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### RESEARCH ARTICLE

#### BUILDING OF THE MUGHAL NAVAL FORCES

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#### Abstract

The military was a major element of the Mughal Empire's strength and integrity. Beginning with the formation and mobility of the Mughal land army which led to their victory in the First Battle of Panipat in 1526, the Mughal military power grew rapidly alongside the development of the Mughal Empire itself. In compatibility with the position of the Mughal Empire which also controlled the Indian Ocean, Mughal rulers paid attention to the building of the naval force. Commencing with the onset of that statement, the purpose of this article is to examine the purpose of and approaches undertaken by the Mughals in building their naval strength, especially in dealing with enemy threats and consolidating their dominance in the Indian Ocean. This study applied a qualitative approach through historical research and content analysis when collecting and analyzing data from primary and secondary sources. Research findings show that the Mughal navy was built during the era of Akbar's reign with the aim of reinforcing the position of the Mughal Empire in several key regions, Gujarat and Bengal being among them, which contributed to economic development within the kingdom. The naval force was given full attention by post-Akbar rulers for the purpose of providing movement support to the land army and dealing with the presence of European powers in India, such as the Portuguese and the British.

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#### Introduction:-

The emergence of the Mughal Empire ushered in a new era for India. This is based on the view that the history of modern India did not start from the British colonization in the 19<sup>th</sup> century AD but started since the establishment of the Mughal Empire in 1526 (Ikram 1964; Ashari et al. 2021). The Mughal Empire was founded by Babur after he successfully defeated the army of the Lodi Dynasty in the First Battle of Panipat in 1526. The success was driven by the military strength possessed by Babur, especially the equipment and weapons of the Mughal army which were more sophisticated than the weapons used by the Lodi army. The use of firearms and explosives was an innovation

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in military technology in India at that time. Babur's success also boosted his reputation after he failed to be the ruler in Samarqand for a long period before that (Hasan 1985). In fact, the Mughal military power put the name of the kingdom in the Islamic Gunpowder Empires comparable to the Ottomans and the Safavids in the 16<sup>th</sup> to 18<sup>th</sup> centuries AD (Richards 2008; Streusand 2018).

The Mughal military strength began with a land army based on the modus operandi of the Mughal army in a number of military expeditions. The era of Babur saw the land army mobilized on a large scale in two major wars, namely the First Battle of Panipat (1526) and the Battle of Khanwa (1527). The active involvement of the Mughal land forces continued after Humayun took over the Mughal Empire in 1530. The evolution of the Mughal military reached an encouraging level after Akbar took over the helm of the Mughals in 1556. Akbar's policy of territorial expansion raised the Mughal Empire's reputation to one of a respected power in the Indian subcontinent. This evolutionary process increased rapidly when building of a naval force began to receive attention when the Mughal ruler realised the importance of controlling the Indian Ocean, especially in economic, strategic and security aspects (Phul 1978).

Based on that statement, this purpose of this article is to examine the Mughal Empire's objectives and approaches in developing naval power, especially in dealing with enemy threats and reinforcing its strongholds in the Indian Ocean. This study used qualitative methods through historical research and content analysis in gathering data based on primary and secondary sources. After that, the data were analyzed and presented according to thematic analysis.

### **The Mughal Navy**

In Islamic civilization, the naval force began a little later than the establishment of the land forces. According to al-'Abadi and Salim (1969), the navy began during the reign of 'Uthman ibn 'Affan RA after being proposed by Mu'awiyah ibn Abi Sufyan RA to compete with the naval power of Byzantine Rome. Efforts to establish a naval fleet bore fruits when the island of Cyprus was successfully opened by the Islamic army. In fact, the Islamic naval power at that time managed to rival that of Byzantine Rome in the Mediterranean Sea.

