised to re-examine the problem and to produce a phased programme of developments which would not only solve the problem but also be revenue producing.

Mr. Posthuma's Advice

46. Mr. Posthuma, Managing Director of the Port of Rotterdam and leader of the International Bank's Ports Mission visited India in 1957 under the auspices of the United Nations Technical Assistance. In his Report (the relevant portion of which was sent to the Bombay Port in April, 1959) Mr. Posthuma is stated to have expressed the opinion that the Minimum Scheme was expensive and that there was no economic justification for it.

Mr. Posthuma suggested an alternative scheme called the Rehabilitation Scheme. It consisted of the dredging of the Prince's and Victoria Docks and the existing approach channel to the fullest depths possible, the widening of the communications passage between them, the lengthening of the jetty berths in the Victoria Dock, the shifting of the ferry wharf to the north and the equipping of six berths along the Alexandra Dock harbour wall.

The Port Trust considered the alternative scheme suggested by Mr. Posthuma in May, 1959 and came to the conclusion that the cost of the scheme, namely, Rs. 12·30 crores (non-recurring) and Rs. 17 lakhs (recurring) would not be commensurate with the benefits to be derived. They decided by a majority of votes that the Minimum

Scheme should be proceeded with and the same included in the draft Third Five Year Plan to be forwarded to Government.

Abandonment of the Minimum Scheme

47. Government, in its reply in June, 1959, said that even if the Trustees now sought to finance themselves the entire cost of the Scheme which was then placed in the neighbourhood of Rs. 20 crores, the proposition that Government should find the necessary foreign exchange out of its own resources could not even be considered. Government is understood to have pointed out that, "for no other consideration than that of foreign exchange alone, the Minimum Scheme would have to be dropped, and requested the Trustees to suggest some other scheme, more modest and financially sound, which would enable Government to procure an adequate loan from the International Bank to cover the foreign exchange expenditure. The Scheme would have to be one that would meet the basic conditions laid down by the Planning Commission. These conditions were:—

(i) the overall cost of any alternative scheme should be appreciably less than that of the Minimum Scheme;

(ii) it should have a revenue producing potential; and

(iii) the outlay of foreign exchange should be as small as possible."

48. To meet this situation the new Chairman, who had taken office in June, 1959 discussed the matter further with the Port Trust engineers and directed that a new Scheme, called the "Modernisation Scheme", should be prepared on certain lines approved by him. This Scheme was eventually approved by the Board in December, 1959; the Minimum Scheme being tacitly abandoned.

49. During the course of evidence the Secretary of the Ministry of Transport stated that "Government had made certain suggestions on the basis of the proposals made by the Port Trust. It was then for the Port Trust to implement it.....It was for the Port Trust to come to us and say that they would be prepared to execute it on the basis of loan of the order of so much instead of Rs. 4 crores and not to make a proposition which cannot be acceptable to Government....." In reply to a question it has been stated that "there is no precedent of Government having given half the expenditure as grant and the other half as loan. We only give loans; no subsidies, no free grants or gifts."

The Secretary further added that no directive to proceed with the scheme was issued to the Port Trust as "the power to issue directives is not in the old Act; it is only in the recent Act (of 1963) .... Even now I feel that the Chairman of the Port, if he does not want to listen to the Government, can really escape out of the position. It is necessary for the Central Government to have effective and adequate powers."

50. A note setting out how the provisions of the Bombay Port Trust Act, 1879 fall short of the requirements and provision made in the Major Port Trusts Act, 1963, as furnished by Government, is reproduced in Appendix IV.

The Committee have been informed in a written note that "the cost of the original Minimum Scheme was estimated in 1951 at Rs. 4.30 crores and if it had been decided to implement it at that time, it might have perhaps been possible for the Trust to finance it from its own resources."

51. A statement reproduced below, showing the balances in the various development and reserve funds etc. of the Bombay Port at the end of 1951-52 and 1956-57, when the Minimum Scheme was under consideration, will clearly indicate that the Port Trust had enough funds with it to finance the Minimum Scheme:

Sl. No.	Name of the Fund		31-3-1952 Rs.	31-3-1957 Rs.
1	Revenue Reserve Fund	General	3,00,00,000	10,14,02,947
2	Revenue Closing Balance	Reserve Fund	4,38,68,385	
3	Fire, Marine and Motor Insurance Fund		20,00,000	19,99,060
4	Pilotage Reserve Fund	Vessels Replacement Fund		10,00,000
5	Pilotage Depreciation Fund		12,72,273	22,46,866
6	Emergency Fund	Renewals Replacement Fund	39,32,199	3,46,42,045
7	Depreciation Fund		59,63,671	
		TOTAL	8,70,36,528	14,12,90,918

Advantages of the Minimum Scheme

52. The Committee have been informed by the Port Trust authorities that the following advantages would have accrued from the implementation of the Minimum Scheme:

(i) The Minimum Scheme would have enabled vessels to enter and leave the Prince's and Victoria Docks at any state of the tide.

(ii) The berths in the Prince's and Victoria Docks would have been converted into deep draft berths, thus making it unnecessary for deep drafted vessels* to wait in the stream, during periods of peak traffic, for berths in the Alexandra Dock.

Also, the present restriction on the berthing and unberthing time of about 5 to 6 hours per day imposed by the single gate entrances would have been obviated and it would have been possible for ships to enter or leave the two docks practically round the clock. It has been added that these factors would have resulted in an improvement in the turn-round of the ships.

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*The Committee are informed that from an analysis of ship detentions during the years 1956-57, 1957-58 and 1958-59, it is seen that a proportion of the detentions as indicated below was occasioned by the draft and length of ships precluding the use of the available berths in Prince's and Victoria Docks :

Year	Total ship-days lost	Ship-days lost due to draft and length precluding the available berths	Percentage
1956-57	1630	279	17%
1957-58	3344	40	1%
1958-59	648	105	16%

Of the above, the figures for 1956-57 and 1958-59 may be taken as representative (those for 1957-58 were abnormal due to general strike of the port workers etc.) and it may be said that the implementation of the Minimum Scheme would have resulted in a reduction of about seventeen per cent in the ship-days lost.

(iii) The modern transit sheds constructed in the Prince's and Victoria Docks, consequent on the destruction of the old ones in the Explosions of 1944, would have been better utilised with the advent of larger ships into the Prince's and Victoria Docks.

(iv) The Scheme possessed potentialities for a fuller development, at a future date, of the east arm of the Prince's Dock, which is rather narrow, by bringing the harbour wall of the Prince's Dock into line with the harbour wall of the Alexandra Dock.

Brief History of Minimum Scheme

53. Briefly the history of the Minimum Scheme has been as under:

The decision to prepare a project for the development of the port was first taken by the Port Trust in February, 1949, the project report was prepared by the Chief Engineer Port Trust in 1950 and the Minimum Scheme was approved in principle by the Trustees in 1951. After obtaining the opinions of two Consulting Engineers on this Scheme in 1951 itself, the Trustees, in May, 1953, approved an enlarged scheme, recommended by the Consulting Engineers, which raised the estimated cost from Rs. 4.30 crores to Rs. 8.50 crores and requested the Government to make an outright grant to meet half the expenditure. In spite of Government's advice to the Trustees to implement the original scheme (Rs. 4.30 crores) and offer of loan assistance amounting to Rs. 4.17 crores, the Trustees in December, 1953 reiterated their view to implement the enlarged scheme only if Government bore fifty per cent of the expenditure. Later on, in July, 1964 the Board invited tenders for the original Minimum Scheme and spent about two years (*i.e.* from July, 1954 to May, 1956) in the process of calling for tenders and their consideration. As the cost of the Scheme on the basis of lowest tenders, had increased to Rs. 11.61 crores by then, the Trustees appointed a Committee to examine the whole scheme. The recommendations of this Committee to execute certain items of the scheme costing Rs. 6.90 crores only, were not accepted and the Trustees again enlarged the scheme which increased its cost to Rs. 12 to 14 crores and approached Government for giving half the cost of the scheme as grant. Government made some alternative proposals which were not accepted by the Trustees. On the other hand in May, 1957, they reiterat-

ed their earlier view to Government for giving grant and loan. In November, 1957, the Trustees urged the Government to receive a deputation which met the then Minister for Transport and Communications in February, 1959. In spite of Minister's advice to re-examine the matter and put up a phased programme of development of the port, the Trustees in May, 1959 decided to proceed with the Minimum Scheme on the terms previously approved by them and included in the draft. Third Five Year Plan. It was only in June, 1959 when a new incumbent had taken over as Chairman, Port Trust, that another scheme was prepared which was approved by the Board in December, 1959, thereby abandoning the Minimum Scheme finally.

The Committee are distressed to note that the Minimum Scheme which was conceived in 1949, drawn up in 1951, should have been dragged on for eleven long years till 1959 when it was finally abandoned. In the meantime its estimated cost had risen from Rs. 4·30 crores to Rs. 20 crores. The Committee consider that the non-implementation of this Scheme has resulted not only in infructuous labour and expenditure which was incurred on its preparation and subsequent proceeding but has also hampered the efficiency of the port by delaying the development of the Bombay Port for over a decade.

The Committee are unable to appreciate the insistence of the Trustees to get a grant from Government to cover fifty per cent of the cost of the Scheme, when there was no precedent for giving such grants to any other port and when the port's own financial position was sound enough to undertake the scheme. It is really surprising that the Trustees did not even avail of the loan assistance of Rs. 4.17 crores, offered by Government in 1953, towards the cost of the schemes included in the First Five Year Plan which covered the Minimum Scheme also. Even after the Minister of Transport in 1959 had advised the deputation of the Trustees to re-examine the scheme and to put up a phased programme of development of the port, the Trustees insisted on proceeding with their original scheme and included it in their draft Third Five Year Plan. All this indicates that the Minimum Scheme had been turned into a prestige issue by the then Trustees which, the Committee consider to be a very unhealthy trend in the Port Trust. This apprehension of the Committee is confirmed by the change in the attitude of Trustees and their willingness to prepare another scheme in June, 1959 when a new incumbent had taken over as Chairman of the Port Trust.

The Committee are surprised at the apparent helplessness of Government to issue necessary directions to the Port Trust to proceed with the development scheme on the lines indicated by them. They are not convinced by the plea taken by the representatives of the Ministry that they did not have powers of issuing directions under the Bombay Port Trust Act, 1879, which lacuna the Government could have and should have filled up any time by necessary legislative measure, rather allow the development of one of the most important ports to be stayed indefinitely due to the undesirable attitude of the Port Trust. This is all the more surprising as under the Major Port Trust Act, 1963, Government have already armed themselves with power of issuing directions to all major ports, which are brought under the purview of the Act. The Committee also note that Government had available to them the powers under Section 90 of Bombay Port Trust Act, 1879 to supersede the Board.

The Committee suggest that Government should review the position in the light of the experience and take suitable measures to ensure that they have adequate powers of issuing directions to the Bombay, Calcutta† and Madras Port Trust authorities, in the overall interest of national economy as also in the interest of the development of the ports.**

B. Modernisation Scheme (1959)

54. The details of Modernisation Scheme were worked out by the Port Trust engineers (June—November, 1959) on the lines indicated by the Chairman, Port Trust.

The Scheme was considered and approved in principle by the Port Trust in December, 1959.

Central Feature and Cost of the Scheme

55. The central feature of this scheme was the provision of a communication channel between the lock-served Alexandra Dock and the tidal Victoria Dock by extending the east arm of the Alexandra Dock, the Victoria Dock being sealed off from the tidal Prince's Dock. This was calculated to convert the Victoria

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†This is governed by Calcutta Port Act, 1890.

**This is governed by Madras Port Trust Act, 1905.

Dock. This was calculated to convert the Victoria Dock into a non-tidal and to provide six new berths, three on each side of the communication channel. Besides, providing a communication channel between the two Docks which was not a new idea this scheme envisaged the separation of the Prince's Dock, which was considered essential as one lock could not efficiently serve the three existing Docks. It also envisaged the raising of the impounded level of the water in the Alexandra Dock and the Victoria Dock. The scheme was estimated to cost about Rs. 8·35 crores with a foreign exchange component of Rs. 1·5 crores.

Reference of the Scheme to Ministry of Transport

56. The Scheme, along with other Third Plan projects, was processed through the Government of India in December, 1960 for the procurement of a loan from the World Bank, sufficient to cover the foreign exchange component. The Government of India, who had at that time requested Mr. F. Posthuma, through the U.N. Technical Assistance Administration, to pay a visit to India to advise on port development problems of the Bombay and Calcutta Ports, referred this Scheme to Mr. Posthuma for advice.

Reference to Mr. Posthuma

57. Mr. Posthuma in his Report (January, 1962) has stated that "In general, the idea underlying the Modernisation Scheme is sound. Contrary to the former 'Minimum Scheme', more berths are added to the facilities of the port and the costs are lower (Rs. 8·35 crores compared to approximately Rs. 20 crores)." He, however, advised in his Report that instead of extending the east arm of the Alexandra Dock basin right upto the Victoria Dock, so as to combine the two Docks, the extension should, for the present, be only about 1200 feet long, so as to provide four berths therein instead of six. The reasons given for this advice were:

(a) It would be risky for the Alexandra and Victoria Docks to depend on a single entrance lock (*i.e.* the entrance lock of the Alexandra Dock).

(b) The communication channel between the two Docks would cut the existing rail and road communications to the harbour fall arm of the Alexandra Dock and all traffic to this area will have to use the rather narrow jetty between the Prince's Dock and the Victoria Dock.

Abandonment of the Scheme

58. The Board of Trustees accepted the advice of Mr. Posthuma and decided to go in for the truncated version of the Modernisation Scheme recommended by him. This version, with some minor modifications proposed by the Port Trust Engineers, has been called the Dock Expansion Scheme (1962).

Economics of the Scheme

59. The Committee have been informed that the Modernisation Scheme would have resulted in a net increase of an equivalent of seven first class berths with a revenue earning potential of Rs. 95* lakhs a year.

The Committee consider that with the experience of the Minimum Scheme and the data and technical advice already available with the port authorities and the fact that the development of the port had been unnecessarily delayed already by a decade, the Port Trust should have taken adequate care, and should have been in a position to draw up a "well thought out" revised plan for the development of facilities at Bombay Port. The Committee regret that the Modernisation Scheme which was approved by Port Trust authorities in 1959 had also to be abandoned in 1962 due to technical shortcomings.

C. Dock Expansion Scheme (1962)

60. The Dock Expansion Scheme drawn up by the Port Trust Engineers is a modified version of the Modernisation Scheme. The Dock Expansion Scheme was approved by the Board of Trustees in principle in January, 1962 and by Government in June, 1962.

Salient Features of the Dock Expansion Scheme, 1962.

61. The salient features of the Dock Expansion Scheme (1962) are as follows:—

(i) The east arm of the Alexandra Dock Basin will be extended by about 1180 feet so as to provide four new deep water berth (31') therein, the excavated material being used

*(on the assumption that the cargo handling capacity of each first class berth according to past experience would be 1,78,940 tons per annum and the gross revenue would be Rs. 8/- per ton).

for filling the Carnac Basin opposite the extended arm, and for making a reclamation to the east of the Carnac Basin;

(ii) The strip and land remaining between the extended arm of the Alexandra Dock and the Victoria Dock will be used for restoring the rail and road communications, intercepted by the extension, to the harbour wall berths of the Alexandra Dock;

(iii) The existing Ferry berths to the east of the Alexandra Dock, along the harbour wall, will be vacated and dredged so as to provide three medium deep (26') cargo berth;

(iv) New impounding pumps will be provided at the Alexandra Dock Entrance Lock so as to increase the depth of water in the basin from the present 30 feet to 34 feet;

(v) Five modern transit sheds will be constructed in the Alexandra Dock, two at the extended berths and three along the harbour wall;

(vi) The KLM harbour wall berths at the Prince's Dock and the transit shed there will be altered to serve as a Ferry Wharf, and an open work cement concrete jetty will be constructed to provide additional ferry berth facilities, with better passenger amenities.

Thus, the scheme provides for four new deep berths in the Alexandra Dock Basin and three medium-deep berths along the harbour wall, for the loss of two shallow berths in the Prince's Dock. The reclamation will provide an additional Dock area of 37,100 square yards and the new transit sheds will result in an increase of 173,000 square feet of storage space. The addition to the number of berths will enable berths to be allotted for ship repairs.

62. Closely connected with the Dock Expansion Scheme is the project for the extension of Ballard Pier southwards by 750 feet so as to provide a second passenger berth at the Mole Station, equipped with a modern passenger terminal building. The existing Ballard Pier building will be reconstructed and converted into a cargo-handling shed. The berth will also be used for handling passengers, if required.

Comparison of the Dock Expansion Scheme with the earlier Schemes

63. Comparing the Dock Expansion Scheme with earlier Schemes *viz.*, Minimum and Modernisation Scheme it has been stated that according to the Minimum Scheme all the three Docks would have been lock serviced and all the berths would have been deep drafted. The Modernisation Scheme provided for the combination of the Alexandra and Victoria Docks, so that the latter could be served by the existing entrance lock. This was sought to be achieved, not by providing entrance lock, as the Minimum Scheme contemplated, but by providing a communication channel between the Alexandra and Victoria Docks. This meant that the Prince's Dock would have continued to be tidal.

Secondly, the Minimum Scheme did not provide for any additional berths, while the Modernisation Scheme provided for six additional berths. At the same time, the Modernisation Scheme suffered from the drawback that the dependence of two Dock systerms on a single involved a certain amount of risk and all the vehicular traffic on the eastern arm of the Alexandra Dock would have had to use the Rim Bascule Bridge.

Under the Dock Expansion Scheme, the Prince's and Victoria Docks would continue to be tidal, but seven additional deep and medium deep berths will be added to the Alexandra Dock.

Neither the Minimum Scheme nor the Modernisation Scheme contemplated the shifting of the Ferry Wharf from its present site along the Harbour Wall of the Alexandra Dock. Under the Dock Expansion Scheme, the Ferry Wharf will be shifted to the northern end of the Prince's Dock.

Cost of the Scheme

64. The Dock Expansion Scheme was originally estimated to cost Rs. 10·92 crores with a foreign exchange component of Rs. 2·16 crores. However, when detailed design was worked out and tenders for some of the works were received, it was found that the cost would be higher than originally estimated. The revised estimate based on the accepted tenders for most of the principal items of works amounts to Rs. 13·25 crores, with a foreign exchange component of Rs. 3·24 crores. The estimated cost of the Ballard Pier Extension is Rs. 4·69 crores, with a foreign exchange component of Rs. 0·63 crores.

The principal reasons for the increase in cost of the Dock Expansion Scheme from Rs. 10·92 crores to Rs. 13·25 crores, as given during the course of the official evidence, are as follows:—

(i) After site investigations, it was found necessary to have a longer coffer dam than the one provided for originally;

(ii) a berth for mooring dredgers has now been provided which was not provided for in the original estimate;

(iii) provision has been made in the revised estimates for a 30 metre long berth for harbour launches which was now found necessary but was not provided for originally;

(iv) original estimate did not make provision for rubber fenders at new dock berths which has now been provided for;

(v) original estimate provided for ordinary cement concrete steps for passengers using harbour launch services; the revised estimate provides for a floating landing stage for safety and convenience of passengers; and

(vi) cost of transit sheds has increased from Rs. 1·25 per cft to 1.87 per cft due to advances in prices of steel. cement and labour.

The earlier estimate for foreign exchange was Rs. 2·16 crores. That was estimated on 19th September. 1962. The revised estimate has increased to Rs. 3·24 crores mainly due to I.D.A's requirement to invite international tenders for items costing over Rs. 5 lakhs. Arrangement for meeting the increase are presently under discussion with the Government.

A summary of works, to be undertaken under the Dock Expansion Scheme, together with their estimated cost, is reproduced at Appendix V.

Economics of the Scheme

65. The Committee have been informed that the Dock Expansion Scheme will result in an increase equivalent of 3½ first class berths. In the past ten years, it has been realised that the cargo tonnage handled at a first class berth is well over 2 lakh tons per year. Adopting this tonnage capacity and an estimated gross revenue of Rs. 8 per ton, at rates then in force, the addition to the revenue earning

potential due to this Scheme may be placed at Rs. 56 lakhs per year. It has been further stated that "as the justification for the Scheme was determined by factors more compelling than revenue returns, a detailed examination as to whether the Scheme would be financially self-balancing was not made. On an overall consideration of the Port's financial position and income and expenditure account, it was found that the required investment could be undertaken without undue strain. Further, the Port charges at Bombay not having been revised for a long period, there was little doubt that a sizeable reserve potential existed for increasing the Port's revenue as and when required by suitable upward revision of the Port charges. It was, therefore, not considered necessary to work out the economics of the Scheme separately."

Execution of the Scheme

66. The programme of execution of the works under the Scheme and the actual progress made are given below:—

The original programme for the execution of the Scheme, as intimated to the International Bank for Reconstruction and Development in the loan application in April, 1962, was as follows:—

"(i) The Consulting Engineers will undertake the preparation of designs and tender documents on 1st July, 1962 and the tender for the Main Contract will be put on 1st July, 1963.

(ii) Tenders for the Main Contract to be received by 1st November, 1963.

(iii) Recommendations of the Consulting Engineers on the tenders to be received by 1st December, 1963.

(iv) Acceptance of tender by Board and Government to be completed by 1st April, 1964.

(v) Work on the Main Contract to be completed by 1st April, 1967.

(vi) Tenders for ancillary works to be put out according to the progress of the Main Contract, so as to be detailed into it. All work to be completed by 1st April, 1968."

67. The actual progress of the Scheme has been as follows:—

(i) Government sanction to the terms of appointment of the Consulting Engineers for the work was accorded on 1st

November, 1962. The tender for the Main Contract was put out on 25th March, 1964.

(ii) Tenders for the Main Contract were opened on 28th July, 1964.

(iii) The Consulting Engineers' recommendations on the tenders were received in September, 1964.

(iv) Acceptance of the tenders by the Board and by Government was completed by 12th February, 1965.

(v) Work on the Main Contract which commenced in November, 1965 is expected to be completed in the middle of 1969.

(vi) All other works included in the Scheme are expected to be completed by the middle of 1970.

Reasons for delay in execution

68. The following reasons have been furnished to the Committee with regard to delay in the execution of the Scheme as per schedule:—

(i) The delay in finalising the terms of employment of the Consulting Engineers for the scheme was due to the fact that the Government had sanctioned the terms in June 1962 and it was considered advisable to revise this. This necessitated further negotiations.

