Warehouse and Transport Facilities in the Port of Calcutta, 1870s-1950s

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This paper looks at the development of the port facilities in Calcutta from the third quarter of the nineteenth century. It specifically looks at the way goods were brought to the port, stored there, and then shipped or transported to other areas. This modes and mechanism of the port facilities have been studied keeping in mind the general political and economic backdrop of the times. The paper will look at the inter-Asian connection where Calcutta port played a pivotal role in forging maritime as well as overland trade networks during the late nineteenth and early twentieth centuries. Major events of the world had direct impact on the ways in which the port of Calcutta functioned over the years. Industrial growth in India and massive increase in import/export trade necessitated rapid development of port facilities in Calcutta. While sharing the major percentage of export trade in India during the early half of the twentieth century, the Calcutta port also emerged as the crucial entry-point for goods aimed at the wide sway of eastern and northern provinces of the subcontinent. Excellent transport routes, especially the railways, acted as a catalyst for the trading activities of the port. Despite unfavourable geographical features, the Calcutta port became the leading centre of trade and commerce for the colonial state in India. The Calcutta Port Trust was officially established in 1870. It made rapid advances in building additional jetties, streamlining dock logistics and cargo handling. In this paper I will focus on two important aspects of this enterprise. First, I will study the role of warehouses in facilitating the trading activities of the port, and secondly, I will analyze the crucial part played by the transport system in aiding the movement of goods to/from the port area. Before going into the details of these activities, let me first briefly outline the larger political and economic context of the paper.

S. C. Stuart-Williams, first the Vice-Chairman and then the Chairman of the Calcutta Port Commissioners in the 1920s, delineated the area under the Calcutta port system to an audience in London in the following manner: The jurisdiction of the Calcutta Port Commissioners is of two kinds, namely, that within the port proper, which now commences at Konnangar, eight miles above Calcutta, and terminates at the subsidiary oil port of Budge Budge, thirteen miles below Calcutta, and also the more limited jurisdiction over the headwaters of the river and Port Approaches, the former of which commences at Kalna, seventy miles above Calcutta, terminating at the upstream limit of the port proper, and the latter commencing at Budge Budge, and terminating at the Sandheads. The whole of their jurisdiction thus comprises nearly 200 miles of river proper, its headwaters and the estuary.¹

Stuart-Williams located a new phase starting in the 1880s in the development of the Calcutta port complex. This was facilitated by the increase of import trade which brought about a corresponding increase in the export trade as well. There was a greater demand for facilities to accommodate steamers which were then replacing the sailing vessels. The capacity of the docks was stretched to twenty-seven berths, of which seventeen were devoted to the export trade. He noted that, "In this period the accommodation available may be said to have been definitely overtaken by the demands of the trade..."² Many new additions to the dock complex were proposed. But the World War I halted the process. As Stuart-Williams mentions, "The war brought about a large reduction in the tonnage of vessels visiting the port, a huge drop in imports and the practical disappearance of the coal trade, leaving only the general export trade...c."³ Also, he lamented that

...a considerable portion of the plant of the port was commandeered for service in other ports of the Empire. The third suction dredger then under construction, a number of cranes, railway wagons, launches, and building material were all commandeered, and

¹ S. C. Stuart-Williams, 'The Port of Calcutta and its Post-War Development', *Journal of the Royal Society of Arts*, July 20, 1928, p. 891.

² Ibid, p. 895.

³ Ibid. p. 896.

although the Trust received compensation, the net loss then incurred reached a very heavy sum, owing to the unprecedented and unexpected costs of replacement.⁴