The building of the navy at that time was not only focused on the creation of a naval force but also encompassed *Dar al-Sina'ah* which functioned as a shipyard and a factory for building warships. Naval military capabilities continued to be reinforced during the reign of the Umayyad Caliphate in Damascus until the *futuhat* movement found many successes in the Mediterranean Sea by opening several islands, such as the Balearic Islands, Corsica, Sardinia, Sicily, Crete, Negropont and Rhodes (Pyror 1988). In fact, the development of the navy went hand in hand with the development of Islamic civilization through a number of achievements, including the construction of *Dar al-Sina'ah*, the production of battleships, the manufacturing of equipment and weaponry as well as the success of many naval expeditions.

Meanwhile, the construction of the Mughal navy was given attention in order to strengthen the empire's dominance in the Indian Ocean regions. The growth of trade activities through sea routes was considered to be the main factor in the development of the Mughal navy which was considered an urgent need to ensure the safety and protection of traders who docked and carried out trade activities in several major ports in India such as Surat, Cambay, Hughli and Masulipatnam (Robinson 2007). Trade activities using sea routes contributed a lot to the growth of Mughal fiscal revenue. Therefore, it is not surprising that the Mughal Government paid special attention to the security aspects in the Indian Ocean, in particular the security of traders.

In addition, the Mughal navy was also used to deal with enemy threats. The geographical conditions which required the use of ships caused the navy to be mobilized to combat any enemy threat. This can be seen in Awrangzeb's actions and approach to strengthen Mughal positions in the Arakan region. Since the King of Arakan enjoyed the support from pirates who threatened the interests of the Mughal Empire in the Bay of Bengal area, Awrangzeb mobilized his naval forces to face the threat from the pirates. The geographical state of the Arakan region and logistical issues rendered naval deployment to be the Mughal Empire's primary choice to face challenges from the Arakan Kingdom.

### **1. Naval Forces**

Mughal naval force only accepted sailors who were experienced, and skilful on sea tides and depth of seas and knowledgeable in sea conditions when the wind blows strongly. In addition, navy personnel must also be excellent swimmers, kind-hearted, hard-working, steadfast and perseverant. The Mughal navy was not made up of Indians

only, in fact people of other origins were also recruited such as Persians, Arabs, Africans and Europeans to strengthen the sea fleet.

The Mughal navy organisation was similar to that of the land forces. The navy was divided into two main units namely the Western fleet headquartered in Gujarat and the Eastern fleet which was based in Bengal. Each unit of the armada was equipped with the strength of warships built in the respective sea base. The construction of the warships was directly monitored by the Mughal rulers. Funds which covered the expenses of the Mughal naval forces were taken from tax revenues, toll collections and proceeds from the empire's land cultivation specially dedicated for military purposes. Meanwhile, remuneration and salary for naval officers followed the same practices used for land army officers through the *mansabdar* system and land awards, otherwise known as *jagir*. Each admiral was given permission to strengthen the strength of the navy under his command using revenues from the granted land. Among the expenses used from the proceeds of the awarded land were building new battleships and recruiting new navy servicemen either as part of the attack force or battleship operators (Streusand 1989).

At the same time, the Mughal navy was also strengthened by existence of musket army who used a type of long rifle using explosive powder. This naval musket army had the same function as the musket army in the Mughal land force. Compared to the Ottomans and the Safavids, the appearance of muskets occurred a little later in the military of the Mughal Empire. Nevertheless, the existence of muskets had strengthened the Mughal army in facing enemy attacks. Musketeers were usually placed on top of the ship's deck to launch attacks on enemy ships. In addition, these musketeers were also stationed on the coastline as support troops to defend the area from any threat. According to Streusand (1989), the use of muskets might not be as fast as the use of arrows, but it could provide a greater impact should the musket soldiers be gathered in large numbers in a single ship.

According to Alam (1986), details of the Mughal naval structure during Akbar's reign were described in the *Ain-i-Akbari* written by Abu al-Fadl. According to the records in the work, membership in the navy consisted of a captain or ship captain, a helmsman, a fleet leader who led the military forces on board, musketeers and low-ranking soldiers whose role were to launch a head-on attack after the Mughal military ships successfully approached close to enemy ships.

