

Control over Maritime Chokepoints an Assurance of Secure Lifeline

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Abstract

From ancient time explorers and military people travelled different lands for a living. In course of time, this natural need institutionalised through trade and commerce. Complementary interest rose through exchange mode of trade but contradictory condition developed with coercive military might in pursuit of wealth. Explorers tried to look for a geographical shortest way to save time and energy. Thereby the major geographical choke points of the world have become significant both from geopolitical and geostrategic perspective. There are approximately 200 straits or canals around the world but only a handful are known as chokepoints. Chokepoints are the strategic strait or canal which could be closed or blockaded to restrict energy flow or lifelines of governing states. This type of geopolitical aggression could surely cause international discontent. In 1982 Law of the Sea Convention further protected the international access for nations to sail through straits or canals and ensured these passageways are available as aviation routes for all nations. Hence the control over such geographical choke points and canals can assure politico-economic relief for nations whose main energy flow or lifeline exclusively depends on safe passage through geographical choke points.

Keywords: Shipping, Chokepoints, Energy Flow, Lifeline, Economic Sanction, Geopolitics, UNCLOS.

Introduction

“.... for whosoever commands the sea, commands the trade, whosoever commands the trade of the world commands the reaches of the world and consequently the world itself”

A 15th century English soldier, a qualified intelligence agent and later became British politician Sir Walter Raleigh mentioned those lines on his autobiography published 200 years after his death (Raleigh, 1829). Though Sun Tzu was the pioneer on the art of war strategy on the battlefield, Sir Walter Raleigh was the pioneer to shift the focus of war more on economic control through the sea. Later on, 18th century US Admiral Alfred Thayer Mahan supplements the concept of sea power of a nation with few credentials like; Geographical

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position, physical conformation, number of population, national character, the character of government and most importantly extent of territory (Mahan, 1660). In 21st Century Geoffrey Till, Eric Groove and Milan Vego further simplify the intent of superpowers at sea on developing sea power.

They clearly signify the aspect of Critical requirement (CR) and critical vulnerability (CV) of any achievable Centre of Gravity (CG) (Vego, 2009). Last decade Strategist Collin S Grey and Charles Hadfield mentioned about the control over geographical choke points and significant canals of the world are the CV to gain control over the trade of the world (Grey, 1999). In today's world, economic security assures the stability of the government.

In this paper, the major geographical choke points of the world along with few canals will be briefly presented with their controlling authority. An assessment specified on power playing nation's politico-economic interest of geographical choke points and canals including their brief history. Finally, a glimpse of thought is expressed on Bangladesh perspective to extract complimentary strategic benefit from power playing nations on the aspect of Geographical choke points.

Conceptual Framework

This paper is a geostrategic meta-analytic research where the concept of geographical chokepoints was described in brief. major geographical chokepoints and man-made chokepoints were also described with geographic maps along with strategic significance. The power politics by the influential nation-state concentrated through geographical choke points were also mentioned in the paper. The growing interest of influential nation state's investment on future manmade choke points and endeavour to dominate in international geopolitics were figured out as an outcome of this paper. Finally, the impact on Bangladesh over maritime politics of geographical choke points were discussed in brief as the future scope of study from this paper. In this exploratory form of research methodology meta-analysis process was adopted as it combines fact from multiple studies for a common outcome. Here multiple geographical chokepoints both natural and man-made were discussed considering the

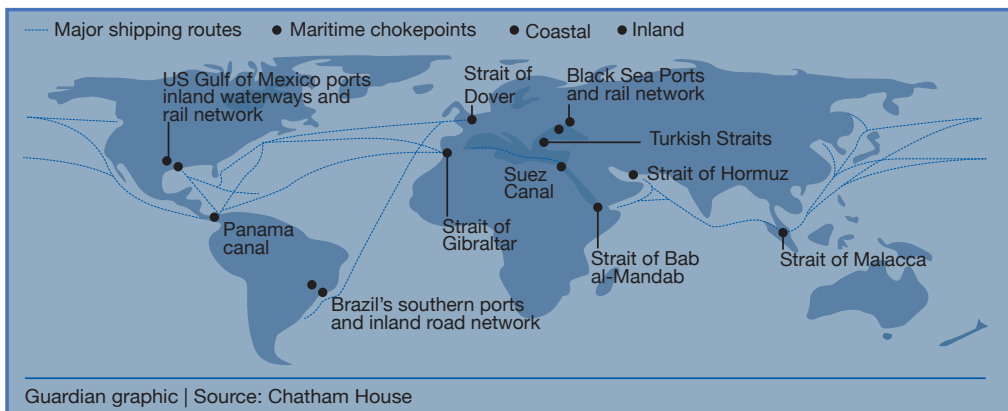


Figure-1: Global Maritime Chokepoints (<http://www.bbc.com/news/world-40415756>)

international maritime geopolitics evolving around them. Thereby global maritime choke points were discussed briefly with future endeavour by power playing nations over choke point, nation states and third-party State interest like Bangladesh were discussed in this paper.