The post-war era put a lot of pressure on the Commissioners to replace the material at the port as cost of finance was almost 50 to 75 per cent higher than the pre-war period. Up till 1921, little addition was made in the Calcutta port. It took some time to restore the port in its previous condition. As for trading activities, Nilmani Mukherjee in his history of the Calcutta port writes that in the post-war era, "[i]mprovement in trade conditions was painfully slow but the growth of trade was undisputed. In 1924-25 it was officially noted that the port was slowly regaining the old pre-war figures of general import traffic while it exceeded these figures in the case of general export."⁵ Also, a new phase of activity started with the construction of four general berths at Garden Reach area and the building of the King George's Dock which increased accommodation facilities enormously. The new dock was opened in February 1929. Though trade surged ahead during 1929-30, the Calcutta port was soon hit by the Depression. Considerable portion of the available accommodation remained unused during these years. Construction of additional berths were stalled. The tide seemed to turn in around mid-1930s with improved trade conditions. The Calcutta port benefitted from "[h]eavy imports of rice from Burma in 1934 and after, of steel and machinery and of Java sugar and Australian wheat in 1938-39 and the improvement in the shipment of coal, pig iron and manganese ore..."⁶ However, the Commissioners of the port were also concerned with the question of export of Indian sugar through the Calcutta port to other ports of India. They knew that this traffic had to compete with Java sugar. They wanted the government to keep port charges low for this sugar, and the government obliged.⁷ The port authorities were trying various methods to stabilize the trade situation, and it was important to augment the export trade. These steps, however, received a severe jolt with the outbreak of the Second World War. This time, the port of Calcutta got directly involved in the war efforts of the Allied group, with South-East Asia being a major theatre of the war. Considerable quantities of Army Stores occupied the berths at the docks. General trading activities got halted. Japanese air

⁴ Ibid.

⁵ Nilmani Mukherjee, *The Port of Calcutta: A Short History*, Calcutta: 1968, p. 125.

⁶ Ibid., p. 150.

⁷ Government of Bengal, Marine Deptt, Proceedings B, Nos. 241-244, January 1935, NAI.

raids proved detrimental from the point of view of labour, as some died and many deserted the dock area. The main problem for the Commissioners during the war-years was regarding the slow clearance of material which congested the berths and warehouses.

This ebb and flow of trading activities, connected with the general political and economic condition of India as a colony of the British Empire, shaped the ways in which the port complex developed in Calcutta. I will focus on the accommodation and transport facilities connected with the port to delineate the different mechanisms that were put in place to produce the space of the port. The micro-stories will give us a glimpse of the situation on the ground, and how large numbers and grand strategies were played out on the site.

Warehouse:

By the mid-nineteenth century, due to the massive increase in trade, more storage space was required in the port area of Calcutta. Between 1850s and 1880s, trade in jute, cotton and tea multiplied enormously. Calcutta was the main centre for imports of cotton piece goods. And from here they were distributed throughout the hinterland that comprised provinces of Assam, Bengal, parts of northern India and central India.⁸ In the 1870s, export trade of tea increased in leaps and bounds. The Port Commissioners decided to build a tea warehouse on Strand Bank to accommodate this increased volume of trade. However, initially the Bengal Chamber of Commerce criticized the step as it believed that the taking up of land on the Strand would interfere with private enterprises. Even during the turmoil regarding the location of the warehouse, the Commissioners went ahead with other relevant issues associated with building of the warehouse. In 1876 they asked all the mercantile firms who were involved in tea trade to get back to the Commissioners about designs for a suitable building. Twenty-two firms responded positively to the entire scheme. A Sub-Committee was formed to look after the construction of the warehouse. The sub-committee met thrice to discuss the building-plans, the mode of working and the scale of charges. A circular was issued with the proposed scale of charges, and the Commissioners asked the firms that if those charges were levied in the warehouse whether the firms would be interested in the trade. The tea-brokers were adverse to the entire scheme from

⁸ Arun Bandyopadhyay, 'Realms of Imperialism', in *Port of Calcutta: 125 Years, 1870-1995*, Commemorative volume, Calcutta Port Trust, p. 20.

the outset, but the firms were more or less favourable to the project.⁹ After various contestation and negotiation, the tea warehouse at the Armenian Ghat was ultimately made available from 1887.

Before dealing further with other warehouses let us first briefly look at the legislative history regarding warehouses and allied issues. Under Act XXV of 1836, Governor of any Presidency could declare any port within his territory as a 'warehousing port'. The Act made a distinction between 'public' and 'private' warehouses. It stated that "the Warehouse of the Custom House, together with such other Buildings as shall be directed by the Governor in Council, or Governor of the Presidency, or Settlement, shall be Public Warehouses for the reception of the Goods under the provisions of this Act." It further elaborated that, "every Public Warehouse shall be under the lock and key of the person whom the Governor, or Governor in Council of the Presidency, shall appoint to be responsible for all duties connected with the charge of Goods, their reception into, and delivery from the Warehouse."¹⁰ The Act issued orders to private warehouses to get license from the government to be able to take part in the business of these ports. And to get the license they had to follow a series of procedures and regulations.¹¹

