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Bangladesh

Post: Dhaka

Chittagong Port Overview and Other Inland Transportation

Report Categories: Agriculture in the Economy Agricultural Situation Grain and Feed

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Report Highlights:

Constructed in 1887 near the Karnafuli river channel and located approximately 16 kilometers upstream from the Bay of Bengal, the Chittagong Port (originally a river port) is the country's largest seaport. For fiscal year (FY) 2014-15 (July to June), according to Chittagong Port Authority data, the Chittagong Port handled 54.78 million metric tons (MMT) of shipments (total imports and exports were 48.94 and 5.84 MMT).

Executive Summary:

Constructed in 1887 near the Karnafuli river channel and located approximately 16 kilometers upstream from the Bay of Bengal, the Chittagong Port (originally a river port) is the country's largest seaport. For fiscal year (FY) 2014-15 (July to June), according to Chittagong Port Authority data (please see Table 5), the Chittagong Port handled 54.78 million metric tons (MMT) of shipments (total imports and exports were 48.94 and 5.84 MMT). Major imported commodities are food grain (e.g., wheat), cement, fertilizer, coal, salt, sugar, and edible oils. According to CPA statistics, the Chittagong Port receives on average 35,500 MT of food grain per month; in FY 2014/2015, the busiest month in terms of tonnage was April (around 44,700 MT).

General Information:

Overview for All Bangladesh Ports

Bangladesh has seaports, land ports, and airports (Please see Table 1) that support Bangladeshi and other South Asian regional trade (such as for Nepal, Bhutan, and northeastern Indian states). Shipments primarily transit via two seaports (Chittagong Port and Mongla Port), ten land ports (Benapole, Burimari, Akhaura, Sonamasjid, Hili, Banglabandha, Teknaf, Bhomra, Bibirbazar, and Nakugaon), and three international airports (Hazrat Shahjalal International Airport, Dhaka, Shah Amanat International Airport, Chittagong, and Osmani International Airport, Sylhet). According to sources, the seaports handle 87 percent of Bangladeshi trade, while land ports handle 13 percent. The Chittagong Port services 79% of Bangladesh's agricultural imports and exports. After imports arrive in Chittagong, they are transported inland by river, road, or railway (Please see Figure 3 and Table 6).

Ports	Quantity
Seaports	2
Inland river ports	22
Land ports (Active 10 and Inactive 10)	20
International airports	3
Domestic airports	6

Table 1. Bangladesh: Land and Sea Ports

Source: Ministry of Shipping, and Civil Aviation Authority

Chittagong Port Authority (CPA)

Constructed in 1887 near the Karnafuli river channel and located approximately 16 kilometers upstream from the Bay of Bengal, the Chittagong Port (originally a river port) is the country's largest seaport. The CPA's mandate is derived from the Chittagong Port Authority Ordinance – 1976 (Ordinance No. LII of 1976), which was published on July 7, 1976 (amended 1995). It is a member of the International Association of Ports and Harbors (IAPH) and oversees 15 departments. The Chittagong Port Authority has oversight over the Chittagong Port (CP), Inland Container Depot (ICD) Dhaka, River Inland Container Depot (RICD) Dhaka, and Sadarghat Jetty, Chittagong.

Table 2. Bangladesh: CPA General Information

- Maximum Permissible Draught: vessels range from 8.5 to 9.2 meters.
- Length overall (LOA): the maximum LOA of a vessel is 186 meters.
- Tidal Range: tides are semidiurnal with prominent diurnal effects. The approximate tidal range is between 2 and 5.5 meters.
- Pilotage: pilotage is compulsory because water levels are constantly changing.
- Radio Communication: the Port Radio Control Room can be contacted 24 hours/seven days per week via VHF over channel six, 12, and 16 or a 2182 KHZ/SSB transceiver.
- Anchorage: a special anchorage area has been established for scrap vessels and vessel employment.
- Night Navigation: ship movements are limited to vessels no longer than 153 meters LOA. A 24 hour prior notice is required for programming.
- Handling Capacity: at present, the CPA is handling over 41 million tons of cargo per year.
- Repair: the Chittagong Dry Dock can repair vessels up to 16,500 Deadweight tonnage; other private repair yards are also available.
- Airport: Hazrat Shah Amanat International Airport is eight kilometers from the port.
- Chittagong Export Processing Zone is located three kilometers from the port.
- Korean Export Processing Zone is under construction and located on the opposite bank of the Karnaphuli river.
- Karnaphuli Export Processing Zone is located four kilometers from the CPA.
- Land and River Transportation: the CPA is connected by road, rail, and river.
- Customs clearance: clearance can be conducted on-line.
- Vehicle Storage: space is available for around 5,200 vehicles.