Geographical Chokepoints

The world's oceans account for nearly 90% of all international commerce. Straits are geographical areas littered across the oceans near land masses that constrict the passage of

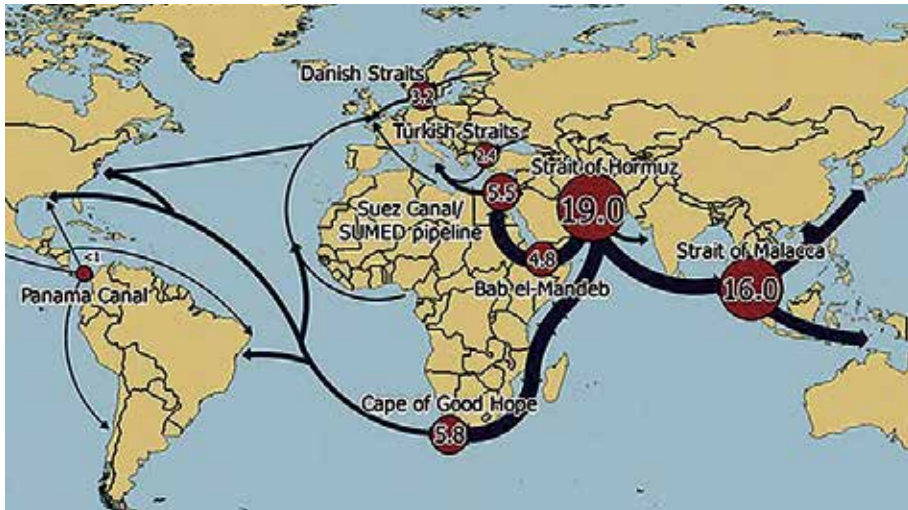


Figure-2: Global Oil production and Consumption flow: million barrel/day-2015
 (<http://energyfuse.org/wp-content/uploads/2015/04/crude-oil-balance-of-trade>)

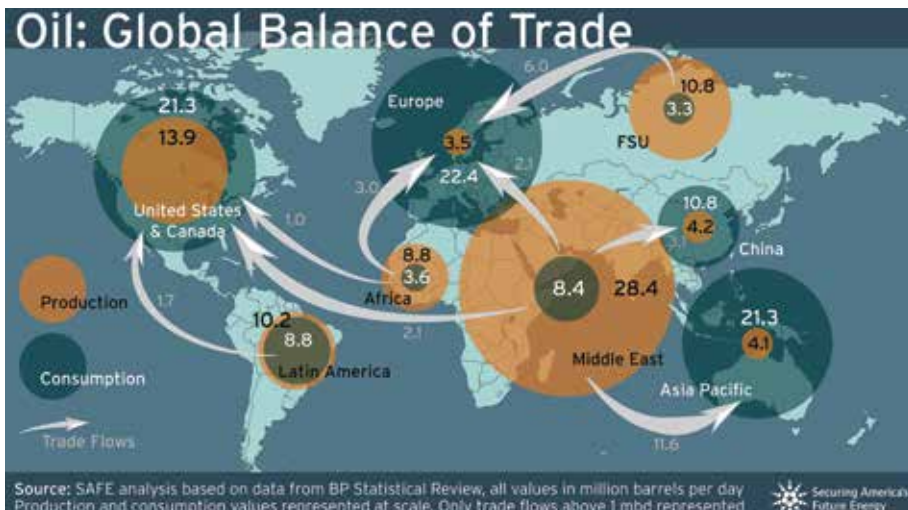


Figure-3: Global Oil transit Chokepoints and energy flow: million barrel/day-2016
 (<https://www.eia.gov/beta/international/regions-topics.php?RegionTopicID=WOTC>)

shipping to narrow passages. These geographical narrow passages are called chokepoints.

In 1982 UNCLOS II protected the international access for nations to safe passage through straits and canals and even ensured that these passageways are available as the innocent passage for aviation (Collins, 1998). These straits often serve as strategic chokepoints those offer potential control of the world's sea lanes of communication. As international shipping lanes are forced to go through these specific vulnerable locations, they are often referred to as the 'Geographical Achilles heels of the global economy'. Many straits are in close proximity to politically unstable nations, which increases navigation risks and compromises access and use. These strategic passages can be mined, blocked by sinking ships or interdicted by naval forces, artillery or missile systems (Jong, 2014).

Major Geographical Chokepoints

There are few geo-strategic oil chokepoints throughout the world. Disruption to any one of these chokepoints could cause unpredictable price fluctuations. Fortunately, these locations are generally safe and are kept clear by the international community, whose economies and standards of living depend on these chokepoints. Uncertainty over maritime security can lead to a global shift in oil prices. If one of these chokepoints were disrupted, ships would need to travel additional thousands of miles to reach an alternate route. The major choke points are appended below in the order of oil flow:



Strait of Hormuz

The Strait of Hormuz is the world's primary oil chokepoint. According to the US Energy Information Administration (EIA), 19 million barrels of oil, representing 30% of all maritime-traded petroleum passed through the strait per day in 2015. Oil from Saudi Arabia, the UAE, Qatar, Iran and Iraq all pass through the strait. These oil flow head mostly towards Asia and



Figure-4: Global Oil flow in Hormuz Strait
(<https://www.google.com/search?hl=en&authuser>)

tankers head west towards Suez Canal and the Red Sea.

The Strait of Hormuz is able to accommodate the largest oil tankers in the world. The mercury of tension rising centring this strait as the US and its allied domination is often challenged by Iran, China and Russia. Recent Qatar issue further tightened the situation of flow at Hormuz. This is a 47 km strait between Bandar Abbas port of Iran and Kumzar island of Oman. British SOLAS (Safety of Life At Sea) station at Al Jeer port of UAE and Safe energy traffic station of US coalition forces established on Khasab port of Oman (Ramazani, 1979) raised the mercury of tension much higher than predicted. US and UK maintain strong military ties with Saudi Arabia, Oman and UAE for active control on the Strait of Hormuz.

