

CHAPTER 6

Kolkata Port: Challenges of Geopolitics and Globalization

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In his 1710 publication, A New Account of the East Indies, Alexander Hamilton wrote that, long before it became an 'imperial city,' Calcutta (now Kolkata) had 'docks for repairing and fitting ships' bottoms' (1995, 71). And Armenian traders possibly made use of these docks in their trade, with 'China to the East and Persia to the West,' before Job Charnock even set foot in the swampy villages of Kalikata, Sutanuti, and Gobindapur to lay the modern city's foundations. As Philip Woodruff remarks, it was from this port city that the British went on to create an empire 'at which they looked with incredulous elation, shot with sharp tinges of doubt, of a village grocer who had inherited a chain of department stores' (quoted in Moorhouse 1971, 37).

The Bhagirathi River, on which the Kolkata port developed, has been and remains a huge navigational challenge, but its location has never failed to entice the freebooter and the brave. A Dutch fleet of seven ships even negotiated the channel without pilots (as ships entering Kolkata rarely dare do) in 1759, two years after the Battle of Plassey, in a futile bid to

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deny the English the control of the Kolkata port. After the opening of the Suez Canal in 1869, the importance of the Kolkata port increased markedly—for both world trade and British interests.

The Muslim League stalwart and mastermind of the 1946 great Kolkata killings, H. S. Suhrawardy, unable to imagine an East Pakistan without Kolkata, pushed for its inclusion in the newly created country. India's current Prime Minister, Narendra Modi, has designated Kolkata as the 'starting point' of his 'Act East' policy for connecting India to South-East and East Asia. While Kolkata's port, a geomorphological nightmare, lies 232 kilometres inland from the sea, its multi-modal linkages to India's vast hinterland, as well as its eastern neighbourhood, have ensured its survival as an odd riverine port in an era of globalization that is now characterized by giant container-driven shipping.

The changing geopolitics of Asia, marked by China's sharp rise and India's emergence, has actually led to renewed interest in the Kolkata port system, amid ongoing questions about its future due to poor draught (water depth), ageing infrastructure, and the high cost of operations due to spiralling financial liabilities caused by its current large payroll, pension commitments, and the funds needed for regular dredging of the Hooghly channel. Nevertheless, the Kolkata Port Trust (KoPT), which handles the Kolkata and Haldia docks which make up the complex port system, is aware of its geopolitical and geo-economic importance, as this post on the KoPT website, by the former KoPT chairman R. P. S. Kahlon, shows:

The process of churning a new and expansive trading hub, on a port-centric customer base with matching logistics and competitive facilities and tariff structure, while harnessing its riverine potentials, is one of the defining challenges the port faces in the years ahead. The 'Look East Policy' of the country, the proposed Trans-Asian Railway corridor, opening of India-China road and proximity to Lhasa will all contribute to making Kolkata the hub port of the region. (Kahlon 2016, my emphasis)

Indian policymakers may worry over possible Chinese maritime encirclement by a 'string of pearls' (China-constructed ports like Gwadar in Pakistan, Hambantota in Sri Lanka, Kyauk Pyu in Myanmar and, possibly, Sonadia in Bangladesh), but the KoPT chairman is indeed looking at a China-India road and reaching out to Tibet as possible options to augment the future business of the port. In fact, India's considerable diplomatic leverage in Nepal and Bhutan owes much to Kolkata port being the

official port of the two countries. With all its economic muscle, China cannot provide a port in close proximity to Nepal and Bhutan, something that significantly adds to India's ability to influence politics in the two Himalayan nations.

The Chinese, for their part, have identified the Kunming-Kolkata (K2K) corridor, now popularly known as the proposed BCIM (Bangladesh-China-India-Myanmar) corridor, as one of six economic corridors to be developed under President Xi Jinping's Belt and Road Initiative. Chinese Vice-Premier Zhang Gaoli recently listed the six economic corridors as China-Mongolia-Russia, China-Central and Western Asia, China-Indo-China Peninsula, China-Pakistan, Bangladesh-China-India-Myanmar, and the New Eurasian Land Bridge which will be the focus of efforts related to Asia-Europe connectivity (Yang 2015). Billions of dollars in Chinese investment will flow into the corridors—which are designated to prop up trade and connectivity, infrastructure, and investment—and the Chinese-sponsored Asian Infrastructure Investment Bank will surely play a major role in their construction.

The BCIM corridor, which aims to connect Kolkata to Kunming in Yunnan province, is one of China's priority projects, although India seems to going slow on it. By getting India to declare Kunming and Kolkata as sister cities during a recent pairing exercise, China has made its priorities clear. Its limited coast in the East has compelled China to push for land-to-sea access in the Indian Ocean through both the Bay of Bengal and the Arabian Sea to avoid the Malacca Straits (which most Chinese security analysts see it as a 'chokepoint'). Besides Kyauk Pyu in Myanmar and possibly Sonadia in Bangladesh, Kolkata could serve as the third land-to-sea access in the Bay of Bengal for China but only if India agrees to operationalize the BCIM corridor.