The Licensed Warehouse and Fire Brigade Act of 1893 provided for the levy of special taxation for the maintenance of the Calcutta Fire Brigade. The taxation was put in the form of licenses for warehouses used for the storage of inflammable goods. The Corporation of Calcutta issued the licenses for the warehouses, which were done after consulting the Commissioner of Police. The amount was determined as an annual fee not exceeding 10 per cent of the annual assessment.¹² The Act, however, divested the Calcutta Commissioners of all responsibility for the control and administration of the Fire Brigade. They were also not required to inspect and supervise the warehouses. With this, the Jute Department which was till then maintained as a branch of the License Department was abolished.¹³ Previously, when large premises in Darmahatta and Armenian Streets were burnt down in 1871, the Justices were forced to look into the condition of warehouses storing inflammable items like jute and cotton, and to maintain the

⁹ Port Commissioners Report 1877, p. 31.

¹⁰ The Bengal and Agra Annual Guide and Gazetteer for 1841, Vol. 1, part II, p. 161.

¹¹ The Bengal and Agra Annual Guide and Gazetteer for 1841, Vol. 1, part II, pp. 158-164.

¹² Report of the Committee of the Bengal Chamber of Commerce for the year 1912, p.55.

¹³ S. W. Goode, *Municipal Calcutta*, p. 282.

Fire Brigade on a more efficient footing. Under Jute Warehouse Act II of 1872, licensing of warehouses was made more stringent, regular magisterial inspection was ordered and the various municipalities of the town and suburbs were ordered to maintain an efficient fire brigade. The cost of the fire brigade was charged to the individual municipalities. Apart from the fees levied on the jute merchants, "a rate was realized from the Fire Insurance Companies", which, as Goode mentions, was "calculated upon the amount of premia received by them. The amount raised by these means was large enough to enable Government between 1872 and 1881 to expend more than 1 ¹/₄ lakhs of rupees out of the surplus of the Fire Brigade Fund on works of public improvement."¹⁴ The Act V of 1879 moderated the severity of the assessments by including more items as taxable material. Under this Act, the Jute Warehouse Fund was established. The town and suburban commissioners could use this fund to maintain the fire brigade and pay all expenses for the inspection and supervision of the jute warehouses. In 1890, the Bengal Chamber of Commerce protested against this Act, as it was seen that the burden fell almost entirely on one industry-jute. A committee was appointed to look into the problem. Finally, the Act of 1893 was passed where only half of the annual cost of maintaining the Fire Brigade was to be derived from the license fees of the warehouses, the other half would come from municipal revenues.¹⁵ Issues of safety and security measures undertaken in the warehouses were crucial for the business. Often fire would destroy large quantity of goods.¹⁶ Also, erosion in the river bank created cracks in the stone foundation as well as the wall of jute and tea warehouse.¹⁷ The successive Acts regarding safety from fire repeatedly take note of the condition of the warehouses in the city. Through series of regulation, license system and taxation the town authorities tried to maintain the functioning of the warehouses. As trading activities increased, port and town authorities had to make provisions for safety and security of the warehouses, keeping an eye on the revenues as well.

With the formation of the Port Trust many new warehouses were soon proposed. A jute warehouse was planned on a portion of Strand Bank land between Ahiritolla Ghat and the Mint

¹⁴ S. W. Goode, *Municipal Calcutta*, pp. 282-283.

¹⁵ Ibid. p. 283.

¹⁶ TOI, Dec 20, 1907; Oct 21, 1931.

¹⁷ TOI, Mar 2, 1955.

in 1872. The advantages of this particular site were eloquently articulated by the Commissioners to the Justices and the government. The port authorities mentioned that,

The lands are separated from the town by the Strand Road, and are thus so isolated as to ensure comparative safety to the town buildings in the event of fire originating in the proposed warehouses. Having a river frontage, and on the land side the tramway, when [it] is to be constructed in connection with the whole municipal system and with the Eastern Bengal Railway, there is every facility for the easy conveyance to the site of all raw material brought to Calcutta either by the Eastern Bengal Railway or by river steamers and flats, and for removal of exports when prepared and ready for shipment by the tramway, which will be in direct communication with the jetties.¹⁸

The reasons were compelling enough and the plan was sanctioned by the government. A loan of Rs. 2 Lakhs was granted to the Commissioners to construct the warehouse.