Strait of Malacca

The Strait of Malacca is the shortest waterway which connects the Indian Ocean to the South China Sea and the Pacific Ocean. In 2015, the US Energy Information Administration, EIA estimated that 15.2 million barrels of oil a day passed through the strait, with the fuel from the Middle East primarily heading towards Indonesia, China, and Japan. The Strait of Malacca is also one of the narrowest chokepoints in the world. The narrowest point in the strait is only 1.7 miles wide, which creates a natural bottleneck for shipping. The Strait is 805 km (500 miles) stretched between Peninsular Malaysia (West Malaysia) and the Indonesian island of Sumatra. At Phillips Channel close to the south of Singapore, the Strait of Malacca narrows to 2.8 km (1.5 nautical miles) wide, creating one of the world’s most significant traffic choke point (Freeman, 2003).



Figure-5: Crude Oil flow through Malacca Strait
 (https://www.eia.gov/todayinenergy/detail.php?id=10671)

It is named after the Empire of Melaka who ruled over the archipelago between 1414 to 1511. From an economic and strategic perspective, the Strait of Malacca is one of the most

important shipping lanes in the world. The strait is the main shipping channel between the Indian Ocean and the Pacific Ocean, linking major Asian economies such as India, China, Japan and South Korea. Over 50,000 vessels pass through the strait per year carrying one-quarter of the world's traded goods including oil, Chinese manufactures and Indonesian coffee. About a quarter of all oil carried by sea passes through this strait (Nordin, 2007). The narrowest point of this channel is about 22 km between Malaysia's Port Dickson and Indonesian Island of Pulut Rupert.

Cape of Good Hope

The Cape of Good Hope, the crossing at the southernmost tip of Africa, is not technically a chokepoint since it's open on one side but considered as a critical trade route. In 2013, the route around the Cape saw 4.9 million barrels of oil a day, approximately 9% of the total maritime oil trade. In 2013, total 3.6 M/bd of crude oil around the world moved eastbound, originating mostly from Africa (2.1 M/bd) and from South America and the Caribbean (1.3 M/bd). Eastbound crude oil flows were nearly all destined for Asian markets (3.5 M/bd). In the opposite direction, nearly all westbound flows originated from the Middle East (1.3 M/bd), mostly destined for the United States (Mulder, 2015).

There is a very common misconception that the Cape of Good Hope is the southern tip of Africa because it was once believed to be the dividing point between the Atlantic and Indian Oceans. In fact, the southernmost point is Cape Agulhas, about 150 kilometres (90 miles) to the east-southeast. The Atlantic and Indian



Figure-6: Oil flow through Cape of Good Hope
(<https://www.eia.gov/todayinenergy/detail.php?id=10671>)

oceans meet at the point where the warm-water current meets the cold-water current and turns back on itself – a point that fluctuates between Cape Agulhas and Cape Point, about one kilometre east of the Cape of Good Hope. When following the African coastline from the equator, the Cape of Good Hope marks the psychologically important point where one begins to travel more eastward than southward. Thus the first rounding of the cape in 1488 by Portuguese explorer Bartolomeo Dias was a major milestone in the attempts by the Portuguese to establish direct trade relations with the Far East (McKinnon, 2015).

The Cape of Good Hope also functions as the secondary route for oil if the primary chokepoints of the Suez Canal or the Bab el-Mandab were closed. According to the US Energy Information Administration, EIA rerouting oil around the cape would increase oil cost considerably as it would add an additional 2,700 miles of transit from Saudi Arabia to the US.



Figure-7: Traffic lane through Bab-el-Mandeb chokepoint
(<http://susris.com/2015/04/14/the-bab-el-mandeb-maritime-chokepoint>)

Bab el-Mandab

Only 18 miles wide at its narrowest point, the Bab el-Mandab connects the Red Sea to the Gulf of Aden and ultimately to the Indian Ocean. Instability or closure of the waterway could force tankers to have to travel around the southern tip of Africa. Crucially, the EIA notes, the vast majority of southbound traffic through the Suez Canal must also pass through the Bab el-Mandab, so the closure of the waterway could have a cascade effect (Anderson, 2014).

In 2015, 3.8 million barrels of oil passed through the waterway per day. Oil prices took a recent jolt after the Yemeni government collapsed, raising the possibility of a security crisis in the Bab el-Mandab. The narrowest passage of the choke point is 12 km between former French colony Djibouti and Perim island of Yemen where 2012 UK invested on hotel tourism and maritime safety observer station for passive control (Blazev, 2016).

Danish Straits

The Danish Straits formed out of a series of channels passing around the Danish Islands is among the most secure oil chokepoints in the world. The chokepoint connects the Baltic Sea in the east to the North Sea in the west. Approximately 3.3 million barrels of oil a day flowed through the region in 2013. Despite rising tensions with Russia in Europe and particularly the Baltics, shipping is unlikely to be affected by regional security issues. The EIA estimates that