Source: Annual report 2013-14, CPA

For fiscal year (FY) 2014-15 (July to June), according to CPA data (please see Table 5), the Chittagong Port handled 54.78 million metric tons (MMT) of shipments (total imports and exports were 48.94 MMT and 5.84 MMT). In general, May and June are the busiest months for overall trade; for the last five years, total shipments grew at 5.43 percent per year. Major imported commodities are food grain (e.g., wheat), cement, fertilizer, coal, salt, sugar, and edible oils. According to CPA statistics, the Chittagong Port receives on average 35,500 MT of food grain per month; in FY 2014/2015, the busiest month in terms of tonnage was April (around 44,700 MT). According to a World Bank Group assessment, on average it takes around 183 hours or 7.6 days to clear and unload shipments, which is high compared to other port authorities around the world.

The Chittagong Port can handle container vessels that carry loads of around 2,500 to 3,000 Twenty-foot Equivalent Units (TEUs) (more modernized seaports can purportedly handle container vessel loads of 5,000 to 18,000 TEUs). Within the last five years (2005-2014), the number of container vessels increased by 2.08 percent per year (Please see Figure 1 and Table 7). There are 16 private bonded offdock services; 37 types of commodities are authorized through these private services. In 2014, according to contacts, these private services handled 89.91 and 22.93 percent of total export and import volumes.

Government of Bangladesh data notes that the Chittagong Port has general and container berths and other jetties for oil, grain, urea, ammonia, fertilizer, and dry cargo. According to the CPA, the two

container berths have 19 jetties: two are equipped with four rail mounted gantry cranes, nine have container cranes, five have wharf rail lines, and 10 include transit sheds; there are pontoon berths for inland coasters and vessels. Transit sheds, warehouses, car sheds, and other cargo storage space are available; cargo can be stored in an unprotected warehouse or open dump area under CPA management. For cargo handling, the Chittagong Port has mobile cranes, forklifts, tractors, heavy and light trailers, and container cranes. The port has a maximum of 36,357 TEUs of cargo handling capacity. Electricity is available for 1,016 refrigerated containers, including eight megawatt (MW) (2X4) diesel generators (11 kilovolts (KV) output per unit). For more details, please see this website: <u>Chittagong Port Authority</u>. For port facility service charges please see <u>CPA Tariff of Goods and Vessels</u>. For custom clearance services, please see <u>Stakeholder's List of Custom Houses, Chittagong</u> and <u>Chittagong Customs Clearing and Forwarding Agents Association</u>.

Transportation by Rail, River, and Road

Railway Transportation and the Inland Container Depot (ICD), Dhaka

The ICD, Dhaka can provide customs clearance for imports. Under the Bangladesh Railway Department, 450 Bogie Flat Container Trucks (BFCTs) are available to move shipments from Chittagong to Dhaka. On average, two trains carry 62 BFCTs (in total) per day; a one-way trip is approximately 18 to 24 hours. It takes six hours to unload 31 BFCTs from one train. According to contacts, it takes approximately three to five days to clear shipments at ICD, Dhaka. There are no refrigerated containers available. Post sources believe the minimum cost of transporting a 20 by 8.5 foot container weighing up to 15 MT by train is \$114. The ICD, Dhaka can store up to 3,927 TEUs per day. For more details, please see this website: Inland Container Depot, Dhaka.

