

Weaponry and War Techniques in Medieval Bengal



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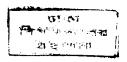
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499735

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DECLARATION

It is hereby declared that this dissertation entitled "Weaponry and War Techniques in Medieval Bengal" has been compiled for submission for the degree of Doctor of Philosophy in Islamic History and Culture, University of Dhaka by myself under the supervision of Professor Dr. Md. Mosharraf Hossain Bhuiyan.

The interpretations in this thesis are based on my reading and analysis and they are not published anywhere in the form of books, monographs or articles. The other sources, which I have consulted, are acknowledged at the respective place

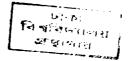
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Supervisor's Certificate

It is hereby being certified that this dissertation entitled "Weaponry and War Techniques in Medieval Bengal", submitted by Mr. Abu Khaled Md. Khademul Haque for the degree of Doctor of Philosophy in Islamic History and Culture, was carried out under my supervision. It is further certified that the work presented by the researcher is entirely original and it has not been submitted to any other University or organisation for any other degree or diploma.

It is hereby being recommended to be forwarded to the examiners.

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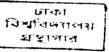
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Date: Dhaka, 12 November, 2017

ভত্তাবধায়ক এম.ফিল/পিএইচডি ইসলামের ইভিহাস ও সংস্কৃতি বিভাগ ফল্লা বিশ্ববিদ্যালয়



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Last of all, I pay my tribute to my late parents Md. Matlub Hossain and Sharifa Khatun who would have been the happiest persons in the world to see me complete this dissertation. May Allah, the Almighty keep them in Jannat.

Abbreviations

Ain-i-Akbari Abul Fazl, The Ain-i-Akbari, Eng. Trans. by H. Blochmann

Akbarnama, Eng. Trans. by H. Beveridge

Art of War J.N. Sarkar, The Art of War in Medieval India

ASI Archeological Survey of India

BPP Bengal Past & Present

Bahristan-i-Ghaiybi Mirza Nathan, Bahristan-i-Ghaiybi, Eng. Trans. M.I. Borah

BS Bangla Son (Bengali Era)

Corpus of Inscriptions Abdul Karim, Corpus of Arabic and Persian Inscriptions of Bengal

Corpus of Coins Abdul Karim, Corpus of the Muslim Coins of Bengal

Elliot and Dowson's History of India as Told by Its Own Historians

Fakhr-i- Mudabbir Adab al-Harb wa-l-shaja □ a, (Partial Eng. Trans.) E.

McEwen, The Islamic Quarterly, Vol. XVIII, 1974

Forts and Fortification Ayesha Begum, Forts and Fortifications in Medieval Bengal Inscriptions of Bengal Shamsuddin Ahmed, Inscriptions of Bengal (vol. III & IV)

IHQ The Indian Historical Quarterly

JASB Journal of the Asiatic Society of Bengal

JASBD Journal of the Asiatic Society of Bangladesh

JASP Journal of the Asiatic Society of Pakistan

JVRM Journal of the Varendra Research Museum

JPASB The Journal and Proceedings of the Asiatic Society of Bengal

JPHS The Journal of the Pakistan Historical Society.

JPPHS The Journal and Proceedings of the Pakistan Historical Society.

JRAS The Journal of the Royal Asiatic Society (of Ireland & Great

Britain)

Map of Hindustan James Rennel, Memoirs of Map of Hindustan, or the Mogul's

Empire

Perso-Arabic Source I. H. Siddiqui, Perso-Arabic Sources of Information on the Life and

Conditions in the Sultanate of Delhi

Rehla The Rehla of Ibn Battuta (eng. tr.) Agha Mahdi Husain.

Riyaz The Riyaz-us Salatin

Society and Urbaization Md. Akhtaruzzaman, Society and Urbanization in Medieval Bengal