If China's long-term goal is to use Kolkata as the third opening into the Bay of Bengal, this prospect has been somewhat mutely highlighted in an analysis:

The Kunming-Kolkata corridor will not only rejuvenate the economies of south-west China, northern Myanmar, Bangladesh, east and northeast India, but will also connect to the proposed Amritsar-Kolkata growth corridor in India. Kolkata is thus the only Indian city that can connect a transregional corridor with an important Indian domestic growth corridor and the port system of the city will sustain a unique convergence of regionalization and globalisation. (Bhaumik 2014, 2)

No wonder, during the 2014 Kolkata-Kunming (K2K) Forum in Kunming, it was decided to 'develop several initiatives for greater connectivity between Kolkata and Kunming, with the BCIM economic corridor in mind' (K2K 2014, 2). But even if the K2K corridor does not materialize anytime soon, Kolkata will remain the 'starting point' of India's 'Look East' policy and its port system will be crucial for India's multi-modal connectivity to nations further east. With the coastal shipping agreement signed with Bangladesh during Modi's Dhaka visit in June 2015, India seems to have taken the first step in that direction. And the Kolkata port system—that will soon include a deep-sea component at Sagar Island and possibly another coastal port, besides Haldia, at Tajpur—will be crucial to connect India to its neighbours further east to South-East Asia and, if Delhi agrees, to China as well.

SAGAR: THE FUTURE OF KOLKATA PORT SYSTEM

Despite its obvious locational advantage, the Kolkata port has been hard put for survival. Draught in the Bhagirathi, the branch of the Ganges flowing into West Bengal, has come down over the years due to siltation. So much so that grants for dredging from the central government are seen as critical for the operability of the Kolkata port as the draught at Kolkata is never above 5 metres and, at Haldia, it is just above 6.5 metres. Kolkata and Haldia can accommodate Panamax ships (those that are capable of traversing the Panama Canal fully loaded), but the former KoPT chairman Bikram Sarkar and DHL Logistics Manager Deep Gupta both told me in personal interviews that even these ships have to reduce their load by half or more than half in other Indian ports or at the mouth of the river (from where they are transported by smaller vessels) to allow them to dock at Kolkata/Haldia port due to depth restrictions. As a result, Kolkata port's cargo volume dropped from an historic peak of 57.32 million tonnes in 2007-08 to 39.88 million tonnes in 2012-13. Through some local marketing moves and technological upgrades, the handling volume might pick up in future but only just a little. Atin K. Sen, former general secretary of the Asian Council of Logistics Services, indicates that large numbers of exporters and importers want to use Kolkata port for its splendid location, but they are discouraged by the rising costs that make its operations less competitive (Atin K. Sen, personal interview).

The huge silt volume brought down by the Ganges and deposited in its lower course impacts adversely on the Kolkata-Haldia port system. The

development of the Haldia docks further down the river during the 1970s did provide some relief to Kolkata's British-era docks in the metropolis, but now the draught has begun to drop at Haldia as well, and this has necessitated the development of a true deep-sea port component to the Kolkata port system. Dredging has become key to the survival of the Kolkata-Haldia dock systems and the Indian government, which owns the port, has to provide between INR 3 billion a year for dredging the Bhagirathi to keep its channels just about navigable. The real beneficiary, needless to say, is the state-owned Dredging Corporation of India as the Kolkata port is its largest customer (Manoj 2013).

As the Indian government, headed by Prime Minister Narendra Modi, is considering phasing out most subsidies as a matter of policy, the dredging subsidy is likely to be slashed. According to Sanjoy Sen, former chairman of the Eastern India Shippers Association, however, the idea of using the funds saved by slashing the dredging subsidy to set up a new deep-sea port off Kolkata has been mooted by many since the late 1990s (Sanjoy Sen, personal interview).

In May 2013, the Indian government approved the setting up of a new deep-sea port at Sagar Island in the Bay of Bengal, near the confluence of the Bhagirathi and the sea. West Bengal's new Trinamul government lobbied hard with the central government on the issue, but, given the pace at which infrastructure projects are implemented in India, the port may take at least five to seven years to become operational.

At the same time and for similar reasons, in neighbouring Bangladesh the government is going ahead with the construction of a deep-sea port off Chittagong. Earlier, Sonadia was chosen as the location and China was supposed to fund its development, but now Matarbarhi has been chosen and Bangladesh is all set to construct it with assistance from Japan. Work was to begin in 2016 (bdnews24 2015), but the process of global tender for the port construction has been delayed, partly because of the uncertain security situation in Bangladesh after the terror strike in Dhaka in July 2016. Like Chittagong, Kolkata is a traditional port and experts say its handling volume cannot be improved merely by port modernization. Only a sprawling deep-sea component gifted with a substantial draught capable of handling large modern container-carrying vessels can reverse the situation. According to immediate past KoPT chairman, R. P. S. Kahlon, the successful integration of such a facility into the existing Kolkata-Haldia port system holds the key to the ultimate survival of India's only riverine port (R. P. S. Kahlon, personal interview).

The Indian government has already committed to invest the Indian rupee equivalent of USD 2 billion for the Sagar deep-sea project, and it has promised to pay back the West Bengal government which already invested INR 1700 million for the Sagar Island deep-sea port at Bhorsagar (*The Hindu* 2014). A study in 2014 by Assocham business chamber and the Institute of Chartered Accountants has indicated that a draught of at least 14 metres is needed for the Kolkata port system to receive big ships, without which its commercial viability is at stake (*Business Standard* 2014).