(ii) The Scheme requires a substantial amount of foreign exchange which it is not possible to obtain from the country's free resources and for which long term assistance from the International Bank was essential. Although it was expected that this assistance would become available from May/June 1962, it was only in November, 1962 that all the formalities connected with the Credit Agreement could be finalised. Pending, completion of firm arrangements regarding foreign exchange, work on the scheme could not be taken in hand.

(iii) The I.D.A. has stipulated certain conditions, *Viz.* (a) that all major items of work should be put out to global tenders and (b) that the I.D.A. should be given an opportunity to comment on tender documents (before they are advertised) as also on the analysis of the bids and the pro-

posal for acceptance of tenders. Inviting global tenders entails considerable loss of time inasmuch as (i) arrangements have to be made for advertising the tender notices in different countries of the world and also a longer period has to be allowed for the tenderers to prepare their tenders; (ii) correspondence for clarifications etc. also take a longer time owing to distant places from which the tenderers have to reply; (iii) in addition, further time is lost in getting the approval of the I.D.A. to the tender documents before they are issued and again to the analysis of bids and selection of the tenderer after scrutiny is over.

(iv) While selecting 16 prospective Contractors who were to be invited to submit bids for the main civil engineering contract an attempt was made to persuade the I.D.A. to make it obligatory for the contractor to have an Indian associate. This was eventually not agreed to by the I.D.A.

(v) After the bids were received, discussions had to be held with the lowest tenderers with a view to keeping the payment in foreign exchange to the minimum and protecting the Bombay Port Trust against limitless compensation payment for delay in issue of licences by Government and in supply of controlled materials.

(vi) The contractors were not given an unqualified Customs Clearance Permit by Government for importing the equipment needed for the work. The permit contained certain conditions which were not acceptable to the contractors.

During the course of evidence the Chairman of the Port Trust stated that "the acceptance letter (to the Contractors) was issued in March, 1965. They gave the first list of plant and equipment in May, 1965. Then the list was sent to Government and the Government raised certain points regarding customs clearance and terms. There was an argument between the contractors and the Chief Controller of Imports. They said: 'We are not agreeing to these terms' and it went on. Then we used our good offices. Our Additional Chief Engineer was sent so many times to Delhi to sort it out and bring about some definite understanding and it was only very recently on the 29th October that the licences were issued".

The Committee are concerned to note that the Dock Expansion Scheme which is stated to be a truncated version of the earlier abandoned scheme, viz., Modernisation Scheme, and was approved by Government in June 1962 will now be executed it by the middle

of 1969 and with all ancillary works by 1970 instead of April 1968, as originally envisaged. The Committee cannot help regretting the delay of about two years at such a crucial time when additional dock facilities are urgently needed to relieve congestion in the port. The Committee consider that most of these delays which are mainly due to lack of administrative and procedural clarifications, could have been avoided if the Dock Expansion Scheme had been pursued from the very beginning with a sense of urgency.

The Committee also note that the cost of the project has risen from Rs. 10.92 crores to Rs. 13.25 crores representing an increase of 21% over the original estimate.

The Committee are surprised to note that the economics of the Port Development Scheme had not been worked out in detail by the Port Authorities. It appears that Government also did not insist on this basic data at the time of approving the Scheme. The Committee recommend that whatever be the other justifications, the financial implications of development schemes together with their revenue earning potential should be worked out in detail in the very beginning so as to enable the Port authorities to carefully examine the effect of the estimated outlay on the port charges and the overall financial position of the port. The working out of these details would also prove helpful in controlling costs and exercising economy. The Committee are glad to note that all preliminaries have been finalised and that the work is gaining momentum. They would like the Port Authorities to ensure that the Dock Expansion Scheme is completed by 1969-70.

Strengthening of the Engineering Department for the execution of Dock Expansion Scheme.

69. The Committee have been informed that for dealing with the execution of all the works covered by the I.D.A. credit, which include the Dock Expansion Scheme, the requirements of officers and staff of the Engineering Department have been carefully considered, and it has been decided that the strength and the composition of staff have to be varied from time to time in accordance with the various stages of execution of different schemes. It has been stated that the requirement has been broken up into the following five phases:—

Phase I	from 1st July, 1962 to 31st December, 1962.
Phase II	from 1st January, 1963 to 31st December, 1964.
Phase III	from 1st January, 1965 to 30th June, 1966.
Phase IV	from 1st July, 1966 to 31st March, 1966.
Phase V	from 1st April, 1968 to 31st March 1969.

It has been stated that appointments envisaged under Phases I, II and III have been made so far and these are given at Appendix VI, together with the estimated cost under each phase. It has been clarified that the posts shown under each phase do not necessarily represent additions to the posts sanctioned for the previous phase as many of these are continued from one phase to the next. These are operated as and when required.

The Committee have been further informed that the strengthening of the Engineering Department is considered adequate for detailed planning, supervision and coordination of such schemes/ works under I.D.A. projects, which have not been entrusted to the Consulting Engineers and are to be handled by the Engineering Department.

The Committee hope that consistent with the necessity of maintaining efficiency, the strength of the Engineering Department as also other Departments of the Port Trust which are associated with the execution of the Dock Expansion Scheme, will be kept to the minimum level necessary and that utmost economy would be effected in the expenditure on the project as far as possible.

D. Rim Bascule Bridge

Dismantling of Old Bridge

70. The Committee have been informed that the old Rim Bacule Bridge, which had been constructed in November, 1917, had during Forty years of its use, developed certain defects which were common to most of the rolling lift bridges of that age and design. After a detailed examination of the bridge in 1957 and after considering various remedial measures to rectify the defects, it was considered that the replacement of the bridge by a new one was inescapable. The traffic across the old Rim Bascule Bridge was accordingly stopped from January 1957, when it was put out of commission for dismantling. The dismantling of the bridge was done by the Railways, and was completed in 1959.

New Rim Bascule Bridge

71. The Consulting Engineers were instructed to start the work on the design and drawings of the new bridge in January 1957, which was completed in January, 1960 when tenders were sisued to selected firms of contractors. The contracts for (i) the foundation work as well as for (ii) the fabrication of the bridge were both

awarded in April, 1961. The original scheduled date for commissioning of the bridge was 31st May, 1963 but it was actually commissioned on 13th January, 1965. The reasons for the delay are stated to be as follows:—

In December, 1961, it was noticed that if the new bridge was installed in the position as planned it would affect the passage of the naval ships. At the request of the Navy, therefore, it was decided to re-designed and re-align the bridge, which resulted in setting back the scheduled date of completion of the bridge by one year *i.e.* to 15th June, 1964. Subsequently the contractors had to be given an extension of time due to a mishap to the components of the bridge while being off-loaded in Bombay.

It has been stated that during the period between the dismantling of the old bridge and the commissioning of the new one, all vehicular traffic on the harbour wall of the Alexandra Dock was diverted to the While Gate and Yellow Gate, situated on the northern perimeter of the Alexandra Dock. Another Dock Gate, called the Brown Gate, adjacent to the Ferry Wharf, was opened for vehicular traffic.

Revision of the estimated cost

72. The Committee have been informed that the original estimate for the construction of the new Rim Bascule Bridge which was sanctioned in October, 1960 amounted to Rs. 35·14 lakhs. The estimate has since been revised in May, 1963 to Rs. 49.17 lakhs. The increase of about Rs. 14 lakhs in the estimated cost is stated to be due to the following reasons:—

(i) increase in the cost of the bridge by about Rs. 7·56 lakhs because of modifications carried out to the design to meet the requirements of the Navy.

(ii) Increase of about Rs. 4·82 lakhs in the fabrication of bridge on account of the operation of escalation clause in the contract. The delay caused by the re-designing of the bridge increased the cost of the fabrication of the bridge in West Germany by about 23% due to rise in the cost of materials and labour.

(iii) Revaluation of D. Mark by 5%. A provision of Rs. 1·37 lakhs has been made in the revised estimate on this account.

(iv) Increase in the cost of miscellaneous works such as diversion of water mains, hydraulic pipes and approach roads etc. by about Rs. 25,000.

Construction of the Bridge

73. The contract for the foundation work was awarded to a local firm Messrs V. R. Ranade and Sons for Rs. 2·87 lakhs and the contract for the fabrication and erection of the superstructure was awarded to Messrs C. H. Jucho, Dortmund, West Germany, for Rs. 28·34 lakhs (subject to an escalation clause). The work of advising on the tenders and supervising the execution of the work was entrusted to the Port Trust Consulting engineers, Messrs Bertlin and Wilton and Bell, for a fee equivalent to 3% of the cost of the bridge.

It has been stated that the original contract for the foundation work was revised from Rs. 2.87 lakhs to Rs. 3.80 lakhs as it was estimated that an additional cost of Rs. 92,400 would have to be incurred on the foundation due to modification carried out to the design of the bridge.

It has been stated that according to the contract the foundation work was to be completed in 6 months from April 1961 onwards but the work was actually completed in July 1963 i.e. about 21 months behind schedule. The delay of 11 months i.e. upto March, 1962 is due to the necessity of changing the design of the bridge and foundations. The remaining delay of 10 months is due to the obstructions met while sinking the wells. It has been stated that this delay did not affect the schedule for the completion of the bridge as the redesigned superstructure was not ready for erection till December, 1963.

The Committee are unhappy that a period of 5 years has been taken after the dismantling of old Rim Bascule Bridge to replace it by a modern structure. The Committee feel that the Port Trust authorities should have undertaken advanced planning and designing of the new bridge, in consultation with the Defence and Railway authorities, so that orders could have been placed for the fabrication of the bridge well before the old bridge was dismantled. They are also unhappy that there was delay of twenty-one months in the execution of foundational works for the bridge and that a period of one year was taken to modify the design of the bridge in order to fit in the naval requirements. All these delays have resulted in substantially increasing the cost of the bridge and also adversely affected the traffic of trucks and other vehicles. The Committee would stress the

need for advanced planning, designing and timely execution in the interest of efficiency an economic execution of works.

E. Master Plan for the Port

Need for the Plan

74. It has been stated that during and sine the last World War, the traffic at Bombay Port has been growing steadily and its pattern also has shown a marked change. With a view to meeting the requirements of the increased traffic, it has become necessary to consider schemes for increasing the port capacity. With the developing economy of the country in general and of the port's hinterland in particular, it is evident that this port, which is rightly regarded as the Gateway of India, would be called upon to handle more and more traffic in the years to come. The development schemes have, therefore, to be so planned that they would not only meet the immediate requirements, but also ensure that they would not interfere with further development at a later stage. Need has, therefore, been felt for a Master Plan which could serve as a broad frame-work into which phased development could be fitted in a balanced and coordinated manner. While examining one of the development schemes of the Bombay Port Mr. F. Psthuma, Managing Director of the Port of Rotterdam, recommended, *inter-alia*, the preparation of a Master Plan for the future development of this Port. The World Bank Appraisal Team, which visited this port in November, 1961, also attached particular importance to the preparation of such a Master Plan. Accordigly, Master Plan was included as one of the schemes in the development project covered by the I.D.A. Credit. The preparation of the Master Plan has been entrusted to the Port Trust Consulting Engineers M's Bertlin and Wilton and Bell who were already familiar with the port problems. They were instructed to take up this work in April, 1964 and to complete it within a period of three years *i.e* by April, 1967. They have also been asked to submit interim reports in respect of some more urgent matters, such as development of additional port facilities on the eastern side of the harbour and facilities for discharge of bulk cargo such as grains, ore, rock phosphate etc.

Terms of Reference to the Consulting Engineers

75. The terms of reference to the Consulting Engineers are fairly wide and cover all aspects of development including the following:—

(1) To carry out economic, engineering and traffic investigations for providing the basic data for framing the Master Plan.

(2) To prepare the Master Plan for the long term development of the Port of Bombay taking into consideration the interest of users of the port and harbour and probable development of the port traffic during the next 50 years.

(3) To make recommendations regarding:

(a) improvements and additions, if any, to the existing docks and port facilities,

(b) a more efficient and effective utilisation of existing docks and facilities,

(c) siting and phasing of future dock development,

(d) feasibility of utilising the dredged spoil for reclamation, and

(4) To give estimated cost and time required for carrying out the improvements and developments as may be proposed.

Programme of work

76. It has been stated that in 1964 extensive investigations were taken in hand. Existing data regarding soundings, probings and borings have been collected and tabulated and these have been further supplemented with additional soundings, probings, current surveys, etc. particularly in the Nhava Sheva area, where there is stated to be good scope for future development. As wave data available for this port was inadequate, two wave recorders were installed during 1964 monsoon. Four more wave recorders, which were received early in 1965 have also been installed. In July, 1964 aerial photographs were taken covering the harbour area for obtaining reliable information regarding the wave pattern in different parts of the harbour.

Hydraulic model investigations, which are very essential for deciding on the lay out of future development, are being taken up very shortly. The harbour model at Khadakvasla has been suitably modified on the basis of the latest soundings and surveys. The proving of the modle of the modified area has been completed and experiments of testing of different lay outs of port facilities and channels will be started very soon.

Specialised advice of Marine Consultants—Captain McMullen has been obtained on navigational matters. It is also proposed to seek the

advice of international experts like Dr. McDowell for siltation studies and Dr. Bishop and Dr. Simon for reclamation studies. The Consulting Engineers have so far submitted an interim report on the question of bulk handling of foodgrains at Nhava * Sheva which is proposed to be developed as a satellite to this port.

The port authorities expect that they will take at least one more year before they would be in a position to formulate concrete proposals regarding the Master Plan.

Cost of preparation of Master Plan

77. The original estimates for the preparation of the Master Plan were made in November, 1963 by the Engineering Department of the Port Trust on the basis of the data furnished by the Consulting Engineers will be paid a fee of Rs. 1,70,000 of which Rs. 1,20,000 will be in Pounds Sterling. Apart from this fee, they will also be reimbursed all actual cost on staff, equipment, specialist advice, laboratory and other investigations, etc. The total cost for preparation of the Master Plan was originally estimated at Rs. 18·97 lakhs but according to recent indications it is expected to go up to Rs. 36·82 lakhs. The break-up of the original and revised cost, as furnished to the Committee under the various heads is as follows:—

	Original estimated cost	Revised estimated cost
	Rs.	Rs.
1. Consulting Engineers' fees	1,70,000·00	1,78,000·00
2. Staff cost including office expenses	8,48,590·00	13,02,600·00
3. Specialist adivice	50,000·00	86,000·00
4. Economic investigations (included in 2)		1,80,000·00
5. Purchase of Special equipment	2,75,000·00	5,76,900·00
6. Land and Marine borings	3,90,000·00	7,25,000·00
7. Marine surveys for soundings, probings currents etc.	66,000·00	4,60,000·00
8. Aerial Photography	17,200·00	17,200·00
9. Model Studies	25,000·00	50,000·00
	18,41,790·00	35,75,700·00
10. 3% contingencies	55,254·00	1,07,271·00
	18,97,044·00	36,82,971·00
say Rs.	18,97,000·00	36,80,000·00

*For Greater details please see para 99.

78. It has been stated that an expenditure of Rs. 8 lakhs has been incurred on the Master Plan upto the end of May, 1965. The break-up of this expenditure is indicated below:—

Sl. No.	Item	1964-65	1-4-65 to 31-5-65
1	2	3	4
1.	Consulting Engineers' Fee	66,083·48	
2.	Staff salaries (European and Indian)	1,29,280·04	99,474·21
3.	Travel cost in UK and India	7,389·19	5,237·04
4.	Office expenses including maintenance and operation of staff cars	1,490·24	3,087·44
5.	Site Investigations including cost of equipment, borings and trial pits and aerial and marine surveys.	3,94,888·01	70,689·08
6.	Model Studies	..	..
7.	Specialist Advice and Laboratory Work	2,019·51	4,033·67
8.	Contingencies.	23,294·67	445·17
		6,24,445·14	1,82,956·61
Grand total 1-4-1964 to 31-5-1965		Rs. 8,07,411·75	
Budget provision for 1965-66		Rs. 6,77,800·00	

Reasons for revision of the cost

79. The increase in the estimated cost for the preparation of the Master Plan from Rs. 18·97 lakhs to Rs. 36·82 lakhs has been attributed to the following reasons:—

(i) The Consulting Engineers have found it necessary to carry out more detailed and extensive investigations and studies, which call for more expenditure on staff and special equipment than allowed for in the original estimate.

(ii) The accepted tender for the land and marine borings has also been considerably higher than expected.

(iii) The Consulting Engineers have thought it necessary to obtain specialist advice on navigational matters, siltation studies and reclamation problems, involving more expenditure on these items than allowed for originally.

(iv) Economic investigations were originally intended to be carried out with the help of one senior and one junior economist, but subsequently it was proposed that the work should be entrusted to a team of economists who have specialised in such work and are approved by the International Development Association. These investigations will, therefore, cost more than what was allowed for in the original estimates.

It has been stated that the preparation of a Master Plan required varies studies and investigations and it is not possible to asses in advance very precisely the amount of work involved. After the work had actually started, the Consulting Engineers were in a better position to make a more realistic assessment of the cost, which has now been estimated at Rs. 36.82 lakhs, with a foreign exchange component of Rs. 13 lakhs.

Cost of implementing the Master Plan:

80. Regarding the total cost of implementing the Master Plan, the Chairman of the Port Trust stated that "that will depend on what exactly are the recommendations" of the Consulting Engineers. He added that "an estimate will not be realistic unless we know what they are providing for.....I can tell you about some of the works which will be carried to the Fourth Plan period. For example, the extension of the harbour on the other side of the port *viz.* Nhava Sheva is under consideration. Construction of the bridge, over-ground pipeline and improvement to the marine oil terminal will be done in the Fourth Plan. I am afraid the projection will not be very realistic—at least the financial aspect of it will not be realistic."

The Committee note that the Master Plan envisaged for the Bombay Port will provide for the long-term development of the Port taking into consideration the interests of users of the port and harbour and probable development of the port traffic during the next 50 years. Bombay is a premier Port of India and has a highly developed hinterland with exportable surplus agricultural products. A number of engineering and cotton industries have been set up in its vicinity and the bulk commodities like foodgrains and industrial goods are mostly imported through this port. This port will, therefore, continue to play important part in the nation's economy. It is therefore of paramount importance that the Master Plan for development of this port should be drawn up keeping in view the following

considerations among other things so that no infructuous capacity is created in any port:—

(i) the immediate needs of the port traffic;

(ii) the long term needs of the country specially of the adjoining areas; and

(iii) the development of facilities in other ports on the western coast—major, intermediate and minor.

The Committee further suggest that a study should be made to find out if any decentralisation and diversion of traffic from Bombay to other ports is possible as that would not only help in relieving congestion of traffic in Bombay Port but would also assist in the development of other areas adjoining the ports and in reducing the load on rail/road traffic.

The Committee would also like the Consultants to be given a specific instruction to ensure the maximum utilisation of structures and equipments from indigenous sources so as to effect maximum economy in foreign exchange.

The Committee would also suggest that before the Master Plan is finalised, its draft should be given wide publicity among the trade and industry and shipping concerns, and other port users with a view to elicit their suggestions.

The Committee would further like to suggest that to avoid duplication of port facilities and to ensure their rationalisation and economic utilisation, the Master Plan for the development of a particular port should form part of the overal planned programme for the long term development of all the ports both on regional basis and on national basis. Such a development programme has necessarily to take into account, among others, the long term forecast of:—

(i) the volume of the country's present foreign trade both imports and exports and the proposed or expected increase in 2 or 3 subsequent Plan periods.

(ii) changes in the pattern of trade;

(iii) the size of future ships and the developments in the shipbuilding industry;

(iv) agricultural and industrial production and consumption in the various regions within the country;

(v) internal traffic arrangements, both rail and road, from and to the ports;

For this purpose detailed statistics in respect of each of these matters will require to be collected and reviewed. The Committee suggest that the collection of basic statistics and the preparation of overall integrated development plan for the ports may be undertaken centrally by the Government in consultation with National Harbour Board, Planning Commission, the Port Trusts, representatives of trade and industry etc.

Planning and Research Cell:

81. A decision to set up a Planning and Research Cell was taken by the Board of Trustees in June, 1965.

Functions.—The main functions of the Cell are to analyse and interpret the statistical data, collected by the various Departments of the Port Trust, and to advise the administration on the changes in the pattern of port traffic which are taking place and are likely to take place. Besides this, the Cell will also deal with the following matters:—

(1) Manpower planning.

(2) Economic investigations relating to port traffic.

(3) Cargo handling and transportation methods.

(4) Economy measures.

(5) Rating problems.

(6) Any other related matter on which its advice may be sought.

The estimated recurring expenditure on the Cell is expected to be about Rs. 1 lakh per annum.

Staff.—The Planning and Research Cell forms part of the Secretary's Department. Apart from the ministerial staff, the set-up of the Cell will be as follows:—

(1) 1 Industrial Engineer (Rs. 1100—50—1400)

(2) 1 Planning and Research Officer (Rs. 700—40—1100—50/2—1250).

(3) 1 Cost Accounts Officer (Rs. 400—950).

(4) 1 Economic Investigator (Rs. 325—15—475—20—575).

(5) 1 Statistical Investigator (Rs. 325—15—475—20—575).

Except the posts at serial Nos. (4) and (5) no other post has so far been filled by the port authorities.

As to the work of economic and traffic investigations for the Master Plan, it has been stated that the consultants have suggested this work to be entrusted to the Economic Intelligence Unit but the Board of Trustees do not favour this. They feel that if the proposed investigations are entrusted to the Economic Intelligence Unit, which is a foreign firm and has branches all over the world, the records of the investigation would not be available to Port Trust and they would not, therefore, gain any experience for carrying out future investigations. Secondly, the expenses involved in entrusting the investigations to the Economic Intelligence Unit is estimated at Rs. 1·80 lakhs out of which Rs. 90,000 would be payable in pounds sterling. It has been added that after considering several alternatives and holding discussions with the Consulting Engineers and the Ministry of Transport, it is now proposed to entrust the investigation to Dr. Bhatia, Director, Transport Research, Ministry of Transport.

The Committee commend the decision of Government to entrust the work of economic and traffic investigations for the Master Plan of the Bombay Port to the Director, Transport Research, in the Ministry of Transport. They hope that in conducting these investigations the Planning and Research Cell of the port would be fully associated so that the Cell may gain, in due course, sufficient experience in dealing with the problems of the port independently.