GLOSSERY OF TERMS

Ahadi: Mughal Cavalrymen

al Khamis: Five organs of Battlefield

Alam: Standard

Amir: Leader of 1000 cavalry

Amir-i-Ghilman: Leader of the boy-slaves

Ariz: Minister

Asi: Indian Sword

Astra: Missile weapon

Banduqchi: Musketeer

Banjara: Shop kippers

Bargir: Regular soldier, who gets arms

ammunition from the state

Chaush: Messenger

Dakmewra: Mughal Messenger

Deg-andaz: Pot thrower

Firangi: Straight-blade heavy sword

Firingi: The Portugese

Gajnal or hathnal: smaller hand

cannons, carried on elephant

Ghazi: Winner in Jihad

Guroh: Rank

Havaldar: Sergeant

Hazari: Commander of 1250 infantry

soldiers

Hukm-andaz: Master Archer

Jihad: Islamic Religious War

Jumladar: Commander of 125 infantry

soldiers

Kaman: Bow in Persian

Kaman: Cannon

Kamandar: Archer

Katar: Dagger

Khail: group of 10 cavalrymen

Khalf: Vanguard

Khanda: Singe-bladed Indian Sword

Khassa-i-Khail: A special cavalier

contingent

Maimanah: Right Wing

Maisarah: Left Wing

Malik: Commander of 10000 horsemen

Mansab: Mughal Officer's Rank

Mir Bakhshi: Commander of Army

Mir Manzil: Quartermaster

Mir Tuzak: Commander of Arrangement

Muqaddam: Commander of Van Guard

Muqaddamah: Van Guard

Naib-i-'ariz: Assistant to the General

Nawwara: Navy

Nezah: Lance

Paik: Foot Soldiers

Piyadagan: Foot Soldier Body Guard

Qalb: Centre Rank

Qarawal: skirmisher

Quddam-i-Lashkar: Commander of the

Scouts

Ra'is-i-shahr: Superintendent of the

markets

Sahm-al-Hashm: Officers for the infantry

Sahna-i-fil: Keeper of Elephants

Sahna-i-Nafar: Keeper of Camels

Sara: Arrow

Sari-fauj-i-maimanah: Commander of Right Wing

Sar-i-fauj-i-maisarah: Commander of Left Wing

Sar-i-Jandar: Chief of the royal bodyguards

Sar-i-Khail: Commander of 10 horsemen

Sar-i-lashkar: Quarter Master General

Sar-i-Silahdar: Commander of irregular

Force

Sastra: Personal weapon in hand

Shamsherbaz: Expert in Sword-fight

Shamsir: Arabian Curved Sword

Shivira: Camp

Shutarnals: Thin Guns

Silahdar: Irregular soldier

Sipah-salar: Commander of 100

horsemen

Suwar: Numbet of Horsemen under a

Mansabdar

Talwar: Indian curved Sword

Tawwcchi: Adjutant

Tir-i-atishin: Fiery Arrow

Topchi: Gunner

tufangchi: Musket bearer

Vana: Arrow, missile

vyuha: Rank

Zat: Mansabdar's Rank

Chapter - I

Introduction

From the earliest period of history, the people of Bengal are known to be very courageous and strong in war techniques. Megasthenes, the Greek diplomat and Indian ethnographer and explorer in the Hellenistic period mentioned about the people of Ganga-Ridai that 'their country has never been conquered by any foreign king'. The same tradition continued even during the medieval period. Even though some historical accounts have portrayed the Sena King Laksmansena as a coward, who fled against an attack of only 17 or 18 persons, the later history shows that Bengal always remained a headache for the Delhi Sultans. During the first 130 years of Muslim rule in Bengal, almost every governors sent by the Delhi Sultans here either revolted themselves of were killed by those who revolted. After that, there was an era of independent Sultan's for more than two hundred years. And then, when the mighty Mughals came here during the sixteenth century; they also found it very difficult to subjugate the Bengal chiefs. These were not mere co-incidents. These happened because the people of Bengal had their own, indigenous and effective ways of fighting wars. They had weapons, forts, ships and other equipments designed specially for

the environmental conditions of Bengal, which the invaders always found very tough to combat with. An in-depth study of these weaponry and techniques can help understanding and explaining the historical events.

1.1 Logical Criteria

The main objective of this research project is to determine the military dynamics in the history of Bengal during the medieval period, and ascertain how and why Bengal could maintain its identity as a land of indomitable people. The word Bengal would be used here to mention the medieval border of Bengal, now divided into two parts- the independent Bangladesh and the state of West Bengal in India, and the time frame should include from the beginning of the thirteenth century to the later half of the eighteenth century.

The research is based on intricate studies of medieval armoury, found in deferent museums. The Bangladesh National Museum has a large collection, and apart from that, museums in Bangladesh, India and elsewhere in the world, specially in the UK was also helpful. Most of the British documents are available online, in the website of British Museum and of the Victoria & Albert Museum in London.

Another important source for first hand data is the study of military architecture, i.e. the forts and fortifications built during the medieval period in Bengal. These data is collected through extensive field surveys.

And like any other historical research, contemporary accounts of historians, travelers and others are used as important sources of data. Accounts like the *Bahristan-i-Gayebi* of Mirza Nathan has interesting description of warfare and techniques, and these needs to be examined to ascertain a military history of Bengal during the medieval period.

The History of medieval Bengal is a popular field of research. But unfortunately most of the researches done so far focus mainly to the narration of historical events. Due to the scarcity of written records the researchers had to rely a lot on the archaeological evidences, but still there was very little effort in analyzing the minor artistic elements other than architecture and coinage. Even in the field of architecture, religious monuments have always been in the limelight. Secular monuments, especially military architecture remained unattended, the only study in this field so far is Ayesha Begum's 'Fort architecture in medieval Bengal', based on her PhD research in the Institute of Bangaladesh Studies, Rajshahi University.

To determine the military dynamics in the history of medieval Bengal, it is needed to examine the following things carefully:

- i. Kinds of weaponry and war techniques used by the people of Bengal since the ancient time, and if there was any significant change in the armoury during the period concerned.
- ii. Was there any significant effect of the geographical condition of Bengal in determining the weaponry and war technique used during the period concerned.
- iii. How and to what extent did these things had affected the course of political history of the land during the period concerned

1.2 The scope: Bengal, Medieval and Weaponry

As mentioned above, human settlement as well as a kingdom of 'brave people' did exist as early as in the fourth century BCE, when Megasthenes visited India as a diplomat of the Selucids. However, he mentioned the region as 'Gangaridai. The term 'Bengal' is kind of a 'modem' phenomenon in comparison. Recent studies have revealed that the term 'Bangladesa' was used in 11th century South Indian records to describe the region of south-

eastern India.¹ It may have derived from the word 'Bong', the name of the Proto-Dravidian tribes settling in the region circa 1000 BCE. The term 'Bangalah' as a kingdom in the region was found in the Muslim chronicles of Shams-i-Siraz Afif and Ziauddin Barani during the fourteenth century for the first time ever. Afif, however, used the term in a derogatory sense to denounce the Sultan of Bengal, Shamsuddin Ilyas Shah², while mentioning that the Sultan had assumed the title of Shah-i-Bangalah, or Sultan-i-Bangalah, and Shah-i-Bangaliyan.

