Maritime Trade History

India has a significant maritime history, with the Rig Veda containing the earliest reference to maritime operations. There are various tales in Indian mythology about the ocean, the sea and rivers with the belief that mankind has benefited from the abundance of seas and oceans. There is a lot of evidence from Indian literature, art, sculpture, painting and archaeology that supports the presence of Indian maritime traditions. (www.joinindiannavy.gov.in)

Ancient India was centered around the Indus Valley years ago, and was already well developed before 3200 BCE, stretched from Afghanistan to the Indian Ocean and points farther east and north, the largest empire in the world at the time. However, its influence spread much further than that. During its peak developments, it had organized cities, multistory brick buildings, vast irrigation networks, sewer systems, the most advanced metalwork in the world, and a maritime trade network that incorporated the use of compasses, planked ships, and trained navigators that reached parts of western Asia, Mesopotamia, Africa, and other ports far beyond their borders. Therefore, it can be comprehended that ancient Indians also had the capability to go on ocean-going trips and in fact, reach the Americas.

Indian maritime history begins during the 3rd millennium BCE when inhabitants of the Indus Valley initiated maritime trading contact with Mesopotamia. As per Vedic records, Indian traders and merchants traded with the far east and Arabia. During the Maurya Empire (3rd century BCE), there was a definite "naval department" to supervise the ships and trade. At the end of 1st century BCE Indian products reached the Romans during the rule of Augustus, and the Roman historian Strabo mentions an increase in Roman trade with India following the Roman annexation of Egypt. As trade between India and the Greco-Roman world increased, spices became the main import from India to the Western world, bypassing silk and other commodities. Indians were present in Alexandria while Christian and Jewish settlers from Rome continued to live in India long after the fall of the Roman Empire, which resulted in Rome's loss of the Red Sea ports, previously used to secure trade with India by the Greco-Roman world since the Ptolemaic dynasty. The Indian commercial connection with Southeast Asia proved vital to the merchants of Arabia and Persia during the 7th–8th century. A study published in 2013 found that some 11 percent of Australian Aboriginal DNA is of Indian origin and suggests these immigrants arrived about 4,000 years ago, possibly at the same time dingoes first arrived in Australia.

On orders of Manuel I of Portugal, four vessels under the command of navigator Vasco da Gama rounded the Cape of Good Hope, continuing to the eastern coast of Africa to Malindi to sail across the Indian Ocean to Calicut. The wealth of the Indies was now open for the Europeans to explore. The Portuguese Empire was the first European empire to grow from spice trade.

A study of the country's maritime history reveals that the Indian subcontinent dominated the Indian Ocean from very early times until the 13th century. Indians went to sea for trade and commerce. Thus, up until the 16th century, peaceful sea-borne commerce and cultural and traditional interchange between countries were common. The Indian Ocean has always been recognized as a vital region, and India is at the heart of it. (www.joinindiannavy.gov.in)

Thus, this study aims to understand the culture and hertiage of Maritime Trade in India.

An attempt to understand culture is done through referring mention of maritime trade in various texts and history of maritime trade is traced through various relevant research sources. Therefore, this study is divided into three parts focusing on:

- **Part I:** Mention of Maritime trade in various texts (ancient texts, travelogues, books and research articles)
- **Part II:** Discuss on Maritime history covering maritime activities carried out in India across various timeline.
- Part III: Highlight the story of Marathas' fight for Maritime Trade

Part I

Mention of Maritime Trade in Various Texts

The maritime tradition of India is as old as our civilization and as vast as the Indian Ocean. Navigations in the Indian Ocean were well attested in the ancient paleographical and geographical literature, though fragmentary they provide information and attest to the existence of cartographic representations. Navigators both Greek and Latin had experienced what it was to sail in the Indian Ocean at that time, offering a constantly evolving representation of this area (Marie Kowalski, 2019).

Following is a list of various pieces of evidence from ancient Indian texts, travelogues, books, etc that have mentioned the occurrence, activities, and (other details) of the maritime trade in ancient India:

- 1. The ancient Vedic texts, such as the Rig Veda and Shatapatha Brahmana, describe the navigation of ships and journeys to faraway places through sea routes that were well-known at the time. One verse from the Rig Veda (1.25.7) states that Varuna had complete knowledge of all sea routes used by ships, while another verse (2.48.3) describes how merchants sent ships for foreign trade. The Rig Veda also mentions merchants traveling frequently and widely across the sea (1.56.2) and a voyage taken by Vasistha and Varuna in a skillfully fitted ship (7.88.3-4). Additionally, there is a verse (1.116.3) that recounts an expedition in which Tugra, a Rishi king, sent his son Bhujya to fight against enemies in distant islands. However, Bhujya and his followers are shipwrecked during a storm and left stranded without support. The twin Ashvins rescue them in their hundred oared galleys. The Atharva Veda also mentions boats that were spacious, well-built, and comfortable. (pragyata.com, n.d.)
- 2. The Ramayana and Mahabharata are known for mentioning ships and sea travel, but the Puranas, such as Matsya, Varaha, and Markandeya Puranas, also contain stories of sea voyages. The Ayodhya Kand of Valmiki's Ramayana describes large ships that could hold hundreds of warriors, while the Kishkindha Kand depicts how Sugriva gave directions to Vanar leaders for traveling to cities and mountains in the islands of the sea, particularly Yavadvipa (Java) and Suvarna Dvipa (Sumatra) in search of Sita. The Ramayana also

mentions merchants who traveled beyond the sea and presented gifts to kings. In essence, ships have been in use since the Vedic age.

The Mahabharata's Sabha Parva mentions Sahadeva traveling to various islands in the sea to defeat their kings. In the Karna Parva, the Kauravas' soldiers are described as merchants whose ships encountered trouble in the deep sea. The same Parva also describes how the sons of Draupadi saved their maternal uncles by providing them with chariots, similar to how shipwrecked merchants are rescued by boats. However, in another verse in the same Parva, the Pandavas were able to escape their planned destruction with the help of a large ship secretly built for them under the orders of Vidura. The ship was well-equipped with machinery, weapons of war, and could withstand storms and waves. In essence, the Mahabharata contains references to sea travel and ships, including military expeditions, shipwrecks, and secret escape plans. (pragyata.com, n.d.)