The government in Bengal had been contemplating the construction of wet-docks from the 1830s. Diamond Harbour, in the south of Calcutta, was thought to be an ideal spot. In the 1880s, the scheme was given fresh impetus. The Diamond Harbour wet-dock scheme was, however, opposed by the mercantile community in Calcutta. They argued that it would mean additional investment on their part in transferring the current activities to another port. They wanted the government and the port trust to first look into all the probable spots in and around the Calcutta port for additional space and building the wet-docks. Finally, this opposition proved vital in initiating the construction of the wet-docks at Kidderpore.¹⁹ But, as the Commissioners' report suggest, more than the wet-docks, more storage space was needed in the vicinity of the Calcutta port. The committee formed to look into the provision of a railway junction and a bridge over the Hooghly stated that,

As regards the convenience of the trade of Calcutta, there seems little to choose between any site along the canals and Circular Road, from Chitpore to Sealdah. The main

¹⁸ Financial Department Proceedings, Accounts 'A', February 1873, Nos. 55-57, NAI.

¹⁹ *Report on the Construction of Docks in the port of Calcutta*, Selections from the records of PWD, 1885, p. 199.

business in warehousing...is carried on in the part of the city bordering on to the Hooghly between the Custom House and Chitpore, and all points on the line named would be nearly equidistant from the centre of this class of business.

It is a fact sufficiently attested that the trade of Calcutta, as now conducted, requires that the mass of the goods for export (which form the most important part of the goods dealt with by the Railway Companies) shall be re-packed in Calcutta. This involves their delivery by cart at the warehouses of dealers. Probably the formation of wet docks, with warehouses attached, might hereafter, in some measure, change the habits of the trade, but meanwhile the requirements of the existing state of things must be met. Hence a large ordinary goods station must be formed, suitable for the present condition of business, quite irrespective of the question of docks.²⁰

The Committee appointed by the commissioners in 1881 suggested that a new line of warehouses were needed to be constructed as soon as possible to ease the heavy pressure of increased goods in the port. Limited covered space was available in the port area, and that caused much problem for the business. As the report mentioned that "the sheds become crowded with goods almost immediately after a ship commences her discharge; and when two ships occupy the berth one after the other, each bringing a large cargo, the work of sorting and delivery becomes most difficult, and is the cause of frequent complaints."²¹ In view of this the need for new warehouses were acutely felt, which would, as the report mentioned, "enable the Calcutta jetties to meet the demands of a growing trade, and compete on more equal terms with the appliances existing in other ports."²² In February 1882, the first block of warehouses at No. 1 jetty was commenced. Another block was sanctioned by the government in 1882 at No. 3 jetty which was entrusted to Messrs. S C Mitter and Company.²³ But before giving the go-ahead, the government had its doubts. The British Indian Association and the Municipality feared that the new warehouses

²⁰ Report of the Committee appointed to consider and report on the Junction of the East Indian Railway with the Eastern Bengal Railway by a Bridge over the Hooghly; on the formation of Wet Docks; and on other matters connected with the convenience of the Trade and Shipping of Calcutta, in Report on the Construction of Docks in the port of Calcutta, Selections from the records of PWD, 1885, p. 58.

²¹ Port Commissioners' Report, 1881-82, p. 22.

²² Ibid.

²³ Port Commissioners Report, 1882-83, p. 3.

would diminish the value of privately-owned resting sheds in the city. The proposed project of the Commissioners seemed to give the impression that the new warehouses were being built for the purpose of renting them to the merchants and traders, opined the Lt-Governor. The Commissioners replied "that the new warehouses were intended to supplement and relieve the existing jetty sheds, and that there was no intention to rent them out for business unconnected with the landing or shipment of goods through the jetties."24 In the opinion of the Commissioners, regular importers or exporters would find it convenient "to rent a certain space in the new warehouses for the storage of their goods pending dispatch or shipment instead of keeping them in the ordinary jetty sheds where examination and assortment of the goods was rendered difficult in consequence of the goods of different firms being mixed together."²⁵ The Commissioners contended that this use of warehouses "was a legitimate one and was in accordance with the practice in all large ports."26 The Municipal Commissioners of the town raised an objection regarding building an elevated structure on the Strand Bank, following the instruction given by the Governor of Bengal in 1852 when this piece of land was acquired by the government for public utility. The Lt-Governor thought that the warehouse was a necessary structure for the advancement of trade and was not antithetical to the use of that piece of land for the good of the general public. These objections and negotiations reveal the difficulties associated with the initial phase of construction of warehouses in the port of Calcutta. Issues regarding private property, proper use of land, trade charges, backing from the mercantile firms and the views of the Port Commissioners about modern port facilities jostled with each other to establish the warehouses.