According to another popular theory, the term may have derived from the name of an ancient settlement or *Janapada* named *Vanga*. There were quite a few of such *janapada*s existed in the region in concern during the ancient times. Apart from *Vanga*, *Gaur*, *Samatata*, *Harikela*, *Varendra*, *Radha*, and *Pundra* are famous. Due to the paucity of documents, the early history of the region is difficult to reconstruct. Written documents are available only after 4th century CE, but they are scarce and insufficient until the arrival of the Muslims in about thirteenth century. When Ikhtyaruddin Muhammad

^{1.} B. C. Law, Ancient Indian Tribes, Vol. II, London, 1634, p. 5; See also: John Andrew Allan, The Cambridge Shorter History of India. Literary Licensing, Cambridge: University Press, 2013, p. 145

Quoted by MA Karim, Banglar Itihas Sultani Amal (in Bangla), 2nd ed, Dhaka: Bangla Academy, 1987, p. 154. (Cited hereafter as Abdul Karim, Banglar Itiahas Sultani Amal)

Bakhtyiar Khalji had invaded the kingdom in early thirteenth century, he mentioned it as the kingdom of Lakhnauti, which remained popular until the rise of the Bengal Sultanate under the Ilyas Shahi's. But since then, *Bengala*, or *Bangala* has become the popular term, even though the Sultans themselves never used it in their official titles. But the term was so popular that even the European traders coming to the region during the age of discovery also referred to it. Thus, '*Bengala*' is found in the Portuguese records of early sixteenth century.³ During the same century the Mughals invaded the region and they preferred the name subah Bangala, which was inherited by the Nawabs of Murshidabad and subsequently by the British who transliterated it as 'Bengal'.

However, determining the geographical boundary of the region called Bengal or *Bangala* is even more difficult. As mentioned above, the South-Indian documents used the term *Bangladesa* to mention the region of South-Eastern India. Until then, the region was effectively divided in smaller regions or *janapadas*, chief among those was Gaur. The first independent king of the region, Shasanka claimed to be the '*Gaureswar*', i.e., king of Gaur. The Pala and Sena kings also emphasized on the

^{3.} Donald F. Lach and Edwin J. Van Kley, Asia in the Making of Europe, Volume III: A Century of Advance. Book 3: Southeast Asia. Chicago: University of Chicago Press, 1998, pp. 1124-5

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authority of Gaur. The main capital of *Maharaja* Laksmanasena was also in Gaur, and was named as Laksmanavati after him.

Analyzing all these sources, D.C. Sircar concludes that 'the country of Gaur, comprising the territories of Mithila, Varendra, Radha (Rarh) and northwestern portion of Bagdi had its capital at Nadia. According to his assumptions, the territory of Lakhnauti had two wings on either sides of the river Ganga. The western side was called *Ral* (i.e. Rarh/Radha) where the city of Lakhnor was situated, while the eastern side was known as *Barind*, where the city of Devkot was. Bakhtiyar Khalji conquered Gaur in 1205, a few months after his conquest of Nadia. He made his capital at Lakhnauti and the region then came to be known as *Bilad Lakhnauti*.

Contemporary sources confirm that the area Bakhtiyar had conquered included only the western part of the region, the *janapadas* of Gaur, Varendra and Pundra. This part was actually different from the territory known as *Bangalah*. Minhaj mentions that after his defeat, Laksmanasena fled towards 'Vanga and Sankanat', where he and his successors continued

^{4.} D.C. Ganguly, "Vangala desh", *Indian Historical Quarterly* (hereafter *IHQ*), vol. xix, no. 4, 1943, pp. 298-299.

^{5.} Ibid

to rule until mid thirteenth century.⁶ It is also evident from a twelfth century inscription found in Paharpur in Naogaon district in Bangladesh that records the attack of *Barindra* (Varendri) by the *Vangala Balair* (i.e. the army of *Vangala/Vanga/Bang* etc.) Ganguly speculates that it was the description of *Jatavarman*, the ruler of a small kingdom around greater Dhaka district attacking Somapura (Paharpur).⁷ The *janapada* of *Vanga* was thus situated in and around Dhaka. The Muslim chroniclers continued to mention the region of *Lakhnauti* and *Bangalah* differently even in the fourteenth century, as is evident from Ziauddin Barani's account. He mentioned that Sultan Ghiyasuddin Balban had appointed Tughril as the governor of 'Lakhnauti' and 'Bangalah', and both Lakhnauti and Bangalah were far from Delhi.⁸

Alexander Cunningham opines that Bengal was divided into four separate regions during the ancient times: Barendra (*Varendra, Barind*) and Banga (*Vanga, Bang*) to the north of the Ganges and Rarh (*Radha, Ral*) and Bagdi

^{6.} Minhaj-i-Siraj, *Tabaqat-i-Nasiri* (English. tr.) M.H.G. Raverty, Calcutta: Asiatic Society of Bengal, 1881) 2 vols. reprint: New Delhi: Oriental Books Reprint Corporation, 1970, vol.1, p. 436-8;