- Classical Sanskrit works like Raghuvamsha, Ratnavali, Dashakumaracharita, Kathasaritsagara, Panchatantra, and Rajatarangini also refer to ships and sea travel. (pragyata.com, n.d.)
- 4. Jatakas, Hitopadesa, and Katha Sarit Sagara contain various tales of people's adventures on the high seas and oceans. These stories describe people traveling across vast bodies of water and encountering various challenges and obstacles. Some of these stories may involve sea voyages for trade or military expeditions, while others may simply be tales of individuals traveling to far-off lands or encountering sea monsters and other dangers. In essence, these works showcase the enduring fascination with sea travel and the dangers and adventures it can bring. (www.exoticindiaart.com)
- 5. Kautilya's Arthashastra provides detailed information about the boats maintained by the navy and state, including the roles and responsibilities of the ship's personnel. The Navadhyaksha is responsible for overseeing the ship, the Niyamaka is the steersman, and the Datragrahaka is in charge of the compass. Additionally, the Arthashastra discusses variations in ship design, such as differences in cabin location and the intended purpose of the vessel. Overall, the Arthashastra offers a comprehensive account of ship operations and design during the time it was written. (Science and Technology in Ancient India, 2002)

- 6. The Brihat Samhita, written by Varahamihir in the 5th century, and the Yukti Kalpataru, written by Narapati Raja Bhoj in the 11th century, provide extensive information on various types of ships, their sizes, materials, and manufacturing processes. These texts also offer guidance on how to outfit ships for passenger comfort, transporting goods, animals, and royal artifacts. The ships are classified into three sizes, namely the Sarvamandira, Madhyamarmandira, and Agramandira. The texts also mention that the type of wood used in the construction of ships affects their durability, with ships made of inferior wood being prone to rotting and splitting easily.
- The literary works of the Tamils in South India during the Sangam period contain many allusions to maritime commerce and the ports and goods involved. These texts include Shilappadikaram Manimekalai, Pattinappalai, Maduraikhanji, Ahananuru, Purananuru, and more. (Ramachandran, 1970)
- 8. When Marco Polo visited India in 1292 CE, he observed that Indian ships were constructed using fir timber with an outer layer of boards that were nailed together and coated with a mixture of quicklime, hemp, and oil from a specific tree. The ships were reinforced with iron nails and filled with a special type of gum to seal crevices. These ships were enormous, requiring up to 300 boatmen to row and capable of carrying 3000-4000 gunny bags. They also had numerous small rooms that offered passengers a comfortable place to stay. To maintain the ship's structure, a new layer would be added on top of the base when it began to deteriorate, sometimes resulting in ships with up to six layers. Marco Polo also remarked that Indian ships could accommodate a crew of 100 to 300 people, and were decorated with gold, silver, copper, and their compounds.
- 9. Nicolo Conti, a traveler who visited India in the 15th century, described Indian ships as significantly larger than their European counterparts. He noted that the bases of these ships were constructed using three boards in a manner that could withstand severe storms. Additionally, some Indian ships were built to remain functional even if one part became damaged or unusable.
- 10. Bertham, another visitor to India, observed that the wooden planks used for boats were expertly joined together to prevent even a single drop of water from seeping through. In some cases, cotton masts were strategically positioned to capture a lot of air. Additionally,

heavy stones were sometimes used to construct anchors. According to Bertham's account, it took eight days for a ship to travel from Iran to Cape Comorin (also known as Kanyakumari) in India.

- 11. A ship from India described in the fourteenth century was capable of carrying more than 700 people, which demonstrates the impressive shipbuilding abilities and maritime expertise of the sailors who operated these large vessels. In another early fifteenth-century description, Indian ships were said to be constructed with compartments, so that if one part of the ship was damaged, the other compartments would remain intact and allow the ship to continue its journey. This innovative approach to shipbuilding, which was unknown to Europeans at the time, may have been an early precursor to the modern practice of dividing ships into watertight compartments.
- 12. According to the renowned archaeologist Padmashri Dr. Vishnu Shridhar Wakankar, while studying in England, he learned about Vasco da Gama's diary which detailed his journey to India. In the diary, Vasco da Gama described encountering a ship three times larger than his own near Zanzibar in Africa. With the help of an African interpreter, he met the owner of the ship, a Gujarati trader named Chandan, who would transport pine wood, teak, and spices from India and diamonds from Cochin. Chandan was sitting on a cot dressed in ordinary attire when Vasco da Gama visited him and expressed his intention to visit India. Chandan informed him that he was returning to India the following day and invited Vasco da Gama to follow him, which he did. (Soni Suresh, 2010)
- 13. Gunnar Thompson explains that the extensive maritime trade between India and the islands of Indonesia is well-documented and illustrated. The Periplus, a Hindu manuscript from the 1st century, mentions ships with two masts and dual rudders mounted on the sides in the same style as ancient Mediterranean vessels. These ships are depicted in Indian murals from the 2nd century. Chinese chronicles from the same era describe Hindu vessels with seven masts that were 160 feet long and capable of carrying 700 passengers and 1000 metric tons of cargo. Buddhist records from a pilgrimage in the 5th century from Ceylon to Java describe ships large enough to accommodate 200 passengers. (Gunnar, 2012)
- 14. According to Prakash Charan Prasad's book, "Foreign Trade and Commerce in Ancient India" (p. 131), ancient Indians were skilled in building big ships that could carry at least

500 men on the high seas. The Yuktialpataru classified ships according to their sizes and shapes. The Rajavalliya mentions that King Sinhaba of Bengal sent Prince Vijaya in a ship that accommodated 700 passengers, while the ship in which Vijaya's Pandyan bride was brought over to Lanka carried 800 passengers. The ship in which the Buddha made his voyages from Bharukachha to Sri Lanka carried 700 merchants besides himself. The Samuddha Vanija Jakarta describes a ship that accommodated one thousand carpenters.