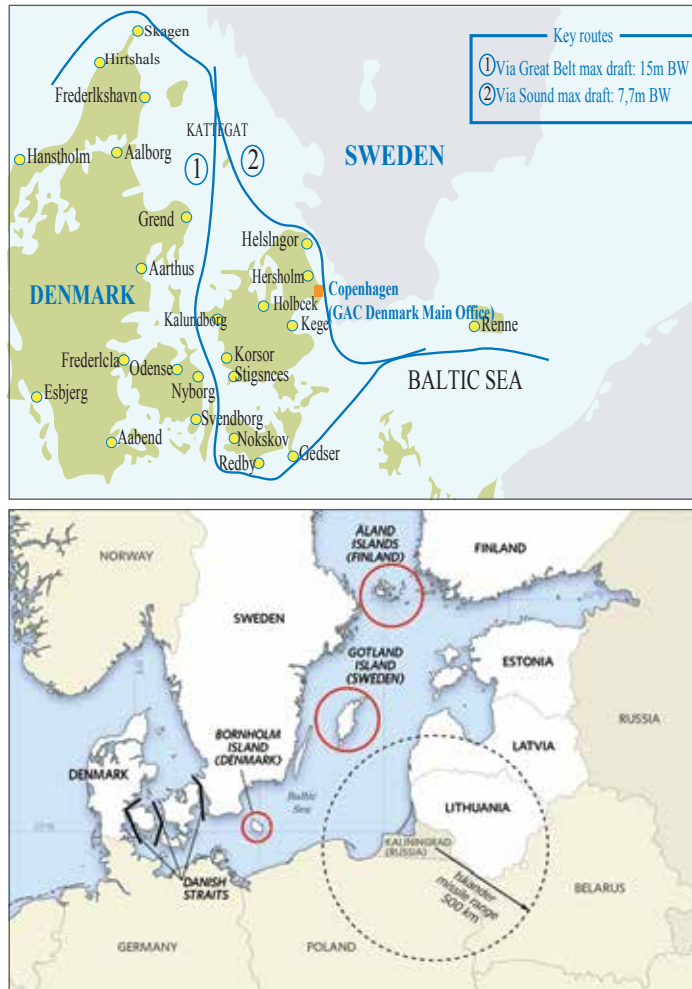


Figure- 8: Traffic lane through Danish Strait
(<https://www.trafficlist.net/lyngby-radio-oxz>)

42% of all oil shipped through the Danish Straits originated from the Russian port of Primorsk in 2013 to the West. A small amount of Norwegian and British oil also went through the straits to the Baltics (Paul, 2010). If Russia ever blockaded the Strait, it would mostly just be blockading its own oil trade as well.

Strait of Gibraltar

The name Gibraltar is the Spanish derivation of the Arabic name Jabaal Tariq, meaning ‘Mountain of Tariq’. It refers to the Rock of Gibraltar, which was named after the Umayyad general Tariq ibn-Ziyad. An Anglo-Dutch force captured Gibraltar from Spain in 1704 during the War of the Spanish Successor on behalf of the Habsburg pretender to the Spanish throne. The territory was subsequently ceded to Britain in perpetuity under the ‘Treaty of Utrecht’ in

1713. The sovereignty of Gibraltar is a major point of contention in Anglo-Spanish relations as Spain asserts a claim to the territory. Gibraltarians overwhelmingly rejected proposals for Spanish sovereignty in a 1967 referendum and again in 2002. Under the Gibraltar constitution of 2006, Gibraltar governs its own affairs such as defence and foreign relations remaining under the responsibility of the UK Government.

The Strait of Gibraltar is a narrow body of water between Spain and Britain that connects the Mediterranean Sea with the Atlantic Ocean. Though the strait having a continuous coast of Morocco, Britain shares the critical entry point of Spanish land and Spain holds the south-eastern part of Morocco. Around 300 cargo vessels pass through the Strait every day. In spite of the heavy concentration of shipping traffic and the noise caused by it, there is still an abundance of whales and dolphins in these waters. The Rock is the Crown property of the United Kingdom and borders Spain (Brown, 2012). The sovereignty of Gibraltar was transferred from Spain to the Kingdom of Great Britain by the Treaty of Utrecht in 1713 after the War of the Spanish Succession.



Figure-9: Strait of Gibraltar
 (<http://attyreycdar.blogspot.com/2014/08/rock-of-gibraltar.html>)

Bosporus Strait

A strait of Bosporus/Turkish Straits is a 17-mile-long waterway with only 1 km wide, which connects the Black Sea with the Mediterranean Sea and supplies Western and Southern Europe with oil from the Caspian Sea. The strait is made up of the Bosporus and Dardanelles and divides Asia and Europe. The Bosporus joins the Black Sea with the Sea of Marmara and the Dardanelles connects the Sea of Marmara and the Mediterranean Sea. Straits of Bosporus is the world's narrowest strait used for international navigation. The Straits are governed under the Montreux Convention, which gives Turkey control over the Bosporus and the Dardanelles. While Turkish maritime authorities have the right to levy tolls on the passing tankers and are also responsible to check ships for sanitary conditions and safety (Cogliati, 2014), the Bosporus and Dardanelles Straits are considered international waterways and



Figure-10: Strait of Bosphorus

(<http://www.bosphorustour.com/Currents-Bosphorus-Water.html>)

Turkey is prohibited from restricting their use during peacetime.

The Bosphorus is a narrow stretch of water that divides both Asia from Europe and splits Istanbul's European and Asian halves. The chokepoint connects the Black Sea to the Mediterranean. In 2013, approximately 2.9 million barrels of oil a day flowed through the Bosphorus, with the petroleum coming from Russia, Azerbaijan, and Kazakhstan. According to the EIA, Russia has slowly been shifting its exports to the Baltics while Azerbaijan and Kazakhstan have further increased shipping through the chokepoint. The Bosphorus is only a half mile wide at its narrowest point and around 48,000 vessels travel through the waterway a year (Bender, 2015).