^{7.} For the inscription, see *Epigraphia Indica*, vol. xxi, p. 97; For the Interpretation, D.C. Ganguly, "Vangala desh", pp. 298-299

^{8.} Ziauddin Barani, *Tarikh-i-Firuz Shahi* (Bangla tr.), Golam Samdani Quraishi, Dhaka: Bangla Academy, 1982, reprint: Dhaka: Dibyaprakash, 2012, pp. 80-81 [hereafter Barani, *Tarikh-i-Firuz Shahi* (Bangla tr.)]

to the south of the river. Blochmann pointed out five such regions that existed before the conquest of Bengal by Bakhtiyar Khalji in 1205: (i) Radha (Rarh, Ral), the country west of the Hughli and south of the Ganges; (ii) Bagdi, the delta of the Ganges; (iii) Banga (Vanga, Bang), the country to the east of and beyond the delta; (iv) Barendra, the country to the north of the river Ganges(Padma) and between the Karotoya and the Mahananda and (v) Mithila, the country west of the Mahananda.

Among the geo-political units of Gaur (Gauda), Vanga (Bang), Samatata (Sankanat), Harikela and Pattikera etc found in contemporary literary and epigraphic sources, the most important apart from Gaur was Vanga, which was the actual source of the identity of the territory Bengal. Vanga is mentioned in ancient Indian literature. The great epic of *Mahabharata* did mention it. According to that description, the sage Dirghatama at the desire of King Bali begot on the latter's queen Sudesna five sons who were named Anga, Vanga, Kalinga, Pundra and Suhma, and the lands conquered by them seem to be known after their names.¹¹ This story bas been repeated with slight variation in the *Purana*s which ascribe the names of the

^{9.} A. Cunningham, Archaeological Survey of India Report, 1879-80, vol.xv, p.145.

^{10.} H. Blochmann, Contributions to the Geography and History of Bengal, Calcutta: Baptist Mission Press, 1878, p.3.

^{11.} The Mahabharata, edited by Panchanana Tarkaratna, Calcutta, Saka 1826, Adi parva, Ch. 104, pp. 113-14, vv. 9-55

principalities or kingdoms to the five princes. ¹² Of these territorial divisions, *Vanga*, *Pundra* and *Sumha* formed in the early stage three important principalities of Bengal. ¹³ This legendary tale can not be taken as reliable historical source, but it permits us to assume that *Vanga* as a *janapada* existed in the epic age extending roughly from the 4th century B.C. to the 4th century CE. ¹⁴ *Vanga* as a *janapada* occurs for the first time in the Meharauli Iron Pillar Inscription of King Indra, datable to the 5th century CE. ¹⁵ The Vanga country is also referred in the Mahakuta pillar inscription ¹⁶, which tells us that in the 6th century CE, Kirtivarman of the Chalukya dynasty gained victories over the kings of *Vanga*, *Anga*, and *Magadha*, which were three neighbouring countries.

The epigraphic and literary mention of Vanga continues to come down to the eleventh century A.D.; the latest epigraphic record being the Mainamati copperplate grants of Ladhaha Chandra and Govinda Chandra, who ruled

^{12.} Vayu Purana, Ch. 99, vv. 26-34, 47-97; Matsya Purana, Ch. 48, vv. 23-29, 43-89; Brahma Purana, IV, Ch, 18, v. 1.

^{13.} Benoy Chandra Sen, Some Historical Aspects of the Inscriptions of Bengal, University of Calcutta, 1942, p. 2

^{14.} AKM Yakub Ali, "Vanga: From Janapada to Country", in *Journal of the Varendra Research Museum* (hereafter *JVRM*), vol. 5, Rajshahi: Varendra Research Museum, 1976-77, pp. 101-110

^{15.} E. Hultzsch, "Tirumalai Rock Inscription of Rajendra Chola" *Epigraphia Indica*, vol. IX, Calcutta, 1907-08, p. 231.

^{16.} Epigraphia Indica, vol. VI, 1808-09, pp. 334

during the first half of the eleventh century. The Chandra kings claimed to rule over *Harikela*, *Samatata*, *Candradvipa* and *Vanga* of which the capital city was situated in *Vikramapura*, present Munshiganj district. All these areas are situated in southeastern Bengal, so it is likely that spreading the power over these countries, the name of *Vanga* was used in a broader sense. At times, it may have consisted of a group of *Mandalas* or divisions, *Samatata* and *Harikela* being few of them. However, *Samatata* and *Harikela* also had separate identity as independent *janapada* during most of the ancient period.

The Tirumalai Rock Inscription of Rajendra Cola¹⁸, dated 1025 mentioned above, where the name of *Vangaladesam* is found, is a contemporary to the Chandra dynasty. Analysing these, it can be safely assumed that *Vanga* is an older term whose origin can be traced back to the Epic age. It was a famous and prosperous country from the very beginning and most probably, the Brahmaputra was the northern and eastern boundary and the Ganges (*Padma*) was the southern boundary of *Vanga* in ancient period.

^{17.} A.H. Dani, "Mainamati Plates of Chandras", *Pakistan Atchaeology*, No-3, 1966, P-23.

^{18.} B. C. Law, op. cit, p. 5.