Type of equipment	Quantity
Reach Stacker	2 (lifts up to 45 tons)
Forklift	4 (lifts up to 42 tons)
Reach Stacker	1 (lifts up to 7 tons)
Low Mast Forklift	6 (lifts up to 3 tons)
Tractor Trailors	8
Railway Wagons for Container Transportation	550
Railway Terminals (length of tracks)	1,097 meters

Table 3. Bangladesh: Equipment Available at ICD, Dhaka

Source: Overview 2015-16, CPA

River Transportation and the River Inland Container Depot (RICD)

In November 2013 the CPA and Bangladesh Inland Water Transportation Authority (BIWTA) established a river container depot called Pangaon, RICD (located outside Dhaka) at the bank of the Buriganga River. The terminal is 32 acres and has two berths. The length of the jetty is 180 meters (two ships no longer than 70 to 75 meters can berth simultaneously); the port has a capacity of 2,400 TEUs. The distance from the Chittagong Port to RICD, Dhaka is 157 nautical miles; the draft of the Buriganga river is 4.5 meters. According to sources, three private vessels are also available to ship containers from Chittagong to RICD, Dhaka; each vessel can carry containers up to 128 TEUs. Sources believe that high

transportation costs, terminal fees, and other challenges have caused traffic to RICD, Dhaka to decline in recent years. For more details, please see this website: <u>Pangaon Inland Container Terminal</u>.

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Year	Import	Import	Export	Export	Total	Total
	Boxes	TEUs	Boxes	TEUs	Boxes	TEUs
2013-14	241	419	189	323	430	742
2014-15	110	170	174	313	284	483

Table 4. Bangladesh: Cargo Handled at Pangaon, RICD

Source: Overview 2015-16, CPA

Highway Transportation and Private Off Dock/ICD services

It takes approximately 12 to 15 hours (242 kilometers) to transport goods by road from the Chittagong Port to Dhaka. Industry contacts note that the estimated transportation cost for a 20 and 40 foot container is \$190 to \$202 and \$278 to \$291. There are a very limited number of service providers that offer refrigerated trucks. For list of offdock service providers, please see this website: <u>Offdock at Chittagong Custom House</u>.

Other Ports and Development Activities

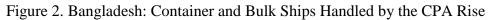
The Mongla seaport is the country's newest seaport (constructed in 1978) and located at the Passur river's east bank in Khulna district; it has five jetties. The Bangladesh government is constructing a third seaport at the Ramnabad Channel. This new port will be 31 kilometers from the sea, 130 kilometers from Mongla port, and 16 kilometers from Chittagong. For more details on the Mongla seaport, please see this website: <u>Mongla Port Authority</u>.

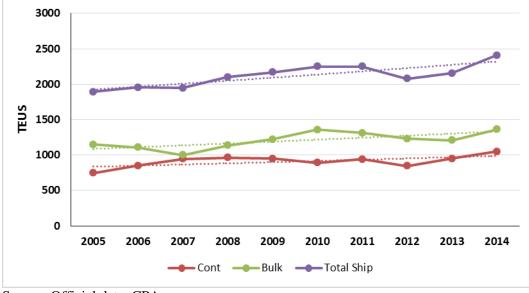
Challenges

In the last couple years, political unrest such as strikes delayed the handling and transportation of shipments from the CPA to inland ports or other end users. Reportedly, the strikes did not result in any damage to shipments stored at the CPA since they were inside a protected area; however, there were media reports of vandalism while goods were in transit to other outside destinations in Bangladesh (particularly by road).



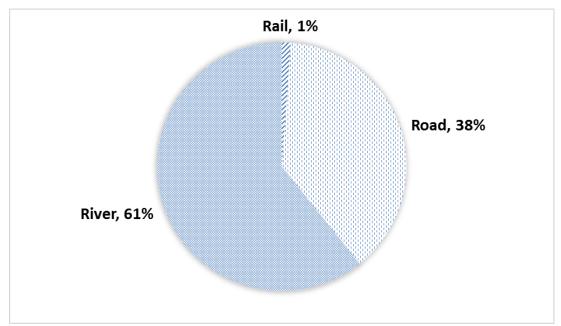
Source: http://www.jfbd.com/bangla_seaports.p





Source: Official data, CPA

Figure 3. Bangladesh: Most Shipments Transshipped by River from the CP



Source: Annual report 2013-14, CPA

Table 5. Bangladesh: Bulk Products Cargo Handled by CPA and Transshipped Inland

Year	Imported via CP (MT)	Exporte d via CP (MT)	Total Trade CP (MT)	Inland transshipmen t (MT)	Transshipmen t to ICD (MT)	Total Handling (MT)
	а	b	с	d	e	(c + d + e)
2010	39,914,14	4,980,37	44,894,52	4,772,786	532,053	50,199,35
-11	5	5	0	4,772,780	552,055	9
2011	36,184,93	4,716,37	40,901,30	6 5 4 9 4 0 0	570 141	48,021,94
-12	5	4	9	6,548,490	572,141	0
2012	38,312,02	5,059,64	43,371,66	(007 047	457 550	49,917,17
-13	8	0	8	6,087,947	457,559	4
2013	41,960,17	5,338,37	47,298,54	5 922 796	445,218	53,577,55
-14	0	7	7	5,833,786	445,218	1
2014	48,941,40	5,839,98	54,781,39	6 460 672	474 800	61,725,86
-15	6	6	2	6,469,673	474,800	5