However, we must also keep in mind that often it was not only an issue of accommodation at the port; rather the dues charged on merchandise became a crucial factor for trading activities of a port. In 1885, various merchants, mill-owners, and jute balers wrote a letter to the Lt-Governor of Bengal regarding the bill in the Bengal Council giving the charge to the Port Commissioners to build docks at Kidderpore and to raise loans for that purpose. They, however, thought that at present it was not necessary. They pointed out that "the export trade of Calcutta has lately shown unmistakeable signs of falling off, and that what is required at present

²⁴ Port Commissioners Report 1882-83, p. 22.

²⁵ Ibid.

²⁶ Ibid.

is not so much additional docks and jetties, as that the charges of the Port should be decreased to enable Calcutta to hold its own against Bombay and Sindh."27 The merchants noted that considerable additions were made at the Howrah terminus of the East Indian Railway which enhanced the prospects of export trade enormously. Increased accommodation in the port would only be needed if export trade grew. But with the proposed dues to be levied in the new dock, the merchants believed that instead of facilitating the growth of trade the dues would in effect render useless any additional space as the cost of export would increase enormously. The chief items of export at that point of time were jute, wheat, rice, gunny bags and oilseeds. These might need further space in the docks but if trade decreases due to the increased rate of customs, any new development at the port would be practically of no use. For instance, in case of jute, the merchants mentioned that "the present practice [was] for the raw fibre to be pressed into bales, at different press houses on the river bank, and for it then to be loaded into cargo boats, and sent alongside the export ship, at a cost of from 10 annas to Re. 1 per ton."²⁸ They feared that this system would be under threat when the new dock with increased dues starts functioning. They apprehended that, "As the dock dues proposed to be levied on this article are Re. 1 per ton, it is obvious that so far from being a boon, the docks will increase the charges on this fibre."²⁹ Trade in gunnies and rice would also face similar problem. For these merchants and jute-balers, more than any increased facilities at the port, a reduction in the charges was desirable. The trade handled at the port did not warrant any extension at that point of time, rather "the building of a dock at an enormous expense will be a great burden on the trade of Calcutta, because it has never been shown that a dock will be the means of either reducing charges or facilitating dispatch."³⁰

Notwithstanding such objections from a section of the trading community, the port authorities always looked out for acquiring more space for various activities. In 1881, the Port Commissioners proposed to purchase the property belonging to the Calcutta Docking Company, which was situated on the Howrah foreshore, north of the Hooghly Bridge. The Government of India was also keen on the project as it needed a space to store materials for the railways. The

²⁷ Public Works Department [PWD], Miscellaneous, Proceedings, August 1885, Nos. 1-4, Part B, National Archives of India [NAI], New Delhi.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

project did not materialize as the Directors of the Company, on behalf of the shareholders, did not accept the amount of Rs. 4,50,000 offered by the Commissioners. The government also did not pursue the matter further. But the Commissioners had to take it up again due to the great inconvenience in carrying out the docking and repairs of several vessels belonging to the Port Trust. Apart from ships and vessels, there were large quantities of materials belonging to several departments laid scattered in various places of the port. The Commissioners asked the Calcutta Docking Company the price of the land. They wanted Rs. 5,75,000. The Port Trust made an offer of Rs. 5,00,000. Both parties ultimately settled for Rs. 5,25,000.³¹

In 1912, the government approved of building a two-storeyed warehouse on the foreshore of river Hughli, north of the Howrah Bridge, for the convenience of the Inland Vessels Companies. A revision of the earlier plan was done and soon it was found out that with minor alteration in the alignment of the proposed warehouse, it could be built on a larger area. Also, the changed position would facilitate better connectivity with the railway lines. But this new position would also mean an increase in the budget. By this time, the port of Calcutta had gained immense importance in the imperial trade network. The government did not hesitate to sanction the extra amount and space needed for building the larger warehouse on the other side of the bank in Howrah.³²

In subsequent years, the trading activities at the port went on increasing, especially during the First World War. The need for warehouse space was acutely felt in these years. More jetties and warehouses were ordered, and the port commissioners continuously put pressure on the government for adequate funds. In 1895, the average daily imported goods weighed around 1000 tons of which 300 tons were stored at the warehouses, the rest being carted away to other parts. In times of pressure, this amount doubled.³³ In fact, a decade later, in 1906, the Secretary of the Bengal Chamber of Commerce mentioned that due to the increase of trade there was hardly any space at the jetties for the imported goods. He noted that new jetties and modern crane system were being constructed at the port but those were not enough; new warehouses were needed. At that time, a new tea warehouse was coming up in Garden Reach which would help in opening up

³¹ Deptt. of Commerce and Industry, October 1882, Proceedings Nos. 1516-18, NAI.