Neither the docks at Kolkata nor Haldia have the capacity for that kind of draught, even after extensive dredging. So just as Bangladesh is going for a deep-sea port at Matarbarhi to take the load off Chittagong, the only option for the Kolkata port system is to go for a deep-sea port, either at Sagar Island or another coastal port at Tajpur, that offers a draught of at least 12 metres.

After the 2016 West Bengal assembly elections, the Union government announced it will start work on the Sagar port by end of 2017. Nitin Gadkari, the Minister for Road Transport, Highways and Shipping in the central government, described Sagar as 'an addition to the 12 major ports of the country' (Gadkari 2016). According to the minister, the project will require an investment of the Indian rupee equivalent of USD 3 billion and that will involve a joint venture of the central government with the state government.

Now the central government has now made it clear it will only fund the Sagar port if the West Bengal government drops the idea of developing a port at Tajpur. The Bengal government, however, insists that it wants to develop the Tajpur port with private investments while the central government should finance the Sagar port (Saha and Sarkar 2016).

As well as the Sagar port project, Gadkari claims the Indian government is also constructing a rail-cum-road bridge, with the help of the National Highway Authority of India (NHAI), to facilitate inland transportation. He states that although Sagar will handle a significant portion of India's trade with Bangladesh after the two countries have signed a coastal shipping agreement, 95 per cent of India-Bangladesh's current trade, which is pegged at 6000 tonnes a year, takes place on land (Gadkari 2016).

We have decided to promote waterways logistics. This will help in reducing the logistics cost (in India-Bangladesh trade) ... The ministry of shipping and the ministry of external affairs are in talks with the Bangladesh government to have a port similar to Chabahar (in Iran). (Gadkari 2016)

India recently signed an agreement to develop Chabahar port for accessing Afghanistan and Central Asian countries and bypassing Pakistan. The Sagar-Paira port pairing in West Bengal and Bangladesh is seen as a similar geo-economic exercise by the Modi government to access the Indian northeast through Bangladesh by using waterways and providing a multi-modal option for making good the promise of the 'Look East' policy, which seeks to connect South-East Asia and India through the northeast. It also lends added importance to the Kolkata port system in which Sagar will constitute the deep-sea component.

There is a possibility that India Ports Global, a joint venture between Jawaharlal Nehru Port Trust and Kandla port, may participate in a bid to build the Paira port in Bangladesh, although it has also attracted China's interest. While Sagar and Paira will be paired as sister ports to promote India-Bangladesh coastal shipping more effectively, the Chinese see Paira as an ideal complement to their Sonadia deep-sea port in the Bay of Bengal and as a means by which China-Bangladesh trade can be boosted. China's Yunnan-Arakan oil-gas pipeline is complemented by a parallel highway that connects its largest province, Yunnan, to Myanmar's Kyauk Pyu port which was developed by the Chinese. According to Gadkari (2016), 'the shipping ministry is closely following the developments with regard to the Paira port so as to secure our national and strategic interests.'

The key to the whole exercise now is to strike a balance between the phasing in of cutbacks on the dredging subsidy for Kolkata-Haldia port and the contribution of sufficient funds to the timely implementation of the deep-sea project. But since the Modi government has also indicated a revamping of internal water transport in India, the dredging on the Ganges can never be totally cut down. Also if the cutback on the dredging subsidy is abrupt and immediate, it will impact on the existing business of the Kolkata Port Trust by causing a sharp drop in the handling of tonnage as bigger vessels give up on the port and instead turn to competitors like Paradip and Vizag on the east coast. The Indian government, therefore, may have to continue with much of the present level of dredging subsidy if it wants to keep the Kolkata port system alive and kicking until the Sagar deep-sea port is ready.

Nevertheless, Prime Minister Narendra Modi's government has a strong antisubsidy lobby led by Finance Minister Arun Jaitley. So while its move to set up the Sagar deep-sea port is a welcome development, and one that may save the Kolkata port system, what it does with the dredging subsidy is something to be closely watched. KoPT officials fear that once

they lose out on handling volumes to competitors like Paradip and Vizag, it may not be easy to recover lost business, and then the Sagar deep-sea port is finally in operation.

As of now, the effort to revive Kolkata as a port system (rather than revive the riverside docks in Kolkata city) provides multiple options once the deep-sea component is ready. While the deep-sea port at Sagar will be able to handle large vessels and account for rising cargo volumes, Haldia will be able to compliment it by handling medium-sized vessels. Even the Kolkata docks can become a profit centre as a barge port for smaller specific cargo volumes and inland shipping (possibly extending to Bangladesh). The sprawling Garden Reach Shipbuilding Yard (GRSY) around the Kolkata port (whose orders are going up as India seeks to beef up its Navy and Coast Guard and also export ships) adds a profitable shipbuilding component due to increasing orders from the Indian Navy and Coast Guard. GRSY is also turning on a fairly aggressive campaign to export medium-sized patrol craft for Coast Guards in neighbouring countries like Bangladesh and Mauritius.