Table 6. Bangladesh: Containers Handled by the CP and Dhaka ICD (DICD)

T 7	СР	СР	СР	СР	СР	СР	DICD	DICD	DIC D	DIC D
Yea r	Impo rt	Import	Expo rt	Export	Total	Total	Impo rt	Impo rt	Expo rt	Expo rt
	TEUs	Tons	TEUs	Tons	TEUs	Tons	TEUs	Tons	TEUs	Tons
201	729,69	11,071,8	739,22	4,511,2	1,468,9	15,583,0	32,238	282,15	32,949	119,52
0-11	3	26	1	73	14	99	52,230	6	52,949	3
201	675,79	9,439,98	667,61	4,398,8	1,343,4	13,838,8	33,123	315,54	33,582	123,18
1-12	6	7	2	15	08	02	55,125	4	55,562	7

201 2-13	743,54 7	9,928,30 0	725,16 6	4,627,8 34	1,468,7 13	14,556,1 34	31,053	323,99 3	31,585	133,56 6
201 3-14	812,91 8	11,125,3 48	812,59 1	5,012,4 27	1,625,5 09	16,137,7 75	30,177	315,11 8	29,807	130,10 0
201 4-15	940,82 7	13,132,9 23	926,11 5	5,535,4 46	1,867,0 62	18,668,3 69	18,243	193,25 2	18,588	61,973

Table 7. Bangladesh: Vessels Handled by the CP

Yea	Ships Berthed	Ships Berthed	Ships Berthed	T/A Time	T/A Time
r				(days)	(days)
_	Container	Bulk	Total Ship	Container	Bulk
200					
5	744	1,148	1,892	4.08	5.02
200					
6	851	1,106	1,957	7.1	5.01
200					
7	946	999	1,945	5.02	5.44
200					
8	962	1,137	2,099	2.48	8.78
200					
9	947	1,220	2,167	2.48	8.02
201					
0	890	1,359	2,249	4.31	7.92
201					
1	938	1,310	2,248	3.2	7.03
201					
2	845	1,231	2,076	3.23	6.3
201					
3	947	1,209	2,156	3.37	5.94
201					
4	1,047	1363	2410	3.17	5.15

Source: Official data, CPA

Table 8. Bangladesh: Products Imported through the CP

Yea r	Food grain (MT)	Cement (MT)	Fertiliz er (MT)	Sugar (MT)	Edible Oils (MT)	Petroleu m (POL) (MT)	Others (MT)	Total (MT)
2009	3,337,83	8,683,87	1,604,13	1,356,85	1,373,68	4,029,92	12,119,3	32,505,6
-10	3	5	3	4	1	9	21	26
2010	4,717,19	11,479,3	1,894,27	1,370,67	1,327,71	4,971,16	14,072,5	39,832,9
-11	5	77	0	9	6	1	82	80
2011	1,957,68	11,023,4	1,541,96	1,863,56	1,626,71	5,381,53	12,790,0	36,184,9
-12	5	32	8	3	8	3	36	35
2012	1,428,49	12,031,4	1,467,55	1,474,51	1,614,21	5,371,99	14,394,8	37,783,0
-13	1	61	4	6	8	0	36	66

-14 6 24 4 5 8 6 27 70	2013	2,072,15	13,580,4	1,256,45	2,044,21	1,710,79	5,576,29	15,719,8	41,960,1
	-14	6	24	4	5	8	6		70

Source: Annual report 2013-14, CPA

Trade 9. Bangladesh: Transshipment of Dry Cargo to Inland Cleared from the CPA

Year	Rails	Road	River	Total
2012-13	463,335	13,899,940	22,134,458	36,497,733
2013-14	456,405	15,037,188	23,955,040	39,448,633
<u> </u>			•	