- 15. The book "Advancements of Ancient India's Vedic Culture" (pp. 143-45) notes that the advanced nature of ancient Indian civilization is often overlooked in comparison to other cultures. However, the book highlights that ancient India had the means for sailing over great expanses of water and a thriving trade industry based on shipping.
- 16. Aurel Stein, a Hungarian researcher, suggests that ancient India had a far-reaching cultural influence, spreading from Central Asia in the north to tropical Indonesia in the south, and from the borderlands of Persia to China and Japan. This civilization was characterized by its religious thought, art, and literature, and its impact was felt by diverse races scattered across much of Asia.
- 17. In The Journal of the Royal Asiatic Society–1901, Sir William Jones explains that the Hindus had knowledge of navigation during the age of Manu, as evidenced by the mention of bottomry in their texts. The Ramayana specifically refers to the practice of bottomry, which involves lending of insurance money for marine activities.
- 18. In The Art of Southeast Asia (1993, p. 7), Philip Rawson acknowledges India's remarkable influence on other cultures as a civilizing force. He notes that India's culture has had a powerful impact on the Far East, including China, Korea, Japan, Tibet, and Mongolia, and that these countries owe much of their own cultural achievements to India. He also acknowledges the West's indebtedness to India, pointing out that India's culture has been widespread throughout the world, without conquest or invasion. The mystery of the ancient Vedic empire's extensive reach is based on its subtle spiritual dimension, which continues to exist today.

19. Sir John Malcom noted that Indian ships were so well-suited to their purpose that even though Europeans had contact with India for two centuries, they were unable to propose or implement any improvements to them.

This information makes it clear that ancient India had the means to reach and in fact did sail to many parts of the world, including the ancient Americas, long before most countries. (Knapp, n.d.)

Part II

Maritime History

"Sea power - includes the main components, ocean research and exploitation, the status of the merchant and fishing fleets and their ability to meet the needs of the state, and also the presence of a navy is to safeguard the interests of a state since antagonistic social systems exist in the world." - Admiral Sergei Gorshkov

Maritime history or Sea Power history is yet another concept, which has been gaining momentum these days. Maritime history has become a tool in the hands of several Indian historians. The study of maritime history enables to come closer to the crucial dynamics of historical process. Maritime history embraces many aspects of history, such as international politics, navigation, oceanic currents, maritime transportation, coastal society, development of ports and port-towns, sea-borne trade and commerce, port hinterland relations and so on. As far as India and the Indian Ocean regions are concerned, maritime studies have a great relevance in the exchange of culture, establishment of political power, the dynamics of society, trade and commerce and religion of these areas. (Jacob, 2014)

Early Days (3000-2000 BC):

India has a rich maritime history that goes back to 3000 BC. During this time, the people of the Indus Valley Civilization engaged in maritime trade with Mesopotamia. Archaeological excavations at Mohenjo-Daro and Harappa reveal extensive evidence of maritime activity during this period.

The discovery of a dry-dock at Lothal, which is located about 400 kilometers southwest of Ahmedabad, sheds light on the people's knowledge of tides, winds, and other nautical elements during that era. This dry-dock, which dates back to 2400 BC, is the first of its kind in the world and was equipped to accommodate and service ships. (www.joinindiannavy.gov.in)

Maritime Activities in Indus Valley Civilisation:

In the past, historians thought that the Indus Valley civilization only traded with Mesopotamia and Elam through land routes in Baluchistan and southwest Iran. However, in the 1950s, excavations uncovered several Harappan ports that showed the coastal aspect of the civilization. This discovery indicated that there was a thriving sea trade between the Indus people and the Sumerians during the late 3rd and early 2nd millennium BC.

The excavation of the southern site of the Harappan Culture at Lothal has challenged previous historical beliefs. Lothal, discovered in 1954 and excavated by the Archaeological Survey of India in the late 1950s, revealed the world's oldest known dock with berths and service ships. The dock was believed to be a mooring station for merchant vessels, while the settlement itself acted as a trading center for Mesopotamia. Lothal was situated at the head of the Gulf of Cambay in the estuary of the Sabarmati and Bhogwa rivers, serving as a warehouse for agricultural products such as rice, cotton, and wheat from the surrounding hinterland. The Indus people were thought to have exported agricultural and marine products while importing raw materials like gemstones and metals for domestic consumption and processing industries. A maritime trade network existed between the Harappan and Mesopotamian civilizations as early as the middle Harappan Phase, with intermediaries from Dilmun (modern Bahrain and Failaka located in the Persian Gulf) facilitating much of the commerce. The development of plank-built watercraft with a single central mast supporting a sail made long-distance sea trade possible.



Harappan civilisation at Lothal near the present-day Mangrol harbour on the Gujarat coast Source: https://www.sanskritimagazine.com/indias-maritime-history/

The size of the Lothal dockyard suggests that the Indus people engaged in maritime activities. The yard measured 710 feet long and around 120 feet wide, indicating that it could have served as a dock for large sea-going vessels or a boat pen for smaller crafts. The Indus Valley lacked fine-grained siliceous stones, which were necessary for bead-making, so the stones had to be imported from other places. Bead-making centers at Chuhu-daro and Lothal imported agate and carnelian and produced beads on a large scale. Workshops for coppersmiths have also been found at Lothal, and the discovery of bun-shaped ingots suggests that copper was imported from overseas sources, particularly from the Persian Gulf region through the sea route. The finding of square seals of Indus origin in Ur, Kis, and Asmar from Akkadian levels indicates direct contact between Indian and Sumerian ports in the Akkadin period, though not in periods

after the third dynasty. The depiction of a ship on a seal and the discovery of two terracotta seals from Lothal suggest that the Indus people engaged in maritime trade with other parts of India, Sumer, Western Asia, Egypt, and Crete. Historian R.C. Majumdar notes that there is enough evidence to support this claim.

