

**Bullock Carts and Boats: Communication across the Land and
Waterways of Nineteenth-Century Bengal**

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***Abstract:**Bengal was the nodal point of early British administration in India, in the matter of communication and governance. The article shows how land and river transport were essentially the main means of interconnectivity between villages and emerging towns. The rivers were natural roads that helped to facilitate the transportation of goods, people, and ideas, while inland routes and cart tracks connected inner regions with market and administrative centers. The paper looks into the difficulties and relative ease of travel, along with patterns of accessibility that bear on Bengal's economy and social mobility.*

***Keywords:** Bullock Carts, Boats, Dawk Choukis, Travel Fare, Land, River etc.*

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Introduction

In 19th-century Bengal, long before the railways connected the province, there existed a vibrant and thriving road and riverine transport system. Bullock carts and boats were more than just means of transport-such modes of transport were the highways of the day. Such means of transportation also gave rise to their own social world. A class of cart drivers and boatmen developed as an occupation, at times hereditary, with intimate knowledge of the seasons and the terrain.¹ Inns, river ghats, and market towns developed as points where people and ideas merged. Simultaneously, transport throughput affected governance and communication too. News took as long to travel as carts and ships; famines, uprisings, and reforms came inside those time frames too. The colonial administration in British India was highly dependent on local transport facilities. The District officials were in the habit of traveling by boats, and the army's supplies

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and post offices were carried by routes that passed through rivers and carts. In fact, the initial railway systems were using bullock carts and boats for feeder services.²

In Bengal, roads and rivers were known to run through dense jungles or unsafe regions that were not only inhabited by beasts but were also hideouts for dacoits, or bandits. For instance, as noted by Mr. Keating in 1792, Birbhum was flanked on the west and southern side by a vast western jungle where dacoit gangs had long been beyond the catch of the law.³

Perceiving the Past: Historical Perspectives

India is recognized for its flourishing trade and commerce since ancient time. In the 16th and 17th centuries, numerous foreign visitors, especially Europeans, wrote on Indian ships with much admiration. Portuguese travellers, who were among the first Europeans to come to India, remarked upon the high quality of Indian shipwrights' work. Duarte Barbosa, for instance, classified the ships on the west coast as big, strong, and with a great capacity to carry goods.⁴ English travelers like William Hawkins and Edward Terry likewise complimented Indian shipping engineering. They remarked that ships constructed in Gujarat and on the Coromandel Coast were as big and efficient as European ships. They further mentioned the Indian sailors' skill while traversing coastal as well as open waters.⁵ John Fryer observed how Indian ships and boats in were expertly built.⁶ French and Dutch visitors provided similar comments. François Pyrard de Laval, who spent a few years in India, marveled at the Indian way of building ships.⁷ The Dutch East India Company often ordered Indian shipyards—particularly in Surat—to construct or renovate ships, testifying their strength and longevity.⁸

The significance of the mode of communication in Bengal has been highlighted by several historians, including Radhakamal Mukerjee, Ashin Das Gupta, and Sugata Bose. Mukerjee⁹ points out that the rivers of Bengal formed “natural highways” facilitating the cheap and massive transport of goods within the province. Ashin Das Gupta, in his work¹⁰ on trade and commerce, underlines the significance of boats for the transportation of bulk commodities like rice, salt, timber, and jute, thereby connecting local markets to regional and international markets. Sugata Bose further illustrates the role of water transport in connecting peasant producers to the cities of Calcutta and Dacca, thereby integrating rural Bengal into the larger commercial system.¹¹ These historians also point out the role of boatmen as skilled laborers who possessed knowledge of river currents, tides, and seasonal variations. Aside from river transport, bullock carts constituted the backbone of overland communication in 19th-century Bengal. Irfan Habib¹² writes that bullock carts represented the most widely used and reliable system of overland transportation in pre-industrial Indian society, especially on short and middle distances. According to Tirthankar Roy, bullock carts played an important role in connecting villages, markets, river ghats, and administrative centers, which contributed to decentralized trade.¹³ The role of cart transport in the movement of agricultural surplus in Bengal, as revealed by studies on rural economy by B.

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B. Chaudhuri, also underlined the importance of bullock carts.¹⁴ The district gazetteers, widely cited by the historians mentioned, refer to poor roads but the indispensability of bullock carts nonetheless.