## 2. Equipment and Weaponry

The Mughal navy was also equipped with various equipment and weapons aimed at fortifying the navy while also enabling them to defeat the threat of the enemy. Equipment and discussion discussed in this topic are warships and firearms.

### (a) Warships

In the history of the development of the Mughal Empire, the earliest ships built were intended for trade and transport carrying *hajj* pilgrims. Guilmartin (2003) stated that the construction of warships during the Mughal era began during the reign of Akbar when his queen, Jodha Bhai, sought her husband's permission to start the ship industry. Following that, the shipping industry grew due to the demands of the time which was to intensify international trade by sea and send pilgrims to the Holy Land. In fact, it was due to this shipping industry that outside communities, especially from Egypt and Europe, recognised the Mughal Empire.

However, pressure from the Portuguese who controlled the Indian Ocean through their base in Goa caused the Mughals to start building warships. The Portuguese often forced the Mughal Kingdom to make payments in return for providing protection to Mughal merchant ships. However, the Portuguese went overboard when they seized Jodha Bhai's merchant ship named *Rahimi* and seized all commodities and trade proceeds from the ship, including gold and silver. Its crew were also killed and thrown into the sea. The incident eventually came to Jodha Bhai's knowledge and she ordered his son, Salim, to retaliate by confiscating all Portuguese interests, including church premises (Rosen 1996). To ensure that the effort did not fail, the Mughals began to build warships to arrest and seize merchant ships in the waters of Goa. A large warship built by the Mughals was known as *the Ganj-i-Sawai* which could accommodate approximately 400 soldiers. Warships as assets were fully utilized by the Mughal Empire until it forced the Portuguese Government to pay back compensations for the losses caused by the European power (Roy 1972).

In terms of warship building, there was a difference between Mughal warships and those of European powers. Mughal warships had a frame made from pieces of wood which were then joined together either by using nails or

wooden pegs. This method gave Mughal warships an advantage over European warships because they were more durable and stronger against any corrosion. In addition, copper alloys were also used to protect the ship's hull from pest attacks and rot. The durability of these Mughal warships was so renowned that it attracted attention from outside powers to get warships of the same quality from India. Among the types of ship which were built for use in sea fleets of the Mughals included *bachari* which is a net fishing ship for use by fishermen, *jung* which is merchant ship styled after the Chinese yacht and *balm* which is a cargo carrier that resembles a large-sized canoe. These ships were very useful in giving supports and transporting armies and supplies.

In addition, the Mughal Empire also built warships that resembled galliots, which were warships in the Mediterranean Sea. This ship known as *jalba* was capable of carrying a load of about 80 seamen and had about 40 oars to move it. Another type of vessel known as *kosa* was widely used in the Bengal region. These ships were built with a smaller size and could accommodate up to 40 people because its function was to move faster to a certain place. Among other assets built by the Mughal Empire were *khelnas* which were small boats and had a design similar to the European *fusta*. These small boats served to carry troops to attack the enemy face-to-face in shallow waters such as in river battles (Bert 1997).

### **(b) Weaponry**

Apart from warships, the Mughal navy also had weapons to use in each and every battle. Among the main armaments placed on every large warship were cannons. The use of cannons was crucial in order to attack enemy warships from a long distance and to sink them. Each cannon on warship was operated by two soldiers whose function was to insert explosive powder and cannon balls before shooting them towards the enemy (Roy 1972). The use of explosive powder gave an advantage to the Mughal army in rivalling the strength of any enemy, including from Europe. For example, the Mughal navy's battle with the British army in the Anglo-Mughal War (1686-1690) was also supported by the superiority of the Mughal navy in terms of weapons and explosives. This successfully forced the British army to surrender and make peace with the Mughal Empire (Ali 2006). Typically, this type of cannon was placed on large warships considering the size of the cannon was about 30 pounds, equivalent to 14 kilograms. In order to support the use of cannons to impart a greater attack impact, most ships were also equipped with guns and arrows placed on the ship's walls (Bert 1997). Next, elephants were also part of the weapons on the Mughal naval fleet as a number of elephants were loaded onto Mughal warships and landed on the beach to infiltrate enemy fortresses. This strategy was rarely used but it was effective when the elephants were fitted with iron claddings on their bodies and which enable them to maintain their stability when attacked by the enemy. The use of elephants in the series of wars in subcontinent India was common. However, in sea fleet use, it was rare to have ships used as waterway transport for elephants before they were landed on beach for attacking enemy fortresses. With the strength and size of elephants, enemy fortresses could be torn down and destroyed in a matter of short time (Streussand 1989).