But the question is, were the janapada Vanga, and the country Bangalah same entity? Hem Chandra Raychaudhury disagrees. He opines that 'Vanga' and 'Vangala' were two separate tracts of land and further suggested that 'Vangala' was probably identical with Candradvipa. 19 In support of his contention he referred to Ablur Inscription of Vijjala and to some South Indian epigraphs in which 'Vanga' and 'Vangala' occur side by side, thereby maintaining that they were two separate countries.²⁰ The location of Vanga and Vangala in close proximity to each other in the Hanunira Mahakavya²¹ lends support to Raychaudhury's opinion.²² Besides holding the same view, R.C. Majumdar mentions the existence of Vangala as a separate country as late as the 15th century A.D.²³ He goes a step further and cites the words 'Vanga' and 'Upavanga' which correspond respectively to Vanga and Vangala of later days. The term 'Upavanga' appears to have been formed by adding the prefix 'Upa' to 'Vanga.'24 Eighth century Buddhist work Manjusrimulklapa further mentioned that

^{19.} See Promode Lal Paul, "Vanga and Vangala", *Indian Historical Quarterly* (Hereafter *IHQ*), vol xii, no. 3, 1936, p. 522.

^{20.} *Ibid*, pp. 523-24.

^{21.} Hanunira Mahakavya is an epic in Sanskrit, composed by Naya Chandra Suri most probably before 1496 A.D. See, AKM Yakub Ali, "Vanga: From Janapada to Country", JVRM, vol. 5, Rajshahi, 1979, pp. 103

^{22.} Promode Lal Paul, op. cit., pp. 523-24.

^{23.} Promode Lal Paul, The Early History of Bengal, vol. I, Calcutta, 1939, Introduction.

^{24.} R.C. Majumdar, History of Bengal, vol. I, Dhaka: University of Dhaka, 1943, p. 19.

Vanga, Samatata and Harikela were also neighbouring countries, but separated from each other.²⁵

The name of the *janapada Samatata* is mentioned for the first time on the Allahabad Posthumous stone pillar inscription of Samudra Gupta²⁶ as one of the most important among the north-east Indian frontier kingdoms which submitted to the mighty Gupta emperor. Therefore, the king of Samatata was a feudatory king under Samudragupta in the middle of the fourth century A.D.

Samatata is also mentioned in the Brhat Samhita as an eastern country that was separated from Vanga.²⁷ The river Lauhitya Samatata Pragjyotisa and the Bhadras are mentioned to the east.²⁸ Famous Chinese travellers Yuang Chwang, I-tsing and Seng-Chi.²⁹ Yuan Chwang visited Samatata between 637-39 A.D. 40 and mentioned that he arrived at Sa-mo-ta-ch (Samatata) after a journey of 1200 li or 1300 li, or 200-217 miles to the south from Kamrupa. According to him, the country of Samatata was about 3000 li in

^{25.} Niharranjan Roy, *Bangalir Itihas: Adiparva*, Calcutta: Dey's Publishing House, 1402, B.S., p. 112.

^{26.} John Faithful Fleet, "Inscriptions of the Early Gupta Kings and their Successors", Corpus Inscriptionum Indicarum, Vol. III, 1963, p. 8

^{27.} Ramakrishana Bhat, V.B.S, Part-1, 1981, p. 169

^{28.} *Ibid*

^{29.} Watters, Thomas, On Yuan Chwang's Travels in India 629-645, vol-II, reprinted, 1973, pp.187-88

circuit and the capital of the country was about 20 li and round. The country was on the seaside and was low and moist.

Around 200 years before Yuan Chuang, Seng-chi traveled to India by the southern sea route and arrived at *Samatata*. He mentioned the name of the king of that country as Rajabhata (or Patu), who was most probably, identical with the Rajarajabhatta of Ashrafpur copperplate.³⁰ His main capital city was in Karmanta, which is identified with Barakamta of the Comilla district.

Analysing all these ancient sources, Raychaudhuri suggests that,

the kingdom of Samatata in the 7th century A.D. may be reasonably regarded as having comprised the area bounded by the old course of the lower Brahmaputra River in the north., Chittagong Hills in the east, and the Bay of Bengal on the south. A branch of the old Ganges (Padma) corresponding to the modern Gorai and Madhumati rivers perhaps formed the western boundary.³¹

And Bhattasali opines,

"natural barriers such as mountains and river marked off one kingdom from another in those days, we cannot but accept the plain tract of land bounded by the Garo and the Khasi Hills and the hills

^{30.} Ganga Mohan Laskar, "Ashrafpur Copper-plate Grants of Devakha ga", Memoirs of the Asiatic Society of Bengal, vol. 1-6, Calcutta, 1906

^{31.} H.C. Raychaudhuri, "Kingdom of Vanga", R. C. Majumdar (ed.), *History of Bengal*, vol-I, 1943, pp. 85-86 in the foot note 4

of Tippera or the north and east by the Lauhitya or the old Brahmaputra river on the west and by the bay of Bengal on the south as the ancient kingdom of Samatata.³²

Dani suggests that *Samatata Mandala* is generally supposed to include the trans-Meghna tracts.³³ According to Law, Samatata is identical with delta of the Ganges and Brahmaputra and must have comprised, according to epigraphic evidence the modern districts of Tipperah, Noakhali, Sylhet and portions probably of Barishal.³⁴ Watters, however identifies Samatata as situated to the south of Dhaka in the district of the modern Faridpur³⁵ while Bhandarkar thinks that "it (Samatata) is taken as comprising the delta of the Ganges and Bramhputra, of which the Jessore District forms the central portion.³⁶ Its capital Karmanta has been indentified with Kamta in the Comilla district by Bhattasali³⁷, Cunninggham suggests that "Samatata must be the Delta of the Ganges; and as the country is described as 3000 li or 500 miles in circuit it must have included the whole of present Delta, or