The Committee would also suggest that the Directorate of Transport Research should arrange to impart, in due course, instructions to Planning and Research Cells of other major ports in the country so that they are fully trained in the work of collection and collation of various statistics required for drawing up traffic projections for the future development of ports.

F. Development of Nhava Sheva as a Satellite Port

Need for a Satellite Port:

82. It has been stated that scope for further development of port facilities adjacent to the port side is very limited. The area just to the south of the docks, is occupied by the Naval Dockyard while on the north and shallow mud flate do not allow economic development. Further, even if it were possible to add more berths, there would have been considerable difficulty regarding the clearance of

the increased traffic from the docks, as the road and rail approaches to the dock system are already fully strained. Any large scale addition to the port's capacity will, therefore, have to be planned at a different site. For further development of the port the natural features in the Nhava Sheva area are stated to be very favourable. Apart from natural deep waters available in the area, which can be provided with good road and rail connections, power and water supplies can be tapped from nearby sources. A large area can also be had in the immediate vicinity for development of a township and industrial and commercial estates. It has been stated that the proposal for the development of Nhava Sheva area has been received with favour in all quarters including Central and State Government, commercial and shipping circles. The Port Trust Consulting Engineers, who have been entrusted with the preparation of Master Plan for the further development of the port, have been asked to study specially the question of developing a satellite port in the Nhava Sheva area. Investigations have already been taken up and it appears that the area near the Sheva Island is likely to be more suitable for such development.

Central Feature of the Scheme:

83. A study of the traffic forecast carried out in 1963, has indicated that the dry cargo traffic at the Bombay Port may increase to about 9·88 million tons by 1975-76. It was estimated that about 9 additional berths will have to be provided over and above the extra capacity that may be available as a result of the implementation of the Dock Expansion Scheme. These additional berths are proposed to be constructed in the Nhava Sheva area in view of the favourable conditions offered by that site. It is stated that as a first phase of development, it has been proposed that 6 berths should be taken up for construction and of these, 4 should be constructed during the Fourth Five Year Plan. Accordingly, a provision of Rs. 12 crores has been made in the proposals for scheme to be executed during the Fourth Five Year Plan.

Progress in Road and Rail Links:

84. As regards the progress in road and rail links to the satellite port in Nhava Sheva area, the Committee have been informed that the road connection from Panvel to Urban passes at a distance of about 6 miles from the site of the proposed port facilities in the Nhava-Sheva area. On completion of land survey which is in hand it will be possible to fix up an alignment of the road for connecting the port to the Panvel-Uran road. Regarding railway facilities, it is stated that the Panvel-Uran line is already under construction by

the Central Railway and is expected to be commissioned by the end of 1965 or early in 1966. A branch line, taking off from the Panvel-Uran railway near Jesai will have to be laid to serve the port site. The alignment of this rail link also will have to be fixed only after the land survey is completed.

Development of hinterland of Nhava Sheva:

85. The Committee have been informed that the Maharashtra Industrial Development Corporation has already carried out studies and surveys for the development of the coastal strip on the Thana-Balapur road. According to the rough zoning plan of this area there will be three industrial zones of 1,000 acres each-marked I_1, I_2, I_3. The northern-most zone—marked I_1—has been earmarked for engineering industrial and the other two—marked I_2 and I_3 have been reserved for petrochemical industries based on the naptha cracker proposed to be put up by the National Organic Chemical Industries Ltd., which is a part of the Mafatlal Shell international combine. It is expected that, by 1969, private capital to the tune of about Rs. 100 crores will be invested in this area. So far about 1,600 acres of land have been allotted to various private industries, with an investment capacity of about Rs. 70 crores.

The Committee are glad that the port authorities have taken the initiative to get prepared iterim plan for the development of Nhava-Sheva, pending the completion of detailed Master Plan. The Committee would like Government to take an early decision about the development of four berths for handling foodgrains at Nhava-Sheva, keeping in view the requirements of the country during the next 20-25 years, the capacity available in Bombay Port and other neighbouring ports and the traffic projections for imports and exports from the hinterland. The Committee would like Bombay Port Trust authorities to maintain effective liaison with the State Government of Maharashtra and the Ministries of Food, Transport and Railways so as to ensure an early integrated development of the proposed satellite port of Nhava-Sheva.

CHAPTER V

CONSULTANCY SERVICE

Appointment of Consulting Engineers:

86. The following foreign firms have been engaged from time to time by the Bombay Port Trust as their Consulting Engineers since 1948-49:—

(i) Sir Bruce White, Wolfe Barry & Partners.

(ii) M/s. Rolfe & Bertlin.

(iii) M/s. Bertlin & Wilton and Bell.

During evidence it has been stated by the Chairman of the Port Trust that all these firms are 'like off shoots of the same tree coming up.....Historically it is of the same stock which is going down the year.' In reply to a question it has been stated that appointment of Consulting Engineers "is based on the reputation, standing and wide experience of the firm of engineers proposed for appointment. As a general rule, an element of competition is not introduced."

87. The Consulting Engineers have been appointed to attend to the following services:—

(i) General consultancy services and for acting as agents of the Bombay Port Trust in London for payment of pensions, annuities and Provident Fund, etc., and for engagement of personnel when required. For this, they are paid a fixed retention fee of £1,000 per annum. In addition they are paid a graduated commission on the value of purchases made through them as well as all out of pocket expenses such as travel, telegraph, telephone charges etc. incurred by them in connection with port trust work.

(ii) Special consultancy service, involving extensive enquiries and technical work for example preparation of estimates,

drawings, tender documents, etc., for the Dock Expansion Scheme and Ballard Pier Extension. For this, the Consulting Engineers are paid a fee on percentage of the total value of the works to be executed. In the case of Dock Expansion Scheme, the fee payable is 3·25 per cent on the first Rs. 3 crores and 3 per cent on the balance.

(iii) In addition to the fees referred to above, the Port Trust also pays to the Consultants the actual cost of site, supervision, cost of equipment required and other expenditure incurred by them in connection with the work. The cost of special professional advice or services of a contractor for carrying out site investigations, recommended by the consultants is also borne by the Port Trust.

Under the specific agreement with them, the Consulting Engineers have been required to appoint, with the Trustees' prior approval, adequate resident site staff. They have accordingly obtained the Trustees' prior general approval of the number, qualifications, experience, remuneration and other service conditions of the staff appointed and to be appointed. It has been provided in the agreement that such staff may also include any suitable engineers that could be seconded by the Trustees from their Engineering Department and accordingly a number of officers from the Port Trust have been seconded on their staff. In the event of the services or conduct of any members of the site supervisory staff being found unsatisfactory by the Trustees, the Consulting Engineers, on being so informed, will have to remove the person concerned from the service. Imprest Accounts have been established in Bombay and in London for enabling the Consulting Engineers to meet the cost of the supervisory staff and they have to submit monthly statements giving full details of the disbursements made from the Imprest. These are examined in detail by the Chief Engineers and the Chief Accountant before recoupments are made.

Payment of Fees, etc.:

88. The following tables indicate the payments made to the Consulting Engineers under various heads since 1948-49. Part 'A' indicates the payments made in respect of works other than International

Development Agency projects, while Part 'B' refers to payment made in respect of International Development Agency projects:—

Part 'A'

Non-I.D.A. Projects.	£. s. d	Rs. p.
(*i*) Retention Fee	11,500-0-0	..
(*ii*) Out-of-pocket expenses	16,173-18-3	..
(*iii*) Commission on materials etc.	14,504-15-6	..
(*iv*) Fees for preparation of project reports etc.	170,517-1-5	329,766·32
(v) Payments on account of preparation of detailed designs, etc.	14,029-1-7	..
(*vi*) Payments on account of supervision and inspection	41,540-16-9	..
(*vii*) Miscellaneous expenses	754-5-11	
TOTAL	269,019-19-5	329,766·32

Part 'B'

I. D. A. Projects.	£. s. d.	Rs. p.
(*i*) Commission on purchase of Vikram	6,101-16-1	..
(*ii*) **Fees for preparation of master Plan	3,600-0-0	18,000·00
(*iii*) †Fees for designs estimates etc. for Dock Expansion Scheme and Ballard Pier Extension	116,894-15-11	668,322·53
(*iv*) Fees for scrutiny of design for floating craft	525-0-0	14,000·00
(*v*) Fees for negotiation in connection with Ballard Pier Extension	2,185-0-0	..
TOTAL	129,306-12-0	700,322·53
Grand Total of Parts 'A' & 'B'	398,326-11-0	1,030,088.85

*These fees are exclusive of the reimbursements allowed to the Consulting Engineers of the actual expenditure in Rupees on the staff (Foreign and Indian) appointed for day to day site supervision of works like Marine Oil Terminal and Rim Bascule Bridge.

**These fees are exclusive of the actual expenditue on staff.

†These fees are exclusive of the reimbursements of the actual expenditure almost entirely in rupees on staff (Foreign and Indian) appointed for day to day site supervision.

The break-up of the payments made to the Consulting Engineers, year-wise, is indicated in Appendix VII.

It will be seen from above that the Bombay Port Trust has paid £ 398,326 and Rs. 10.3 lakhs in rupees to the Consulting Engineers since 1948-49. These amounts are exclusive of the reimbursements allowed to the Consulting Engineers on account of actual expenditure on staff for day to day site supervision which would also be quite substantial.

The Committee are unable to appreciate fully the justification for the payment of annual retention fee of £ 1,000 to the Consulting Engineers for general consultancy work as they are to be paid separately for all special works and are reimbursed all expenditure incurred by them in connection with the port work. The Committee note that an appreciable number of engineers from the Port Trust Engineering Department are seconded to the Consulting Engineers. While the Committee appreciate in principle that the seconding of such officers may help them to get the requisite experience in port designing, they apprehend that such an arrangement is liable to create a vested interest and may come in the way of objective assessment of the work done by the Consultants particularly when the same consulting firm has been continuing for over twenty years.

The Committee further consider that the payment of fees on percentage basis to the Consulting Engineers, may give them unintended remuneration on account of increases in the cost of works, due to extraneous reasons like contractors' delays and failures, rise in the cost of labour, material etc. and not so much due to additions to their work. The Committee have a feeling that such a system of payment provides no incentive to the Consulting Engineers to economise on costs. Rather, it tends to work the other way as the Consulting Engineers become direct beneficiaries from increases in costs. In fact, the costs of marine oil terminal scheme increased from the original estimate of Rs. 4.49 crores to Rs. 10.25 crores. Similarly, the estimates of Dock Expansion Scheme have been revised upwards from Rs. 10.92 crores to Rs. 13.25 crores. The Committee feel that the fees of Consultants should be fixed in such a manner as to provide incentive for bringing about reduction in the costs of works. The Committee recommend that Government should review the whole matter and lay down principles for the payment of fees to the Consulting Engineers after taking the above factors into account. They would further suggest that Government/Port authorities should negotiate with the Consulting Engineers for adjusting their fees in respect of Dock Expansion Scheme and Master

Plan in such a manner as to eliminate the accrual of fees on account of increases in cost of works due to extraneous factors.

The Committee are distressed to note that the Bombay Port Trust has all along been depending on the foreign firm of Consulting Engineers even after eighteen years of Independnce. Similar position appears to exist in other major ports in the country. Apart from the outgo of precious foreign exchange which in the case of Bombay alone, amounted to £398,326, the employment of foreign consultants may also lead to excessvie purchases of plant and machinery from the consultant's own country as the designs and specifications prepared by them naturally tend to take into account the developments in their own country. In fact the Chairman, Bombay Port Trust admitted during evidence that "this is the price we have to pay for not being able to have our own indigenous engineers." The Committee have already recommended in para 37 of their Ninety Second Report on Mormugao Port that effective action should be taken to establish inter-port technical consultancy service in the country for the Fourth Plan. The Committee hope that determined steps would be taken to make a beginning in providing indigenous consultancy service to the ports without further delay.

CHAPTER VI

BERTHING FACILITIES

A. Berths

The Docks:

89. The Port of Bombay has fairly commodious wet dock accommodation. It has three enclosed wet docks having a total water area of 104½ acres and quayage of nearly 4½ lineal miles. The main particulars of these docks are given below:—

Wet Docks	Width of entrance	Depth of water available with normal impounding	Water area acres	Lineal feet quayage includes Harbour Walls	Number of berths (excl. harbour walls)
Prince's Dock (1880) . .	66′-0″	21′	30	6,750	10*
Victoria Dock (1888) . .	80′-0″	23′	25	7,700	13*
Alexandra Dock (1914) .	100′-0	30′	49·52	10,000	17**

Open Berths:

There are several deep water open berths outside the dock. Their details are given below:—

Berth	Depth of water available.	Length of quayage	No. of berths
Alexandra Dock	..	..	..
Harbour Wall	25′	1,700-0″	3**
Ballard Pier	30′	570-0″	1**

*First Class

**Second Class

(For the purpose of classification, berths longer than 450′ and having a depth of 26ft are considered as First Class, while those with less length and depth are treated as Second Class berths.

It is stated that in addition to the above berths, which are available for dry cargo, there are also three berths for discharge of bulk oil at Butcher Island capable of receiving tankers of 650 ft. in length and 34 ft. 6 inches draft and one berth at Pir Pau, which can accommodate tankers upto 525 ft. in length and 28 ft. draft.

The Bunders:

Besides the wet docks described above, there are along the harbour front a number of 'bunders' or open wharves and basins where the traffic carried by sailing vessels is handled. These bunders, which provide an aggregate quayage of 41,000 lineal feet, are equipped with cranes and other facilities for loading, unloading and storing cargo. Coastal traffic constitutes a considerable proportion of the trade of the port and is handled at the bunders. The extensive Timber Ponds at Sewri, covering an area over 60 acres, form an important feature of the bunders.

Depths of Berths:

90. The Committee have been informed that the actual depth of any berth would vary depending on the state of dradging. With the help of the departmental dredgers, dredging is continuously carried out at various berths so as to maintain depths at the berths within the desired limits. It is stated that "here is an occasional loss of depth at few of the berths when either the berth is not available for dredging or the dredger is not available for the work. Dredging is, however, done according to programme as far as possible in consultation with the Deputy Docks Managers, Alexandra, Prince's and Victoria Docks."

In this connection, the Chairman of the Port Trust stated during evidence that "siltation of our berths in docks as well as the main channel and the approach channel is constant. In consequence, it is not possible to spare a dredger to dredge a berth which shortly after having been previously dredged shows signs of siltation as periodical attention must be paid to keep the approach channels and the main channel of the port clear at all times. Where a berth has been found to silt, the only alternative is to allocate it to a vessel of a draft capable of berthing alongside. This no doubt causes difficulties in the allocation of berths. Generally speaking, a sweep is made of all berths in the Alexandra dock once every six months and oftener if that be necessary. In this process, if dredging is found necessary, then the entire berth is given over for dredging even if this involves having to keep ships out waiting in stream off that berth for sometime. The figures of loss of shipdays in consequence of dredging berths have not been recorded. Among other things,

because of high berthing intensity we do not get sufficient time for dredging purposes."

The Study Group which visited the Port in June, 1965 have been informed that under normal conditions, berths inside Alexandra Dock can accommodate ships drawing 30 ft. and those at the Alexandra Dock Harbour wall can take ships drawing 25 feet. Ballard pier can take ships drawing 30 feet. The port authorities stated that for improving drafts at Alexandra Dock, it is proposed to impound water to an extra height of 4 feet, so that ships drawing upto 34 feet can use the dock, though their entry will be subject to certain tidal restrictions.

The Committee are concerned to note that there is occasional loss of depth at some of the berths when either the berth is not available for dredging or the dredgers are not available for the work, with the result that sometimes a berth found to silt has to be allocated to only vessels of lower drafts. The Committee feel that such a state of affairs not only causes difficulties in allocation of right berth for the right draft but is also bound to affect adversely the turn-round of vessels.

The Committee are glad to note that for improving drafts at Alexandra Dock, it is proposed to impound water to an extra height of 4 feet so that ships drawing upto 34 feet can use the docks as against 30 feet under normal conditions. While welcoming this measure, the Committee urge that concerted efforts should be made to keep the approach channels and berths clear of siltation in order to allow entry of ships with requisite drafts for the maximum period possible.

The Committee also note that at present, figures of ship-days lost due to dredging operation being carried on the berths are not being recorded. The Committee suggest that a record of these figures may also be kept separately as it will enable better control over dredging of berths by the port authorities.

Allocation of Berths:

91. The Docks By-laws at Bombay regulating admission of vessels into docks for loading and unloading of cargoes are briefly as follows:

(i) A written application in respect of every vessel desiring to enter the docks must be made by the Master, owner or agent of the vessel stating, *inter-alia*, the cargo carried for discharge and also the cargo due to be loaded.

(ii) Vessels bringing import cargoes for discharge in the docks shall be given preference over all vessels waiting for berths subject to there being berths available and suitable for such vessels.

(iii) The order of precedence laid down above may be altered in circumstances where better use of the docks and general interest of shipping will be served. Notwithstanding this, the Trustees may direct that preference be given in the allotment of berths to any vessel or vessels if in their opinion it is desirable to do so in the public interest.

In reply to a question whether the allocation of berths is changed at short notice, it has been stated that "generally, a berth once alloted is not altered. It may, however, happen that after a berth is allotted to a vessel anticipating that the vessel already at berth vacates it in time, the vessel continues at the berth for good and sound reasons. In such a case the allotment of the berth to the succeeding vessel may have to be altered. Instances of this kind are few and far between.

A vessel at bearth may, however, be required to move to another berth for reasons of efficient dock operation. The main reasons for such shifting are:

(i) Lack of room in the shed.

(ii) discharge or loading of cargo requiring heavy lift cranes.

(iii) in the case of a vessel loading export cargo, the draft at the berth being required by an import vessel.

(iv) in the case of vessel loading ores the lack of storage capacity for the entire load at one berth.

92. Asked whether the question of allocation of berths to private parties as is done at most European and American Ports, has been considered for adoption in Indian ports, the Secretary of the Ministry of Transport stated during evidence that "it has not been considered because firstly we don't have so many berths as to give one berth exclusively to shipping companies and secondly our companies have not expanded so much as in Scotland where one million GRT is owned by one shipping company." He, however, admitted that for trade purposes a berth in the Alexandra Dock has been reserved on preferential basis for exclusive passenger-*cum*-cargo traffic of the vessels of the Bombay Steam Navigation Company and

another company Messrs. B.I.S.N. Co. plying between the African ports and Bombay.

The Committee note that under the existing dock by-laws, the vessels bringing import cargoes into the port are given preference over all other vessels waiting for berths. The Committee urge that in the light of experience gained, the port authorities should review the dock bye-laws keeping in view the changing priorities for handling of cargoes at Bombay Port e.g. foodgrains, exports etc.

Berthing of Ships at Victoria Dock:

93. It has been represented to the Committee by a leading chamber of commerce that "ships of upto 480 ft. in length were being taken into Victoria Dock for 20 years until Berthing Masters refused to do so in 1963. Now ships of only upto 456 ft. in length are allowed into Victoria Dock. This, in 12 months has resulted in about 150 ships having had to be worked in Alexandra (and some in Prince's) Docks, leading to further congestion at this already congested deep water dock".

During the course of evidence, the Chairman of the Port stated that the reasons advanced by the Berthing Masters for restricting the entry of ships into the Victoria Dock to 456 ft. were that "the turning circle there is not sufficiently big and that the approach is also very angular. Some berths were not designed, according to them, for longer ships. But as against that, during the last war, as an emergency measure, they did take ships of greater length than 456 feet." The Commitee have been informed that from the 21st September 1965 the Berthing Masters have volunteered to berth ships upto 475 in length by day and 450 feet by night in the Victoria Dock.

The Committee regret the dislocation and delays caused by the refusal of the Berthing Masters to take ships longer than 456 feet into the Victoria Docks for about two years which aggravated the already acute congestion in the Bombay Port during that period. The Committee hope that with modern navigational aids, it should be possible to bring in larger vessels into the Victoria Docks in future.

Berthing of Bulk Carriers:

94. It has been suggested to the Committe by a leading shipowners' association that "the port should carry out continuous re-

search for developing the port and should allow for the berthing of large modern tankers and bulk carriers which is the modern trend in shipping today".

The Study Group which visited the port in June, 1965 have been informed that the depth of water available in Alexandra Dock is adequate for the modern dry cargo ships. The length of these ships is, however, tending to be longer than the length of the berths, which are 450 feet to 500 feet long. It has been stated that the tendency for increased tonnage and draft is seen mainly in bulk carriers. The main commodity handled at Bombay which could use such bulk carriers is foodgrains. The draft limitations at the Alexandra Dock do not allow a bulk carrier of more than 20,000 to 22,000 tons to be handled in that dock.

The Committee expect that many of the present ills of Bombay Port regarding length and draft of the port would be resolved with the completion of the Dock Expansion Scheme which envisages the provision of deep water berths. They also hope that with the commissioning of additional berths under the proposed satellite port in Nhava-Sheva area, the position would further improve.

B. Bulk Foodgrain Handling Facilities

Quantity of Foodgrains Handling

95. The quantity of foodgrains handled at the Bombay Port during each of the last four years is as follows:—

(in lakhs tonnes)

Year	Quantity of Foodgrains
1962-63	16·94
1963-64	14·99
1964-65	21·33
1965-66 (1st 6 months)	12·85

Existing Arrangements for Handling of Foodgrains

96. The Committee have been infromed that almost all the bulk foodgrains imported through the Port of Bombay are received in

tankers. The discharge of foodgrains is effected by means of suction pumps.

The Port Trust authorities have further stated that "Till about April, 1965 the discharge of foodgrains (bulk wheat) from tankers was the responsibility not of the Charters but of the owner of the vessel who in turn engaged local contractors to evacuate the grain. An assortment of machines was used by these contractors to evacuate grain, since none of the machines was of a standard rated capacity, the rate of discharge of foodgrains varied from tanker to tanker and ranged from an average discharge rate of 1,500 tons per day in the case of those contractors who used vacuators to 2500-3000 tons for those who used Buhler machines. Since April, 1965 the charters *viz.* the Government of India, have taken over the responsibility for discharging foodgrain tankers. Government have purchased both Buhler machines as well as vacuators. By a judicious use of both these types of machines, it has been possible to obtain a discharge rate upto 5,500 tons daily although this output was not consistently maintained for the entire days that a tanker was discharging. On an average, however, the rate of discharge has fluctuated between 3,000 and 3,500 tons per day of three shifts. With three to four berths generally occupied by food ships, the total discharge comes to about 8,000 to 10,000 tons per day."