Major Manmade Canals as a Chokepoint

There are few manmade-strategic chokepoints throughout the world. Since these choke points are manmade, they represent strong economic and political intention of state government with regional influence. Closure or disruption to any one of them could cause unpredictable price fluctuations of commodities and energy. Therefore, these choke points became the vital regional lifelines exhibiting supreme strategic importance. Economic superpowers also influencing states to have more manmade canals to dominate regional economic growth and establish own interest. Military movement and positioning along the canals further secure the interest of influencing nation and disrupt the interest of other States. Uncertainty over maritime security can lead to a global shift in oil prices. If one of these chokepoints were disrupted, ships would need to travel additional thousands of miles to reach an alternate route. The major manmade canals are appended below in the order of shipping flow:

Suez Canal

Suez Canal is an artificial sea-level waterway in Egypt, connecting the Mediterranean Sea to the Red Sea through the Isthmus of Suez. Constructed by the Suez Canal Company between

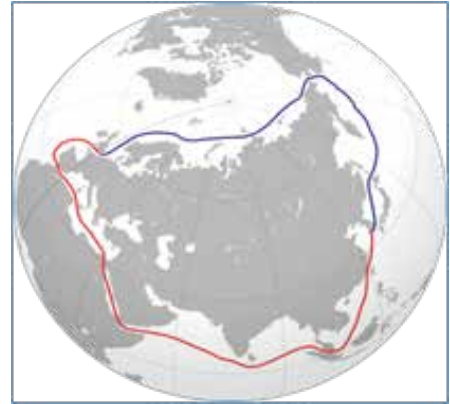


Figure-11: Suez Canal

(<http://www.npr.org/sections/thetwo-way/2017/06/14/532960178>)

1859 and 1869, it was officially opened on November 17, 1869. The canal offers watercraft a shorter journey between the North Atlantic and northern Indian Oceans via the Mediterranean and Red seas by avoiding the South Atlantic and southern Indian oceans, in turn reducing the journey by approximately 7,000km (4,300 miles). It extends from the northern terminus of Port Said to the southern terminus of Port Tewfik at the city of Suez. Its length is 193.30km (120.11 miles), including its northern and southern access channels (Lesseps, 1876).

In 2013, a record 3.2 million barrels of oil a day passed through the canal, mostly to markets in Europe and North America. According to the EIA, the Suez Canal was expanded in 2010 to allow 60% of all tankers in the world to effectively pass through. The fall of dictator Hosni Mubarak in Egypt in

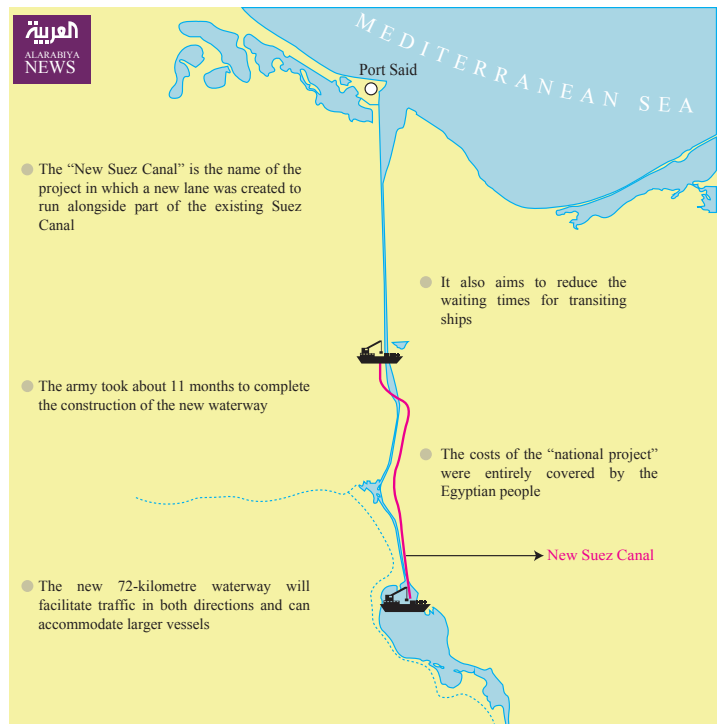


Figure-12: Suez Canal Development

(<http://english.alarabiya.net/en/perspective/2015-Egypt-s-Suez-Canal>)

2011 and the resulting unrest did little to deter shipping through the canal. But security remains a primary concern and in September 2013 terrorists planned a failed rocket attack on cargo ships passing through the region. In 2012 total 17,225 vessels traversed the canal which means 47 vessels per day. In August 2014, construction was launched to expand the speed of the canal's transit time to double the capacity of the Suez Canal from 49 to 97 ships a day. The 'New Suez Canal', as the expansion opened with great fanfare in a ceremony on 6 August 2015 (Waterfield, 2016).

Panama Canal

The United States commenced building a canal across a 50-mile stretch of the Panama isthmus in 1904. Chief engineer John Stevens devised innovative techniques and spurred the crucial redesign from a sea-level to a lock canal. His successor, Lt. Col. George Washington Goethals, stepped up excavation efforts of a stubborn mountain range and oversaw the building of the dams and locks. The Canal opened in 1914, oversight of the world-famous Panama Canal was transferred from the U.S. to Panama in 1999. The Panama Canal is strategically important to the United States because it is a rapid link between the east and west coast, saving approximately 13,000km (from 21,000km to 8000km). It is comprised of three



How the Panama Canal Works

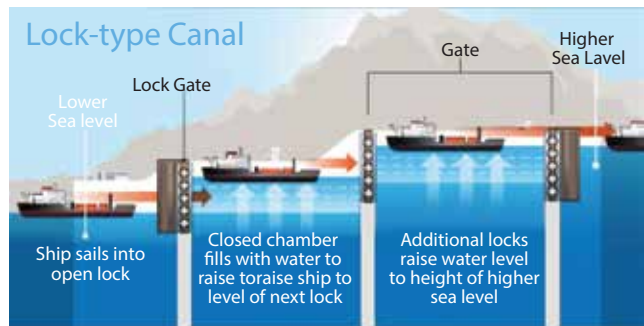


Fig 13: Panama Canal Operation.