³² Deptt. of Commerce and Industry, Proceedings B, December 1912, Nos. 8-9, NAI.

³³ The Times of India [TOI], 4 Jun, 1895.

almost 15,000 square feet of space at the jetties for import trade. He wanted the port authorities to construct a new warehouse for import trade on Strand Road frontage.³⁴ The shortage of space in tea warehouse was a recurrent feature in the first half of the twentieth century.³⁵ After independence, the new government also faced this problem. An Ad-Hoc Committee was established in 1950 to look into the matter of tea trade. It noted that the Port Commissioners of Calcutta was constructing a four-storeyed permanent tea warehouse with floor-space of 140,000 square feet and a tea transit shed covering 20,000 sq feet between the present tea transit sheds no 1 and 2, and the sales tea warehouse.³⁶ The issue of storage space and volume of trade shaped the port complex in Calcutta over the years. Exigencies of trade, global warfare, domestic demand and pressure from mercantile firms combined to mould the various activities of the port of Calcutta.

Another interesting issue is the operation inside the warehouses. A major concern in this regard was the proper measurement of weight of the goods. Often disputes arose regarding the method of weighing. For instance, in 1901, the Indian Tea Association send a letter to the Commissioners of the port urging them to broach the fact to the government that the English Customs Department should accept the weight of the tea ascertained by the Calcutta port authorities in their warehouses. The Port Commission agreed to this proposal and urged the government to look into the matter. They gave a detail description of the process of weighing, arguing that there was very little chance of any error and no loss can possibly accrue to the English revenues if they accept the weight as measured in Calcutta. The process described was as follows:

The tea having being bulked in the patent machine which the Commissioners have erected, passes by gravity into the weigh hopper. From this hopper the required contents of each chest is weighed and discharged by gravity into the chest, the tare of which has been ascertained by separate weightment. The loose tea is then compressed into the chest

³⁴ TOI, Feb 8, 1906.

³⁵ TOI, Oct 25, 1939.

³⁶ TOI, Apr 8, 1950.

by hydraulic power and the chest is closed and the gross weight taken, which is checked by the already ascertained tare and the weight of the tea put on to the chest.³⁷

The concern with weight and measures was persistent. In 1950, the 'Ad Hoc Committee' formed to look into the problems of tea trade noted that in the tea warehouse, only 10 per cent of the product, randomly chosen, was inspected. This did not ensure the quality of the tea or the security of the packaging. They suggested 100 per cent inspection. For this, additional warehouse space was needed as that would help in inspection as well as packaging and handling of tea chests.³⁸

Transport:

The Port Trust initiated large-scale infrastructural development in the 1870s. One of the major areas of interest was to create proper channel of transport facilities to move goods to and from the dock area. The railways played a crucial role in connecting Calcutta with other parts of the province and country. Calcutta was served by the East India Railway, the Bengal-Nagpur Railways, and the Eastern Bengal Railways. The development of the railways was crucial in facilitating the activities of the port. Major terminals were at Sealdah (Eastern Bengal Railway) on the east of the river on Calcutta side, and on the west at Howrah. In the 1880s a bridge was proposed to be constructed over the Hooghly. The railways played a crucial role in fostering the business activities at Calcutta port. The Lt-Governor of Bengal in 1883 noted that "The future developments of trade which the continual progress of railways encourages are incalculable; and when the bridge over the Hooghly is finished, and direct communications with Calcutta have been established from the producing districts of the North-Western Provinces, and the tracts of country served by the Northern Bengal, the Central Bengal, and the contemplated line from Seetarampore to the Central Provinces, with their connected branches, the space at present at the disposal of the Port Commissioners seems to me to be utterly inadequate."³⁹

³⁷ Finance and Commerce Deptt, Statistics and Commerce Branch, Progs, May 1901, Nos. 240-241, NAI, New Delhi.

³⁸ TOI, 8 Apr, 1950.

³⁹ Note by Lt-Governor of Bengal, 17 Febraury, 1883, in *Report on the Construction of Docks in the port of Calcutta*, Selections from the records of PWD, 1885, p. 158.