97. It has been stated further that the present method of handling of grains though adequate for the present requirements, cannot be considered satisfactory for the following reasons:

(i) Three to four berths are taken up for this traffic which could be reduced to one if the grain was handled at a berth equipped with grain elevators and served by a silo.

(ii) Due to the limited scope for the despatch of grain by rail, a large quantity has necessarily to be sent out by trucks for local storage, thus involving double handling.

(iii) The heavy truck traffic generated by the despatch of foodgrains causes heavy congestion on the road approaches of the docks.

A leading chamber of commerce has stated that "... discharge and clearance of fertilizers and foodgrains should be completely mechanised. In fact the handling of these bulk commodities within the existing port area is not recommended. The scheme to have separate berths for handling bulk cargo at Nhava-Sheva on the main land

opposite the present port, should bt expedited to the maxium extent, coupled with the construction of a silo."

A leading shipowners' association has suggested that "with a speedier handling of foodgrains, two deep drafted berths would be found quite adequate for the foodgrain ships so that two deep drafted berths could be released for general cargo ships."

The Committee were informed in October, 1965 by the port authorities that "till June, 1965 we had reserved five berths for grain handling at the Docks. They were thereafter reduced to four, but at present they are restricted to three, an additional berth being allotted if and when the occasion demands. It has, therefore, been possible to release two berths, off and on, for use of vessels with general cargoes."

98. Giving an overall position of foodgrain handling at the various ports in the country, Government have stated in reply to a question in Rajya Sabha that in 1965, as much as 8.98 lakh tonnes of grain was cleared in the month of May, 1965. The target now aimed at is 12 lakh tonnes in the non-monsoon months with a possibility of the figure having to be stepped up to 15 lakh tonnes, if necessary. The capacity of the various ports to handle foodgrains against arrivals of upto 12 lakh tonnes per month in non-monsoon months would be as follows:

	('000 tonnes)	
Bombay	370	
Kandla	130	
Mormugao	20	
Calcutta	240	(including vessel to vessel discharge at Paradeep)
Vishakhapatnam	60	
Madras	170	
Cochin	30	
Bhavnagar	50	
Navlakhi	40	
Other minor ports in Gujarat	30	
Minor Mysore ports	40	
Minor Kerala ports	10	
Tuticorin	10	
	1200	

The Committee are glad to note that to provide for massive food imports in the coming months, Government have earmarked the quantities of foodgrains to be handled monthly at the various ports. It will, however, be seen that Bombay Port will be required to handle the largest quantity (i.e. 3.7 lakh tonnes per month). This would naturally place a great strain on the deep berthing capacity at the Alexandra Dock.

The Committee note the increase in the average rate of handling of foodgrain tankers at Bombay Port from 1500-2500 tons to 3000-3500 tons per day since the Government took over the responsibility from the shippers. To cater to the increased quantities of foodgrains to be handled in future, it is imperative that the discharge rate from bulk foodgrain carriers should be further increased. The Committee urge that Government should make concerted efforts to achieve the maximum rate of discharge by judicious use of modern machinery/ equipment and speedy clearance of foodgrains so as to achieve optimum utilisation of the berths.

The question of providing a belt conveyor to speed up movement of foodgrains should be examined early.

As Bombay Port is susceptible to heavy monsoons and as there is no silo for storing foodgrains there, Government may also examine the feasibility of providing quickly erectable rain shelters to make for uninterrupted handling of foodgrain operations.

The Committee would further emphasise that co-ordinated arrangements should be made for expeditious movement of foodgrains from the port, to their destinations, cutting out all infructuous and unnecessary movement. The Committee would, therefore, recommend that so far as possible imported foodgrains for destinations outside Bombay, should be moved from quay side in rail wagons.

The loading dates of chartered ships should be so planned as to obviate bunching for unloading of foodgrains.

Alternative Schemes for Food Handling

99. The Committee have been informed that the Consulting Engineers in their interim report have suggested the following alternative schemes for handling of foodgrain imports at Bombay Port in future:

Scheme A:

Discharge in Alexandra Dock from grain tankers with the help of high capacity grain elevators and transporting the grain by a system of belt conveyors to a silo to be constructed at the west yard of Alexandra Dock, which would be served by suitable rail facilities.

Scheme B:

This scheme envisages the use of lighters into which the grain will be discharged from the tankers in the stream and the lighters in their turn will be unloaded either at a new lighter berth to be constructed at Cross Island or in the Prince's Dock, which would be rendered tidal by keeping the gates permanently open.

In both these cases, the grain discharged from the lighters would be transferred by means of belt conveyours to a slio in the west yard where requisite rail facilities will be provided.

Scheme C:

This scheme envisages the discharge of foodgrains from bulk carriers into the lighters in stream as in Scheme B with discharge facilities at suitable berths on the east side of the harbour where a silo with necessary rail facilities would be constructed. Suitable lighter berths with a smaller silo of 25000 tonnes capacity will be provided on the west side also for discharge of grain required for local distribution for Bombay city.

Scheme D:

Under this scheme, it is proposed that the major part of bulk grain should be discharged at the new facilities to be created on the east side of the harbour. This scheme envisages construction of deep water berths off Sheva Island connected by a system of conveyor belts to a silo 50/60 thousand tons capacity. Adequate railway yard facilities near the silo as also a rail link connecting the silo to the Uran Panwel line of the Central Railway is also proposed. These berths will cater for all grains other than intended for the Bombay city. Consignments for the latter are proposed to be discharged in lighters, which will be handled at lighter berths on the same lines as envisaged in Scheme C.

It has been stated by the Port Trust authorities that after assessing the merits of the various alternative schemes outlined above, it

has been finally decided to adopt the scheme 'D'. It is estimated to cost Rs. 12 crores,—cost of land (Rs. 1.3 crores), the cost of the scheme (Rs. 7.2 crores), the cost of silo, lifts etc. (Rs. 3.5 crores). The scheme is stated to have been approved in principle by the Trustees and has been forwarded for the approval of the Government as it is intended that the ancillaries like the silo, elevators, conveyors etc. should be provided by the Ministry of Food and Agriculture. The Committee have been informed during evidence that the proposal has been sent by Ministry of Transport to Planning Commission in June, 1965 because this will form part of the Fourth Five Year Plan projects. The Committee have been further informed that further action to entrust to the Consulting Engineers the work of preparation of the project report, detailed design, drawings and estimates and tender documents for the berths will be taken on receipt of Government's reactions.

The Committee are aware that due to recent drought conditions in the country, Government had to resort to large scale imports of foodgrains. To meet the situation, the capacity of various ports had to be geared up. The Committee also understand that a team of American experts has recently visited the country to study the capacities of the ports to handle the imports of foodgrains. The Committee feel that with all the above data now available about the capabilities of the ports to handle the foodgrains, Government should be in a better position to decide as to what additional facilities are needed to handle imports of foodgrains in the coming years and how these imports can be dispersed regionwise among different ports.

The Committee like to stress that as the creation of additional handling facilities is a costly and time consuming process, these should be completed expeditiously so as to be available in the present food emergency.

The Committee need hardly emphasise that when new berths are constructed, care should be taken to see that they are equipped with the latest handling devices and are capable of handling larger tankers and bulk carriers which are increasingly coming into use.

The Committee wolud also like to remind Government, that while creating additional foodgrains handling facilities in Indian Ports, they would take into consideration the fact that food emergency is not expected to continue after the present year and that imports of foodgrains are expected to slow down in every subsequent year with the success of the food production drive which has been undertaken

in the country, till ultimately it is stopped when self-sufficiency in foodgrains is attained. They further expect that the additional handling facilities to be created during the present food crisis may be so designed and erected as to make them capable of handling other bulk cargoes with the easing of the food crisis.

Grain Silo in Nhava-Sheva

100. There is no silo in Operation at Bombay Port at present. It has been stated that with a view to speeding up the discharge of bulk grain, the Food Ministry have been considering construction of a silo in the vicinity of the docks. In 1960, a site west of Carnac Basin was proposed to be leased to the Food Ministry for the construction of a grain silo of a capacity of 50.000 tons. Subsequently, however, when the Dock Expansion Scheme, 1962 was finalised, it was felt that from the point of view of dock traffic, it would be desirable to site the grain silo on the harbour side—reclamation on the east side of the existing entrance of the Carnac Basin. The Food Ministry is stated to have approved the site and also agreed that the construction of the silo should be included in the Main Civil Engineering Contract for the Dock Expansion Scheme so that it may be possible to complete its construction by about the same time as the new berths in the extended eastern arm of Alexandra Dock, which were to be equipped with grain elevators, would be ready for commissioning. The Bombay Port Trust had also expressed their willingness to make available to the Ministry of Food land, railway siding facilities and other facilities necessary for the construction of a silo.

In December, 1963 it was, however, found that it would not be possible to provide yard facilities on the required scale in the vicinity of the proposed site for the silo. In November, 1964 the Food Ministry advised the Port Trust authorities that without the requisite rail facilities, the harbour side reclamation site would not be suitable for the silo and therefore desired that the item of silo foundations should be deleted from the Main Contract for the Dock Expansion Scheme. Subsequently, the then Chairman of the Port Trust instructed the Consulting Engineers to study, as a part of the Master Plan, the problem of bulk handling of foodgrains at the port and to suggest suitable scheme including short-term measures.

101. As mentioned earlier, a grain silo of the capacity of 50,000 tonnes has been proposed under the 'D' Scheme suggested by the Consulting Engineers for bulk handling foodgrains at the satellite

port at Nhava-Sheva. The Committee have now been informed that an Indo-Swedish team of experts has been appointed by the Food Ministry to make recommendations regarding the location of silos, their capacities etc. It is stated that according to present indications, the team is of the tentative view that the construction of a silo of 75,000 tonnes capacity may be justified at Sheva. This is, however, stated to be dependent on the overall development by the Bombay Port Trust of the satellite port of Nhava-Sheva and the provision of all other facilities at this location including necessary dredging to enable large tankers to be brought into this port. It is stated that the discharge of foodgrains from tankers into the silo would be completely mechanised. The cost of the silo is estimated at Rs. 2.76 crores.

The Committee are constrained to observe that although the need for the construction of a grain silo at Bombay Port was felt as early as 1960, it has so far not been installed. The Committee feel that for a Port like Bombay which has to handle more than 3 million tonnes of foodgrains annually, it is necessary that in addition to providing for quicker discharge of foodgrains from the ships, it should also be ensured that the foodgrains are regularly cleared from the berths every day to avoid congestion in the port. This can be achieved by having a grain silo.

Now that the scheme of silo forms a part of the overall development of food-handling facilities in the satellite port at Nhava-Sheva, the Committee hope that Government will give due consideration to the size and design of the silo which should be set up to meet the present and the future requirements. In this connection the Committee would like to emphasise that Government should profit from the experience of working of the silo at Calcutta Port so that the initial operating troubles encountered in Calcutta are obviated.

M/s. Chowgule's Scheme for handling foodgrains

102. The Committee have been informed that a local firm Messrs. Chowgule and Company have been discussing with the port authorities a proposal whereunder they intend to enter into a contract with the Government of India for receiving into their barges, from tankers positioned in stream, foodgrains for eventual discharge of the grain at Hay Bunder. Their intention is to construct a shed at Hay Bunder on land to be leased to them by the Bombay Port Trust into which, by means of belt conveyors, the grain will be evacuated from the barges. They intend to provide for a daily discharge of

7000 tons of grain. After landing, the grain is proposed to be automatically bagged for loading into trucks and rail wagons. The Port Trust are stated to have discussed with the firm the question of a suitable site at which this work could be done at Hay Bunder. The maximum depth of water alongside at all stages of the tide throughout the year has also been furnished to them to enable the firm to determine the size of the barges which they will provide. Chowgule's are now stated to be working out the details of the scheme.

According to the Port Trust the scheme is desirable because, if it materialises and all grain is discharged in streams, two berths in the Alexandra Dock at present used for foodgrains, can be released for general cargo vessels.

Shortcomings of the Scheme

103. The Ministry of Transport in a written note furnished to the Committee have stated that the scheme was examined by Government and it was found that it suffered from various drawbacks and shortcomings, some of which are explained below:—

(i) The scope for unloading barges at the Prince's or the Victoria docks is restricted as these are tidal docks and there is great pressure in the channel leading to these docks. The port authorities were of the view that only two barges would be able to enter the docks in a day resulting in the discharge of only 3,000 tons per day —would be less than what is expected on the berth at Alexandra docks. Thus, the main attractive feature of the scheme *viz.* that it would release the Alexandra dock berths, would not materialise.

(ii) The scheme could not be in operation during monsoon months when discharge into barges may not be possible due to rough sea, thereby necessitating carriage of food-grains by tankers of the present size during such periods.

(iii) Serious difficulties were also anticipated at the U.S. and in moving foodgrains in bulk carriers or super tankers on long term basis. Arrangement of the required quantity of grain for such super-size vessels from any one supplier in the U.S. at reasonable price might also pose serious problems.

(iv) Government had already made arrangements for improving the discharge and clearance at Bombay to the extent of over 4,000 tons per berth at atleast two berths at a time. These arrangements include the ordering of a number of pneumatic discharging machines, construction of hoppers and other improvements in the port sheds together with various other measures intended to increase ship discharge and clearance to the required extent.

It has been stated that Government of India were of the view that the scheme, in its present form, could not be considered.

The Committee are of the opinion that the technical and economic feasibilities of the scheme offered by M|s Chowgule and Company for handling foodgrains at Bombay Port should be gone into fully with particular reference to its cost and period of implementation by the Ministry of Transport in consultation with the Ministries of Food and Agriculture and Railways before taking a final decision in the matter.|

CHAPTER VII

BULK OIL HANDLING FACILITIES

A. Traffic in POL

104. Bombay is the principal port for the import of crude oil in bulk. It also receives large quantities of important refined POL for distribution to different parts of the country. Further there is a possibility that with the successful exploitation of oil resources in the Western region the country may be enabled to export crude and refined oil through Bombay Port. The following table indicates the quantity of petroleum and other products (i.e. POL traffic) handled at the Port of Bombay, together with the number of tankers handled at the tanker discharge jetties during the last four years:—

Year	Number of tankers	Imports (in tonnes)	Exports	Total
1961-62	458	5,592,100	2,202,300	7,794,400
1962-63	508	5,882,600	2,378,500	8,261,100
1963-64	595	6,950,600	3,251,100	10,201,700
1964-65	546	7,090,619	3,250,730	10,341,349

It will be seen that the traffic in POL at the port has increased from 7.8 million tonnes in 1961-62 to 10.3 million tonnes in 1964-65, thereby registering an increase of about 44 per cent during the four years of the Third Five Year Plan.

B. Marine Oil Terminal at Butcher Island

105. It has been stated that till recently the dangerous petroleum imported at Bombay was all handled at the Pir Pau Berth. Non-dangerous petroleum was handled at the Alexandra Dock Harbour Wall Berths. Pursuant to the Government of India's decision to establish two major oil refineries at Trombay, the Bombay Port Trust was asked by Government in 1952 to take immediate steps to provide suitable terminal facilities for oil tankers. As these facilities were required before the target date for commissioning of the refineries, which was early in 1955, it was necessary to initiate action with the utmost possible expedition. It has been added that adequate time was not available for making detailed investigations etc.

normally required before undertaking such a project. In order, however, to enable work being put in hand, a block estimate was prepared on the basis of whatever information was available or could be had readily. This block estimate amounted to Rs. 4.49 crores. On the basis of the detailed designs and drawings taken up for execution, the Consulting Engineers are stated to have prepared in 1955 a revised estimate, which amounted to Rs. 9.83 crores.

This estimate was further revised in 1959 to Rs. 10.15 crores as on completion of the works, certain claims of the contractors, which were referred to arbitration, were allowed by the Arbitrator and as a result thereof expenditure on some of the items had exceeded the amount provided in the earlier estimate. The main reasons for the actual expenditure being in excess of the original estimate are stated to be as under:—

"(i) The block estimate was prepared on a very rough information as to the facilities required to be provided. As the oil Companies' Offices in Bombay could not furnish all the necessary information, the Consulting Engineers were asked to discuss and ascertain the requirements in the Head Offices of the Oil Companies in London before formulating their proposals. The scope of the work, actually taken for execution, was found to be considerably in excess of that envisaged in the block estimate.

(ii) For over 40 years, no major marine construction work had been carried out at this port and no reliable guidance was available as regards the likely prices for such work. The rates adopted in the estimate were, therefore, found to be much lower than those quoted in the accepted tenders."

Execution of the Project

106. The original schedule for execution of the marine oil terminal project and the actual time of completion are given below:—

	Original time schedule.	Actual time of completion
First Berth	June, 1954	February, 1955
Second Berth	February, 1955	July, 1955
Third Berth	May, 1955.	December, 1956.

As to the reasons for delay it has been stated that the commissioning of the berths involved completion of the civil engineering structures as well as the pipe line system, which included laying of nearly 2½ miles length of pipe band under the bed of the sea. The pipe line system also required a large number of imported components, such as valves, expansion units etc. Due to the time factor involved in obtaining import licence as well as getting the special units manufactured, the scheduled commissioning of the berths was set back by a few months. According to the Port Trust, this period, however, did not affect the working of the refineries as temporary arrangements for the supply of crude oil were made.

Asked whether the long term requirements of bulk oil handling facilities were taken into account at the time of preparation of the scheme, the Chairman of the Port Trust stated that "as far as we can foresee these facilities should be adequate till about 1975 but there is one pattern which is now presenting itself and the oil interests have been pressing us and that is, to improve the facilities of the marine oil terminal for bringing alongside tankers of bigger displacement tonnage and we had applied our mind to that and we have asked the consulting engineers to go into the question of the modifications to enable berthing of tankers of larger dlisplacement tonnage.

The Committee regret to observe that the marine oil terminal scheme at Butcher Island was planned and executed without making detailed investigations about the future pattern of oil traffic, scope and quantum of works required and the rates for their execution. The result has been that the cost of scheme which was originally estimated by the Consultants at Rs. 4.49 crores in 1951, increased by 100 per cent to Rs. 9.83 crores in 1955 and to Rs. 10.25 crores in 1959, the total increase from the original estimate being about 110 per cent Further, the execution and commissioning of the works were delayed and could not be synchronised with the commissioning of the oil refineries which necessitated the making of temporary arrangements for the supply of crude oil to the refineries at extra cost. What is more, the facilities provided under the scheme have also now proved to be inadequate within a short period of 8-9 years and some proposals are being contemplated for their improvement and development. The Committee recommend that the rasons for these shortcomings and inadequacies should be examined carefully by Government with a view to draw lessons while planning and executing port development schemes in future.

C. Detention of Oil Tankers

107. Detention of oil tankers during the year from 1st September, 1964 to 31st August, 1965 has been as under:

Year	No. of tankers berthed	No. of tankers delayed	No. of ship-days lost
1962-63	455	238	529
1963-64	516	395	834
1964-65	503	372	749
1965-66 (upto 31-1-66)	401	277	508

It has been represented to the Committee by a leading chamber of Bombay that "the facilities are already overloaded and utilisation is at the maximum, but the bill for demurrage and delays to tankers is high and still increasing. This should not be allowed to continue bearing in mind that large sums for demurrage on tankers are being incurred in foreign exchange (currently approaching £1 million per annum).

The Committee have been informed in a written note that the main reason for detention to tankers is that the import of finished products has gone up far more than was anticipated at the time the marine oil terminal was planned. It was then expected that only small parcels of aviation spirit and such other products not manufactured by the Refineries in Bombay would be imported, for which one pipeline of 12" dia. (W3) had been provided. Lately, owing to shortages finished, products such as kerosene and high speed diesel are also being imported in large quantities. Pumping of different grades of oil through the same pipeline requires flushing to be done, which takes a long time. Many of the tankers, which bring a number of small parcels of different grades of finished products, are now found to be too large to be accommodated at the Pir Pau Jetty and have therefore to be handled at Butcher Island. It has been added that the discharge of products of such tankers, through one line, punctuated by intermediate flushing, entails occupation of berths by such tankers for extended periods with consequent delay to waiting tankers. The port authorities expect that with the commissioning of a new manifold with pipelines of 14" (instead of the present 8") leading to the various installation and with the falling off of imports of kerosene and H.S.D. the delays will be reduced in future.

Payment of Demurrage

108. It has been stated that demurrage of tankers varies from £300 to £900 per day depending on their size. On this basis, the amount of foreign exchange involved on detention of 640 tanker days will work out to between £1,92,000 to £5,76,000 approximately during the period from September, 1964 to August, 1965. It is stated that the amount is payable in rupees in the case of tankers belonging to the East European countries and in foreign exchange in the case of other countries but figures are not readily available to indicate the precise effect of this item on the foreign exchange bill of the country.

D. Additional Facilities for Oil Handling

109. It has been brought to the notice of the Committee that at a joint meeting held on the 3rd February 1965, the representatives of the Port Trust and Oil Industry examined both the utilisation of the oil berths and the facilities with a view to finding means for rapidly increasing the capacity of oil traffic at modest cost. The measures envisaged at the meeting are as under:

(i) Simultaneous use of crude lines C-1 and C-2.

(ii) Berthing of 47,000 to 53,000 DWT Class Tankers at Butcher Island Berths.

(iii) Making the Pir Pau berth suitable for receiving 18,000 DWT Class Tankers.

(iv) Commissioning of fresh and salt water facilities at Pir Pau.

(v) Provision of 80,000 cubic metres tankage for crude oil at Butcher Island.

110. In a written note furnished to the Committee, it has been stated that all the measures suggested above have been agreed to. The progress made in this respect is as under:

(i) Tankers with sufficient capacity are already availing of the facility.

(ii) The present dolphins are designed for tankers upto 30,000 d.w.t. drawing upto 34'-6'. However, they can be utilised for berthing bigger and more economical tankers upto 36,000 d.w.t. by utilising the part of the safety margin allowed in the design. It is stated that in view of the suggestion of the oil interests to bring tankers upto 53,000 d.w.t. it is proposed to investigate the possibility of im-

proving the berthing capacity of the dolphins by suitable modifications to the fendering system or otherwise to make them suitable for larger tankers. The Port Trust authorities propose to entrust to the Consulting Engineers the work of formulating detailed proposals, design and specifications. The terms quoted by them for this assignment are stated to be under consideration by the Trustees. It is stated that reliable indication of the cost can be had only after the details about nature and scope of the modifications required are finalised.