The recent excavation at Padri in Gujarat, India, reveals evidence of maritime activities during the Harappan period. The site is located near the shoreline and is dated to around 2200 BC. The excavation team from Deccan College, Pune, found a large copper fish hook, weighing 45 grams and measuring 14 cm long, with a barbed point and a loop on the other end. This discovery suggests that the Harappans at Padri had the ability to engage in deep sea fishing and possibly used big boats for this purpose. The team also discovered evidence of salt production, which was likely supplied to nearby Harappan settlements.

The Harappan site of Dholavira, situated in the Great Rann of Kachchh, provides evidence of potential maritime activities during the Harappan era. The excavations carried out at the site have uncovered a long cultural sequence that dates back to the beginning of the third millennium BC. It is believed that a group of people from the Makran coast may have arrived on the island through Kori Creek, based on the discovery of ceramics that resemble those from the Amerian culture, which dates back to 3000 BC. Similar pottery has also been found at other Harappan sites in Kachchh. (Kumar, A. 2012).

Type of Ships during the Harappan Period

The Harappan people were involved not only in the construction of docks and warehouses but also in the building of boats. The boats from this period can be inferred from various sources such as terracotta models and engravings on Indus seals. One seal from Mohenjo-daro shows a sailing ship with a high prow and a stern made of reeds. The ship had a square cabin in the centre. Another interesting boat depicted on a terracotta amulet had a flat bottom, a raked stern and prow, and two steering oars at the stern. There is also a cabin in the middle of the boat. Two sea-birds, known as dishakak, are depicted at both ends of the ship which were used by sailors to find land. The ship had two masts, one on each side of the central cabin. (Duraiswamy Dayalan, 2018)



A Harappan seal depicting a reed boat coupled with oars. The presence of avian figures alludes to the historic disa-kaka used by seafarers in long-distance travel. Source:

Harappa.com

https://www.mhsindia.org/traversing-the-oceans-indian-seafaring-through-theeons/#more-4035

Maritime Trade During Vedic Age:

The Rig Veda contains references to ships, including a type called the "Sataritara" or galley with a hundred oars. These references describe commercial sea voyages and use the term "Samudra" to refer to oceans in classical Sanskrit. Additionally, it has been confirmed that the ancient city of Dwarka, which is now submerged in the sea, served as the gateway for Indian ships to trade with Syria and Cyprus between 1500 and 1000 BC. Archaeological research at Dwarka has revealed evidence of iron implements, sea anchors in triangular and rectangular shapes, and rock-drilled posts for tying up ships. Excavations in Uttar Pradesh have uncovered artifacts, furnaces, and slag dated to between 1800 and 1000 BC using radiocarbon dating. However, it remains a mystery how shipwrights were able to precisely drill so many holes in hard teak wood to make ships watertight as early as 2400 BC. (Bansal, n.d.)

The late Chalcolithic Rig Vedic corpus contains numerous references to maritime voyages. One of the hymns dedicated to the Ashvins describes a marine voyage undertaken by Prince Bhujyu, who traveled across the seas to defeat his foes. During this expedition, his ship was destroyed in a storm mid-sea, but he was later saved by seafarers who used a ship with a hundred oars. This account is considered one of the earliest mentions of oceanic voyage and seafaring in the Vedas, which is the oldest literary corpus in the Indian subcontinent. (www.mhsindia.org)

The vast range of Sanskrit literature, including the Vedas, Sutras, Puranas, poetry, epics, dramas, and romances, contains numerous references to India's maritime trade. These

references indicate that in ancient times, the Indians used the ocean as a major route for international commerce.

The evidence from Sanskrit literature regarding India's maritime trade is further supported by Buddhist literature, including the historical works, chronicles of Ceylon, canonical books, and Rebirth stories. The legends of Vijayan as described in Mahavamsa and other works contain many references to the sea and sea-borne trade. The Rajavaliya states that Prince Vijaya and his 700 followers were banished by King Sinhaba of Bengal due to their oppression of his people. They were placed on a ship and sent away, while their families were placed on two other ships and sent away as well.

Tumour's Mahavamsa states that the vessel which brought Vijaya's Pandyan wife to Ceylon was quite large, as it was able to carry eighteen state officers, seventy-five menial servants, a group of slaves, the princess, and seven hundred other virgin women who were accompanying her.

The legends of Tapoosa and Palekat, two Burmese merchant brothers, are also noteworthy in relation to India's maritime history. According to the legend, they crossed the Bay of Bengal in a large ship loaded with five hundred cartloads of their own goods and landed at Adzeitta, a port in Kalinga, on their way to Suvama in Magadha. The existence of a sea route between India and the Persian coasts in the days of Buddha is implied by this legendary tale. Additionally, there are several clear references to sea voyages and sea-borne trade in the Jatakas, a vast collection of Buddhist literature that is believed to relate to a period of one thousand years from 500 B.C.(Mookerji,1912)

Ancient Maritime Trade of Bharath under various Kingdoms:

Since ancient times, India has had a thriving maritime trade network that expanded as new powers emerged in the Western world, such as the Greeks, Romans, and Sassanians. Records and archaeological evidence attest to the voyages undertaken and places visited by maritime explorers and traders. Numerous artifacts such as coins, pottery, and amphorae have been found in various countries, including Italy, China, Korea, Africa, and the Arabian Peninsula, indicating extensive maritime trade with India. The Indian sub-continent had dominance over the Indian Ocean from early times up to the 13th century, with a focus on peaceful sea-borne commerce and cultural exchange. India has always been central to the Indian Ocean and has been an important area of trade and commerce. (Duraiswamy Dayalan, 2018).

A careful look at some of the most ancient kingdoms in India would reveal a hint of their focus on trade across continents through the sea.

Emperor Ashoka: During the reign of Emperor Ashoka, who ruled from 265-238 BC, there was direct contact between India and Egypt via ship canal. Pliny the Elder, who wrote in 69-70 AD, reported that around 125 Indian ships were present in the ports of Egypt, Cyria and Rome, supplying Indian products to the Ptolemies, and that there was no year when Indians did not drain the Roman empire of 100 million sesterces. Ashoka also sent Prince Mahendra to Sri Lanka by ship to spread Buddhism. A Sanskrit source called "Yukti Kalpataru" describes ships of various sizes and types of that era. The Periplus of the Erythraean Sea, a mariner's guidebook written by a Greco-Egyptian author in the first century AD, names many ports on the west coast of India. In about 399-415 AD, the Chinese traveler Fahien returned to China via Java on an Indian ship. The famous traveler Marco Polo, who lived from 1254 to 1324 AD, mentions Aden as a regular port of call for Indian ships and notes that some Indian ships were built to last 100 years and required 150, 200, or even 300 crew members due to their size. (Bansal, n.d.)