The KoPT also possesses swathes of what is turning out to be prime urban land. So far, some of it has been leased to companies like the filmmaking Shree Venkatesh Films, but the KoPT is drawing up a comprehensive privatization plan that will make the land available for real estate and some industrial renting. This is bound to boost KoPT coffers by adding to its kitty sizeable one-time funds and regular income from renting (*The Telegraph* 2015). A further source of income is the joint venture commercial partnerships KoPT is considering for riverside development to boost tourism.

But the deep-sea port at Sagar is also seen by some as only a medium-term solution. Logistics expert Atin K. Sen told me (in a personal interview) that a floating port at the Sandheads, further down from Sagar, could offer a lasting solution. Cargill on the west coast is a ready model for such an offshore port. It is based on an inventive port structure, designed to float offshore in deeper waters, that is capable of accommodating bigger ships. Cargill's massive platform debuted in India in 1998, and it features integrated cranes that unload more than 55,000 tonnes of dry bulk commodities while simultaneously loading other cargo for export. Floating five miles off the coast, goods are quickly unloaded from ships onto smaller barges and then ferried to shore for ground distribution (Cargill 2008). The Sandheads could be to the Bay of Bengal what Cargill is to the Arabian Sea. Its draught would be more than 50 metres at least.

KoPT reached its highest cargo handling volume in 2005–06 when it handled 41 million tonnes. That represented a rise of 35 per cent in two years, while all major ports grew by only 20 per cent in the same period. Only two major ports handled more cargo than Kolkata—the Kandla port at 41.5 million tonnes and the Vizag port at 47.7 million tonnes. In 2003–04, the Kolkata Port Trust clocked a growth of 15 per cent, compared to the 10 per cent growth recorded by all the major ports. Last year, container cargo grew by 19 per cent to about one million tonnes, behind only the Jawaharlal Nehru Port Trust and the Chennai Port Trust. Despite the spurt in cargo handling volumes, which was made possible by some management decisions like the abolition of the age-old tariff system and by cutting wharfage charges several times, the rise in handling volumes did not translate to greater profits.

In fact, between 2002–03 and 2004–05, there was a drop in operating profits by 16 per cent. Ever since then, KoPT's cargo handling volume has stagnated at between 35 and 42 million tonnes. In 2013–14, it handled 41.39 million tonnes against 39.28 million tonnes in 2012–13. The Haldia docks handled 28.51 million tonnes in 2013–14 against 11.84 million tonnes handled by Kolkata docks, clearly pointing to the limitations of the riverine port. Altogether, though, KoPT notched third place in handling container traffic. The number of vessels handled at Kolkata port during 2013–14 was the highest of all Indian major ports. During the year 2013–14, 3236 vessels called at KoPT, and it handled 17.1 per cent of the total number of vessels worked at Indian major ports in 2013–14.

For the Kolkata port management, tariff flexibility has not been the only strategy. It has tried to attract new types of cargo that would also give a boost to the economy of its hinterland. For instance, it found out that West Bengal had an annual surplus of 2.5 million tonnes of potatoes and that Singapore was ready to import more of this vegetable, which would otherwise either go waste or be sold in the domestic market at a throwaway price. While a few thousand container loads of potatoes had been exported, it was felt that such exports needed special containers and this increased the packaging costs. If only the port could reduce its cargo handling charges, Bengal's potato growers could reap huge export benefits. The Kolkata port authorities did not take long to reduce by half the wharfage charges for handling the potato containers. As a result, potato exports have become viable and the beneficiaries are the Kolkata port and of course the farm economy of Bengal (Bhattacharyya 2004).

Modernizing for Survival

The journey of the first major port of India—and its only riverine port—continues through the tortuous process of ebb and tide, expectancy and challenges, and is intricately woven with the varying draught/siltation challenges of the river Hooghly which cradles it. Nonetheless, the port continues to adapt and re-engineer itself in new locales and by diversifying its functions. The port of Kolkata has made investment decisions for both the Kolkata dock systems and Haldia dock systems. By keeping in mind the river morphology and traffic that can best be handled in these two locations, it is able to harness the potential of the two dock systems. A major challenge for a major riverine port like Kolkata has been its inadequate draught that prevents modern high-volume container ships from visiting the port. But being a riverine port and strategically connected to the National Waterway 1 and National Waterway 2, Kolkata port has huge potential in respect of the movement of cargo via the inland water transport (IWT) mode.

A well-diversified investment programme, aimed at improving infrastructure and augmenting capacity, is to be funded through internal resources and grant-in-aid by the government of India as part of its 11th/12th Five Year Plan. It encompasses construction of riverine terminals with improvement of back-end facilities as well as integrated development of infrastructure such as road/rail connectivity, improved storage yard logistics, induction of state-of-the-art equipment (such as stacker-cum-reclaimers), new Vessel Traffic Management (VTM) systems along with Automatic Identification Systems (AIS) with interfacing/integration, augmentation of IT infrastructure, and river regulatory measures for improvement of the draught at Hooghly estuary.