### **Conclusion:-**

The Mughal Empire began to pay attention to building its naval power during the reign of Akbar. Aiming to protect trade routes in the Indian Ocean Sea and dominate its waters, the naval force was developed to compete with the strength of her enemies, especially European powers such as the Portuguese and the British. Like the land forces, the navy was also strengthened with the best recruits based on their ability and assignment. Also, the navy was strengthened with the existence of musket troops in accordance with the position of the Mughal Empire as one of the Islamic Gunpowder Empires. Apart from military recruits, equipment and weapons were also given attention by the Mughal rulers in building its naval strength. The main asset of the navy such as warships were built in various shapes and sizes according to the role of the vessel. Similarly, in the matter of armaments, the Mughal Empire also gave main attention especially to the production of firearms such as cannons and rifles. The use of explosive powder and firearms gave the Mughal navy an advantage in winning battles.

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### **References:-**

1. al-'Abbadi, A.M. & Salim, A.A. (1969). *Tarikh al-Bahriyyah al-Islamiyyah fi Hawd al-Bahr al-Abyad al-Mutawasit: al-Bahriyyah al-Islamiyyah fi Misr wa al-Sham*. Vol. 2. Alexandria: Mu'assasat Shabab al-Jami'ah.

2. Alam, M. (1986). *The Crisis of Empire in Mughal North India: Awadh and the Punjab, 1707-1748*. New York: Oxford University Press.
3. Ali, M.A. (2006). *The Mughal Nobility under Aurangzeb*. New Delhi: Oxford University Press.
4. Ashari, M.Z.A.H., Nor, M.R.M., Safian, N.L., Safiai, M.H., Zainal, H. & Jamsari, E. A. (2021). Mughal Kingdom in India according to Hamka's *Sejarah Umat Islam*. *International Journal of Advanced Research* 9(11): 970-978.
5. Bert, S.H. (1997). *Weapons and Warfare in Renaissance Europe: Gunpowder, Technology and Tactics*. Baltimore: John Hopkins University Press.
6. Guilmartin, J.F. (2003). *Gunpowder & Galleys: Changing Technology & Mediterranean Warfare at Sea in the 16<sup>th</sup> Century*. Annapolis, MD: Naval Institute Press.
7. Hasan, M. (1985). *Babur Founder of the Mughal Empire in India*. New Delhi: Manohar Publications.
8. Ikram, S.M. (1964). *Muslim Civilization in India*. New York: Columbia University Press.
9. Phul, R.K. (1978). *Armies of the Great Mughals: 1526 -1707*. New Delhi: Oriental Publishers.
10. Pyror, J.H. (1988). *Geography, Technology and War: Studies in the Maritime History of the Mediterranean, 649-1571*. Cambridge: Cambridge University Press.
11. Richards, J.F. (2008). *The New Cambridge History of India: The Mughal Empire*. Cambridge: Cambridge University Press.
12. Robinson, F. (2007). *The Mughal Emperors and the Islamic Dynasties of India, Iran and Central Asia*. London: Thames & Hudson Ltd.
13. Rosen, S.P. (1996). *Societies and Military Power: India and its Armies*. New York: Cornell University Press.
14. Roy, A.C. (1972). *A History of the Mughal Navy and Naval Warfare*. Calcutta: World Press.
15. Streusand, D.E. (1989). *The Formation of the Mughal Empire*. New Delhi: Oxford University Press.
16. Streusand, D.E. (2018). *Islamic Gunpowder Empires: Ottomans, Safavids and Mughals*. New York: Routledge.