The Satavahanas: The Satavahanas, who ruled the Deccan region from 200 BC to 220 AD, held sway over parts of present-day Karnataka, Madhya Pradesh, Chhattisgarh, and Saurashtra in Gujarat. They also controlled the East coast of India, along the Bay of Bengal, and had a thriving trade with the Roman Empire. Notably, they were the first Indian rulers to mint coins featuring ships. There are indications that the Satavahanas facilitated the spread of Indian culture, language, and Hinduism to various parts of Southeast Asia through maritime trade. (www.joinindiannavy.gov.in)



Evidence of ships on Satavahana coins https://www.worldhistory.org/image/9104/satavahana-ship/

Kushans: The Kushans had significant cultural and economic relations with the Greeks. The Angavijja, a Prakrit text from the Kushan period and later edited in the Gupta period, makes reference to ship-building and provides names for various types of ships, some of which are also mentioned in the Periplus of the Erythrean Sea. These ships, including the Tappaka, Kotimba, and Sarghad, were known for their large size and ability to navigate deep seas. (Kumar, A. 2012).

Mauryan Period: According to the Arthashastra written by Kautilya and the accounts of Megasthenes of Greece, there was a superintendent of shipping, known as Navadhyaksha, who oversaw the shipping administration during the Mauryan rule that began in 321 BC. The state encouraged shipbuilders and provided them with tax relief to build ships. (Bansal, n.d.)

The administration of the Naval Department during Mauryan rule was highly organized, with a Superintendent of Ships at its head. This officer was responsible for overseeing all aspects of navigation, including both oceanic and inland navigation on rivers and lakes. As expected, there were many different matters that fell under the purview of the Naval Department. The Superintendent of Ships during the Mauryan period had a role similar to that of a modern-day Port Commissioner. One of his primary responsibilities was to ensure that all port dues were collected and that no one avoided paying them. These port dues included taxes levied on coastal and riverine villages, fishing fees, taxes on merchants, and sailing fees for passengers arriving on state or king's ships. The state also leased out boats for activities like pearl-fishing and conch shell fishing, and charged a fee for their use, although individuals were also allowed to use their own boats for these purposes.

In addition to the taxes payable to the Port Commissioner, ferry fees were also collected during that period. These ferry fees varied according to the size of the river being crossed and the type of load being transported. For example, a man with a smaller quadruped carrying a load had to pay a certain ferry fee, while for larger rivers involving greater risks, double the ferry fees had to be paid. These ferry fees were also levied on conveyances, beasts of burden and loads of merchandise. Apart from tax collection, the Superintendent of Ships was also responsible for enforcing regulations aimed at ensuring humane treatment of harbour workers and visitors. (Mookerji,1912)

Gupta Period:

The Gupta period in India, which saw the reigns of Chandra Gupta I, Samudra Gupta, and Chandra Gupta II, is considered the 'Golden Age of India.' Fa-Hien, a Chinese monk who visited India in 399 CE to study Buddhism, gave a first-hand account of the Gupta Empire. During this time, overseas commerce expanded, leading to prosperity, economic progress, cultural and artistic advancements, and architectural developments. Fa-Hien sailed from Tamralipti in Bengal and passed through Ceylon, Java, Nicobars, and the Strait of Malacca to reach the Pacific, showcasing the advanced state of oceanic navigation during this era.

Another Chinese traveler, Huein Tsang, who visited India between 633-645 AD, also gave accounts of vast overseas trade during the Gupta period. India maintained regular maritime relations with Sri Lanka, Persia, Arabia, Ethiopia, the Byzantine Empire, China, and the islands of the Indian Ocean, and several ports were opened in the east and west, reviving maritime trade with European and African countries. Trade relations between India and China also flourished, with the volume of external trade greatly increasing during the Gupta period. Chinese silk, known as chinasunka, was popular in India, and Indo-Chinese maritime trade had a significant impact on both countries' fortunes. (www.joinindiannavy.gov)

The Period of the Cholas:

During this time, Indian maritime enterprise extended as far as Japan, as noted by Japanese tradition and official records made accessible through the efforts of Japanese scholars like Dr. Taka-kusu. The Chola dynasty, which reigned from 200 to 1279, reached its peak during the medieval period under Emperors Rajaraja Chola I and Rajendra Chola I, who expanded the Chola kingdom beyond traditional limits, stretching from Sri Lanka to the Godavari basin. The Cholas excelled in foreign trade and maritime activity, extending their influence overseas to China and Southeast Asia. They conquered Srivijaya, the largest empire in Maritime Southeast Asia, and Indian goods and ideas played a significant role in the "Indianization" of the wider world. The Chinese traveler, I-Tsing, wrote about Indian maritime activity in the Eastern waters and intercourse with China in the latter half of the 7th century, while Chinese records show evidence of Chola maritime intercourse with China. Early Chinese Buddhist pilgrims to South Asia booked passage with the Austronesian ships that traded in Chinese ports, as recorded in books by Chinese monks such as Wan Chen and Hui-Lin, containing detailed accounts of large trading vessels from Southeast Asia dating back to at least the 3rd century CE.

By the end of the 9th century, southern India had established significant maritime and commercial activity, with the Cholas being a leading player due to their control of both the west and east coasts of the Indian peninsula. Their main trading partners were the Tang dynasty of China, the Srivijaya empire in Maritime Southeast Asia under the Sailendras, and the Abbasid caliphate in Baghdad.



Source: https://www.worldhistory.org/image/9107/chola-ship/

Wikipedia, E. a. E. (2018, August 15). Chola Ship. World History Encyclopedia. Retrieved from <u>https://www.worldhistory.org/image/9107/chola-ship/</u>

Model of a Chola (200—848 CE) ship's hull, built by the ASI, based on a wreck 19 miles off the coast of Poombuhar, displayed in a Museum in Tirunelveli.