Source: Overview 2015-16, CPA

Table 10. Bangladesh: Containers handled by the CPA and Private ICD

Year	Container handled by CPA (TEUs)	Container handled by Private ICD (TEUs)
2010	1,343,448	990,512
2011	1,392,104	948,709
2012	1,406,456	1,086,998
2013	1,541,517	1,116,260
2014	1,931,219	1,259,872

Source: Bangladesh Inland Container Depots Association (BICDA)

Table 11. Bangladesh: Facilities for Ocean Going Vessels at the CP

	Berths and Product Handled	Quantity of Berths	Description
a.	Berths Owned and Operated by CPA		
	General Cargo Berths	6	
	Container Berths	14	
b.	Specialized Berths for Bulk Handling		
	1. Dolphin Oil Jetty (for POL)	03	For handling crude and product oil vessels of up to 186 meters
	2. Grain Silo Jetty	1	Vessels up to 186 meters
	3. Cement Clinker Jetty	1	Vessels with LOA up to 161 meters with maximum draft 9.15 meters and vessels with LOA up to 170 meters with max draft 8.6 meters
	4. TSP	1	Vessel up to 175.25 meters
	5. Chittagong Urea Fertilizer Jetty	1	Vessels up to 176 meters and can be loaded up to maximum draft of 8.5 meters
	6. KAFCO Urea Jetty	1	Vessel having LOA of 186 meters will be allowed to take berth at KAFCO (Urea)
	7. KAFCO Ammonia Jetty	1	Vessel having LOA up to 186 meters at KAFCO (Ammonia) jetties can be loaded up to a maximum draft of 9.2 meters.
	Repair Berths:		
	8. Dry Dock Jetties	3	
c.	Mooring Berths		

River Moorings	4	
No. 3		Vessels up to 182.9 LOA and 7.76 meters draft for edible oil and POL in bulk
No. 8		Vessels up to 186 meters and 8 meters draft for vegetable oil carrier
No. 9		Vessels up to 186 meters and 6 meters draft for repair of vessel / laying off.
No. 10		Vessels up to 145 meters LOA and 7.5 meters draft for repair of vessel / laying off.
Total		

Table 12. Bangladesh: Facilities for Inland Coasters and Vessels at the CP

Sl. No.	Type of Berths	Quantity of Berths
1.	Jetty Berths (For POL)	1
2.	Concrete Berth (For Grain Handling)	1
3.	Pontoon Berths (For POL)	3
4.	Pontoon Berths (For Cement)	1
5.	Single Point Mooring	14
	Total	20

Source: Overview 2015-16, CPA

Table 13. Bangladesh: Protected and U	Inprotected Area Cargo	Storage Space at the CP

A) Protected Area	Quantity	Square Meters	
Transit sheds 1-9	9	64,364.7	
Warehouses D,F,P,O	4	20,712.41	
Car Sheds (P Shed & F Shed)	1	8,696.63	
Open Dumps	-	90,000	
B) Outside Protected Area:			
Warehouses	6	25,179.36	
Open Dumps	2		
Food department (Grain Silo), TSP Complex, Cement Clinker Grinding Company and different oil			
companies have their own storage facilities (covered and open) adjacent to their respective berths.			

companies have their own storage facilities (covered and open) adjacent to their respective berths. Source: Annual report 2013-14, CPA

Table 14. Bangladesh:	Warehouses at the CPA	(Protected Area)
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Shed	Square Meters	MT
A. Shed	2,436.8	1,048.8
B. Shed	277.81	1,196
D. Shed	1,108.73	477.2
F. Shed	8,696.63	3,742.6
G. Shed	9,409.85	4,050
H. Shed (CFS)	1,543.4	664.28
L. Shed	1,911.33	822.64

M. Shed	8,084.1	3,479.4
N. Shed (CFS)	8,084.1	3,479.4
O. Shed (CFS)	8,084.1	3,479.4
P. Shed	2,822.95	1,215
R. Shed (CFS)	1,881.97	810.22
Shadarghat Shed	3,808	5,428
Total	60,650.77	29,892.94
Others		
Baggage Shed	1,789	
X Shed (for Tea Export Cargo)	9,535.68	4,104.16
Y Shed (for Tea Export Cargo)	9,293.68	4,000
Automobile Shed	2,258.36	500