Major items like rice, coal and jute were transported to other parts of the subcontinent from the port via the railways. But in the immediate vicinity of the port proper roads and carriers were not suitable to handle large bulk of cargo. For this, the Port Trust started constructing the Strand Road and the Bank as well as a tramway. The tramway work progressed rapidly with materials being imported from England. In their report of 1877, for instance, the Port Commissioners mentioned that the Trust had been able to obtain burning *ghat* [crematorium] site and section no. 17 of the new road between Ahiritolla and Ruth Ghats which enabled them to complete the work as far as the Armenian Ghat. The trains ran daily bringing the cargo from the Eastern Railway to the godowns on the inland vessels wharves. The detail of the development of the tramway around the port area helps us understand the way the port complex grew. The development of the tramways was also directly linked to the massive increase in the net cargo handling in the port. The successive stages of the tramway construction gives us an idea of the gradual extension of the port activities and the way crucial links were established between the docks and the city, and in turn with the hinterland. Various plans were proposed, some were followed while negotiations on ground forced changes and alterations. For instance, the Commissioners noted in 1877 that "the traffic passes over the municipal line of railway from Sealdah to Bagh Bazar; but this is only a temporary arrangement, the Commissioners having...undertaken to construct a bridge across the entrance to the Chitpore Canal, and so carry their line of tramway direct into the Eastern Bengal Railway goods terminus at Chitpore."40 To use the municipal line the port authorities had to enter into an agreement with the Town Commissioners. The terms of the agreement included the following:

1. That the Port Commissioners shall pay eight annas per wagon for every wagon that passes over the municipal line, either way, full or empty;

2. That the Port Commissioners shall have free use of the line for six hours daily, from 7 to 10 am in the morning and 3 to 6 pm in the afternoon;

3. That the Port Commissioners shall pay the cost of keeping that portion of the municipal line over which the trains run in repair;

⁴⁰ Port Commissioners Report, 1877, p. 3

4. That either the Town or Port Commissioners shall have the option of terminating the arrangement by giving one month's notice at the end of each year after the second year.
5. That this arrangement shall be binding on both parties for two years certain.⁴¹

With this arrangement with the railways and the town authorities, the port tramway was inaugurated on 22 November, 1876. But crucial works were still left to be done. Originally, the intention of the Trust was to carry the tramway line across the mouth of the Chitpore canal by building a moveable bridge. However, objections were raised against such a bridge as it was feared that it would interfere with the traffic on the canal, and the "Government required that any bridge to be constructed in this position should have a clear headway of 16 feet above high water. To obtain the necessary incline for the approaches to such a bride, an embankment would have to be made at the frontage of the Eastern Bengal Railway Company, which would shut out the Company from access to the river, and to this the Company would not have agreed."⁴² Also, an elevated line would cost around Rs. 4.5 lakhs which was not possible to recover from the goods traffic on that line. The Commissioners decided to abandon that route as they thought that a fixed bridge was the only solution. The new bridge was designed keeping in mind all the objections of the canal authorities while providing a passage for the trains at ordinary level at a cost of about Rs. 90000.

Apart from the bridge, major problem arose with the connection of the jetties with the inland wharves and the Eastern Bengal railway line. The proposed tramway was passing through the Armenian Ghat station. The East Indian Railway Company did not agree to dismantle the station and a long-drawn negotiation ensued. The Strand tramway line was of immense importance to the port as well as for other departments, especially for the army headquarters at the Fort William. The line ran along the boundary of the fort on one side and thus provided an excellent opportunity for military stores to be carried by government wagons. The port authorities did not have any objection with such usage of the new line. The Vice-Chairman of the Commissioners for making Improvements in the Port of Calcutta informed the Brigadier General, commanding the Presidency District that

⁴¹ Ibid.

⁴² Ibid.

There will be no objection to Government using its own wagons for the conveyance of stores, and moving such wagons either by steam or manual labour on the sidings leading into the Government premises, but there are serious objections against the main line being used by any other engines than those belonging to the Commissioners. It would be impossible to regulate the traffic over the main line if Government and the Commissioners both had the power to move wagons along it whenever they pleased, and would certainly lead to some serious accident. The haulage of wagons must...be done entirely by the Port Commissioners' engines in the same manner as the traffic is worked at present between Cossipore and the Jetties, where all wagons whether belonging to the Port Commissioners or to the Government State Railways are hauled by the Port Commissioners' engine. There is no objection to Government wagons being used to any extent, but the engines on the line must be under the authority of the Commissioners, or they could not be responsible for the safe working of the line.⁴³