(iii) The Port Trust authorities propose to increase the length of the pier at Pir Pau sufficiently and also to deepen the approach channel as well as the berth to enable tankers of 560 ft. in length and drawing upto 31 ft. to be accommodated there. With this improvement, the port authorities feel it will be possible to transfer all multi-grade traffic to Pir Pau, relieving the Butcher Island berths to a substantial extent. Preliminary designs for the extension of the jetty have been prepared. It is added that after the design is finalised, detailed estimates will be prepared. The port authorities expect that the proposal would be submitted for the Board's sanction early in 1966.

(iv) The pile work for the fresh and salt water facilities and the Pump House is stated to be almost completed. The installation is expected to be commissioned shortly.

(v) Subsequent studies made by Burmah-Shell and Esso Companies have revealed that improving the fendering system and re-arranging tanker priorities may be sufficient toward improving berth utilisation. In that event, the provision of the 80,000 cubic metres crude oil tankers at Butcher Island need not be pursued.

The Committee attach a good deal of importance to the improvement of facilities for handling of oil traffic at Bombay and would like the port authorities to take early decision about deepening the approach channel to Pir Pau Pier and the modifications to the fendering system so as to improve the berthing capacity of dolphins at the Butcher Island. If these schemes are found to be technically feasible and financially sound the Committee would like them to be implemented with expedition so that bigger tankers can be accommodated in the port as early as possible. The improvement in port facilities should also result in saving of detention charges which are being incurred on tankers for want of berthing capacity in the port.

E. Construction of Pipe Line Bridge

111. Another scheme contemplated is the construction of an over-bridge from Butcher Island to Trombay to carry new pipe lines, which will replace the existing submarine pipe lines in a phased programme.

Advantages of the Scheme

112. The main advantage in carrying the oil pipe lines over a bridge instead of laying them under the sea is stated to be that the pipe lines will then be readily accessible for repairs and maintenance. The element of uncertainty about the service life of the submarine pipe (which is not accessible for preventive maintenance) will be eliminated. Any alterations or additions to the pipes could also be made easily and quickly to suit any changes in operational requirements. It has been stated that the overall cost of providing the bridge with overlaid pipes is not likely to be much more than that of providing submarine pipe lines. It is added that the foreign exchange requirements, if any, will be much less than that for submarine lines and that it would be possible to adopt a phased programme for the replacement of the pipes which will enable the existing submarine pipe lines to be used to the fullest extent without taking any risk as to the condition of the submarine pipe lines beyond their safe service life. It has been further stated that the bridge will also enable electric power to Butcher Island being supplied from the city's power system at a cheaper cost than generating it locally as at present. Similarly, a telephone cable can be laid over the bridge to Butcher Island. The bridge will also provide a means of quick and dependable access to Butcher Island independent of weather conditions.

Objections

113. The Committee have been informed that although there seems to be no doubt about the desirability of constructing the bridge, viewed purely as a vehicle for carrying the pipes, some views have been expressed against the scheme from the point of view of navigation in the area. It has been stated that these views have been carefully considered by the port authorities and the considered opinion of the port engineers is that the arguments urged against the proposal are not weighty or compelling for the following reasons:

> "Capt. McMullen, an expert who was retained to advise on navigational matters pertaining to the Master Plan, expressed the view that such a bridge would hinder the

development of navigational traffic in the Butcher Island and that it would be open to the risk of damage by vessels passing under it or drifting on to it in stormy conditions.

As regards the future navigational traffic in this channel, this will depend largely on the traffic potential in the Thana Creek. The State Government, who are at present building a bridge across the Thana Creek, were addressed as to whether they would increase the clearance under that bridge to 75 feet at high water to allow sailing craft and small coasters to pass under it at all states of the tide. The State Government have expressed their inability to agree to increase the clearance, which is being kept at 30 feet. With this clearance under the bridge, the scope for sailing craft traffic in the Thana Creek is restricted. Consequently the traffic in such craft plying in the channel north of Butcher Island will also be limited. In the circumstances the onstruction of the bridge cannot be reasonably approved. The apprehension regarding possible damage to columns by vessels passing under the bridge and damage due to vessels getting out of control during storms, could be met by suitable protective measures, due provision for which can be made when the design is finalised.

The Defence Ministry raised two points against the proposal *viz.* that it will result in the diversion of the sailing boats and small craft traffic through the main channel south of Butcher Island and that the pipe line carried on the bridge will be more vulnerable to attacks from the air than the submarine pipe lines which are practically immune from damage from conventional types of attacks. As regards the first point, there would be no difficulty in providing a suitable passage under the bridge for barges, launches and other small craft without high masts. Consideration will have to be given, however, to the necessity or otherwise of providing adequate clearance for sailing craft with height to pass under this bridge. The higher clearance required for high masted craft will mean a considerable increase in the cost of the bridge. As the number of high masted vessels plying in this channel is not expected to be large, it may be economical to mechanise the craft so that they could dispense with the mast and be able to pass under a comparatively low bridge. In view of these factors and in view of the limitation of 30 feet clearance under Thana Creak bridge it would be reason-

able to expect that the proposed bridge for carrying the pipe lines would not seriously affect or cause much diversion of the traffic that is likely to use the channel north of Butcher Island.

As regards the second point, it may be noted that the construction of a bridge to carry the pipe lines would not add in any way to the vulnerability of the pipe line system. While 12,500 feet of the pipe band is at present under water, nearly 10,000 feet of it is carried over-land on both the Butcher Island and Trombay sides. The latter portion is not less vulnerable than the pipes on a bridge both from the point of view of siting as well as of interruption caused to the Refineries in the event of damage. Further, the submarine section of the pipe band can be located because of the mud ponds on both sides of it, and the depth of the submarine section is not much. It would, therefore, be doubtful whether the submarine pipe section could be considered to be immune from the conventional types of attacks. The damage caused to the submarine section would also be definitely much more crippling than that to pipes above surface as the former will take much longer time to repair."

The Committee have further been informed that in February 1965, one of the experts of the Oil Industries Team who visited this port, stated that a number of submarine pipe lines have been laid during the last two decades and with the experience gained so far, it is possible that suitable techniques for detection and speedy repairs of faults in such pipe lines have been developed. The expert is also stated to have furnished some information on the subject and recommended some firms to be consulted. The port authorities are of the view that in case it is found to be possible to carry out repairs to the submarine pipe lines quickly and satisfactorily, consideration would be given to the advisability of dropping the proposal for the pipe line bridge.

The construction of the bridge is estimated to cost Rs. 3·50 crores. It is stated that an expenditure of about Rs. 30,000 has already been incurred on the preliminary work of site investigation consisting of marine borings, for which a contract was awarded.

The Committee are concerned to note that the port authorities have already awarded a contract for preliminary work of site investigation consisting of marine borings in connection with the construction of the over-bridge from Butcher Island to Trombay to

carry pipe lines, without taking a final decision in the matter. Since the feasibility of carrying out repairs to the submarine pipe line quickly and satisfactorily, has been indicated by the experts of Oil Industries Team, the Committee recommend that the need for constructing the over-bridge which is estimated to cost Rs. 3:5 crores, may be examined carefully in consultation with technical experts.

F. Telephone System for Butcher Island

114. It has been stated that the installation of the entire commercial telephone system for Butcher Island and Pir Pau is being carried out by the Bombay Telephones (P. & T. Department) and the present position is as under:

Wadala: The completed installation, consisting of two exchange lines, and two extensions, has been commissioned.

Pir Pau: One exchange line and four extensions have been commissioned.

Butcher Island: Telephone switch-board and cables have been delivered at site.

It is understood that the work was delayed due to non-availability of cables and other equipment.

The Committee consider that as communications between the Butcher Island and the mainland are of considerable importance from the point of view of security as well as public, the telephone system should be completed and brought into operation without further delay.

CHAPTER VIII

STORAGE AND CLEARANCE OF GOODS

A. Warehousing and Transit Facilities

115. The storage accommodation for goods in transit sheds, warehouses in Bombay Port is 35,12,800 sq. feet. The accommodation is distributed as follows:—

Area served	Transit Sheds		Warehouses	
	No.	Floor area	No.	Floor Area
Prince's Dock . . .	9	6,12,024 sq. ft.	5	89,143 sq. ft.
Victoria Dock . .	7	4,60,901 sq. ft.	..	..
Alexandra Dock . . .	18	14,90,879 sq. ft.	7	6,44,541 sq. ft.
TOTAL . .	24	25,63,804 sq. ft.	12	7,33,684 sq. ft.
Wadi Bunder Warehouses . . .				—88,146 sq. ft.
Frere Basin Warehouses . . .				—1,27,166 sq. ft.

After the explosion in the ship and the resultant fire in 1944, 13 sheds in Prince's and Victoria Docks have been re-constructed and provided with cement concrete flooring with 2" thick renewable asphalt wearing coat. The warehouses in Alexandra Dock which are used by bigger ships do not have modern flooring. The flooring consist of blue stone Khandki pavement on the ground floor and cement concrete flooring with asphalt wearing surface on the upper floors. The hoist working in these warehouses are also very old.

Income and Expenditure on Warehouses

116. The figures of income and expenditure in respect of the Docks warehouses (Bonded and Duty paid) and Port Trust godowns

outside the docks area, as furnished to the Committee for the last three years are indicated below:—

Year	Bonded and Duty Paid Warehouse in the Docks.		Godowns outside the Docks.	
	Income	Expenditure	Income	Expenditure
	Rs.	Rs.	Rs.	Rs.
1962-63 . . .	5,10,623	4,42,362	24,91,678	4,04,630
1963-64	2,74,917	4,03,927	27,64,936	3,98,716
1964-65	3,49,636	4,45,204	30,71,750	4,41,606

(Transit sheds and uncleared goods warehouses are not rented. The goods stores therein incur demurrage).

The Committee consider that as there is considerable margin of profit from the warehouses and godowns and as the Alexandra Docks are used by bigger ships, the conditions of these godowns and warehouses should be improved e.g. the floors of the warehouses and transit sheds should be improved, the hoists modernized, and in general, action should be taken to arrange the goods on scientific lines so that these are easily accessible for identification and clearance.

Congestion and accumulation of cargoes at transit sets and warehouses.

117. The Committee note from a reply given recently to a question in Lok Sabha that "large quantities of uncleared goods other than confiscated cargo such as bundles of steel sheets, coils of wire, motor vehicle parts, nylon yarn, steel pipes, chemicals, rubber goods, machinery, drums, dyes, lorry wheels, cycle rims etc. have been lying at the Bombay Port uncleared."

A recent census has disclosed that the following packages are lying uncleared in the docks:—

	Packages
Landed in 1960—lying unclreaed	313
Landed in 1961—lying uncleared	3,332
Landed in 1962—lying uncleared	7,920
Landed in 1963—lying uncleared	3,051
Landed in 1964—lying uncleared	15,719
Landed in 1965—lying uncleared	55,419
TOTAL .	85,754

Cargoes confiscated by Customs but left uncleared by them

118. Out of the 85,754 packages lying uncleared, 12,920 (*i.e.* 14 per cent.) packages have been confiscated, outright, by the Customs. Their year-wise breakdown is as under:—

Landed in 1959 and confiscated	165
Landed in 1962 and confiscated	1,857
Landed in 1963 and confiscated	84
Landed in 1964 and confiscated	1,457
Landed in 1965 and confiscated	9,357
TOTAL	12,920

The Committee are perturbed to note that as many as 3,563 packages are awaiting disposal after 2 years of confiscation by Customs. The Committee consider that save in subjudice cases, the Customs Department should expeditiously arrange to hold auctions in suitable lots at frequent intervals to dispose of goods to avoid congestion in the port area and prevent their deterioration due to long storage.

119. The Committee have been informed that 72.000 packages (*i.e.* 83 per cent of total uncleared packages) are lying uncleared by the Customs, due to dispute with the Importers, regarding classification of the goods for duty or on the ground that the goods imported do not conform in all respects to the relative Import licence. In the latter case, several consignments have been temporarily confiscated, the importer having been given the option to redeem them on payment of fine within three month from the date of the order of confiscation. In many cases the owners have gone in appeal against this decision to the Central Board of Revenue.

It has been stated that the clearance of cargoes is a matter between the Importer and the Customs and hence the Bombay Port Trust is not competent to adjudicate these disputes and consequently to say whether the Customs have delayed clearance or the Importer is himself to be blamed.

120. It has been represented to the Committee that a number of important recommendations made by the Customs Re-organisation Committee in 1957-58 have not been implemented in Bombay Port.

It is added that "the effect of delay in completing customs formalities on shipping interests was not felt until the congestion started building up in the port from 1962. One of the main reasons for the congestion in the port is the fact that cargo remains uncleared for long periods causing congestion in sheds, warehouses and open spaces."

121. The Committee are given to understand that "the letting rates for the godowns vary widely. The average letting rate work out to about Rs. 20 per 100 square feet per month for cotton Depot godown and Rs. 30 per 100 square feet per month for Grain Market godowns. The corresponding rates charged by private parties vary from Rs. 37.50 to Rs. 75 per 100 sq. ft. per month."

122. The port authorities in a written note furnished to the Committee, have stated that in discussion with members of firms of clearing, forwarding and shipping agents, operating at the Customs House at Bombay, in regard to the difficulties faced by them in obtaining release of goods from the Customs, it has been represented that:—

"(i) In addition to having to lodge with the Customs House a Bill of Entry, the Bill of Lading, the Bank Draft, Insurance certificate, Invoices and the Import Licence covering a consingnment it appears that it has now become a rule for the Customs to demand in almost all cases the Acceptance Letter, catalogues. Drawings in the case of Machinery, proof of relationship between the Importer and the Supplier and/or the Importer and the manufacturer. Since at Bombay, the bulk of commercial goods landed are cleared on behalf of the Importer by Clearing, Forwarding and Shipping Agents, including the processing of documents at the Customs House, requests for production of Acceptance Letter, Catalogues, Drawings etc. involves references by the Clearing Agents to the Importers to produce these documents. It is the contention of the Clearing Agents that, while additional information contained in catalogue Indents, Acceptance Letters might be required in certain cases, there seems to be no good reasons why it should be demanded in the majority of the cases particularly since the categories of goods now allowed to be imported are severely restricted. A reference back by the Clearing Agent to the Importer for production of additional information called for by the Customs House involves delay in processing the documents covering goods and also consequent delay in their clearance.

(ii) Further the Customs, for the purpose of appraising and examining goods, demand that the Importer should bring forward specific numbered package or packages from out of his consignment and that if this is not readily available for inspection, another package indicated by the Customs Appraiser must be produced. The Clearing Agents allege that the bringing forward of specific marked packages involve a search for them. They feel that in order to expedite clearance of goods the Importer or his Agent should be allowed to produce any package or packages out of the consignment for appraisement purposes and where large lots are involved a percentage check should be undertaken by the Customs.

(iii) It has been alleged that the Customs tariff is complex and Customs duties are very much higher than they were several years ago. Frequent disputes arise between the Importer and the Customs House in regard to the rate of duty determined by the Customs. This gives rise to further delay in clearance of the goods.

(iv) Importers also face the difficulties due to a general wagon shortage particularly in categories in which heavy packages are moving, goods are delayed in clearance."

Measures to speed up clearance of goods

123. The following measures are stated to have been taken to speed up the clearance of cargoes—

(a) (i) From the middle of September, 1965 miniature customs houses (called 'Dock Appraising Scheme') have been constituted in some sheds in Alexandra Dock. The documentation connected with all cargoes landed at these sheds is handled in each of these sheds. Whereas previously the owner of goods landed into these sheds, had to complete customs formalities prior to clearance of his goods, at the customs house which is at a distance from these transit sheds, all this work, excepting a few cases, is now being dealt with at these sheds.

(ii) A Liaison Committee has been established on which are represented Customs Officials, Bombay port Trust officials as well as ship agents which discusses matters of

common interests with particular reference to speeding up the landing, shipment and delivery of goods landed.

(iii) The Railway Board have been requested to make availble a daily quota of 100 covered empty wagons, in addition to the loaded wagons moving inwards to the port.

(iv) At the request of the Bombay Port Trust the Customs House has taken special steps to reduce the time taken in completing formalities connected with detention of goods under the Import Trade Control orders with a view to their earlier release than was the case previously.

(v) Until August, 1965, charges on goods payable to the port were assessed between 10.30 a.m. and 4 p.m. and goods were allowed to be delivered from transit sheds until 4 p.m. Charges on goods are now being assessed from 8.30 a.m. to 4 p.m. the overtime payable to the staff not being recovered from the trade. Similarly, goods are allowed to be delivered from transit sheds up to 6 p.m. instead of upto 4 p.m. without recovery of the prescribed overtime charges from the trade.

(vi) In order to enforce speedier clearance the demurrage rates have been further stepped up with effect from 15th July, 1965. From that date, with the exception of cargo requiring to be railed to up country destinations from the docks and transhipment cargo, all goods lying uncleared after the expiry of the 'free days' is charged demurrage at the full rate of wharfage for every day of storage after the expiry of the free days. Noticeable improvement in the rates of delivery of goods is observed since the demurrage rates have been raised. It is stated that a sample survey conducted recently has disclosed that since 15th July, 1965 the percentage of goods cleared within the free days has risen.

(b) It has been stated that the business houses have made the following suggestions for averting delays in clearance of goods, which have been passed on to the Collector of Customs for examination and implementation at an early date:—

(i) Noting and processing of the Bill of Entry should be proceeded with without prior entry of Steamer even

though final completion may be done only after the manifest is noted.

This will advance the procedural working and will leave enough time for importer to work in advance of arrival of the steamer.

(ii) Foreign exchange rate applicable may be a freezed rate for a period of time, so that Bill of Entry can be prepared in advance.

(iii) Examination scales of Customs in the Docks should be further increased and as far as possible each shed should have a scale of its own to avoid the necessity of removing packages from sheds to examination scales.

(iv) Importers having their own Bonded Warehouse, should be allowed to appoint Customs Preventive Sepoys approved by Customs authorities.

(v) Importers having their own Bonded Warehouses, should be allowed to clear their cargo in Bond after noting of Bill of Entry and all the rest of the formalities should be completed subsequently as the goods are within the charge of Customs authorities.

(vi) If there is any objection on the Bill of Entry likely to result in considerable delay of completition for such Bill of Entry, importer should be allowed to clear 90 per cent of his consignment, retaining 10 per cent for examination and completion of Bill of Entry."

The Committee are concerned to note that 72,000 packages are lying uncleared by the customs due to disputes with the importers for duty or on the ground that the goods imported do not conform to the relative import licence etc.

The Committee would also like to point out that there is a general impression among the trade circles, shipping interests and even the port authorities that due to custom formalities goods are not cleared from the transit sheds as quickly as they should be. The Committee note that the Liaison Committee has been set up recently and learn that it is working quite actively of late at the port and that it provides a useful forum for the representatives of shipping agents and port authorities to meet the Deputy Collector of Customs. They

hope that the Liaison Committee would help to dispel the impression referred to above that customs procedure are cumbersome, and time consuming. They suggest that the Liaison Committee should take effective steps to identify and remove the factors which hamper speedy clearance of goods so that remedial measures by way of rationalisation and simplication of procedures can be devised. In particular, the Committee would suggest that measures suggested in para 123 above should be carefully examined with a view to their early implementation.

They would also suggest that there shohu!d be periodical meetings at the level of the General Manager of the Port Trust and the Collector of Customs so as to review the overall position and remove all impediments coming in the way of speedy clearance of goods.

The Committee welcome the experiment of miniature custom houses which have been set up in some sheds. They would like Government to assess carefully the achievements of this experiment in consultation with the trade and shipping agents and extend it to the remaining sheds and other ports.

The Committee would also suggest that the rates for letting out godowns in the port area which are understood to be lower than the rates prevailing in private godowns in the vicinity of the port area* should be reviewed.

The Committee would also commend the suggestion made by the Sundara Committee in September, 1965 that "in respect of Government project cargoes which are imported on a large scale through the port of Bombay, special arrangements should be made on a coordinated basis for the prompt clearance of such cargoes from the sheds and open spaces in the docks and for warehousing them or despatch to destination."

Storage of Heavy Cases of Cargo

124. It has been suggested to the Committee by a leading shipping conference that for protection from rains etc. the import cargo consisting of outsize and heavy cases of electrical equipment should be stored in temporary sheds which may be contructed out of tubular material with high roofs and one or two sides open to permit cranes to work inside. The Committee have been informed that here is

* Please see Para 121.

no adequate space around transit sheds at the Bombay Docks on which sheds of the type suggested could be erected. In consequence, heavy packages landed at the Docks are stored in the open areas where available. It has been stated that during periods of bad weather such as during the monsoons, such packages are placed on skids and covered with tarpaulins as a protection against weather damage. The port authorities propose to provide a lean-to, to the proposed warehouse to be built at Frere Basin for the storage of heavy packages as a protection against weather damage.

It is well known that heavy machinery which is imported at heavy cost of scarce foreign exchange is of great importance for the development of the country. The Committee cannot too strongly urge that every effort should be made for the proper storage of heavy machinery, particularly, the sensitive ones like scientific, electronic and electrical goods with a view to prevent them from damage due to exposure to rain.

Warehouses for Uncleared Cargo

125. The Committee have been informed that the existing capacity of warehouses for the storage of goods lying uncleared at the Docks is as follows:

	Sq. ft.
'A' uncleared Warehouse, Alexandra Dock	1,90,000
No. 1 Uncleared Warehouses, Alexandra Dock . . .	1,92,000
'C' Warehouse Alexandra Dock	60,000
No. 4 Warehouse, Prince's Dock	23,000
No. 6 Warehouse, Prince's Dock	18,000
No. 7 Warehouse, Prince's Dock	18,000
TOTAL .	5,01,000

It has been stated further that due to recurring delayed clearance of goods, the existing accommodation is proving insufficient despite steps taken to enforce speedy clearance. The port authorities have,

therefore, prepared plans and estimates for augmenting warehousing facilities as per details below:

Proposed Warehouse	Floor Area	Estimated Cost	Date of Completion
	Sq. ft.	Rs.	
Frere Basin (350'×120') .	40,000 on two floors	19 lakhs	early 1968
Prince's Dock . .	40,000 on two floors	19 lakhs	middle of 1969
Mole Station, Ballard Pier (by enclosing the platform)	28,560 on one floor	4,37,800	August 1966

The port authorities are of the view that so long as importers of cargo would clear at least sixty per cent of their cargoes landed within the 'free days' allowed and a good part of the remaining by the end of the end of the tenth working day following the expiry of the 'free days', the estimate is that the existing warehouse capacity would be sufficient for the port's needs.