^{32.} N.K. Bhattasali, "The Bhaghaura Narayana Image Inscription", *Epigraphia Indica*, vol. XVII, 1923-24, p. 353

^{33.} A.H. Dani, "Mainamati plates of Chandras", *Pakistan Archaeology*, Number- III, 1966, p. 24

^{34.} B.C. Law, "The Vangas", *Indian Culture*, vol-1, 1934-35, p. 62

^{35.} Watters, op. cit, p. 188

^{36.} Bhadrakar D.R, "Identification of the Princes and territories mentioned in the Allahabad Pillar Inscription of Samudragupta", IHQ,, vol-1, 1925, P- 256

^{37.} N.K. Bhattashali, "A Forgotten Kingdom of East Bengal", *Journal of the Asiatic Society of Bengal* (hereafter *JASB*), new series, vol. x, 1914, p. 85 ff.

triangular tract between the Bhagirathi River and the main stream of the Ganges".³⁸

Another important document in the process of identifying Samatata is the Gunaighar copper-plate inscription³⁹ of Vainyagupta, dated in the beginning of the 6th century CE. It mentions donation of a land in a village named Gunikagrahara, situated in the 'Uttara Mandalika', northern part of Samatata mandala. The village can easily be identified with the find spot of the plate, present Gunaighar in the district of Comilla. It clearly shows that the western part of present Tripura and present Comilla were under Samatata Mandala. The Ashrafpur copper plate grants of king Devakhadga cited above were issued from the royal residence at Karmanta. It is identified with Barakamta near Mainamati. These epigraphic sources indicate that the Samatata was just as a Mandala, or a division and that there were a group of such mandalas during the independent ruling dynasties in south eastern Bengal like the Chandras and the Khadgas. It has come to light from these sources that Vikarmpura area of Dhaka, Vanga and Vangala were not included in Samatata.

^{38.} A. Cunningham, *The Ancient Geography of India*, London, 1871, p. 576.

^{39.} Bhattacharyya, D.C, "A Newly discovered copperplate from Tippera", *IHQ*, vol-VI, 1930, pp. 45-60.

It appears from the description of Minhaj that the Sena rule in *Vanga* and in *Sankanat*, which was possibly *samatata* continued till the end of the thirteenth century and at that point it included in its jurisdiction the region of Sonargaon and the coastal areas of Tripura, Noakhali, and Comilla i.e. the eastern side of the river Meghna. Barani's account is relevant in this regard. He writes, 'Sultan Balban in subduing Tughril (1268-1281) made an agreement with *Danuj Rai*, the ruler of Sonargaon, so that he might guard against the escape of the rebel *muqta* (i.e. Tughril) by water'. As is cited above, Barani also mentioned earlier that Tughril was appointed as the governor of Bangalah as well, so that means Sonargaon was not a part of Bangalah.

Among the other *janapadas*, *Harikela* is the most significant. The name of *Harikela* was found in the Rampal⁴¹ and Dhulla⁴² copper plate grants of Sri Candra. The lexicographer Hemachandra identifies the *Harikela* and *Harikali contury* with *Vanga* from the passage, 'Vangastu Harikeliay' found

^{40.} Ziauddin Barani, Tarikh-i-Firuz Shahi (Bangla tr.), p. 80

^{41.} R. G. Basak, "Rampal copper-plate grant of Srichandradeva", *Epigraphia Indica*, vol. XII, pp. 1913-14. pp. 136-42

^{42.} D. C. Sircar, "Dhulla plate of Srichandra", *Epigraphia Indica*, vol. XXXIII, 1959-60, pp. 134-40

in a twelfth century work Avidhana Chintamoni. 43 However, as we have already mentioned, the eighth century Buddhist work Manjusrimulklapa, confirms that Harikela, Samatata and Vanga were separated from each other but neighbouring countries. An idea about the geographical location of Harikela can be found in the travelogue of I-tsing. He came to Harikela in the seventh century from Kamarupa and stayed there for one year. Harikela is reffered to by I-tsing as the eastern limit of Eastern India. From here, he went to Mahabodhi Nalanda and Tiladha. 44 Considering this record and the description found in two fifteenth century manuscripts found in the Dhaka University Library, Niharranjan Roy conclusively identified Harikela with present day Sylhet region.⁴⁵ The region was included in the territory of Muslim Bengal after it was evidently conquered by Sikandar Khan Ghazi with the help of Shaikh Jalal Mujarrad in 1304 during the reign of Sultan Shamsuddin Firuz Shah (1301-1322).