The tram lines soon became profitable. Between 1880-81 and 1882-83, there was an increase of almost Rs. 15,000 in Tramway Receipts.⁴⁴ Also, the increase in traffic necessitated opening up a third line (with already two lines for up and down traffic inaugurated in 1881) between Nimtollah Ghat and Ruthghat within a year of its functioning.⁴⁵ Thus, the ways in which the roads and tramways were created give us a glimpse of the manner in which the port area was extended and got integrated with the rest of the city, the difficulties that arose regarding land or finance, negotiations between various branches of the government, and the general implication of this expansion for the trading activities of the Calcutta port.

Let us end with the story of Burma rice during the First World War. Rice produced in Burma was exported to India through Calcutta port. From the port, railway wagons carried the rice to other parts of the country. This rice was usually cheaper than Indian rice and was consumed by a section of the poor. In 1917, during the War, the rice situation faced a crisis in Burma. There was abundant production; a few dealers held on to it hoping for a rise in the price. In the meantime,

⁴³ PWD, Civil Works-Misc Branch, Proceedings A, January 1885, Nos. 1-3, NAI.

⁴⁴ P. Banerjee, *Calcutta and its Hinterland*, Calcutta: 1975, p. 41.

⁴⁵ Ibid., p. 40.

wagons to supply coal from Calcutta were needed by the railways. It was proposed that there was no need to import Burma rice, and the wagons should be used to transfer coal and not rice. Smooth operation of the railways was deemed as "a matter of Imperial importance".⁴⁶ There had been good crops in India that season. So, apart from the difficulties with freights, the Indian authorities were not very keen to accept more rice from Burma in light of its own abundant produce. But this decision put a lot of stress on the rice industry in Burma. The port authorities in Calcutta also said that they did not have enough storage space to keep the rice under their control. The Burmese government tried to point out that there was a demand for Burma rice in some of the upcountry provinces in India. They were ready to divert their export trade through any other port than Calcutta owing to the congestion and objection regarding storage facilities and transportation from Calcutta. However, they were clear "that such steps should be taken only in the last resort."⁴⁷ In the end, to ease the situation in Burma, the Home government in Britain agreed to import some quantity of rice. In fact, congestion in the port area was a recurrent feature. Goods were needed to be prioritized. Problem with Burma rice arose again in 1919. The authorities knew that it was essential that sheds in the dock should be kept clear for the arrival of the rice, and that the rice shipment should be regulated keeping in mind the railway schedule; otherwise there would be undue congestion in the docks and the railways would not be able to carry off the consignment. There was also the case of sugar arriving from Java and wheat from Australia. The preferred destination of these goods was always Calcutta port. The port authorities also did not want to lose out on the customs revenue. But they needed more space to store this material. The port commissioners requested the railway board to provide them with more warehouse space. Sometimes goods were stored by the port authorities in the sheds at Howrah belonging to the East Indian Railway, but on this instance, the railway board refused to grant any more space to the port traffic. Ultimately special arrangements were made to supply a large number of wagons to the port authority to clear the stock of sugar and rice so that fresh imports could arrive.⁴⁸ The activity in the docks needed to be regulated and systematized so that a smooth functioning was possible. It was not only a question of storage or increased trade, equally

⁴⁶ Deptt. of Revenue and Agriculture, Government of India, Proceedings, April 1917, No. 76, Part B, NAI.

⁴⁷ Ibid.

⁴⁸ Deptt. of Commerce and Industry, GoI, March 1919, No. 25, NAI.

important was the dispersal of the goods. The story of the Burma rice also reveals the way in which the Calcutta port was intricately linked in the imperial traffic of commerce and war.

Conclusion

The paper looked at the development of port facilities with the increase in trade from the 1860s-70s. It studied two aspects of this--storage and transport--both related to the massive increase in the bulk of the cargo. Related to these individual systems (of warehouse and the transport) was the production of the space of Calcutta port where different actors--the port commissioners, municipal authorities, imperial government, mercantile firms, or the railways--had their claim. The paper tried to capture these negotiations and contestations through an analysis of the infrastructural development of the warehouse and the port tramway—while also looking at their internal workings, management, and safety measures. These activities were intimately connected with the wider political and economic scenario of the world. The port of Calcutta was a crucial node in the British imperial network. The paper tried to hint at some of these links that had a bearing on the development of the port complex of Calcutta.