Apart from the above, various public-private partnership (PPP) and allied projects with an investment commitment of an India rupee equivalent of approximately USD 2 billion have been and are being taken up, the details of which are:

- 1. Major PPP projects included in 2012–13, spilling over to 2013–14
 - Development of berth facilities at Haldia Dock II (Salukkhali). There is a need for expansion of Haldia Dock Complex at an alternative location on the west bank of river Hooghly to cater to a higher volume of traffic, primarily coal, coking coal, and iron ore. Development of Haldia Dock II has been envisaged in the west

bank at Salukkhali/Rupnarayanchak, 15 kilometres northeast on the same bank from the existing HDC, where the land connectivity is conducive to cargo handling operations. Increased cargo throughput at the new site at a reduced overall logistic cost would be possible because of the availability of a relatively better draught, low turnaround time for the vessels by way of avoiding the existing lock system. Fresh Request for Quotation (RFQ) was issued in April 2012 Haldia Dock II (North) (cost INR 8 billion) and Haldia Dock II (South) (cost INR 8.8 billion), each having one mechanized and one multipurpose jetty, and with 23.4 tonnes—11.7 tonnes each—per annum capacity.

• Transloading facilities at Sandheads and its vicinity for midstream handling of dry bulk cargo

In order to overcome river draught problems, Kolkata port has already undertaken a string of initiatives aimed at setting up new port facilities at deep-draught locations. Priority has been assigned to the creation of transloading facilities within the limits of the port in an integrated manner with the construction of a riverine terminal (Outer Terminal 1) outside the lock gate at Haldia Dock. The transloading facility would avoid two port calls by mother vessels which are now visiting Haldia Dock with a much reduced load due to draught constraints.

• Public Private Partnership Appraisal Committee (PPPAC)

A meeting of this committee was held as early as July 2012. Earlier, activation of the project was subject to the outcome of the Special Leave Petitions (SLPs) filed by Kolkata Port Trust, Minister of State, and Government of West Bengal in the Honourable Supreme Court of India against the order passed by the Honourable Odisha High Court regarding the territorial jurisdiction of KoPT. During a recent hearing, the Honourable Supreme Court directed the parties concerned to have the matter amicably settled and action taken accordingly. Government approval has been obtained and as per observation of the Honourable Supreme Court, the locations for transloading operations have been identified with the neighbouring ports of Odisha. A draft notification prepared by the central Ministry of Shipping that declared the concerned locations to be within KoPT's limit is awaiting approval of the Government of Odisha.

- 2. PPP projects included in 2013-14 for placement of award
 - Diamond Harbour container terminal

Development of a dedicated container terminal at Diamond Harbour, on the east bank of river Hooghly, was recommended by a high-powered committee set up by the Ministry. The project site, around 50 kilometres south of KoPT by road, is envisaged at an indicative cost of an Indian rupee equivalent of approximately USD 2.5 billion. The first phase of the project will comprise a contiguous quay length of 900 tonnes (a design capacity of 1.2 million TEUs). Projected container traffic is 1.2 million TEUs, that is, a 100 per cent rise in container handling is envisaged with the setting up of this container terminal—expected within four years from the date of award of contract. The first phase of the project will comprise a contiguous quay length of 900 tonnes including two jetties capable of handling container vessels of parcel load of 1200 TEUs.

- 3. Other major PPP projects to be taken up beyond 2013-14
 - Development of a deep-draught project for handling dry bulk cargo and containers at Sagar Island

To establish port facilities at Sagar Island, including rail-road connectivity and construction of a rail-cum-road bridge over Muriganga, a feasibility study was entrusted to RITES Ltd who have since submitted the final report. In terms of decisions taken during a high-level meeting held recently at Kolkata, with a subsequent site visit, RITES made the necessary changes in the draft final report to project cost, implementation schedule, and economic analysis. Recently, a presentation on the proposed Sagar port was made before the Finance Minister of the Government of India by the Secretary of the Ministry of Shipping. The feasibility report submitted by RITES in December 2012, and approved in principle by the KoPT Board in January 2013, highlighted the need to set up a port facility at Sagar Island for handling 13.5 metres draughted vessels at a cost of INR 4.8 billion and allocation of another INR 3 billion for rail-road connectivity to enable the handling of 54 million tonnes of traffic in 2019-20. The project is currently awaiting cabinet clearance.

• Development of Floating Storage Operations

Owing to draught constraints, importers/exporters are unable to bring in fully laden vessels, and this leads to higher transportation costs. KoPT intends to address this by introducing Floating Storage Operations (FSO). Daughter vessels would transport liquid cargo between the oil terminals at Haldia and the floating storage. Tugs and other floating craft and equipment are required for undertaking Floating Storage Operations, and project parameters are to be soon finalized through initiation of feasibility study.

4. Schemes funded through grant-in-aid

• River regulatory measures for improvement of channel draught

River Regulatory Measures (RRMs) for improvement of the draught at Hooghly estuary, which comprise capital dredging and river training works, were earlier formulated by Hamburg University, and the scheme was approved by the Public Investment Board and subsequently by the Cabinet Committee on Economic Affairs (CCEA), at an estimated cost of INR 3 billion. The scheme could not be implemented as the bidders put in technical deviations in the form of unassured depth. On the backdrop of the earlier scheme, the entire project was reexamined by national and international experts and was finally revalidated by Water and Power Consultancy Services (WAPCOS), in association with Central Water and Power Research Station (CWPRS) and Lanka Hydraulic Institute, Sri Lanka. Due to a hike in the dredging cost and rapid siltation within the dredge-cut alignment, the entire project cost ballooned up to INR 1 billion. Since the unassured depth became the prime issue of contention and no one could assure a guaranteed result after implementation of the scheme, WAPCOS was requested to review the entire situation through an international expert. WAPCOS selected H. R. Wallingford, a renowned UK institute, for the said study. H. R. Wallingford, during a recent presentation to Minister of Shipping in March 2013, suggested KoPT not to implement the RRM in the present hydrodynamic condition of the river.