The Committee consider that goods which remain uncleared after the expiry of free days should be removed to uncleared warehouses. This would ensure that the operational area in the port is not cluttered with these uncleared goods. The Committee would, therefore, recommend that early action should be taken to augment the warehousing accommodation for uncleared goods and that adequate arrangements should be made therein for proper stacking of goods to facilitate their eventual disposal.

Identification of Cargoes

126. It has been stated that out of cargoes lying uncleared in the port, approximately 500 packages are lying uncleared due to difficulty in identification. Many of these packages are stated to have been offered to importers against their undelivered consignments but due to slight discrepancy between the markings appearing on the packages and those in the covering documents, the importers have not been able to clear them. They are, however, stated to be making enquiries with their Principals to identify these packages.

The Committee need hardly stress that clear marking on packages helps identification and facilitates delivery. The Committee would suggest that Government should bring to the attention of all concerned viz., the importers, manufacturers, trade, shippers, shipowners, the imperative need for secure packing and bold marking of packages to facilitate identification and quick delivery.

Disposal of Goods not removed from Port Premises

127. Section 64A* of the Bombay Port Act, 1879, provides the sale of goods by public auction if they are not removed by the owner or other person entitled thereto from the port premises within one month from the date on which they were placed in the custody of the Trustees.

The Committee have been informed that "no sale of goods under Section 64A of the Bombay Port Trust was held during the last three years. All sales were held under Section 64** of the Act. Action under Section 64A is being taken regularly since last month (January 1966)."

The Committee are constrained to note the failure of the authorities to invoke till January, 1966 the provisions of Section 64A of the

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*64A. (1) Notwithstanding anything contained in this Act, where any goods placed in the custody of the Board upon the landing thereof are not removed by the owner or other person entitled thereto from the premises of the Board within one month from the date on which such goods were placed in their custody, the Board may if the address of such owner or person is known, cause a notice to be served upon him by letter delivered at such address or sent by post (or if the notice cannot be so served upon him or his address is not known, cause a notice to be published in the Official Gazette and also in at least one of the principle local daily newspapers) requiring him to remove the goods forthwith and stating that in default of compliance therewith the goods are liable to be sold by public auction.

Provided that, where all the rates and charges payable under this Act in respect of any such goods have been paid, no notice of removal shall be (so served or published under this sub-section) unless two months have expired from the date on which the goods were placed in the custody of the Board.

(2) If such owner or person does not comply with the requisition in the notice served upon him or published under sub-section (1), the Board may at any time after the expiration of one month from the date on which the notice was so served or published in the Official Gazette, sell the goods by public auction after giving notice of the sale in the manner prescribed in paragraphs 2 and 3 of section 64.

(3) The Central Government, may, by notification in the Official Gazette, exempt any goods or class of goods from the operation of this section.

**64. If the rates payable to the Board in respect of any goods are not paid, or if the lien of the ship-owner for freight, when such notice as aforesaid, had been given, is not discharged, the Board may, and in the latter event, if required by or on behalf of the person claiming such lien for freight, shall, at the expiration of two months from the time when the goods were placed in their custody, or if the goods are of a perishable nature, at such earlier period (being not less than twenty-four hours after the landing of the goods) as they shall think fit, sell by public auction the said goods, or so much as may be necessary to satisfy the amount hereinafter directed to be paid out of the produce of such sale.

Before making such sale, ten days' notice of the same shall be given by publication thereof in the Bombay Government Gazette, unless the goods are of so perishable a nature as, in the opinion of the officer aforesaid, to render their immediate sale necessary or advisable in which event such notice shall be given as the urgency of the case admits of.

If the address of the owner of the goods has been stated on the manifest of the cargo or in any of the documents which have come into the hands of the Board, or is otherwise known, notice shall also be given to the owner of the goods by letter delivered at such address, or sent by post ; but the title of a *bona fide* purchaser of such goods shall not be invalidated by reason of the omission to send the notice herein before mentioned, nor shall any such purchaser be bound to inquire whether such notice has been sent.

Bombay Port Act 1979 for the sale of goods by public auction when they have not been removed within one month of their receipt, although the Act was amended in 1949 to provide for this particular Section. The Committee consider that if action had been taken earlier in accordance with the provisions of Section 64A, it would have provided the much needed relief in easing the congested conditions in the transit sheds.

Storage of Perishable Goods

128. The following quantities of fresh fish landed at the Bunders at Bombay during each of the last three years:

1962-63	18,456 tons.
1963-64	18,721 tons.
1964-65	12,741 tons.

It has been stated that in addition to above, approximate ly 4,000 tons of fresh fruit was exported from the Bombay Docks during each of the above three years. The bulk of the fresh fruit consisted of bananas.

As regards facilities provided for the storage of these perishable goods, the Committee have been informed that most of the fresh fish landed is cleared immediately on landing. Some part of it is stored in cold chambers constructed by private parties at the Sassoon Dock, on Port Trust land leased to them. The Bombay Port Trust does not provide facilities for the storage of perishable goods but it has earmarked a plot of land, approximately 320 sq. yards at the Prince's Dock for the erection of a cold storage plant for fresh fruit by the export interests concerned. The land is stated to have been offered to the Maharashtra Government at their request. It has been added that the present volume of perishable goods traffic at this port does not make it economical for the port to provide cold storage facilities. Besides, such facilities, if they are to serve the required purpose, must be provided in the proximity of berths at the Docks where it is not possible to provide any space for the purpose. When the scheme for expanding the Alexandra Dock is completed, a fairly large area of reclaimed land will be available. It is proposed to earmark a part of this land for the erection of a cold storage plant.

The Committee are distressed to note that in spite of large quantities of fish and fresh fruit handled at the port annually, the authorities have so far neglected to provide proper cold storage facilities

for these perishable goods. They have no doubt that the provision of these facilities would attract more traffic of this kind to the port. They hope that this deficiency would be removed by providing necessary cold storage facilities under the Dock Expansion Scheme.

B. Out-turn Reports

129. Docks Bye-law 59 provides that the Master or Owner of a vessel, before proceeding to "break bulk", shall deposit with the Docks Manager a true copy of the General Manifest. In the Manifest the list of goods carried on the ship for discharge are entered in serial order. A separate Manifest is to be lodged for all cargoes to be discharged at each port. After the goods listed in such a Manifest are delivered, an entry is made against the correspodning item in the Manifest indioating the party to whom the goods were delivered as well as the number of the receipt covering the charges paid on the goods so delivered. It has all along been practice to furnish to Ships' Agents as well as to the Customs, an out-turn for each ship's Manifest. The out-turn contains the following details:

(a) The items in the Manifest, without furnishing details of the goods covered thereunder, which still remained undelivered at the end of 6 weeks following the date of completion of the ship's discharge.

(b) The number of packages included in any item for which application for delivery was made but which was short-landed.

(c) List of goods not entered in the Manifest but which were landed from the vessel and cleared including the particulars of the documents under which clearance was allowed.

130. It has been represented to the Committee by a leading shipowner's organisation that "there is invariably inordinate delay in the availability of out-turn reports indicating the quantum/number of packages discharged and shipowners have to wait for as many as ten to fifteen months for these reports. There have been occasions where as many as eighteen to twenty-four months delays have been experienced. This position needs early rectification."

131. It has been stated by another non-official organisation that "the delays in issuing the out-turn reports are on three accounts:

(i) there is delay in issuing the 1st out-turn report in respect of packages which have been delivered and those for which there is no dispute;

(ii) there is delay in finalising the supplementary out-turn report on items which are disputed;

(iii) there is delay in amending the out-turn report if a package is traced subsequent to the issue of the out-turn report."

In a written note furnished to the Committee, it has been stated by the Port authorities that "due to delayed deliveries numerous items remain undelivered at the end of the period of six weeks (laid down in the Manifest). At intervals thereafter, as these latter items are delivered, or are not available for delivery, intimation is sent to Ship Agents as well as to the Customs. Also a list of goods lying uncleared is sent to him. Wherever items included in these uncleared goods are delivered from time to time, intimation is given to the Custom House.

The complaint of Ship owners has been that in the case of certain items which remain undelivered, we are not always able in good time to furnish to them the location of these packages. This is mainly due to the large accumulation of cargoes lying uncleared at transit sheds and warehouses. The position, however, has considerably eased in the course of the last two months and this has been mainly due to speedier deliveries of cargoes."

132. The following table gives details of the periods within which out-turn reports have been given by the Bombay Port Trust during each of the last four years:

	1961-62	1962-63	1963-64	1964-65
(*i*) No. of out-turn reports given within 3 months .	1049	995	1290	1257
(*ii*) No. of out-turn reports given within 6 months .	650	780	675	605
(*iii*) No. of out-turn reports given within 9 months .	596	603	299	287
(*iv*) No. of out-turn reports given within one year .	150	102	93	74
(*v*) No. of out-turn reports given after more than one year	23	18	59	74

The Committee are concerned to note that the number of out-turn reports indicating the quantum/number of packages discharged from ships which are given after three months continues to be quite

large. More over, the reports given after more than one year have increased from 23 in 1961-62 to 74 in 1964-65. They appreciate that port authorities have taken some steps to reduce this period but greater efforts are still called for for bringing about the desired improvements in this regard. The Committee would suggest that the following measures be considered urgently in order to reduce the period of the out-turn reports to the minimum:

(i) continuous endeavours should be made to improve the tally by implementing effectively the incentive scheme and by maintaining careful supervision;

(ii) prompt executive action should be taken in settling disputed items and in amending the out-turn report if a package is subsequently traced;

(iii) attempts should be made to segregate the cargo consignmentwise and to simultaneously warehouse the entire cargo of a ship which remains uncleared after the expiry of the free days.

NEW DELHI;
March 26, 1966.
Chaitra 5, 1888 (*Saka*)

ARUN CHANDRA GUHA,
Chairman,
Estimates Committee.

APPENDIX 1

(*Vide* para 25)

Reasons for the shortfall in expenditure during the first five year Plan—Bombay Port

(1) *Minimum Scheme*:

The scheme was sanctioned by the Board on the 23rd January, 1951, and by Government by their letter No. 8-P(14)/49 of the 4th September, 1951, in principle. The Scheme was estimated to cost 4.5 crores in 1951. After the details of the Scheme were finalised and tenders invited in 1955, its cost amounted to Rs. 11.61 crores. Experts such as Mr. F. Posthuma considered the scheme too costly as it did not increase the number of effective berths and had little additional revenue earning capacity. The World Bank Mission also did not favour the scheme. The Government of India intimated in June 1959 that there was no likelihood of the International Bank giving a loan to finance the Scheme and that the Government could not possibly spare the large amount of foreign exchange involved from free resources. Therefore, it was ultimately dropped and instead, the Dock Expansion Scheme (1962) was sanctioned by the Board. The provision of Rs. 4.1 crores made in the Plan remained un-utilised and was carried forward as a spill-over scheme in the Second Five Year Plan.

(2) *Re-organisation of the Electrical Distribution System*:

Owing to the considerable time lost in correspondence with M/s. Tatas regarding the details of 22 KV main supply, there was initial delay in the implementation of the Scheme. Sanction for a part of the scheme, estimated at Rs. 27,30,700/- was obtained but the issue of the tenders had to be held back owing to a objection raised by Government regarding the provision of an alternate feeder cable. Again, the work also involved the import of the bulk of plant and equipment for which long deliveries were quoted. Due to the above, execution of the scheme was considerably delayed and the amount of Rs. 0.796 crores could not be spent out of the provision of Rs. 0.80 crores made in the Plan. Hence the shortfall.

(3) *Electrification of Cranes in Alexandra Dock*:

Order was placed only for a part of the requirements on account of the difficult supply position and uncertainty of obtaining sufficient

electric power from Tatas. Also owing to the delay in receipt of steel, the scheme was almost a year behind schedule. The required steel was obtained by the contractors in 1953 and they commenced the delivery of cranes at the rate of two per month from June 1954.

The amount of Rs. 1.542 crores provided in the Five Year Plan could only be utilised to the extent of Rs. 0.90 crores resulting in a shortfall of Rs. 0.642 crores.

(4) *Re-construction of Transit Sheds*:

The works were commenced according to the programme, but the anticipated achievement could not be reached due to shortage of steel and the need for minimising the berths remaining out of commission at a time due to construction work in progress at the berths.

Due to these reasons, the provision of Rs. 2.110 crores made in the Plan could not be fully utilised, resulting in the shortfall of expenditure in Plan by Rs. 0.39 crores.

(5) *Labour Housing Scheme*:

Out of the 928 units planned for construction under this scheme at Antop Village Extension, 368 units were completed and occupied. Piled foundation of 272 units was completed and the work on the superstructure of 176 units out of the above 272 units was taken in hand Work was also undertaken for laying drains and sewers and construction of roads. Work on the remaining 288 units of the Labour Housing Scheme was not taken in hand as the Defence Ministry did not vacate the site.

Due to shortage of steel and other second materials the housing programme could not be kept up to the schedule and therefore the provisions made in the plan could not be utilised to the extent anticipated, resulting in a shortfall of Rs. 0.98 crores.

APPENDIX II

(*Vide* Para 29)

Statement showing the Spill over Schemes to the IV Plan, their latest Progress, and target dates for completion

Sr. No.	Description of Scheme	Latest Progress	Target date for completion
1	2	3	4
1	Marine Oil Terminal	The main work is duly completed and the terminal is in commission since 1956. Some ancillary work are now in progress.	March 1967
2	Dock Expansion Scheme (1962)	The contract for the main civil engineering work has been awarded and the contractor is making arrangements for importing the constructional plant. In response to the contractor's application, the Chief Controller of Imports issued c.c.p.s. for the import of the construction plant. As these c.c.p.s. were subject to certain conditions which were not acceptable to the contractor, the matter has to be taken up with the Authorities for withdrawal or amendment of these conditions which has now been done and the order to commence work has been issued to the contractor on 9-11-1965. Departmental works for diverting services etc. falling within the area of the scheme have been completed.	1967—70
3	Preparation of Master Plan.	Investigations in progress.	April 1967
4	Reorganisation of Electrical Distribution System.	Work completed.	

1	2	3	4
5	Housing Scheme.	75% of the programmed work completed.	
6	Ballard Pier Extension including Passenger Terminal Building.	Same as Item No. 2 above.	1969-70.
7	125 ton Floating Crane.	Floating crane received and put into commission.	
8	B.P.T. Hospital and Equipment.	Foundation work completed. Superstructure about 40% completed.	March 1967.
9	Anchore-hoy-cum-salvage and water boat to replace S.A.H. 'Panvel'.	Tenders reinvited due on 11-1-1966.	June 1967.
10	Re-construction of Transit sheds—F Shed, Prince's Dock.	Deferred for the present.	
11	Two Grab Dredger units.	Tenders to be finalised.	I. unit by December 1967. II. unit by June 1968.
12	Mine Tugs (4 Harbour and 5 Dock)	2 Harbour Tugs Orders placed. 4 Dock tugs 2 Harbour tugs Tenders to be invited. 1 Dock	December 1966.
13	Two flat barges.	Work deferred.	
14	Four launches	Tender documents under preparation.	December 1967.
15	Replacement of S.T. Azad.	The item has been deferred on account of inadequacy of I.D.A. Credit.	—
16	Electrification of Hughes Dry Dock.	Tender documents duly vetted by the Consulting Engineers forwarded to I.D. A. for approval.	May 1966.
17	Electrification of Hoists and Capstans.	Finalisation of tender documents held up pending I.D. A.'s approval to the deletion from the list of goods.	December 1968.

1	2	3	4
18	Reorganisation of Electrical distribution system for 16 and 17 above.	Will be dealt along with items 16 and 17 above.	
19	Miscellaneous works	These are various Small works of which a few are likely to spill over into the next financial year and are being carried forward into the Fourth Plan.	
20	Mechanical cargo handling equipment.	5 Nos. International Harvester tractors received. 10 Nos. Diesel Mobile Cranes received. 2 Nos. Heavy lift cranes order placed. 12 Nos. Fork lifts—Tenders to be prepared.	March 1967
21	Spare lock gates.	Matter under discussion with the Consulting Engineers.	Cannot be stated.

APPENDIX III

(*Vide* Para 31)

BOMBAY PORT

New Projects to be included in the Fourth Five Year Plan

(Rs. in lakhs)

Name of the Project/Programme	Total Capital Cost	4th Plan Cost	Total Foreign Exchange Cost	Fourth Plan Foreign Exchange ost
(1)	(2)	(3)	(4)	(5)
NEW SCHEMES—				
(A) FOR AUGMENTING PORT CAPACITY.				
(a) *P.O.L. Traffic.*				
(i) Extending Pir Pau Pier and deepening approach channel.	40	40	10	10
(ii) Construction of a bridge to carry oil Pipe Line from Butcher Island to Trombay and laying new pipe lines thereon	350	50	50	50
(b) *General Cargo Traffic*				
(i) Development of Port facilities on eastern side of the harbour				
Phase I—Six berths including access channel and ancillary works	1,600	850	300	250
(ii) Deepening and impounding Frere Basin . . .	40	40	15	15
(B) FOR AUGMENTING SHIP REPAIR FACILITIES.				
(a) (i) Construction of Dry Docks .	500	50	200	50
(ii) Impounding Clarke Basin for the use of Port Trust flotilla under repairs . . .	30	30	8	8

(1)	(2)	(3)	(4)	(5)
(C) FOR ADDITIONS, RENEWALS AND REPLACEMENTS.				
(a) *Structures and Buildings*				
(i) Construction of quarters for Class III & IV employees (Inclusive of spill over) .	485	485	2	2
(ii) Renewal of Transit Sheds in Alexandra Dock . . .	150	150	3	3
(b) *Services.*				
Replacement of Sub-marine telephone cables . . .	2	2	2	2
(c) *Floating Plant.*				
(i) Replacement of 3 Old Suction dredgers by two new Suction Dredgers	120	120	100	100
(ii) Replacement of Fire Float No. 1 (Buxor) . . .	17·5	17·5	10	10
(iii) Replacement of four launches	10	10	2	0·5
(iv) Replacement of lighthouse tender	15	15	5	5
(v) Purchase of a new Water-Boat	17·5	17·5	5	5
(vi) Purchase of two harbour tugs	68	68	50	50
(d) *Mobile Plant and Equipment*				
(i) Replacing 10 Ton Mobile Cranes—10 Nos. . . .	15	15	12	12
(ii) Purchase of 10 Diesel Locos .	37	37	35	35
(e) *Workshops Plant and Machinery.*				
(i) Replacement of workshop's machinery	5	5	4	1
(ii) Electrification of slipway winches	1·5	1·5	0·5	0·5
(f) *Dock Plant Machinery.*				
(i) Electrification of lock-Gate machinery . . .	5	5	4	4
(ii) Spares for Dock Plant and Machinery . . .	50	50	25	45
(g) *Miscellaneous Minor Capital Works*	250	250	20	20

APPENDIX IV

(*Vide* para 50)

ifferences in Bombay Port Trust Act, 1879 and Major Port trusts Act, 1963

There are some important differences between the provisions of the Bombay Port Trust Act, 1879 and those of the Major Port Trusts Act, 1963. These may broadly be itemised as follow:—

(1) Under Section 111 of the Major Port Trusts Act, Government have the authority to issue directives on policy matters to a Board of Trustees, and the decision of Government as to whether any particular matter is one of policy or not is final. There is no similar provision in the Bombay Port Trust Act.

(2) While in the Major Port Trusts Act, 1963, the financial and other powers of a Board of Trustees are left to be prescribed by Government by notification from time to time, these powers are specifically prescribed in the Bombay Port Trust Act. The method adopted in the Major Port Trusts Act provides for flexibility in that Government can increase the powers of the Board and thereby its autonomy from time to time in the light of changing circumstances, without having to resort to the time-consuming and cumbersome procedure of introducing fresh legislation. The Board of Trustees of this port had expressed the opinion that the existing pattern of the Bombay Port Trust Act should not be changed and that only those provisions of the Major Port Trusts Act, which constitute indubitable improvements, should be incorporated therein. The object of empowering Government to prescribe the financial and other powers of the Board from time to time can also be achieved by amending the Bombay Port Trust Act, so as to refix the powers of the Board in such manner that they should not require revision for many years to come.

(3) The provision of the Major Port Trusts Act in regard to the liability of a Board of Trustees regarding the goods in its custody and also in regard to the acts of its employees, are considerably by the Port Trust to be unduly more onerous than those contained in the Bombay Port Trust Act. This however, is the Port Trust's view.

(4) The Bombay Port Trust Act does not contain any provision for the delegations of powers of the Board to the Chairman or to any

Officer of the Board. The Major Port Trusts Act contains suitable provisions for such delegation of powers.

(5) In the Bombay Port Trust Act, the powers of the Board of Trustees to undertake and provide various services are not clearly defined. They have to be inferred from the Board's powers to levy rates and charges. In the Major Port Trusts Act, the powers of a Board to undertake and provide services have been clearly spelt out. The Act also specifically empowers a Board to undertake works on behalf of outside parties, a provision which is absent in the Bombay Port Trust Act.