Closed Space Outside Port Protected Area	Capacity	
Cold Storage (Sadarghat)	1,055 square meter to store 500 tons	
Godown No. T-06	1,420 square meters	
Godown No. T-07	1,420 square meters	
Godown No. T-08	1,750 square meters	
Godown No. T-09	1,755 square meters	
Grain Silo	170,000 MT capacity for bulk wheat	
T.S.P Complex	127,500 MT	
Cement Clinker	40.80 CMT	
Open space within Port Protected		
Area		
R. C. C. pavement	17,366.16 square meters	
Brick pavement	5,639.00 square meters (at the Sadarghat L. J. River Port	
	near Dhaka)	
Container yard: Main Jetty	161,418 square meters ** Multipurpose Berth: 150,000	
	square meters	

Table 15. Bangladesh: Protected and Unprotected Closed and Open Space at the CP

 Table 16. Bangladesh:
 Electrical Power Supply Facilities at the CP

Sl. No.	Type of equipment	Capacity	Quantity	Remarks
1	Stand by	2.0 megawatt	4	For continued uninterrupted power

	diesel	(MW), 11 KV		supply throughout the port area in case
	generator set	output		of power failure from Power
				Development Board (PDB) source.
	Stand by	2.5 MW, 11		For continued uninterrupted power
2	diesel	KV output	1	supply throughout the port area in case
	generator set	K v Output		of power failure from PDB source.
	Solar papal	18 kilowatts		For the lighting system of the Port
3	Solar panel power system	with 4 hour	1 Set	Administrative Building's main
	power system	output		building.
4	Reefer point	440 volts	1.016	For providing power supply to reefer
4	facility	440 VOIts	1,016	containers in the port protected area.

Equipment	Lifting Capacity	Quantity
Mobile Crane	10-50 MT	45
Forklift Truck	10-20 MT	6
Forklift Truck	3-5 MT	96
Industrial Tractor	25 MT	11
Heavy Trailer	20-25 MT	5
Light Trailer	6 MT	30
Share Crane	2-3 MT	19

Table 17. Bangladesh: General Cargo Handling Equipment at the CP

Table 18. Bangladesh: Container Handling Facilities at the CP

Facilities	Quantity/measurement
Holding Capacity (GCB+CCT+NCT+NCY)	36,357 TEUs
Yards	20
Container Freight Stations at GCB (05 Nos.)	45,064 square meters
Container Storage yard at GCB	282,239 square meters
CFS at CCT	13,671 square meters
Container Storage yard at CCT	150,000 square meters
Container Storage yard at NCT	225,000 square meters
Container Storage yard at NCY	63,000 square meters
Railway Container Siding	550 meters
Reefer Points	900 (415 volts) points
Standby Generator -8 MW (2*4)	8 MW (2*4)
Water Reservoir	140,000 gallons

Fire Brigade	1 unit	
Source: Overview 2015-16, CPA		

Equipment	Lifting Capacity	Quantity
Quay Gantry Crane	40 MT	4
Mobile Harbor Crane	84 MT	2
Rubber Tyred Gantry Crane	40 MT	19
Straddle Carrier (02 High)	40 MT	2
Straddle Carrier (04 High)	40 MT	36
Reach Stacker (RS)	45 MT	11
Forklift Truck	25-42 MT	5
Forklift Truck (Spreader)	7-16 MT	19
Reach Stacker	7 MT	6
Container Mover	50 MT	5
Terminal Tractor	50 MT	43
Terminal Trailer	50 MT	55

Table 19. Bangladesh: Container Handling Equipment at the CP

Table 20. Bangladesh: Jetties at the CP

(1) L.J.	Permanent cement concrete jetty with a 122 meter jetty at Sadarghat River Port for
NO.1	coasters and inland vessels up to 70 meters length (dry cargo).
(2) L.J.	Pontoon and shore connections (at New Mooring) for coasters and inland vessels up
No.2	to 76 meters (dry cargo).
(3) L.J.	Pontoon and shore connections (Jamuna) for inland tankers and vessels up to 76
No.3	meters (POL in bulk).
(4) L.J.	Pontoon and shore connections (Meghna) for inland tankers and vessels up to 75
No.4	meters (POL in bulk).
(5) L.J.	Pontoon and shore connections (ITT) for inland tankers and vessels up to 75 meters
No.5	(edible oil in bulk).
(6) L.J.	Cement concrete jetty (PADMA) for inland tankers and vessels up to 70 meters (POL
No.6	in bulk).
<u> </u>	