(<http://marinersgalaxy.com/2015/06/panama-canal-history>)

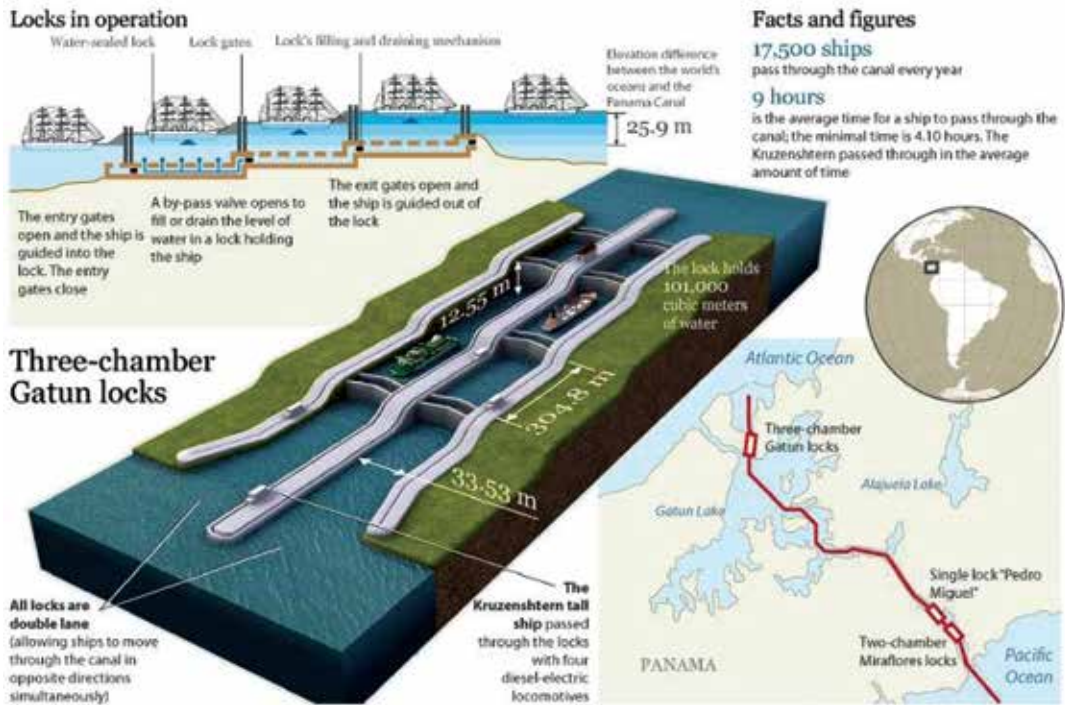


Figure-14: Economic benefit of the Panama Canal.
 (<http://marinersgalaxy.com/2015/06/panama-canal-history>)

main elements, the Gatun Locks (Atlantic Ocean access) the Gaillard Cut (continental divide) and the Miraflores Locks (Pacific Ocean access). The Panama Canal connects the Pacific Ocean to the Caribbean and ultimately to the Atlantic (McCullough, 2001). According to the US Energy Information Administration EIA, the Panama Canal transported 1.4% of all oil and petroleum products globally in 2013. This amounted to approximately 0.85 million barrels of oil a day in 2013. The utility of the canal has waned in the years since it was built.

Today, the narrowest point of the Panama Canal is only 110 feet wide forcing larger super-tankers to avoid the canal. The canal is undergoing an expansion project which should enable larger tankers to pass through the region more easily. The USA will fund the expansion project of the Panama Canal to ensure the safe passage of her Supertankers and Aircraft Carriers. Political negotiation is underway to attain more benefit from Panama and early completion of the development project by 2022 (Friar, 2016).

Kiel Canal

The Kiel canal built between 1887 and 1895, initially served German military needs by eliminating the necessity for ships to travel northward around the Danish peninsula. It was enlarged between 1907 and 1914 to accommodate large naval ships. Prior to World War I the



Fig 15: German Kiel Canal.
 (<https://www.britannica.com/topic/Kiel-Canal>)

canal (former Kaiser-Wilhelm Canal) was owned by the German government. The Treaty of Versailles (June 28, 1919) laid down regulations, internationalised the canal and leaving it under German administration. Traffic on the canal was subject only to general police, shipping, sanitary and customs regulations. These provisions were rejected by Adolf Hitler in 1936. Since World War II the conditions of the Treaty of Versailles guaranteeing freedom of navigation to be practised (Gollasch Stephan, 2006). The canal remains an important route for Baltic shipping.

The canal has been enlarged twice and is today 160 metres (526 feet) wide and 11 metres (37 feet) deep and is spanned by seven high-level bridges that have about 43 metres (140 feet) of clearance for ships beneath them. The locks are 45 metres (146 feet) wide by 327 metres (1,072 feet) long. The canal constitutes the safest, most convenient, shortest and cheapest shipping route between the North Sea and Baltic Sea (Sheffield, 2016). This canal gives the quickest access route to all the rim nations of Baltic Sea like Poland, Lithuania, Latvia, Estonia, Finland and Moscow.