Boats of Bengal: Eighteenth Century Portraits by Balthazar Solvyns, edited by Robert L. Hardgrave, Jr., is a multidisciplinary study that integrates art history, maritime history, and social history, which attempts to resurrect the riverine culture and society of eighteenth-century Bengal. The monograph is derived from the rare pictorial record created by the hand of Balthazar Solvyns (1760–1824), a Flemish artist who resided in Calcutta during the formative years of British colonial rule.¹⁵ In particular, the work of C. A. Bayly, covering the period that stretches roughly from the end of the eighteenth century to the middle of the nineteenth century, illustrates the information-control paradigm's significance for colonialism and its profound influence on the formation of the region of Bengal as an important part of the Bengal Presidency.¹⁶ In regard to this paradigm, the work of other researcher Rajat Datta, who investigates the early modern period of Bengal, makes it clear, *inter alia*, that information dissemination had been related to economic changes.¹⁷

Bullock Carts: The Lifelines of the Countryside

Bullock carts represented the major mode of land transportation. They were powered by pairs of oxen and were accustomed to transporting rice, jute, salt, fabrics, and people through the rural areas of Bengal. The flat topography of Bengal made cart transport possible, though it was no less difficult in many cases. The roads were mainly of earth, which turned into mush during monsoons and into dust in summers. Despite these shortcomings, bullock carts linked villages to local markets called haats, as well as to towns. They allowed peasants to pay their rent, businessmen to transport their goods, and administrators to visit their territories. The pace of life of bullock carts, calculated in miles per day and not in hours, regulated the tempo of countryside economics.¹⁸ During the Muslim rule, the construction of roads was in progress. There was a metal Grand Trunk Road from Calcutta to Meerut and Delhi. There were police chowkies every two and a half miles apart. Commodity and Seraias had been established fourteen and fifteen miles apart.¹⁹ The geographical region of Bengal descended heavily upon jungles and wild animals with a wide network of rivers.²⁰ In 1802, there were 20 miles of roads in Jassore. In his notes on Indian affairs, dated May 1835, Shore wrote: "Excepting those within the boundaries of civil stations, we have only 16 miles between Calcutta and Harrackpur".²¹ There were no roads in the Hoogly Districts in 1837 on which a European carriage could be moved. Only two roads existed in the Dacca district in 1839—the one leading to Narayanganj and the other to Tangi. Montgomery Martin, in 1838, wrote how there were no roads in Bengal, and in the map of Rennels, the roads laid down did not exist except on paper.²² There were two roads, Puccka and Kutcha. An extract from a letter written by the postmaster General of the North Western Province to the lieutenant governor (1850) shows how necessary was metalling a road, so

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profitable to the state. In 1852, a postmaster general and a horse wagon service accommodated native passengers at seven miles an hour for one anna per mile. The company shall not be liable if any accident occur to carriages belonging to private persons. Passengers are to bear all charges. The travelers occupying one seat in a carriage are allowed one petarah or box, not to exceed twenty shillings in weight. The traveler occupying two seats in a carriage is entitled to two petarahs or boxes not to exceed forty seers. The travelers hiring trucks may have two boxes not to exceed forty shillings in weight. Half rates to apply. Before the year 1850, there existed no railways or very few roads in Bengal.²³ Until 1869, there were no roads in Pabna, and in 1871, there were no roads and no carts in Malda.²⁴ In 1793, on an average, the jurisdiction of each thana embraced an area of 400 sq. miles.²⁵ According to the recorded history by W.W. Hunter, the region was so unsafe that nobody had the courage to travel unless they were accompanied by armed security or in huge parties. A class of wealthy people including zamindars, merchants, and traders, were escorted by their own retainers, multiple collectors, and a detachment of infantry as they pursued travel through the districts. One had to travel with an escort of arms. At least one officer and five men comprised the guard. The excursion was expensive on that account.²⁶ The jungle served not only as the natural habitat of wild animals but also as a refuge for bands of dacoits. In 1828, W. Hamilton observed that because dacoits—or organized gang robbers—played such a prominent role in the criminal jurisprudence of Bengal, closer attention should be given to the formation of their character.²⁷