The Srivijaya empire was a Hindu-Buddhist empire that adopted Indian culture and was founded in Palembang in 682 CE. According to records from the Tang dynasty, the Srivijaya empire became dominant in the trade of luxury aromatics and Buddhist artifacts between West Asia and the Tang market in the region around the straits and the South China Sea.

During the Chola dynasty from the 3rd to the 13th century, sea trade was extensive and new harbors were established with quarters, warehouses, workshops, ship repair yards, wharfs, and lighthouses along the Indian coast to support their powerful navy that protected their merchant ships. The Sri Vijayas' cultural and trading expeditions extended to various areas such as Sumatra, Burma, the Malay Peninsula, Java, Thailand, and Indo-China, attracting Indian, Arab, and Chinese merchants to ports with excellent harbor facilities. The Pandya dynasty from the 6th to the 16th century were prominent Agniveer and sea traders, with links that stretched from the Roman empire and Egypt in the West to China in the East. They controlled pearl farming along India's southern coastline, producing some of the finest pearls of that time.

During the 12th century, the Cheras engaged in prosperous trade with the Greeks and Romans, utilizing rivers that flowed into the Arabian Sea. They harnessed the monsoon winds to directly sail their vessels from Indian ports such as Tyndis (located near Kochi) and Muziris (also near Kochi) to Arabian ports. (Sangeetha, Dr. 2019).

Vijayanagar Empire:

The Vijayanagara empire was the most prosperous state in India during its time, and its prosperity was due to the growth of agriculture, industries, trade, and commerce. The land was fertile, with most of the countryside under cultivation. Commerce occurred inland, along the coast, and overseas. The city of Vijayanagara was the most important center of commerce in the country, with trade in diamonds, rubies, pearls, and more. Calicut was also an important port on the Malabar Coast. Abdur Razaq recorded that there were about 300 sea ports in the Vijayanagara empire, and there were commercial relations with various countries, including islands in the Indian Ocean, the Malaya Archipelago, Burma, China, Arabia, Persia, South Africa, Abyssinia, and Portugal. Imports included horses, elephants, pearls, copper, coral, mercury, China silk, and velvet, while exports included cloth, rice, iron, saltpetre, sugar, and spices. The empire's main industries were cloth, perfumes, and various utensils. Traders and industry workers formed trade guilds to protect their interests. (Sonali, n.d.)

Delhi Sultanate and Mughals:

During the Khalji period, Gujarat became an important hub for trade between the Delhi Sultanate, the Persian Gulf, and the Red Sea. Merchants used ports such as Hormuz, Basra, Aden, Mocha, and Jedda to transport goods to cities like Damascus, Aleppo, and Alexandria in the Mediterranean, as well as to the ports of Malacca, Bantam, and Achin in the Indonesian archipelago. European travelers such as Tome Pires and Varthema commented on the extensive trade networks in Gujarat, with Pires noting the importance of Malacca to the prosperity of Cambay. Colored cloths from Gujarat were in high demand in Malacca, while spices were a popular import to Gujarat. Bengal also had trade relations with China and the Far East, exporting textiles, sugar, and silk fabrics. Bengal imported salt from Hormuz and used seashells from the Maldive Islands as currency. Sindh was another important region for trade, exporting cloth, dairy products, and smoked fish. Coastal trade between these regions flourished during this time, with an estimated 40,000 Indian ships plying the Indian Ocean during Emperor Akbar's reign. (Bansal, n.d.)

Abd-erRazzak mentions Calicut as a major harbor that was considered one of the most important shipping centers in the world. Nicolo Conti, an Italian traveler who visited India in the 15th century, provided insights into the shipbuilding industry in India. There were naval battles between the Jats and Sultan Mahmud, and shipbuilding thrived under the reign of Akbar, who tried to establish a strong navy through the Meer Bahri office. However, despite having an organized navy, the Moghuls did not fully recognize the importance of sea power. Their lack of foresight and interest in mastering the sea led to a neglect of sea power, which ultimately allowed for European penetration into the Indian subcontinent due to the Moghuls' continental outlook. (Kumar, 2012)

Maritime India and the Europeans:

Portuguese:

Before the 16th century, the Indian Ocean was a bustling hub of commercial trade with many coastal and seafaring communities actively participating. However, the arrival of Portuguese merchant Vasco da Gama in India in 1498 marked a turning point in India's maritime history. The Portuguese aimed to control the Indian Ocean trade flow and established factories at various ports, including Calicut, Cochin, Goa, Surat, and other west coast ports. They also took control of important ports such as Hormuz, Socotra, Aden, and Malacca. When the Zamorin ruler of Calicut granted permission for the Portuguese to trade, Arab traders who were already trading with the Zamorins were displeased.



Source:https://timesofindia.indiatimes.com/blogs/tracking-indian-communities/trade-down-the-ages-how-british-stormed-southern-sea-trade/

Vasco da Gama refused to pay the usual customs tariff when asked by the Zamorin king and sailed back to Europe. The Portuguese then made alliances with the kings of Kochi and Cannanore and launched multiple assaults on the Zamorin ports. The Zamorins resisted the Portuguese for over a century, but the Portuguese eventually defeated the Sultan of Bijapur in 1510 and seized Goa, making it the headquarters of Portuguese India and the seat of the Portuguese Viceroy.

Dutch:

The Dutch East India Company made their first voyage to India in 1595 and set up their first base in the region at Batavia (now Jakarta, Indonesia). Instead of confronting the Portuguese, they were allowed to establish a trading post at Pulicat in 1608, which eventually led to the formation of Dutch Coromandel. Later, Dutch Surat and Dutch Bengal were established in 1616 and 1627, respectively. The Dutch gained control of the forts on the Malabar Coast in around 1661 and established Dutch Malabar to safeguard Ceylon from potential Portuguese attacks. In addition to textiles, the Dutch traded precious gems, indigo, silk, opium, cinnamon, and pepper.