APPENDIX V

(*Vide* para 64)

ESTIMATES OF DOCK EXPANSION SCHEME

PART I—*Summary of works under the supervision of the Consulting Engineers, M/s. Bertlin & Wilton and Bell.*

Item	*Estimated Cost*	
1. *Alexandra Dock Extension*—	(In rupees)	
(i) Dock Walls and Basin . .	4,28,44,000·00	
(ii) Dredging and Reclamation .	1,07,60,800·00	
(iii) Stormwater Drain . .	5,08,400·00	
(iv) Dredger Berth Wall . .	12,16,900·00	
(v) Tug Berth	3,07,900·00	
		5,56,38,000·00
2. *Ferry Jetty*—		
(i) Dredging	64,55,900·00	
(ii) Jetty and Approach . .	79,54,900·00	
(iii) Ferry Terminal Building and Ancillary Works . . .	5,04,700·00	
		1,49,15,500·00
3. Miscellaneous Items . . .		38,98,900·00
4. 7% Supervision and Overhead Charges		52,11,668·00
TOTAL . .	Rs.	7,96,64,068·00

PART II—*Works to be supervised by the Engineering Department*

Items	*Estimated Cost*	
1. *Alexandra Dock Extension and Ancillary works.*		
(i) Drains and sewers . .	16,81,300·00	
(ii) Water Supply . . .	3,02,000·00	
(iii) Diversion of services . .	11,86,500·00	
(iv) Clearing site of structures .	11,97,600·00	
(v) Oil pipe lines . . .	8,85,100·00	
(vi) Wharfside cranes . .	1,35,09,000·00	
(vii) Dock boundary walls & Gates	5,38,700·00	
(viii) Transit sheds . . .	1,13,69,900·00	
(ix) Railway works . . .	38,61,900·00	
(x) Electrical Supply . .	15,51,600·00	
(xi) Dredging	11,22,000·00	
(xii) Pavements	43,52,500·00	
(xiii) Miscellaneous items of works	8,05,000·00	
		4,23,83,500
2. *Ferry Wharf*		
(i) Drains	2,91,000·00	
(ii) Water Supply . . .	3,86,700·00	
(iii) Oil Pipe lines . . .	2,51,800·00	
(iv) Hydraulic pipe lines . .	9,10,500·00	
(v) Clearing site of structures .	1,07,100·00	
(vi) Passenger Sheds . . .	16,64,700·00	
(vii) Dock Boundary Walls and gates	2,57,000·00	
(viii) Electrical Supply . .	5,44,700·00	
(ix) Railways	1,12,200·00	
(x) Pavements . . .	10,37,500·00	
		55,63,200·00
3. *Miscellaneous works* . . .		14,06,700·00
4. 7% *Supervision and overhead Charges*		34,54,738·00
TOTAL .		5,28,08,138·00
Part I .		7,96,64,068·00
Part II .		5,26,08,138·00
GRAND TOTAL .		13,24,72,200·00

APPENDIX VI

(*Vide* para 69)

Statement showing additional number of officers and staff appointed in the Engineering Department, Bombay Port

(i) Phase I—From 1.7.1962 to 31.12.1962.

1 Executive Engineer
1 Jr. Asstt. Engineer
1 Asstt. Officer-in-Charge, 'Design'
2 Sub-Engineers
1 Works Inspector (Civil)
2 Draftsmen, Grade I
2 Draftsmen, Grade II
1 Steno, Grade II
1 Clerk 'A' Scale
3 Peons
1 Pressman
1 Drawing Office Lascar
2 Lascars.

Estimated cost—Rs. 10,000/-.

(ii) Phase II—From 1.1.1963 to 31.12.1964.

Civil—1 Addl. Chief Engineer

2 Deputy Chief Engineers
1 Executive Engineer
1 Officer-in-Charge, 'Design'
1 Sr. Asstt. Engineer
2 Jr. Asstt. Engineers
1 Asst. Officer-in-Charge, 'Design'
6 Sub-Engineers
2 Jr. Asstt. Office-in-Charge, 'Design'
1 Chief Permanent Way Inspector

1 Surveyor, Railway Engineering
1 Sr. Works Inspector
3 Works Inspectors (Civil)
1 Works Inspector (Sanitary)
1 P.W. Maistry
12 Maistries
4 Draftsmen, Grade I
6 Draftsmen, Grade II
4 Draftsmen, Grade III
1 Head Clerk
2 Sr. Clerks
7 Clerks 'A' Scale
1 Record Keeper
9 Clerks 'B' Scale
2 Stenographers, Grade I
2 Stenographers, Grade II
1 Timekeeper 'A' scale
1 Timekeeper 'B' Scale
2 Telephone Clerks (Outdoor)
2 Record Peons
1 Naique
13 Peons
3 Hamals
10 Lascars
2 Pressmen
3 Drawing Office Lascars
1 Printing Machine Operator

Mechanical—1 Addl. Mechanical Superintendent
1 Sr. Asstt. Mechanical Superintendent
1 Asstt. Mechanical Superintendent
1 Asst. Electrical Foreman
1 Inspector (Electrical)
1 Draftsman, Grade I
1 Stenographer, Grade II
1 Clerk 'A' Scale.

Estimated cost—Rs. 6.00 lakhs.

(iii) Phase III—From 1.1.1965 to 30.6.1966.

Civil—1 Addl. Chief Engineer
2 Dy. Chief Engineers
1 Executive Engineer
1 Officer-in-Charge, 'Design'
2 Sr. Asstt. Engineers
4 Jr. Asstt. Engineers
1 Asstt. Officer-in-Charge, 'Design'
8 Sub-Engineers
1 Jr. Asstt. Officer-in-Charge, 'Design'
1 Sr. Works Inspector
3 Works Inspectors (Civil)
1 Works Inspector (Sanitary)
1 Jr. Surveyor
3 Draftsmen, Grade I
6 Draftsmen, Grade II
4 Drafsmen, Grade III
1 P.A. to Addl. Chief Engineer
1 Office Superintendent
1 Head Clerk
2 Sr. Clerks
10 Clerks 'A' Scale
1 Record Keeper
6 Clerks 'B' Scale
7 Clerks 'B' Scale (Typists)
2 Stenographers, Grade I
2 Stenographers. Grade II
10 Maistries
1 Permanent Way Maistry
2 Timekeepers 'A' Scale
1 Timekeeper 'B' Scale
1 Telephone Clerk (Outdoor)

Mechanical—1 Addl. Mechanical Superintendent
1 Sr. Asst. Mechanical Supdt.
1 Asstt. Mechanical Superintendent

1 Marine Engineer
1 Asstt. Electrical Foreman
1 Inspector (Electrical)
1 Sr. Technical Assistant
1 Draftsman, Grade I
1 Head Clerk
2 Sr. Clerks
3 Stenographers, Grade II
3 Clerks 'A' Scale
2. Technical Supervisors (Mech.)
1 Draftsman, Grade III
2 Jr. Technical Assistants
2 Clerks 'B' Scale
2 Clerks 'B' Scale (Typists)

Estimated cost—Rs. 14.00 lakhs.

Total Estimated cost

Phase I—	Rs. 10,000
Phase II—	Rs. 6,00,000
Phase III—	Rs. 14,00,000
	Rs. 20,10,000

APPENDIX VII

(*Vide* para 88)

PART A

Payments made in foreign exchange and in Indian Rupees to the Consulatants for Bombay Port in respect of works other than I.D.A. Project Works from 1948-49 to 1964-65

Name of the Consultants	Year	Retention fee	Out-of-pocket expenses	Commission on materials, etc.	Fees for the preparation of project reports, development plans, etc.		Payment on account of preparation of detailed designs, etc.	Payment on account of supervision & inspection of execution of works	Miscs. expenses, such as cablegram, postage etc.
(1)	(2)	(3)	(4)	(5)	(6)(a)	(6)(b)	(7)	(8)	(9)
		£ s. d.	£. s. d.	£. s. d.	£. s. d.	Rs. P.	£. s. d.	£. s. d.	£. s. d.
1. Sir Bruce White, Wolfe Barry and Partners . .	1948-49 .	500 0 0	121 0 9	326 18 9	..	..	..	135 9 2	..
2. „	1949-50 .	500 0 0	536 16 4	1262 16 3	5250 0 0*	..	3750 0 0	..	..
3. „	1950-51 .	500 0 0	403 10 3	1607 11 4	..	..	2750 0 0	..	..
4. "	1951-52 .	500 0 0	382 17 7	1870 5 6	3250 0 0	..	..	..	..
5. "	1952-53 .	500 0 0	651 10 9	611 11 11	15000 0 0*	..	..	..	..
6. "	1953-54 .	500 0 0	901 10 2	1066 11 6	*61277 1 7 1837 10 0	*80,499·73	..	5984 18 9	..

(1)	(2)	(3)	(4)	(5)	(6)(a)	(6)(b)	(7)	(8)	(9)
		£. s. d.	£. s. d.	£. s. d.	£. s. d.	Rs. P.	£. s. d.	£. s. d.	£. s. d.
7. Sir Bruce White Wolfe Barry and Partners	1954-55	500 0 0	1907 15 0	789 4 3	32751 17 6*	*72,785·37	1750 0 0	1806 17 3	..
8. „	1955-56	500 0 0	1421 12 8	2208 14 7	27304 1 8*	1,01,081·22*	..	..	..
9. „	1956-57	500 0 0	470 6 7	429 14 1	..	..	..	..	..
10. „	1957-58	500 0 0	812 12 0	598 13 11	*9501 10 8	..	..	10,808 13 0	..
11. M/s. Rolfe and Bertlin	1958-59	500 0 0	657 9 7	165 10 7	..	..	..	1276 4 3	..
12. „	1959-60	1000 0 0	929 8 6	399 1 1	*5000 0 0	..	..	4823 5 11	..
13. Sir Bruce White, Wolfe Barry and Partners	1960-61	..	..	..	..	*20,000·00	..	..	..
14. M/s. Rolfe and Bertlin	1960-61	..	..	343 18 2	*4500 0 0	..	..	1192 4 1	..
15. M/s. Bertlin and Wilton & Bell	1960-61	1000 0 0	1029 6 6	241 13 5	..	..	3200 0 0	..	134 1 1
16. Sir Bruce White, Wolfe Barry and Partners	1961-62	..	..	..	..	*44,000·00 6,400·00	..	..	..

17. M/s. Rolfe and Bertlin	1961-62	..	..	..	*2720 0 0	..	..	4286 8 0	..
18. M/s. Bertlin and Wilton & Bell	1961-62	1000 0 0	1933 1 6	494 18 10	..	..	..	..	112 4 10
19. Sir Bruce White, Wolfe Barry and Partners	1962-63	..	..	..	..	*5000 0 0	..	..	..
20. M/s. Rolfe and Bertlin	1962-63	..	..	..	*21250	..	..	3807 12 3	..
21. M/s. Bertlin and Wilton and Bell	1962-63	1000 0 0	2232 0 1	1358 7 6	..	..	2185 0 0	3441 13 1	138 10 9
22. M/s. Rolfe and Bertlin	1963-64	..	..	..	..	..	394 7 1	..	..
23. M/s. Bertlin and Wilton & Bell	1963-64	1000 0 0	1,445 19 5	157 11 6	..	..	..	250 2 4	176 16 0
24. M/s. Bertlin and Wilton & Bell	1964-65	1000 0 0	337 0 7	571 12 4	..	..	..	3717 8 8	192 13 3

*These represent composite fees paid on a percentage basis for the Marine Oil Terminal on account of preparation of a Project Report, detailed designs, estimates, etc. and the general supervision of execution of the project.

NOTE.—The fees shown in columns (6), (7) and (8) are exclusive of the re-imbursements allowed to the Consulting Engineers of the actual expenditure in Rupees on the staff (Foreign and Indian) appointed for day-to-day site supervision of works like Marine Oil Terminal and Rim Bascule Bridge.

PART B

Payments made to the Consultants for Bombay Port in respect of I.D.A. Project Works upto 30-6-1965

Year	Name of Consultants	Commission of purchase of "Vikram"	Fees for preparation of a Master Plan	Fees for designs, estimates, etc. for Dock Expansion Scheme and Ballard Pier Extension.	Fees for scrutiny of designs for floating craft.	Fees for negotiations in connection with the Ballard Pier Extension
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		£	Rs.	£ Rs. £	Rs. £	£
1948-49 to 1960-61	..	..	..	.. .. ..	.. ..	..
1961-62	M/s. Rolfe and Bertlin . . .	2,501 3 4	..	.. .. ..	.. ..	..
1962-63	M/s. Rolfe and Bertlin . . .	3,347 15 5	..	.. .. ..	.. ..	..
	M/s. Bertlin and Wilton & Bell .	..	..	.. 1,52,357·56 28,080 0 0	.. ..	2,185 00
1963-64	M/s. Rolfe & Bertlin . . .	252 17 4	..	.. .. ..	.. ..	..
	M/s. Bertlin and Wilton & Bell .	..	..	.. 3,04,715·12 56,160 0 0	.. ..	..
	Sir Bruce White Wolfe Barry and Partners . .	..	..	.. .. ..	14,000·00 ..	..

1964-65	M/s. Bertlin and Wilton & Bell . ..	18,000·00	3600	0	0	1,86,673·33	28,259	9	8	..	..	..
	Sir Bruce White Wolfe Barry and Partners	..	..	..	..	..	..	..	..	525	0	0	..
1-4-1965 to 30-6-1965	M/s. Bertlin and Wilton & Bell	..	..	..	..	24,576·52	4,395	6	3	..	..	..	..

**Exclusive of the reimbursement of the actual expenditure on staff, etc.

*Exclusive of the reimbursements of the actual expenditure almost entirely in Rupees, on staff (Foreign and Indian) appointed for day-to-day site supervision.

APPENDIX VIII

Summary of Conclusions/Recommendations

Reference to Para No. of Report		Summary of Conclusions	Recommendations
1	2	3	
1	1	The Committee feel that with the proposed extension of the port operations beyond the existing port limits, and the proposed construction of a satellite port at Nhava-Sheva it is imperative that the port authorities should have administrative control over the actual area of its operations, both on the water and land, so that the port operations are carried out unhampered, by a single authority without any administrative or procedural difficulties. They would suggest that Government may constitute a technical committee consisting of representatives of Ministries of Transport, Railways, Finance etc. and the representatives of States Government of Maharashtra to examine carefully the question of extending the jurisdiction of the port having regard to the plans for developing the satellite port of Nhava-Sheva and of ensuring efficient port operations.	
2	14	The Committee are glad to note that the total traffic passing through the port has increased from 10.4 million tonnes in 1955-56 to 17.3 million tonnes in 1964-65, thereby registering a rise of about 66 per cent during the decade. The Committee, however, note that whereas the rise in imports during the last ten years has been of the order of about 78 per cent, exports have risen only by about 43 per cent during the same period. The Committee consider that till such time as Dock Expansion Scheme is implemented there is need to find ways and means of affording relief to the congested Port of Bombay by diverting some	

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		of the import traffic to neighbouring ports. The Committee would like Government to consider in particular the question of diverting some of the inward cargo of food grains and fertilisers to other neighbouring ports like Kandla and Mormugao.
3	18	The Committee regret to note that the scheme for the extension of the Ballard Pier and the construction of a new passenger terminal building which was included in the Second Plan, has not yet made much headway. The Committee consider that passenger amenities at Ballard Pier need improvement to bring them in line with international standards as that would go a long way in attracting overseas passenger traffic, particularly the foreign tourists. The Committee would like passenger amenities at Ballard Pier to be such as to attract ships carrying tourists on World cruise as this is bound to help the country in earning some valuable foreign exchange. The Committee have no doubt that in deciding the scale and standard of amenities to be provided at Ballard Pier, Government will make a careful study of the requirements of passenger traffic over the next 15-20 years as also the passenger amenities which have been provided in other countries e.g. Italy, Spain, Lebnon etc. for attracting tourist traffic.
4	23	The Committee are glad to note that the total number of ship-days lost for general cargo ships which had risen to 3844 in 1964-65 has come down to 2089 in 1965-66 and that similarly the number of shipdays lost for foodgrain ships in 1965-66 has come down by nearly 50 per cent i.e. from 1072 in 1964-65 to 545 in 1965-66. The Committee would like the port authorities to intensify their efforts so as to achieve a still better turn-round of ships as it has an intimate impact not only on the detention money paid but also indirectly on the freight charges levied by the Conference Lines. This has also an impact on our critical foreign exchange position as almost the entire extra charges for detention of ships have to be paid in foreign exchange.

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5	33	The Committee are constrained to observe that the shortfall in Plan expenditure which was Rs. 4.5 crores (29 per cent) during the First Plan period rose to Rs. 20.2 crores (81 per cent) in the Second Plan period. The main reason for this shortfall in the planned expenditure was the failure of the port authorities and Government to take a firm decision about the developmental schemes for the port with the result that during the first two plan periods no concrete steps were taken to increase the much needed berthing capacity in Bombay Port. It was only in 1962, the second year of the Third Plan, that Dock Expansion Scheme was finalised and credit from I.D.A. was arranged. The Committee are unhappy that the port authorities and Government have taken as many as two years to call for global tenders and place orders for the execution of the Dock Expansion Scheme, 1962. The leisurely manner of dealing with the matter shows that the port authorities and Government were not actuated by any urgent desire to undertake timely execution of the Plan Scheme. The net result is that the Dock Expansion Scheme has commenced in right earnest only in the last year (1965-66) of the Third Five Year Plan and it is therefore, no wonder that there would again be a shortfall to the extent of Rs. 8.04 crores (31 per cent) during the Third Plan period. The Dock Expansion Scheme is now expected to be completed by 1969-70, that is almost towards the end of the Fourth Plan period, and for all these years the much-needed berthing capacity would remain short of requirements. The Committee would like Government to undertake a study of the inordinate delay which has taken place in the implementation of the Dock Development Scheme so as to draw lessons for future and take remedial measures such as advance planning, tying up in advance arrangements for foreign aid, streamlining of the procedure for calling global tenders and placing of orders so that the Plan schemes are implemented as per scheduled programme.
6	33	The Committee would like to draw pointed attention to the shortfalls under the heading of dredging of main harbour channel. A provision

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		of Rs. 5 crores and Rs. 4 crores was made in the Second and Third Five Year Plans for capital dredging but the expenditure incurred was only Rs. 0·1 crores and Rs. 2·86 crores respectively. These shortfalls are particularly unfortunate as these must have adversely affected the operational efficiency of Bombay Port. The Committee hope that necessary steps would be taken to ensure that the harbour channels are kept properly and efficiently dredged.
		The Committee find that the provision made for Ballard Pier in the Second Plan for Rs. 0·47 crores and under the Third Plan for Rs. 3·25 crores has been utilised only to the extent of Rs. 0·89 crores due to prolonged and inconclusive discussions with the Navy. The Committee consider that the Port Trust authorities and Government should have finalised arrangements for extension of Ballard Pier with greater urgency as these facilities were badly required to augment amenities in order to attract passenger and tourist traffic.
	33	The Committee would urge that necessary investigations about the new schemes, included in the Fourth Plan, should be taken in hand and blueprints prepared in good time so that the execution thereof can be undertaken as per scheduled programme. As regards the continuing schemes the Committee would like Government to review the factors which have hampered progress in the past and to devise necessary measures to complete the schemes without delay.
8	34	The Committee hope that the Design Cell would be suitably manned so that it can undertake all work relating to the preparation of detailed project reports, and designs and specifications in respect of the scheme to be executed by the port authorities in future.
9	53	The Committee are distressed to note that the Minimum Scheme which was conceived in 1949, drawn up in 1951, should have been dragged on for eleven long years till 1959 when it was finally abandoned. In the meantime its estimated cost had risen from Rs. 4.30 crores to Rs. 20 crores. The Committee consider that the non-implementation of this Scheme has resulted not only in in-

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fructuous labour and expenditure which was incurred on its preparation and subsequent processing but has also hampered the efficiency of the port by delaying the development of the Bombay Port for over a decade.

The Committee are unable to appreciate the insistence of the Trustees to get a grant from Government to cover fifty per cent of the cost of the Scheme, when there was no precedent for giving such grants to any other port and when the ports own financial position was sound enough to undertake the scheme. It is really surprising that the Trustees did not even avail of the loan assistance of Rs. 4·17 crores, offered by Government in 1953, towards the cost of the schemes included in the First Five Year Plan which covered the Minimum Scheme also. Even after the Minister of Transport in 1959 had advised the deputation of the Trustees to re-examine the scheme and to put up a phased programme of development of the port, the Trustees insisted on proceeding with their original scheme and included it in their draft Third Five Year Plan. All this indicates that the Minimum Scheme had been turned into a prestige issue by the then Trustees which, the Committee consider to be a very unhealthy trend in the Port Trust. This apprehension of the Committee is confirmed by the change in the attitude of Trustees and their willingness to prepare another scheme in June, 1959 when a new incumbent had taken over as Chairman of the Port Trust.

The Committee are surprised at the apparent helplessness of Government to issue necessary directions to the Port Trust to proceed with the development scheme on the lines indicated by them. They are not convinced by the plea taken by the representatives of the Ministry that they did not have powers of issuing directions under the Bombay Port Trust Act, 1879—which lacuna the Government could have and should have filled up any time by necessary legislative measure, rather allow the development of one of the most important ports to be stayed indefinitely due to the undesirable attitude of the Port Trust. This is all the more surprising as under the Major Port Trust Act, 1963, Government have already armed themselves with power of issuing direc-

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		tions to all major ports, which are brought under the purview of the Act. The Committee also note that Government had available to them the powers under Section 90 of Bombay Port Trust Act, 1879 to supersede the Board. The Committee suggest that Government should review the position in the light of the experience and take suitable measures to ensure that they have adequate powers of issuing directions to the Bombay, Calcutta and Madras Port Trust authorities in the overall interest of national economy as also in the interest of the development of the ports.
10	59	The Committee consider that with the experience of the Minimum Scheme and the data and technical advice already available with the port authorities and the fact that the development of the port had been unnecessarily delayed already by a decade, the Port Trust should have taken adequate care, and should have been in a position to draw up a "well thought out" revised plan for the development of facilities at Bombay Port. The Committee regret that the Modernisation Scheme which was approved by Port Trust authorities in 1959, had also to be abandoned in 1962 due to technical shortcomings.
11	68	The Committee are concerned to note that the Dock Expansion Scheme which is stated to be a truncated version of the earlier abondoned scheme, *viz.* Modernisation Scheme, and was approved by Government in June 1962 will now be executed, by the middle of 1969 and with all ancillary works by 1970 instead of April 1968, as originally envisaged. The Committee cannot help regretting the delay of about two years at such a crucial time when additional dock facilities are urgently needed to relieve congestion in the port. The Committee consider that most of these delays which are mainly due to lack of administrative and procedural clarifications, could have been avoided if the Dock Expansion Scheme had been pursued from the very beginning with a sense of urgency. The Committee also note that the cost of the project has risen from Rs. 10·92 crores to Rs. 13·25 crores representing an increase of 21 per cent over the original estimate.