Figure-16: Israeli Lifeline Strait of Tiran
 (<https://earthobservatory.nasa.gov/IOTD/view.php?id=81772>)

Future Exertion on the Canal as the Chokepoint

There are few natural chokepoints new world order will ponder out. Complementary and conflicting interest will open the avenue to think for the execution of new manmade canals. Few future planning of economic giants trying to secure their interest through Geographic and manmade canal development are given below:

Strait of Tiran

The Straits of Tiran are the narrow sea passages between the Sinai and Arabian peninsulas which separate the Gulf of Aqaba from the Red Sea. The distance between the two peninsulas is about 13 km. After the 1956 war, Egypt agreed to reopen the Straits of Tiran for Israeli shipping, whose closure had been a significant catalyst in advancing the Suez Crisis. It has two passages deep enough to be navigable by larger ships. The Enterprise passage, 290 metres (950 feet) deep, is adjacent to the Egyptian side, while the 73 metres (240 feet) deep Grafton passage, surrounded by shallows, is to the east, nearer to the island of Tiran (Lapidoth, 1982). To the east of Tiran and Saudi Arabia, the other strait has reefs and shallows with a single channel has 16 metres (52 feet) depth.

Access to Jordan's only seaport of Aqaba and to Israel's only Red Sea seaport of Eilat is through the Gulf of Aqaba, which gives the Straits of Tiran strategic importance. In 1967, 90% of Israeli oil passed through the Straits of Tiran, making it a target of Egyptian blockade during the Arab League boycott of Israel. In May 1967, Israeli Prime Minister Levi Eshkol repeated declarations that Israel had made in 1957, saying that closure of the Straits of Tiran would be an act of war. Spiritually the route of Exodus gives this strait an added value to Jews (Fritz, 2016), yet Israeli lifeline Strait of Tiran will be protected by her allies in the name of Maritime security.

Nicaragua Canal

This canal is the extended reach of China’s string of pearls which negotiates with Nicaraguan government to have an alternative manmade canal other than the Panama Canal. On 26 September 2012, the Nicaraguan Government and the newly formed Hong Kong Nicaragua Canal Development Group (HKND) signed a memorandum of understanding that committed HKND to finance and building the ‘Nicaraguan Canal and Development Project’. HKND Group is a private enterprise (Ellis, 2016). The Nicaraguan Government subsequently approved the Master Concession Agreement with HKND on 13 June 2013 thereby granting ‘The sole rights to the HKND Group to plan, design, construct and thereafter to operate and manage the Nicaragua Grand Canal and other related projects, including ports, a free trade zone, an international airport and other infrastructure development projects’. The construction work is due to start by the end of 2022.

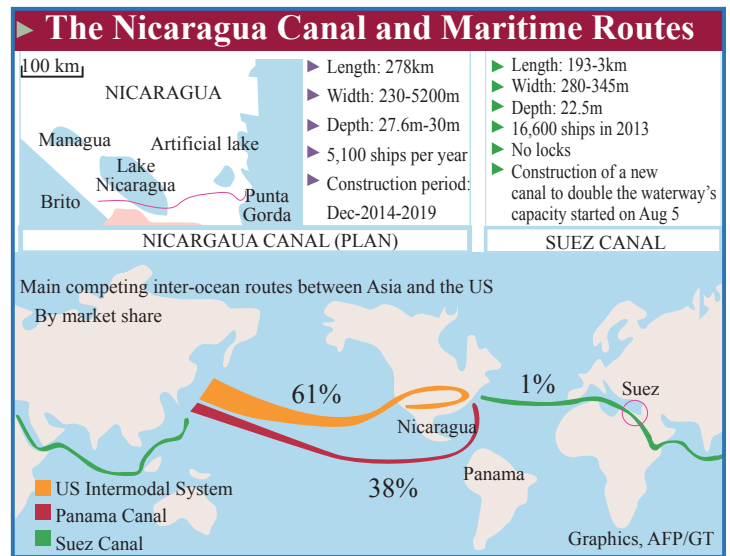


Figure-17: Panam’s Alternative Nicaragua Canal (<http://www.globaltimes.cn/content/898353.shtml>)

The country has been waiting for the project’s completion and a chance to compete with the Panama Canal. This Special Law for the Development of Nicaraguan Infrastructure and Transport to the Canal and Free Trade Zones allow for the construction of the project, which is estimated at USD 50 billion. The agreement establishes that the Canal will have its own special operation team with immunity to Nicaraguan law and HKND descendants will be the

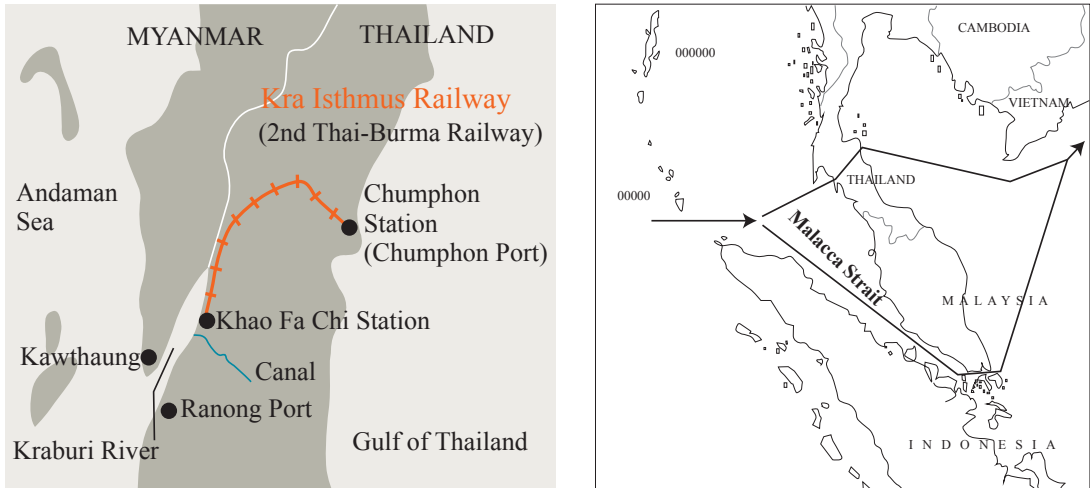


Figure-18: Ranong-Chumphon Canal
 (<https://books.google.co.uk/books?%Thailand%20Ranong%20Canal>)

owners of the Canal until the year 2129 (Ellis, 2016).