A few more geographical names are worth mentioning here. Some coins of the Chandra Kings record the name of a small principality called *Pattikera*

^{43.} See D. C. Sircar, "Madanpur plate of Sri Candra", *Epigraphia Indica*, vol. XXVIII, 1949-50, p. 338

^{44.} J. Takakusu, "Notes on Geographical names", A Record Of The Buddhist Religion: As Practised In India And The Malay Archipelago (Ad 671-695) by I-Tsing, Delhi: Munshiram Manoharlal Publishers Pvt. Ltd., 1998, p. XLVI

^{45.} Niharranjan Roy, op. cit., p. 112

in eastern Bengal. The Mughal revenue chart shows a *pargana* named *Paitkara* in Comilla district. Barrie M. Morrison belives that Pattikera was in the Lalmai-Mainamati Hills (Comilla), more likely on the eastern side near the northern end of the range. It seems that the principality of Pattikera in course of time merged into *Samatata* or *Harikela*. Dinesh Chandra Bhattacharya is more specific on his assumption, "the city of Pattikera was apparently situated some where in the Lalmai and Mainamati Hills where the plate was discovered and gave the name to an important pargana in the district of Tippera, still known as Patikara or Paitkara which extends up to the same hills, though the Hills themselves now fall under a separate Pargana named Meherakula. In older documents of the 18th century the name of the Pargana occurs regularly as either *Patikera* or and Paitkera, leaving no room for any doubt on the identification. The strategies of the same of the Pargana occurs regularly as either *Patikera* or and Paitkera, leaving no room for any doubt on the identification.

A copper plate of Raja Damodaradeva dated saka-year 1165/1243 shows that the Chittagong region formed a distinct geo-political unit under a dynasty other than the Senas. Fakhruddin Mubarak Shah (1338-1349)

^{46.} Barrie M. Morrison, Lalmai, a Cultural Center of Early Bengal: An Archaeological Report and Historical Analysis, Seattle: University of Washington Press, 1974, p. 27

^{47.} Dinesh Chandra Bhattcharyya, "The Mainmati Copper-plate of Ranavankamalla Harikaladeva: 1141 Saka", Varendra Research Society Monograph, No-5, 1934, P-12

defeated the Tripura king Raja Fa and snatched Chittagong he then annexed it to the Sultanate of Sonargaon in 1340.⁴⁸

Therefore, it can be summed up that, the term Bangala most probably derived from the ancient Vanga. However, the geographical location of Bangalah during the period under review is different from the ancient Vanga, which sometimes included the janapadas of Samatata and Harikela in a greater sense. The Bangalah under the independent Sultan's of Bengal and later the Mughal province of Subah Bangala is even bigger, and it included territories located to the west of Vanga, Samatata, and Harikela, i.e., the janapadas of Gaur, Radha and Pundra. It even included the smaller principalities of Chandradvipa and Pattikera, situated to the south of greater Vanga. Infact, the first Muslim conqueror Bakhtiyar Khalji had invaded only the western part of the country that was not known as Vanga. It was a latter development that the lands of Vanga were annexed to the kingdom, but ever since Sultan Shamsuddin Ilyash Shah started to use the title of Sultan-i-Bangala, the identity of the region begun to be reconstructed as the country of Bangala.

^{48.} R.C. Majumdar, "Lama Taranatha's Account of Bengal", *IHQ*, vol. xvi, no.2, 1940, p. 238

It should also be noted here that Bakhtiyar himself and many of his successors have been mentioned by the Muslim chroniclers of Delhi as Malik ul Mulk ul Sharq or 'King of the East' as well, as the kingdom was in the eastern part of India. For example, Tabaqat-i-Nasiri records that 'once while Husamuddin Iwaz Khalji (1212-1227) was carrying a laden ass in Walishtan (Pushtah Afroz, i.e. the burning mound), on the borders of the mountain tracts of Ghur (i.e. Afghanistan), two darvishes, being satisfied with his conduct advised him to go to that place in Hindustan, which was the extreme of Muhammadanism'. Accordingly, 'Iwaz Khalji with his family came towards Hindustan and joined Muhammad bin Bakhtiyar Khalji'. Since then the territories of Bengal and Bihar was called Muluk ul-Sharq (i.e. the eastern country) and its rulers and Sultans got designated as Malik ul-Muluk ul-Sharq (i.e. the rulers of the eastern regions).⁴⁹ Nasiruddin, the eldest son of Sultan Iltutmish (1210-1236) is also referred to as Malik ul Mulk ul Sharq (i.e. emperor of the east) in the inscription of his tomb in Delhi.⁵⁰ The other son of Iltutmish, who succeded his brother as the ruler of Bengal after his sudden death at an young age, Nasiruddin

^{49.} Minhaj-i-Siraj, *Tabaqat-i-Nasiri*, vol. I, p. 436-8; Quoted by Md. Akhtaruzzaman, *Society and Urbanization in Medieval Bengal*, Dhaka: Asiatic *Society* of Bangladesh, 2009 (hereafter Md. Akhtaruzzaman, *Society and Urbanization*), pp. 35-37