The official transportation charges over the land during the colonial period in India were indicated in a table in the year 1785. The transport charge was exorbitant and expensive. Under the post office, there were '*dawk choukis*'. The palkies and bearers were allotted by the post master in each *dawk chouki*. The rich used it for journey or carrying their goods. The rate from Calcutta to Chandannagar was 24 rupees and 8 annas; Calcutta to Chucchura or Hooghly was 48 rupees and 8 annas; Calcutta to Baharompur was 159 rupees and 8 annas; Calcutta to Murshidabad was 159 rupees and 8 annas; and Calcutta to Benares was 764 rupees.²⁸ In an order issued on the 28th of May, the 28th day of May, 1794, it was stated that the rate for the five bearers for carrying a palkie is five sicca rupees per day and eight annas each for half a day. Outside the Kolkata area, within five miles, 'the rate for each bearer in a day was 4 annas'.²⁹ In another notice dated March 12, 1796, it was mentioned that the fees between Kolkata and Baranasi were 500 rupees, and from Kolkata to Patna, 400 rupees. An additional charge was taken between two places if the passengers went to different places.³⁰ "Herklots adds an interesting table of 'Rates of Travelling By Dawk Bears' i.e. by palki, which shows that the rate charged was eight annas (50 paise per mile. Three days `s notice had to be given by passengers ... and the control of these arrangements was vested in the post office authorities."³¹ It is notable to mention that the travel over land was expensive. Palankeens which were smaller than litters had mostly been the means by which passengers were moved on the mainland. There were simply made carts for the transportation of loads; this took place through the agency of either oxen or buffaloes. Most of the goods are moved through other canals and creeks which pass

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through this region.³² Revenue collection under the Permanent Settlement depended heavily upon bullock-cart transport-grain and cash rents being carried from villages up to administrative centers, often over poorly maintained roads. These limitations also shaped the tempo of rural economic life and gave strength to seasonal patterns of movement.³³

Boatmen and Rivers: Bengal's Watery Highways

Bengal's land was traversed by large rivers like the Ganges, Brahmaputra, Meghna, and Hooghly. Floods, especially from rivers, often changed river courses and disrupted roads, making river transport more preferable to road transport over long routes.³⁴ Boatmen were skilled boat handlers and could sense the current, the sand banks, and the change of season. It cost less to move grain along the waterways and could carry much heavier loads compared to carts, and so this played an essential role in long-distance trade. The importation of rice from Eastern Bengal, the movement of jute to Calcutta, and the distribution of goods within the country were affected by waterways.³⁵ Historically, water transport was more important than land transport. Rennell demonstrated in his *Memoir of Hindusthan* (A.D.1787) that "considering the very large amount of traffic that is carried on in Bengal, it is no wonder that the inland navigation gives constant employment to thirty thousand boatmen."³⁶

However, this period had been remembered by a writer in a dual sense of nostalgia and ironical overtones as 'the good old days'. In 1792, court boats regularly proceeded up the river to the higher stations with full cargo holds of goods for the intended markets at frequent halting points along the way, as far as Cawnpore. At this period, Messrs. Davidson & Maxwell regularly sent off their boats on the 1st & 15th of every month in regular, regular river trade. Later years, within the personal memory of the writer, this trade had passed largely into the hands of Messrs. Holmes & Allan, who had come to monopolize the river transport trade. According to the writer, merchants who wishing to send their goods by this route were politely invited to insure their cargoes at the boat office for a small extra charge. Those who submitted to this measure of caution could await the arrival of their ventures with confidence, assured that their shipments would reach their destination within three, four, or at most six months from the date of despatch. Those who refused this safeguard of sorts, however, could expect a result equally less uncertain. Their goods, intercepted and stealthily distributed by the chuprasee in charge at the various stations along the route, seldom lasted the journey whole. And the inevitable result was that nothing more now arrived at the astonished consignees than the empty cases and packages.³⁷ As transport was mainly by boat, it would be quite interesting to speculate on the time it took to journey by river between Calcutta and other principal stations in the country in the year 1781. A journey by boat from Calcutta to Murshidabad would take 25 days, Dacca 37 days and a half, the same to Malda, to Chittagong or Patna 60 days, to Banares or Goalpara 75 days, to Kanpur 90 days, and to Faizbad 105 days.³⁸ From what has been ascertained regarding the time taken by boats to travel between the same points, the above mentioned journeys from Calcutta to

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Murshedabad, Patna, etc., seem rather prolonged. It is also surprising that a journey from Hugly to Dacca with a stop at Kasimbazar took about 11 days by water during the time of a company employee named William Hedges (1682 A.D.).³⁹ In a Bengal transportation system of the 18th and 19th centuries, it is quite interesting to see that the expense to which the passengers were subject could be calculated depending upon the number of days they traveled. The calculation was made based on the number of days and the respective charges according to the type of vessel used for travel.