The British:

In the past, a British ship called the Hector, led by Captain William Hawkins, arrived in Surat and brought a letter for Emperor Jahangir requesting permission to trade with the Mughal Empire. The emperor allowed the British to trade and offered additional trading privileges. The Portuguese, who were the dominant European power in India at that time, did not welcome the British arrival as it affected their trade. However, the British recognized the significance of the sea and not only took control of land territories but also formed a naval force to safeguard their sea trade and deter potential threats. (www.joinindiannavy.gov.in)

The decline of Indian shipping began with restrictive legislation in 1646, which became more severe over time. The Navigation Act of 1651 banned the import of goods produced in Asia, Africa, or America to England on non-English ships. Indian sailors and ships were hit the hardest by these regulations. Tariff discrimination was also introduced in Indian ports. In 1814, Indian sailors were denied the status of British mariners, despite being subjects of the empire. The British India Steam Navigation Company was established in 1862, which was given preference for trade in India and overseas. Despite the opening of the Suez Canal, Indian shipping tonnage reduced due to these restrictive laws. In response, Tata Line was started in

1894, but faced stiff competition from British companies. Between 1860 and 1925, 102 Indian shipping companies went bankrupt due to competition from British interests. Mahatma Gandhi stated in 1928 that Indian shipping was destroyed, and the rise of Lancashire on the ruins of Indian cotton manufacturing almost required the destruction of Indian shipping. The golden age of Indian shipping, which had lasted for several centuries, came to an end. (Narasiah, 2015)

Indian Maritime Post Independence:

After India became a republic on January 26, 1950, the Royal Indian Navy was renamed as the Indian Navy and the word "Royal" was removed. Additionally, the Crown on the Royal Indian Navy's Crest was replaced with the Ashoka Lion Motif for the Indian Navy's Emblem. The Indian Navy chose to adopt the invocation to Lord Varuna, the Sea God, from the Vedas for its emblem with the motto "Sam no Varunah", which translates to "Be auspicious unto us Oh Varuna". The Indian Navy's Crest also includes the phrase "Satyamev Jayate" below the State Emblem. To commemorate successful naval actions during the India-Pakistan war of 1971 and pay tribute to the martyrs of the war, Navy Day is celebrated annually on December 4 since 1972. This includes naval actions in the Arabian Sea, Bay of Bengal, and the missile attack on Karachi harbor. (www.joinindiannavy.gov.in)

Part III

Story of Marathas' fight for Maritime Trade

The Maratha Empire dominated a large part of the Indian subcontinent in the 17th century. The empire formally existed from 1674 with the coronation of Chattrapati Shivaji Maharaj and ended in 1818 with the defeat of Peshwa Bajirao II at the hands of the British East India Company. The origins of the Maratha Empire can be traced back to a series of rebellions led by Chhatrapati Shivaji Maharaj against the rule of the Bijapur Sultanate and later the Mughal Empire. Based on the principle of Hindawi Swarajya, he carved out an independent Maratha kingdom with Raigad as the capital.

A large portion of the Maratha empire was coastline, which had been secured by the potent Maratha Navy under commanders such as Kanhoji Angre. He was very successful at keeping foreign naval ships at bay, particularly those of the Portuguese and British. Securing the coastal areas and building land-based fortifications were crucial aspects of the Maratha's defensive strategy and regional military history.

The Marathas put up the most resilient opposition against the British's attempts to dominate the Indian coast. Initially lacking a navy and constantly under siege by the Mughals, Shivaji recognized the significance of a potent naval force after facing the Siddis, who were stationed at Murud Janjira, and witnessing the naval supremacy of the Portuguese along the Konkan coast. He acknowledged the need for a robust port system and navy and constructed numerous coastal forts, including Vijaydurg and Sindhudurg, along the Konkan coast. By locating these forts atop hillocks overlooking the coastline, Shivaji ensured their formidable defense.

The Marathas built strongholds in forts such as Kolaba, Sindhudurg, Vijaydurg, and Ratnagiri, which helped them hold off both the Portuguese and the British alone for over 40 years. Shivaji expanded the Maratha navy into a formidable force that had over 500 ships. However, upon Shivaji's death in 1680, Kanhoji Angre took charge as the Sarkhel (Admiral) of the Maratha fleet in 1699.

Kanhoji Angre's initial focus was on expanding his fleet from ten ships to around 50 galbats and 10 ghurabs, which made it a formidable naval force. He successfully recaptured all the forts that had been lost by the Maratha navy to the Siddis and then targeted the Portuguese. Kanhoji attacked and captured Portuguese merchant ships that refused to purchase his passports, resulting in the Portuguese signing a peace treaty with the Marathas. He then shifted his focus to the British, who considered him a threat and tried to win over his enemies. Governor Charles Boone and Kanhoji fought several battles over a decade, with both sides suffering heavy losses. Eventually, Kanhoji proposed peace to Governor William Phipps in 1724, and although there was no formal agreement, both sides refrained from any activity that the truce. As a result. Kanhoji remained undefeated could break at sea. (www.joinindiannavy.gov.in)

Conclusion:

In conclusion, maritime trade has played a significant role in the economic development of India throughout history and has been an essential aspect in the country's cultural, economic and religious exchange with other regions of the world. The ancient Indian maritime industry was advanced for its time, and the seafaring traders and merchants were instrumental in the spread of culture and religion. The use of dhow ships and the monsoon winds, as well as the control of key ports on the Indian coastline, were critical factors that allowed ancient India to thrive in the maritime trade industry. From ancient times to the present day, India has been a major player in the maritime trade industry, with a rich history of trade and commerce with other countries and regions. Despite some challenges, the Indian government is taking steps to further develop the country's maritime trade industry, which will play a major role in the country's continued economic growth.

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 https://www.stephen-knapp.com/indias_ancient_and_great_maritime_history.htm
 About the reference: In this weblink we get to see an excerpt from Advancements of Ancient India's Vedic Culture, by Stephen Knapp where the author provides a glimpse of India's ancient and great maritime history.
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About the reference: This book discusses in detail the systematic presentation of medium of exchange; export and import organizations as well as a good number of new topics like geo-economic features of India of profit; money circulation; gold currency standard; gold exchange standard; silver standard; relative value of gold, silver and copper; the international currency system; and theory of interest rate.