Ranong Canal

Ranong is located 586 kilometres south of Bangkok and is the first southern province that is located on the Andaman Sea. The narrowest part Ranong province of Thailand is only 44 kilometres which give explicit chance for any country to invest in manmade canals. China showed interest in this project which may challenge and incapacitate the shipping flow of Malacca Strait. If this canal is established after the hydrographic assessment, it will definitely transform the economic posture of Thailand.

Thailand is seeking investments to build a Canal Zone through the provinces of Ranong and Chumphon. This will shorten the trip from the Middle East by a couple of days by skipping the strait of Malacca. International energy flow duration will be reduced by a day with distance reduction of 2300 km toward China and East Asia (Graham, 2005). Japan is interested but China is ready to invest and start the project by 2022 after political clearance from China's policy-making level.

Bangladesh Perspective on Global Chokepoints

Bangladesh, a littoral state in the Bay of Bengal (BoB), is becoming more and more strategically significant for many countries. Since the BoB leads to the Malacca Strait, that opens up to the South China Sea (SCS), these routes are crucial to economies in the SCS (China, Japan) which explains the growing interest and involvement of extra-littoral players in the Bay. Protection of SLOCs has added to the importance of increasing maritime power projection capabilities in the BoB. Even though relatively manageable in terms of confrontations between nations, the intentions of the major powers are increasingly being

questioned. In terms of foreign policy strategy, China is clearly adopting a 'Look South' policy, reflected through its heavy infrastructure investments in the countries around the Bay. India is opting for a 'Look East' policy, to intensify connectivity to Southeast Asia and the US with its Asia 'Rebalancing' strategy which shifts its focus from the Middle East to this dynamic region (M H Kabir, 2015).

Geographically Bangladesh residing among world economic superpower's like China and India where politico-economic calculation seems tedious on conflicting and contradictory interest. Considering Bangladesh under the 'String of Pearls' policy of China with their deep sea port investment gave huge importance to Bangladesh in the global arena. Chinese interest lies in the investment on Bangladesh's plain fertile land and transit point to develop her southern Sichuan province. On the other hand, India's political influence on Bangladesh assures transit facilities towards her eastern regional development at Tripura, Assam and Mizoram. Internationally as a Muslim state and vibrant UN member state Bangladesh maintains healthy foreign relation with global powers and middle east for safer and smooth flow of petroleum through geographical choke points.

Conclusion

At the dawn of the 15th century, Sir Walter Raleigh recognised the strategic importance of oceanic chokepoints for commercial trading vessels in times of peace and have enhanced the military power of their occupiers in times of war. However, in course of time, structural changes in the shipping industry have had significant consequences for strategic chokepoints, especially the two great canals. Over the last 25 years, the real cost of sea transportation fell by 80% because larger ships generated economies of scale, containerisation reduced labour costs and information technology improved resource allocation. The rise of super tankers and post-Panamax container ships has significantly diverted traffic from the Panama Canal and has motivated the Egyptian government to approve a 10-year 441 million-dollar project to widen and deepen the Suez Canal. The development of railway trans-shipment in Suez and Panama and competition from rail and truck transportation in North America and Europe may further undermine the commercial value of strategic waterways. Moreover, most products of information industries cost very little to transport, even by aeroplane and sometimes can be 'exported' abroad via the internet.

Growing demand and squeezed supplies are unavoidable consequences of the geography of petroleum production, distribution and consumption. The global economy is beginning to realise the full extent of a growing shortage of oil and its inherent economic and geopolitical costs. Current estimates place the peak of global oil production at around 2008-2010. In the meantime, oil consumers are struggling to diversify their oil supplies, but most of the remaining oil reserves are predominantly in the Middle East, a region which will remain the focal point of global oil shipments. Although there is a current energy shift towards renewable and environmentally-friendly resources, such as natural gas and eventually hydrogen, the move from petroleum is likely decades away. Even a transition to natural gas, the reserves of which are substantial, would be very costly since entirely new distribution infrastructures would be required, including additional LNG carriers, terminals and processing facilities.

Meanwhile, an era of insecurity and vulnerability is likely to prevail as petroleum circulation increases with strategic chokepoints bearing the brunt of the tension. Like the limited additional petroleum production capacity, the circulation capacity, which is mainly dictated by the chokepoints of oil circulation, leaves little room for additional growth. These geographical constraints cannot be bypassed easily and will be a significant factor in global insecurity of oil supplies in terms of who will get preferential access to these limited resources. The situation is likely to become very tense among large consumers, such as the United States and China during the second decade of the 21st century. As they compete, the outlets of the Middle East handle the last large volume supply routes of the petroleum era. Since additional economies of scale in maritime shipping are difficult to achieve and alternative routes, including pipelines are limited and insecure so, world economic power seeks alternative ways and routes through new manmade canals to secure their energy flow. Thereby, solutions for petroleum distribution, namely the use of geographical chokepoints will demand rationalised use for the wellbeing of world peace.

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