- 5. Projects aimed at opening the secondary channel and improving connectivity
 - Opening of Eden channel

The existing system of pilotage through Eden channel was commenced on 1 December 2012. With the opening of the channel, ships enter Jellingham via Eden channel while bypassing the present Auckland channel. Steps are also being taken on the basis of recommendations of a high-powered committee to operationalize the channel throughout the year.

• Vessel Traffic Management System

Kolkata Port Trust has installed a Vessel Traffic Management System (VTMS) with three radar stations at Frasergunj (S-band radar), Sagar (X-band radar), and Haldia (X-band radar) that are interfaced through a microwave link. The VTMS has worked satisfactorily since 1996 to provide effective navigational aid to vessels plying in the coverage area. To arrange the bare minimum necessary surveillance through instrumentation, installation of an Automatic Identification System (AIS) base station at Dadanpatra, as well as the introduction of a microwave link between Dadanpatra and Sagar, has facilitated the surveillance of vessels passing through Eden channel and its surroundings. A proposal for tender for design, development, installation, and commissioning of VTMS on a turnkey basis—at a cost of INR 330.5 million over a period of ten years, and inclusive of seven years of a central annual maintenance contract (CAMC)—has been taken up. It will involve replacing the entire system (Haldia, Sagar, and Frasergunj) with state-of-the-art technology, and all the four radar stations (Dadanpatra, Sagar, Frasergunj, and Haldia) will be equipped with 'X' band radar and dual transceivers through a microwave link.

Convinced that the Kolkata port system has a future in the emerging geo-economics of Asia, the West Bengal government has recently suggested another coastal port at Tajpur, not far from the fishing harbour of Shankarpur and the favoured tourist resort town of Digha in the state's East Midnapore district. The Bengal government claims that not only will the port at Tajpur be less costly than the one proposed at Sagar, it will also have greater draught which will allow large vessels with greater loads of cargo to dock.

While the draught at the deep-sea port at Sagar Island is expected to be 9 metres (as against Haldia's 6.5 metres), Tajpur could offer a draught of at least 12 metres. An estimate by the Bengal government indicates that the whole Tajpur construction project will cost no more INR 5–6 billion, while the one at Sagar will cost more than INR 12 billion. Sagar will also need much work on land reclamation and transport infrastructure to connect to the mainland, while those costs would be much less at Tajpur. The railways have estimated that at least INR 8 billion will be needed to connect the Sagar port to the existing railway system—and that includes the bridge over the Muriganga. West Bengal Chief Secretary Basudeb Banerji

argues that while the biggest vessel that could dock at Sagar will not be heavier than 45,000 tonnes, the proposed port at Tajpur could accommodate ships with tonnage up to 60,000 tonnes (Basudeb Banerji, personal interview).

The Indian shipping ministry has said it will scrap the proposal for constructing the deep-sea port at Sagar Island if the Bengal government goes ahead with its plans to construct the port at Tajpur. Shipping ministry officials have told the media that in view of the current traffic and logistics trends, two ports so close to each other would not be viable in addition to the existing Kolkata-Haldia port complex (Saha and Sarkar 2016). In the meantime, India wants to approach the Japanese International Cooperation Agency (JICA) for a soft loan to develop the Sagar Island deep-sea port (or Tajpur).

REGION-MAKING: LOGISTICS OR GEOPOLITICS

Nations, either as part of regional groups or independently, seek alliances with like-minded countries to play a major role in the contemporary world. They create geopolitical regions that are often sustained by geoeconomic drivers like trade and logistics. The Association for South-East Asian Nations (ASEAN) made sense in geo-economic and geopolitical terms when it was formed in the 1960s to bring together non-Communist nations of South-East Asia in a strong bloc that was capable, with US and Western backing, of staving off the challenge of communism. Its subsequent expansion to include the three communist regimes of Indo-China (Vietnam, Laos, and Cambodia) was not only made possible by geoeconomic drivers like efforts to create a seamless production value chain but also by a felt need to neutralize China's rising economic power and influence. No wonder, Vietnam, once backed by China in its anti-colonial struggles against the French and later the US, is now strongly aligned to the US in its efforts to checkmate Chinese domination.

In South Asia, India failed to spearhead a comparable ASEAN-type grouping of South Asian nations, primarily due to its unrelenting rivalry with Pakistan, but it has now looked to its eastern frontier to create regional groupings as a means of forwarding its national interest. This includes the development of its underdeveloped east and northeast and the securing of its frontier zones, both militarily and economically. Much of India's trade has grown in recent years with South-East and East Asian countries. Since it is somewhat uncomfortable with the Bangladesh-China-India-Myanmar (BCIM) grouping because of China's presence and

the dominant role it might play, India has joined two initiatives: the Bay of Bengal initiative BIMSTEC (which includes India, Myanmar, Thailand, Bangladesh, and Sri Lanka) and the new Bangladesh-Bhutan-India-Nepal (BBIN) initiative. The US and Japan remain strong allies, due to a mutual desire to contain China's rising influence and have shown ever-greater interest in strengthening relationships with both India and Bangladesh as well as the ASEAN nations.