It would not be out of place to mention here that the present work is the first of its kind which encompasses almost all the aspects of international trade activities of India in early days which had scholars far.

 Thompson, Gunnar, American Discovery: Our Multicultural Heritage, Hayriver Press, Colfax, Wisconsin, 2012, p.216

About the reference: Book of America's Multicultural Heritage celebrates the rich diversity of people who proudly call themselves Americans. This highly illustrated book tells the compelling tales of those who struggled to make life better for themselves and their descendants. It also carefully explores the less positive side of immigration through discussions of racial and ethnic prejudice, discriminatory laws, and the sometimes violent confrontations that have occurred between groups or individuals.

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About the reference: This book is a collection of essays by eminent scholars on the Indian seafaring and maritime activity. It covers a wide range of subjects exploring both the pan- Indian and the regional dimensions of the theme. The contributions of different regions of India are analysed in the general framework of Indian History. The sea-trade and cultural links with the outside world, especially with Rome, Sri Lanka, and South-

east Asia are discussed on the basis of textual sources and archaeological data. Some of the papers throw light on the indigenous boat types with reference to their technique of construction and navigation. The ordinary and reversed clinker-built boats, found in coastal Orissa, highlight the need for serious investigation into the changing tradition of boat building and navigation. The stimulating papers, based on previous and most recent research, collectively provide a clear and coherent picture of the great seafaring tradition of India from the ancient times to the 17th century. It is hoped that the volume will be useful to scholars, as well as anyone with interest in the seafaring.

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About the reference: Most common people feel that the first rays of science broke out in the west and thus started the wheel of development throughout the world. There was darkness in the field of science in the east. As such, there is a tendency to follow the west. The unawareness of the fact that we had a scientific tradition and a scientific point of view often puts us on the backfoot. This book is an attempt to bring to light the glorious tradition that we had in various streams of science. Today's generation can get a direction from reading this literature; they can gain self-respect and hold their head high for being the major contributors to science and technology. Besides acquainting the modern generation with India's contributions in the field of science, this book will also inspire them to study more and experiment.

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About the reference: The present volume is a result of the resolve of the Swami Vivekananda Centenary Celebration and Vivekananda Rock Memorial Committee to publish a monumental Vivekananda Commemoration Volume on the occasion of the inauguration of the Vivekananda Rock Memorial at Kanyakumari. Swami Vivekananda being one among the many who carried India's thought beyond its frontiers, the Committee decided to remember, in this volume. India's projection in the outside world in various fields, temporal as well as spiritual, since the dawn of history. The Volume has. therefore, been titled "India's Contribution to World Thought and Culture".

 Science and Technology in Ancient India, by Editorial Board of Vijnan Bharati, Mumbai, August 2002, p. 105 **About the reference:** The book is a compilation of material that was assembled for an exhibition that was on display at Bhayandar in December 2000. The book aims to provide the reader a glimpse of the scientific and technological achievements of our forefathers of 10th and 12th century AD

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About the reference: The weblink provides an essay on India's Ancient Maritime History-Part 1 by Stephen Knapp where the essay discusses the maritime history of India as recounted in numerous literary texts, showcasing its navigational expertise and resultant trade with several countries. Stephen Knapp(Sri Nandanandana Dasa) grew up in a Christian family, during which time he seriously studied the Bible to understand its teachings. In his late teenage years, however, he began to search through other religions and philosophies from around the world and started to find the answers for which he was looking. He also studied a variety of occult sciences, ancient mythology, mysticism, yoga, and the spiritual teachings of the East. He continued his study of Vedic knowledge and spiritual practice under the guidance of a spiritual master, His Divine Grace A. C. Bhaktivedanta Swami Prabhupada.

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- 11. Trade down the ages How British stormed southern sea trade, October 21, 2015, 6:20 PM IST KRA Narasiah in Tracking Indian Communities, India, TOI About the reference: This is an article published in a blog of Times of India on 21st October 2015. The article is written by KRA Narasiah under the title Tracking Indian Communities. The article focuses on how the glorious period of Indian shipping that lasted for several centuries ended. Narasaiah has the enviable distinction of being a writer, novelist, mariner, engineer and historian. when he puts pen to paper, it is only

after meticulous research and analysis. h is scientific method of documentation makes his articles factual and very good resource for reference for future research and learning. his language is simple and stylish and easy to read.

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About the reference: This weblink provides a detailed overview of the maritime heritage of India. The content published focuses on a study of the country's maritime history from very early times up to the 13th century where Indians took to the sea for trade and commerce rather than for political ends. Thus, it highlights the peaceful seaborne commerce, cultural and traditional exchange between countries that existed in the period up to about 16th century.

 Progress of the Vijayanagar Empire in India: Article shared by: Sonali, <u>https://www.historydiscussion.net/history-of-india/progress-of-the-vijayanagar-</u> <u>empire-in-india/2738</u>

About the reference: This weblink provides a platform to discuss anything and everything about history. The current article provides the progress of the Vijayanagar empire in India written by Sonali. The author highlights the view of foreign traveler's about Vijayanagar empire and further discusses the prosperity of the people of Vijayanagar and its glory through an elaborate explanation on the socio-economic, political conditions of the state.

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17. A K Bansal, India's Meritime Heritage, http://www.maritimetraining.in/documents/Indias_Maritime_heritage.pdf

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 Duraiswamy Dayalan, Ancient Seaports on the Western Coast of India: The Hub of the Maritime Silk Route Network, Acta Via Serica Vol. 3, No. 2, December 2018: 49–72 doi:10.22679/avs.2018.3.2.003

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About the reference: E. Chew's chapter "Southeast Asia and the Indian Ocean: Maritime Connections Across Time and Space" is part of a book titled "ASEAN and the Indian Ocean: The Key Maritime Links." The chapter explores the historical and contemporary maritime connections between Southeast Asia and the Indian Ocean.