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		The Committee are surprised to note that the economics of the Port Development Scheme had not been worked out in detail by the Port authorities. It appears that Government also did not insist on this basic data at the time of approving the scheme. The Committee recommend that whatever be the other justifications, the financial implications of development schemes together with their revenue earning potential should be worked out in detail in the very begining so as to enable the Port authorities to carefully examine the effect of the estimated outlay on the port charges and the overall financial position of the port. The working out of these details would also prove helpful in controlling costs and exercising economy. The Committee are glad to note that all preliminaries have been finalised and that the work is gaining momentum. They would like the Port Authorities to ensure that the Dock Expansion Scheme is completed by 1969-70.
12	69	The Committee hope that consistent with the necessity of maintaining efficiency, the strength of the Engineering Department as also other Departments of the Port Trust which are associated with the execution of the Dock Expansion Scheme, will be kept to the minimum level necessary and that utmost economy would be effected in the expenditure on the project as far as possible.
13	73	The Committee are unhappy that a period of 5 years has been taken after the dismantling of old Rim Bascule Bridge to replace it by a modern structure. The Committee feel that the Port Trust authorities should have undertaken advanced planning and designing of the new bridge, in consultation with the Defence and Railway authorities, so that orders could have been placed for the fabrication of the bridge well before the old bridge was dismantled. They are also unhappy that there was delay of twenty-one months in the execution of foundational works for the bridge and that a period of one year was taken to modify the design of the bridge in order to fit in the naval requirements. All these delays have resulted in substantially increasing the cost of the bridge and also adversely affected the traffic of trucks and other vehicles. The Committee would stress the need for advanced plan-

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		ning, designing and timely execution in the interest of efficiency and economic execution of works.
14	80	The Committee note that the Master Plan envisaged for the Bombay Port will provide for the long-term development of the Port taking into consideration the interests of users of the port and harbour and probable development of the port traffic during the next 50 years. Bombay is a premier Port of India and has a highly developed hinterland with exportable surplus agricultural products. A number of engineering and cotton industries have been set up in its vicinity and the bulk commodities like foodgrains and industrial goods are mostly imported through this port. This port will, therefore, continue to play important part in the nation's economy. It is therefore of paramount importance that the Master Plan for development of this port should be drawn up keeping in view the following considerations among other things so that no infructuous capacity is created in any port. (i) the immediate needs of the port traffic; (ii) the long term needs of the country specially of the adjoining areas; and (iii) the development of facilities in other ports on the western coast—major intermediate and minor. The Committee further suggest that a study should be made to find out if any decentralisation and diversion of traffic from Bombay to other ports is possible as that would not only help in relieving congestion of traffic in Bombay Port but would also assist in the development of other areas adjoining the ports and in reducing the load on rail/road traffic.
15	80	The Committee would like the Consultants to be given a specific instruction to ensure the maximum utilisation of structures and equipments from indigenous sources so as to affect maximum economy in foreign exchange.
16	80	The Committee would suggest that before the Master Plan is finalised, its draft should be given wide publicity among the trade and industry and shipping concerns, and other ports users with a view to elicit their suggestions.

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17	80	The Committee would like to suggest that to avoid duplication of port facilities and to ensure their rationalisation and economic utilisation, the Master Plan for the development of a particular port should form part of the overall planned programme for the long term development of all the ports both on regional basis and on national basis. Such a development programme has necessarily to take into account, among others, the long term forecast of:— (i) the volume of the country's present foreign trade both imports and exports and the proposed or expected increase in 2 or 3 subsequent Plan periods. (ii) changes in the pattern of trade; (iii) the size of future ships and the developments in the ship-building industry, (iv) agricultural and industrial production and consumption in the various regions within the country, (v) internal traffic arrangements, both rail and road, from and to the ports. For this purpose, detailed statistics in respect of each of these matters will require to be collected and reviewed. The Committee suggest that the collection of basic statistics and the preparation of overall integrated development plan for the ports may be undertaken centrally by the Government in consultation with National Harbour Board, Planning Commission, the Port Trusts, representatives of trade and industry etc.
18	81	The Committee commend the decision of Government to entrust the work of economic and traffic investigations for the Mastern Plan of the Bombay Port to the Director, Transport Research, in the Ministry of Transport. They hope that in conducting these investigations the Planning and Research Cell of the port would be fully associated so that the Cell may gain, in due course, sufficient experience in dealing with the problems of the port independently.
19	81	The Committee would suggest that the Directorate of Transport Research should arrange to

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		impart, in due course, instructions to Planning and Research Cells of major ports in the country so that they are fully trained in the work of collection and collation of various statistics required for drawing up traffic projections for the future development of ports.
20	85	The Committee are glad that the port authorities have taken the initiative to get prepared interim plan for the development of Nhava-Sheva, pending the completion of detailed Master Plan. The Committee would like Government to take an early decision about the development of four berths for handling foodgrains at Nhava-Sheva, keeping in view the requirements of the country during the next 20—25 years, the capacity available in Bombay port and other neighbouring ports and the traffic projections for imports and exports from the hinterland. The Committee would like Bombay Port Trust authorities to maintain effective liaison with the State Government of Maharashtra and the Ministries of Food, Transport and Railways so as to ensure an early integrated development of the proposed satellite port of Nhava-Sheva.
21	88	The Committee are unable to appreciate fully the justification for the payment of annual retention fee of £ 1,000 to the Consulting Engineer for general consultancy work as they are to be paid separately for all special works and are reimbursed all expenditure incurred by them in connection with the port work. The Committee note that an appreciable number of engineers from the Port Trust Engineering Department are seconded to the Consulting Engineers. While the Committee appreciate in principle that the seconding of such officers may help them to get the requisite experience in port designing, they apprehend that such an arrangements is liable to create a vested interest and may come in the way of objective assessment of the work done by the Consultants particularly when the same consulting firm has been continuing for over twenty years.
22	88	The Committee consider that the payment of fees on percentage basis to the Consulting Engineers, may give them unintended remuneration on account of increases in the cost of works, due

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		to extraneous reasons like contractors' delays and failures, rise in the cost of labour material etc. and not so much due to additions to their work. The Committee have a feeling that such a system of payment provides no incentive to the Consulting Engineers to economise on costs. Rather, it tends to work the other way as the Consulting Engineers become direct beneficiaries from increases in costs. In fact, the costs of marine oil terminal scheme increased from the original estimate of Rs. 4·49 crores to Rs. 10·25 crores. Similarly, the estimates of Dock Expansion Scheme have been revised upwards from Rs. 10·92 crores to Rs. 13·25 crores. The Committee feel that the fees of Consultants should be fixed in such a manner as to provide incentive for bringing about reduction in the costs of works. The Committee recommend that Government should review the whole matter and lay down principles for the payment of fees to the Consulting Engineers after taking the above factors into account. They would further suggest that Government/ Port authorities should negotiate with the Consulting Engineers for adjusting their fees in respect of Dock Expansion Scheme and Master Plan in such a manner as to eliminate the accrual of fees on account of increases in cost of works due to extraneous factors.
23	88	The Committee are distressed to note that the Bombay Port Trust has all along been depending on the foreign firm of Consulting Engineers even after eighteen years of Independence. Similar position appears to exist in other major ports in the country. Apart from the outgo of precious foreign exchange which in the case of Bombay alone, amounted to £ 398,326, the employment of foreign consultants may lead to excessive purchases of plant and machinery from the consultant's own country as the designs and specifications prepared by them naturally tend to take into account the developments in their own country. In fact the Chairman, Bombay Port Trust admitted during evidence that "this is the price we have to pay for not being able to have our own indigenous engineers". The Committee have already recommend-

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		ed in para 37 of their Ninety-second Report on Mormugao Port that effective action should be taken to establish inter-port technical consultancy service in the country for the Fourth Plan. The Committee hope that determined steps would be taken to make a beginning in providing indigenous consultancy service to the ports without further delay.
24	90	The Committee are concerned to note that there is occasional loss of depth at some of the berths when either the berth is not available for dredging or the dredgers are not available for the work, with the result that sometimes a berth found to silt has to be allocated to vessels of lower drafts. The Committee feel that such a state of affairs not only causes difficulties in allocation of right berth for the right draft but is also bound to affect adversely the turn-down of vessels. The Committee are glad to note that for improving drafts at Alexandra Dock, it is proposed to impound water to an extra height of 4 feet so that ships drawing upto 34 feet can use the docks as against 30 feet under normal conditions. While welcoming this measure, the Committee urge that concerted efforts should be made to keep the approach channels and berths clear of siltation in order to allow entry of ships with requisite drafts for the maximum period possible.
25	90	. The Committee note that at present, figures of ship-days lost due to dredging operation being carried on the berths are not being recorded. The Committee suggest that a record of these figures may also be kept separately as it will enable better control over dredging of berths by the port authorities.
26	92	The Committee note that under the existing dock by-laws, the vessels bringing import cargoes into the port are given preference over all other vessels waiting for berths. The Committee urge that in the light of experience gained, the port authorities should review the dock bye-laws keeping in view the changing priorities for handling of cargoes at Bombay Port *e.g.* foodgrains, exports etc.

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27	93	The Committee regret the dislocation and delays caused by the refusal of the Berthing Masters to take ships longer than 456 feet into the Victoria Docks for about two years which aggravated the already acute congestion in the Bombay port during that period. The Committee hope that with modern navigational aids, it should be possible to bring in larger vessels into the Victoria Docks in future.
24	94	The Committee expect that many of the present ills of Bombay Port regarding length and draft of the port would be resolved with the completion of the Dock Expansion Scheme which envisages the provision of deep water berths. They also hope that with the commissioning of additional berths under the proposed satellite port in Nhava-Sheva area, the position would further improve.
29	98	The Committee are glad to note that to provide for massive food imports in the coming months, Government have earmarked the quantities of foodgrains to be handled monthly at the various ports. It will, however, be seen that Bombay Port will be required to handle the largest quantity (*i.e.* 3·7 lakh tonnes per month). This would naturally place a great strain on the deep berthing capacity at the Alexandra Dock. The Committee note the increase in the average rate of handling of foodgrain tankers at Bombay Port from 1500-2300 tons to 3000-3500 tons per day since the Government took over the responsibility from the shippers. To cater to the increased quantities of foodgrains to be handled in future, it is imperative that the discharge rate from bulk foodgrain carriers should be further increased. The Committee urge that Government should make concerted efforts to achieve the maximum rate of discharge by judicious use of modern machinery/equipment and speedy clearance of foodgrains so as to achieve optimum utilisation of the berths. The question of providing a belt conveyor to speed up movement of foodgrains should be examined early.
30	98	As Bombay Port is susceptible to heavy monsoon and as there is no silo for storing foodgrains

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		there, Government may also examine the feasibility of providing quickly erectable rain shelters to make for uninterrupted handling of foodgrain operations.
31	98	The Committee would emphasise that coordinated arrangements should be made for expeditious movement of foodgrains from the port, to their destinations, cutting out all infructuous and unnecessary movement. The Committee would, therefore, recommend that as far as possible imported foodgrains for destinations outside Bombay, should be moved from quay side in rail wagons. The loading dates of chartered ships should be so planned as to obviate bunching for unloading of foodgrains.
32	99	The Committee are aware that due to recent drought conditions in the country, Government had to resort to large-scale imports of foodgrains. To meet the situation, the capacity of various ports had to be geared up. The Committee also understand that a team of American experts has recently visited the country to study the capacities of the ports to handle the imports of foodgrains. The Committee feel that with all the above data now available about the capabilities of the ports to handle the foodgrains, Government should be in a better position to decide as to what additional facilities are needed to handle imports of foodgrains in the coming years and how these imports can be dispersed region-wise among different ports. The Committee would like to stress that as the creation of additional handling facilities is a costly and time-consuming process, these should be completed/expeditiously so as to be available in the present food emergency. The Committee need hardly emphasise that when new berths are constructed, care should be taken to see that they are equipped with the latest handling devices and are capable of handling larger tankers and bulk carriers which are increasingly coming into use. The Committee would also like to remind Government, that while creating additional food-

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		grains handling facilities in Indian Ports, they would take into consideration the fact that food emergency is not expected to continue after the present year and that imports of foodgrains are expected to slow down in every subsequent year with the success of the food production drive which has been undertaken in the country, till ultimately it is stopped when self-sufficiency in foodgrains is attained. They further expect that the additional handling facilities to be created during the present food crisis may be so designed and erected as to make them capable of handling other bulk cargoes with the easing of the food crisis.
33	101	The Committee are constrained to observe that although the need for the construction of a grain silo at Bombay Port was felt as early as 1960, it has so far not been installed. The Committee feel that for a Port like Bombay which has to handle more than 3 million tonnes of foodgrains annually, it is necessary that in addition to providing for quicker discharge of foodgrains from the ships, it should also be ensured that the foodgrains are regularly cleared from the berths every day to avoid congestion in the port. This can be achieved by having a grain silo. Now that the scheme of silo forms a part of the overall development of food-handling facilities in the satellite port at Nhava-Sheva, the Committee hope that Government will give due consideration to the size etc. of the silo which should be set up to meet the present and the future requirements. In this connection the Committee would like to emphasise that Government should profit from the experience of working of the silo at Calcutta Port so that the initial operating troubles encountered in Calcutta are obviated.
34	103	**The Committee are of the opinion that the technical and economic feasibilities of the scheme offered by M/s Chowgule and Company for handling foodgrains at Bombay Port should be gone into fully with particular reference to its cost and period of implementation by the Ministry of Transport in consultation with the Ministries of Food and Agriculture and Railways before taking a final decision in the matter.**

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35	106	The Committee regret to observe that the marine oil terminal scheme at Butcher Island was planned and executed without making detailed investigations about the future pattern of oil traffic, scope and quantum of works required and the rates for their execution. The result has been that the cost of scheme which was originally estimated by the Consultants at Rs. 4.49 crores in 1951, increased by 100 per cent to Rs. 9.83 crores in 1955 and to Rs. 10.25 crores in 1959, the total increase from the original estimates being about 110 per cent. Further, the execution and commissioning of the works were delayed and could not be synchronised with the commissioning of the oil refineries which necessitated the making of temporary arrangements for the supply of crude oil to the refineries at extra cost. What is more, the facilities provided under the scheme have also now proved to be inadequate within a short period of 8-9 years and some proposals are being contemplated for their improvement and development. The Committee recommend that the reasons for these shortcomings and inadequacies should be examined carefully by Government with a view to draw lessons while planning and executing port development schemes in future.
36	110	The Committee attach a good deal of importance to the improvement of facilities for handling of oil traffic at Bombay and would like the port authorities to take early decision about deepening the approach channel to Pir Pau Pier and the modifications to the fendering system sc as to improve the berthing capacity of dolphins at the Butcher Island. If these schemes are found to be technically feasible and financially sound the Committee would like them to be implemented with expedition so that bigger tankers can be accommodated in the port as early as possible. The improvement in port facilities should also result in saving of detention charges which are being incurred on tankers for want of berthing capacity in the port.
37	113	The Committee are concerned to note that the port authorities have already awarded a contract for preliminary work of site investigation consisting of marine borings in connection with the construction of the over-bridge from Butcher Island to Trombay to carry pipe lines, without taking a final decision in the matter. Since

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		the feasibility of carrying out repairs to the submarine pipe line quickly and satisfactorily has been indicated by the experts of oil Industries Team, the Committee recommend that the need for constructing the over-bridge which is estimated to cost Rs. 3:5 crores, may be examined carefully in consultation with technical experts.
38	116	The Committee consider that as there is considerable margin of profit from the warehouses and godowns and as the Alexandra Docks are used by bigger ships, the conditions of these godowns and warehouses should be improved *e.g.* the floors of the warehouses and transit sheds should be improved, the hoists modernized, and in general, action should be taken to arrange the goods on scientific lines so that these are easily accessible for identification and clearance.
39	118	The Committee are perturbed to note that as many as 3563 packages are awaiting disposal after 2 years of confiscation by Customs. The Committee consider that save in *sub-judice* cases, the Customs Department should expeditiously arrange to hold auctions in suitable lots at frequent intervals to dispose of goods to avoid congestion in the port area and prevent their deterioration due to long storage.
40	123	The Committee are concerned to note that 72,000 packages are lying uncleared by the customs due to disputes with the importers for duty or on the ground that the goods imported do not conform to the relative import licence etc.
		The Committee would also like to point out that there is a general impression among the trade circles, shipping interests and even the port authorities that due to customs formalities goods are not cleared from the transit sheds as quickly as they should be. The Committee note that the Liaison Committee has been set up recently and learn that it is working quite actively of late at the port and that it provides a useful forum for the representatives of shipping agents and port authorities to meet the Deputy Collector of Customs. They hope that the Liaison Commit-

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		tee would help to dispel the impression referred to above that customs procedure are cumbersome, and time consuming. They suggest that the Liaison Committee should take effective steps to identify and remove the factors which hamper speedy clearance of goods so that remedial measures by way of rationalisation and simplification of procedures can be devised. In particular, the Committee would suggest that measures suggested in para 123 above should be carefully examined with a view to their early implementation.
41		123 The Committee would suggest that there should be periodical meetings at the level of the General Manager of the Port Trust and the Collector of Customs so as to review the overall position and remove all impediments coming in the way of speedy clearance of goods from the port premises.
42		123 The Committee welcome the experiment of miniature custom-houses which have been set up in some sheds of the Bombay port. They would like Government to assess carefully the achievements of this experiment in consultation with the trade and shipping agents and extend it to the remaining sheds and other ports.
43		123 The committee would suggest that the rates for letting out godowns in the port area which are understood to be lower than the rates prevailing in private godowns in the vicinity of the port area should be reviewed.
44		123 The Committee would commend the suggestion made by the Sundara Committee in September, 1965 that "in respect of Government project cargoes which are imported on a large scale through the port of Bombay, special arrangements should be made on a co-ordinated basis for the prompt clearance of such cargoes from the sheds and open spaces in the docks and for warehousing them or despatch to destination."
45		124 It is well known that heavy machinery which is imported at heavy cost of scarce foreign exchange is of great importance for the development of the country. The Committee cannot too strongly urge that every effort should be made

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		for the proper storage of heavy machinery, particularly, the sensitive ones like scientific, electronic and electrical goods with a view to prevent them from damage due to exposure to rain.
46	125	The Committee consider that goods which remain uncleared after the expiry of free days should be removed to uncleared warehouses. This would ensure that the operational area in the port is not cluttered with these uncleared goods. The Committee would, therefore, recommend that early action should be taken to augment the warehousing accommodation for uncleared goods and that adequate arrangements should be made therein for proper stacking of goods to facilitate their eventual disposal.
47	126	The Committee need hardly stress that clear marking on packages helps identification and facilitates delivery. The Committee would suggest that Government should bring to the attention of all concerned *viz.*, the importers, manufacturers, trade, shippers, ship-owners, the imperative need for secure packing and bold marking of packages to facilitate identification and quick delivery.
48	127	The Committee are constrained to note the failure of the authorities to invoke till January, 1966 the provisions of Section 64A of the Bombay Port Act, 1879 for the sale of goods by public auction when they have not been removed within one month of their receipt, although the Act was amended in 1949 to provide for this particular Section. The Committee consider that if action had been taken earlier in accordance with the provisions of Section 64A, it would have provided the much needed relief in easing the congested conditions in the transit sheds.
49	128	The Committee are distressed to note that in spite of large quantities of fish and fresh fruit handled at the port annually, the authorities have so far neglected to provide proper cold storage facilities for those perishable goods. They have no doubt that the provision of these facilities would attract more traffic of this kind to the port. They hope that this deficiency would be removed by providing necessary cold storage facilities under the Dock Expansion Scheme.

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50	132	The Committee are concerned to note that the number of out-turn reports indicating the quantum/number of packages discharged from ships which are given after three months continues to be quite large. Moreover, the reports given after more than one year have increased from 23 in 1961-62 to 74 in 1964-65. They appreciate that port authorities have taken some steps to reduce this period but greater efforts are still called for for bringing about the desired improvements in this regard. The Committee would suggest that the following measures be considered urgently in order to reduce the period of the out-turn reports to the minimum: (i) continuous endeavours should be made to improve the tally by implementing effectively the incentive scheme and by maintaining careful supervision; (ii) prompt executive action should be taken in settling disputed items and in amending the out-turn report if a package is subsequently traced; (iii) attempts should be made to segregate the cargo consignmentwise and to simultaneously warehouse the entire cargo of a ship which remains uncleared after the expiry of the free days.

APPENDIX IX

(*Vide* Introduction)

Analysis of Recommendations/ Conclusions contained in the Report

I. CLASSIFICATION OF RECOMMENDATIONS

A. Recommendations for improving the organisation and working:

Serial Nos. 1, 2, 3, 5, 6, 7, 8, 9, 13, 14, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 38, 39, 40, 41, 42, 44, 46, 47, 49 and 50.

B. Recommendations for effecting economy:

Serial Nos. 4, 11, 12, 15, 22, 34, 37, 43 and 45.

C. Miscellaneous Recommendations:

Serial Nos. 10, 16, 28 and 48.

II. ANALYSIS OF MORE IMPORTANT RECOMMENDATIONS DIRECTED TOWARDS ECONOMY.

S. No.	S. No. as per Summary of Recommendations (Appendix VIII)	Particulars
(1)	(2)	(3)
1	4	Port authorities should intensify their efforts to achieve a better turn-round of ships as it has an intimate impact not only on the detention money paid but also indirectly on the freight charges levied by the Conference Lines. This has also an impact on our critical foreign exchange position as almost the entire extra charges for detention of ships have to be paid in foreign exchange.
2	11	The financial implications of development schemes together with their revenue earning potential should be worked out in detail in the very beginning so as to enable the Port authorities to carefully examine the effect of the estimated outlay on the port charges and the overall financial position of the port. The working out of these details would also prove helpful in controlling costs and exercising economy.
3	12	Consistent with the necessity of maintaining efficiency, the strength of the Engineering Departments of the Bombay Port Trust which are

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		associated with the execution of the Dock Expansion Scheme, should be kept to the minimum level necessary and utmost economy should be effected in the expenditure on the project as far as possible.
4	15	The Consultants should be given specific instruction to ensure the maximum utilisation of structures and equipments from indigenous sources so as to effect maximum economy in foreign exchange.
5	22	The fees of Consultants should be fixed in such a manner as to provide incentive for bringing about reduction in the costs of works. Government should review the whole matter and lay down principles for the payment of fees to the Consulting Engineers. Government/Port authorities should negotiate with the Consulting Engineers for adjusting their fees in respect of Dock Expansion Scheme and Master Plan in such a manner as to eliminate the accrual of fees on account of increases in cost of works due to extraneous factors.
6	34	The technical and economic feasibilities of the scheme offered by M/s Chowgule and Company for handling foodgrains at Bombay Port should be gone into fully with particular reference to its cost and period of implementation.
7	37	Since the feasibility of carrying out repairs to the submarine pipe line quickly and satisfactorily has been indicated by the experts of oil industries team, the need for constructing the overbridge from Butcher Island to Trombay, which is estimated to cost Rs. 3·5 crores should be examined carefully in consultation with technical experts.
8	43	The rates for letting out godowns in the port area, which are understood to be lower than the rates prevailing in private godowns in the vicinity of the port area, should be reviewed.
9	45	Every effort should be made for the proper storage of heavy machinery, particularly the sensitive ones, like scientific, electronic and electrical goods with a view to prevent them demage due to exposure to rain.