Ports are emerging as important projects in the new chessboard of Asian geopolitics and geo-economics. To be economically viable, ports have to make geo-economic sense, but geo-economic viability in contemporary Asia is often driven by geopolitics. A huge Indian investment in Chabahar port in Iran appears justified because it would provide greater access to Central Asia and Afghanistan while allowing India to bypass Pakistan. Considering the area's huge energy resources, the money allocated by India to developing Chabahar appears well spent. If Pakistan had played ball, India would not need Chabahar. But since Pakistan is worried about India's rising influence in Afghanistan (and possibly Central Asia in the future)—and has shown a determination to oppose it, even to the extent of getting its intelligence agencies to use Taliban insurgents to attack Indian diplomatic establishments—India has to look to Iran and the port at Chabahar to achieve a crucial geopolitical and geo-economic objective. Chabahar is seen by India to have the potential to offset the China-funded port of Gwadar in Pakistan's Balochistan province, which is not far from Chabahar. That Gwadar lies at the coastal end of the proposed China-Pakistan Economic Corridor (CPEC) may be generating an Indian-US congruity of geopolitical and geostrategic interests.

In the east, India is now keen to further its bilateral relations with Bangladesh, not least to make up for its failure to normalize relations with Pakistan, despite some initial efforts by the Modi administration. Bangladesh is seen as crucial for Indian efforts to connect its mainland to the country's northeast, since the born-in-1971 nation sits between the two. In fact, developing close relations with Bangladesh is seen as crucial to furthering India's 'Look East' or 'Act East' foreign policy (Bhaumik 2014).

Integration of the transport infrastructure of India and Bangladesh to bring down logistical costs and facilitate a more seamless movement of goods and people seems to explain the Indian (and West Bengal) push for a deep-sea port at Sagar and/or a new coastal port at Tajpur, as well as the Bangladesh drive for deep-sea ports at Sonadia and Matarbarhi. But behind this lies the all-pervading Indian desire to connect closely to its

own northeast through Bangladesh. A deep-sea port in Bangladesh's east that could reduce the load on the pre-British port of Chittagong is seen as crucial for India to access its northeast and connect further to South-East Asia. But if the deep-sea port is built by Japan, and not China, it suits not only Indian interests but also those of the US and Japan who want to contain China's rise and deny Beijing as many land-to-sea access points into the Indian Ocean as possible.

China seeks such access to avoid the Malacca 'chokepoint.' According to Chen Wenling, Chief Economist at the China Center for International Economic Exchanges, India's discreet but sustained lobbying in Bangladesh is responsible for the shelving of the Sonadia deep-sea port project (to have been constructed by China), and its replacement by the Japanese-funded Matarbarhi deep-sea port project may not be unfounded (Chen Wenling, personal interview). India's interest in developing the Paira port in Bangladesh, and pairing it with a new port like Sagar/Tajpur in West Bengal, is seen as crucial to the success of the coastal shipping agreement between India and Bangladesh. This agreement aims to bypass logistical hubs like Colombo and Singapore in order to transport goods in large ships directly between Indian and Bangladesh ports. Such a plan makes logistical sense because it would bring down the cost of transporting goods between India and Bangladesh, not only because the bulk of mutual exports and imports would now be sent by sea instead of land transport through checkpoints like Benapole-Petrapole but also because such goods would no longer be carried to Singapore or Colombo as part of a great bulk and then shipped back. It would also cut down on transportation time and thus sharply increase bilateral India-Bangladesh trade which would strengthen bilateral relations in both economic and political terms.

A Bangladesh firmly integrated with India is seen as the first big step in Delhi's efforts to break the jinx in the East and develop regional groupings that offset the failure of similar efforts in the West while also containing or at least curbing Chinese influence. Much as Indian interest in Bangladesh developing a deep-sea port with Japanese rather than Chinese help is seen as crucial for its access to its own northeast and then beyond to South-East Asia, Indian investment in Sittwe port in Myanmar's Rakhine province as part of the Kaladan multi-modal transport project aims at both developing alternative access to its own northeast and connecting to South-East Asian nations through Myanmar.

The nearest Indian port to Sittwe is the Kolkata-Haldia complex. So it is not unexpected that India would be considering the future expansion of

the Kolkata-Haldia port complex—either by furthering down the coast or by developing a deep-sea component to link up to ports in Bangladesh and Myanmar. Such an arrangement would further India's trade and commerce with two neighbours through whose territory it has to access its own northeast as well as the 'tiger economies' of South-East Asia and, if necessary, China.

Revitalization of the Kolkata port complex (including Haldia and future coastal/deep-sea port components) holds the key to Indian efforts at 'region-making' in eastern South Asia, which is itself a prelude for linking up to South-East Asia. Such efforts are seen by the US as bearing the potential for creating a strong bloc of rimland Asian nations capable of containing China's rise, which was undoubtedly the key objective of former US President Barack Obama's 'Asia rebalancing' strategy. Strengthening economic relations with friendly Asian nations, who are close allies of the US, was one of the declared objectives of Obama's 'Asia rebalancing' (Hall 2016).