Table I
Bengal's river journeys: determining passenger expenses through daily rates

			Rs	A
For a budgerow of 8 dandees	per day		2	0
10 ditto	ditto		2	8
12 ditto	ditto		3	8
14 ditto	ditto		5	0
16 ditto	ditto		6	0
18 ditto	ditto		6	8
20 ditto	ditto		7	0
22 ditto	ditto		7	8
24 ditto	ditto		8	0
For a wollack of 4 dandees	per month		22	0
5 ditto	ditto		25	0
6 ditto	ditto		28	0
For a boat 250 mounds	per month		29	0
300 mounds (7 dandees)	per month		34	0
400 mounds (8 dandees)	per month		40	0
500 mounds (10 dandees)	per month		50	8

(Source: Carey, *The Good old days of honorable John Company*, Vol.2, p.15)

The Geographical Description of Countries Near the Bay of Bengal written by Thomas Bowrey, published between AD 1669-1679, an English traveller who visited India, gave some more interesting information and pictures related to some boats which were some of the best of their times. The following information related to boats in Bengal at that time was given by him: 1. The *Olocko* was similar to wherries in the Thames River and was worked by four and six oarsmen, mostly used in fairs. 2. The *Budgaroo* (Bajra) or Pleasure Boat was liked by the rich and high-ranking persons as it allows plenty of room at the back over its backside. 3. The *Purgoo* was mostly used between the Hugly, Pyppo (Pipli), and Ballasore ports. These boats carried cargo off English, Dutch vessels, &c. and remained anchored in the middle of the sea for long periods mostly from the sterns. 4. A light boat called the *Boora* which carried 20 to 30 oarsmen, carried

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salt Peeters and other articles downstream from the Hooghly. They also helped in the exchange of Dacca and salt as well as towed the cargo vessels upwards and downwards.⁵ The *Patleas* were boats from Patna that moved downwards.⁴⁰



A Large Bengali Vessel – depicting traditional Bengali ship by Balthazar Solvyns
(Source : wikipedia.org)

In 1823 the Calcutta newspapers had an account on the introduction of steam vessels in the Hooghly River. “The steam vessel”, states the Calcutta Gazette of August 14th, “may now be seen daily in active operation on the Hooghly, and groups of curious natives, drawn by the novelty of the exhibition, crowd both banks of the river to witness its surprising maneuvers.”⁴¹ The growth of Calcutta as a colonial metropolis was, to a significant extent, due to this riverine network. Commodities entered the port of Calcutta by ship, integrating the interior of Bengal into international markets. Calcutta’s growth as a colonial metropolis was intimately related to its geographical position along the river Hooghly. Calcutta was a hub of transport, where transport by rivers within the interior intersected with overseas shipping. Agricultural commodities of countryside Bengal entered Calcutta by ship and then continued to interior transport by bullock carts and beasts of burden⁴²

The boats along the Bengal coast included mainly riverine boats, reflecting less maritime voyages compared with other coastlines. These boats included those of types *jaliya*, *piary*, *kusa*, *balia*, *ghurab*, and *patella*. Some of these were war boats, while the last one was a cargo boat, which was wide-bottomed, designed for carrying heavyweight through the swift rivers of the delta.⁴³ Agricultural and non-agricultural economy of Bengal had been influenced by the flow of rivers. The Bengal Delta had a network of local markets or weekly haats. Most such markets did not evolve into towns, and the markets existed in the form of ganjas or semi-rural towns. These markets and ganjas generally functioned near the confluences of the rivers.⁴⁴ The official report of 1844 emphasized not only the benefits of riverine travel but also the dangers: dacoits robbed

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boats at night, yet boatmen “rarely knew” who the bandits were, for the chance of further loss or eventual delay in reporting to the police deterred them from attempting to identify the bandits.⁴⁵

Conclusion

In the nineteenth century, bullock carts and boats were the main means of internal transport in Bengal. Bullock carts and boats contributed immensely to the connectivity of towns and villages by enabling the free movement of people and goods. Roads were poorly made, and even though rails began to operate in the mid-nineteenth century, it was limited. This means that ox-cart transportation of agricultural products, raw, and other commodities continued, while boats moved through the well-developed river and canal system in Bengal to take bulky commodities like rice, jute, and salt from one place to another. This traditional form of transportation system comprised the backbone of the internal economy of Bengal.

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