Despite these developments, China sees ports like Kyauk Pyu in Myanmar or the proposed deep-sea port at Sonadia as capable of generating crucial land-to-sea access that holds the key to cutting down its dependence on the Malacca 'chokepoint' as well as generating potential huge savings in the logistical costs of imports and exports. Such access is also seen as crucial to China's current geo-economic and geopolitical vision that is expressed through the six proposed economic corridors as part of the Belt and Road Initiative. That vision seeks to create China's 'fraternal regions' through the expansion of key logistical infrastructure which will be made possible by generous funding from the China-sponsored Asian Infrastructure Investment Bank (AIIB). If India decides to play ball and goes ahead with the BCIM Economic Corridor, China sees the possibility of a third outlet to the Bay of Bengal-Indian Ocean region through Kolkata, as well as the proposed Sonadia deep-sea port in Bangladesh and the Kyauk Pyu port in Myanmar, which is also the starting point for an oil-gas pipeline to Yunnan. This may be one of the reasons why, as long as India remains engaged with it, the Chinese are taking the K2K Forum so seriously.

As geopolitical considerations influence Asia's emerging geo-economics and India joins China in the big league of nation-states, Kolkata and its port will grow in importance yet again. Not only does it serve a huge hinterland like the landlocked north-eastern states of India, the Himalayan countries of Nepal and Bhutan, and the Bihar-Eastern Uttar Pradesh

region, it also sits at the centre of two proposed growth corridors—one national (Amritsar-Kolkata) and the other transnational (K2K) which could connect to eastern India and the neighbouring countries of Bangladesh, Myanmar, and South-West China. The Modi government has identified Kolkata as the 'starting point' of its 'Act East' thrust. But for the port system to take up these challenges, it has to survive. Modernization and expansion (with a deep-sea component and finally an offshore component) are seen to hold the key to the survival of the country's only riverine port.

REFERENCES

- bdnews24. 2015. 'Matarbarhi Deep Sea Port Work to Start "Next Year".' 24 June 2015. http://bdnews24.com/bangladesh/2015/06/24/matarbarhi-deep-sea-port-work-to-start-next-year
- Bhaumik, Subir. 2014. Look East through Northeast: Challenges and Prospects for India. Observer Research Foundation Occasional Paper 51. New Delhi.
- Bhattacharyya, A. K. 2004. 'Why Calcutta port has a future.' *Business Standard*, 1 September 2004. http://www.rediff.com/money/2004/sep/01guest.htm
- Business Standard. 2014. 'Kolkata Port Depth Needs to be Increased: Study.' 29 December 2014. http://www.business-standard.com/article/news-ians/kolkata-port-depth-needs-to-be-increased-study-114122900552_1.html
- Cargill. 2008. 'The World's First Offshore Port.' Accessed 5 April 2017. http://150.cargill.com/150/en/ROZY-PORT-FLOATING-BARGE.jsp
- Gadkari, Nitin. 2016. 'Coastal States Video Press Conference.' Press Information Bureau, Government of India video, 1:30:38. 3 June 2016. http://pib.nic.in/newsite/webcastplay.aspx?relid=0
- Hall, Craig. 2016. Speech by US Consul-General in Calcutta at a book release function on 21 July 2016.
- Hamilton, Alexander. 1995. New Account of the East Indies. Delhi and Chennai: Asian Educational Services.
- Kolkata Kunming Forum (K2K). 2014. *Resolutions*. Yunnan Development Research Council (Kunming) and Centre for Studies in International Relations (Kolkata). 24 November 2014.
- Kahlon, R. P. S. 2016. 'Message from the Chairman.' *Kolkata Port Trust*. http://www.kolkataporttrust.gov.in/index1.php?lang=1&level=0&lid=115&linkid=18
- Manoj, P. 2013. 'All Above Board: Kolkata Port's Survival Blues.' *LiveMint*, May 17. http://www.livemint.com/Opinion/x9VN5Jp1xj1FnOaGXCbK6M/Allabove-board–Kolkata-ports-survival-blues.html

- Moorhouse, Geoffrey. 1971. Calcutta: The City Revealed. London: Weidenfeld and Nicholson.
- Saha, Sambit and Pranesh Sarkar. 2016. 'Viability Cloud on Sagar Port Project.' *The Telegraph*, Kolkata edition, 5 August 2016. https://www.telegraphindia.com/1160805/jsp/bengal/story_100716.jsp
- *The Hindu*. 2014. 'Gadkari Assures Support for Sea Port at Sagar Islands,' 24 December 2014. http://www.thehindu.com/news/cities/kolkata/gadkariassures-support-for-sea-port-at-sagar-islands/article6721551.ece
- The Telegraph. 2015. 'CPT Sniffs Big Bucks in Land Lease.' Kolkata Edition, 16 October 2015. http://www.telegraphindia.com/1151016/jsp/business/story_48267.jsp#.ViCpLuyqqko
- Yang Ziman. 2015. 'Six Economic Corridors to Better Connect Asia and Europe.' *China Daily*, May 29. http://www.chinadaily.com.cn/business/2015-05/29/content_20858327.htm