^{50.} Md. Akhtaruzzaman, Society and Urbanization, pp. 35-37

Mahmud Bughra Khan has been mentioned as Sultan-Sharaq by several contemporary sources. Sadiduddin Muhammad Awfi, an early thirteenth century Persian poet, mentions that in Bengal 'Balka Khalji Daulat Shah after the death of Malik ul Muluk ul Sharq Nasirul Haque wal Din Mahmud (i.e. Sultan Nasiruddin Mahmud, the chief of the eastern territories) declared his independence'. 51 Therefore, both the terms Bengal and Eastern India are used to indicate the same regions in many medieval documents. Defining the time-frame 'medieval' is no less complicated than identifying the region called Bengal. In order to render history and time intelligible, past is often periodized into different units such as eras, epochs or periods. The origins of periodization dates back to the myths of ancient Greece, however the biblical narratives of periodization are more common. Saint Paul's theological division of history into three ages: a) before the age of Moses (under nature); b) under Mosaic law (under law) and c) the age of Christ (under grace) - was one of those biblical periodization scheme, used widely during the middle ages. Another popular periodization scheme of

the Middle Ages was the Six Ages of the World, where every age was a

^{51.} I. H. Siddiqui, Perso-Arabic Sources of Information on the Life and Conditions in the Sultanate of Delhi, New Delhi: Munshiram Monoharlal, 1992, pp. 33-34. (hereafter I. H. Siddiqui, Perso-Arabic Source)

thousand years counting from Adam to the present, with the present time (in the Middle Ages) being the sixth and final stage.

So far, there has not been an significant attempt to analyze the historical epochs of Bengal in particular. However, while attempting to compose the first elaborate history of Bengal, experts like R.C. Majumdar and J.N. Sirkar followed the structures of the Indian History as proposed by James Mill in his famous book *The History of British India*. Mill had divided the Indian history into three distinct periods, based on the character of the ruling class. Thus, his divisions were Hindu Period (upto the 12th Century), Muslim Period (13th-mid 18th century) and British Period (Late 18th Century onwards). The *History of Bengal*, published in two volumes by the University of Dhaka followed the same periodization; thus the division of the two volumes followed the same time-frame, i.e. Hindu Period and Muslim Period. Muslim Period.

However, Mill's scheme of periodization is often criticized as being 'Colonial' in mindset. Therefore, since the beginning of the twentieth

^{52.} Stewart Mill, *The History of British India*, London: Baldwin, Cradock and Joy, first edition, 1817; revised fifth edition ed. by Horace Hayman Wilson, 10 volumes, London: James Madden, 1858; reprint, London: Taylor & Francis/Routledge, 1997

^{53.} Volume I of the book, published in 1943 ends with the events of Muslim conquest of Bengal, while volume II, published in 1948 starts from there and ends with the events of the Battle of Plassey in 1757

century, the ancient-medieval-modern division replaced the formulation of Hindu, Muslim, and British periods of Indian history. In fact, the so-called Hindu, Muslim and British periods roughly correspond with the ancient, medieval and modern eras of Indian history. In contemporary South Asian historiographical traditions, the latter chronological constructs are now commonly used as convenient labels.54 The term 'medieval' also has a vague connotation to some extent. That was why, Contributors to the inaugural issue of the first journal of Indian medieval history, asked whether the category was a 'tyrannous construct', or an 'alien conceptual hegemony' when applied to non-European societies.⁵⁵ Since then, there have been many debates on the connotations of medieval history, especially in the Indian contex.⁵⁶ However, the periodization proposed by Mill, back in the beginning of the nineteenth century had so strong reasoning, that even though his terms of Hindu, Muslim and British has been replaced, no stronger time division has been proposed so far. Therefore, the period Mill

^{54.} Tanvir Anjum, "Medieval' in the Eyes of the 'Modern': A Critique on the Construction of Medieval Period of Indian History", in *Pakistan Vision*, Vol. 9, No.1, Lahore: Pakistan Study Centre, 2008, pp. 66-67

^{55.} See T. Reuter, "Medieval: another tyrannous construct", *Medieval History Journal*, vol. I, No. 1, New Delhi: 1998, pp. 25-46 and H. Mukhia "'Medieval India': an alien conceptual hegemony?", *Pakistan Vision*, Vol. 9, No.1, pp. 91-106

^{56.} For a more elaborate discussion on the debate, see Daud Ali, "The idea of the medieval in the writing of South Asian history: contexts, methods and politics", in *Social History*, Vol. 39, No. 3, 2014, pp. 383-407

called as 'Muslim Period' can still be considered as an important chunk in the history of India in broader sense, and of Bengal in particular. However, we prefer it to call 'medieval', because, especially in the case of Bengal, during most of these five and a half century, the connotation 'Muslim' creates a misconception. Muslims were the ruling class, but never during this period had Bengal been a Muslim state by character. Moreover, as we shall see later in this study, that the non-Muslims were actually integral part of both the Sultanate and Mughal administration, Military administration in particular. Therefore, we have taken this period, roughly from the beginning of thirteenth century to the middle of eighteenth as the boundary of this study. From Mill's theory and the later development on the matter, we already have the explanation of why the time-frame should be considered as a different era. Apart from it, this era is very important in the development of military technology and techniques of warfare in this region.

To determine the military dynamics as cited above, it is necessary to examine the technological development in the field of weaponry. Defining the term 'weaponry' is not an easy task either. Military historians and experts explained it in many ways. However, to summarize, the term can be

used as to define the items used by the military personnel during war. It includes combination of equipment, vehicles, structures and communication systems, used in warfare.

Depending on the historical and geographical background in which they are used, the character of weaponry often changes. For example, the most common personal weapon for warriors since the ancient age is the sword, however, the Indian *Asi* or the Arabic *Saif* are so different in size, shape and usefulness. From the ancient age, many kind of weapons have been invented and used. Depending on their usage, these can be classified into different categories such as:

- a. Personal weapons: Commonly known as 'Melee weapon' are weapons used in hand-to-hand combat. The term Melee originates in the Seventeenth century from the French word mêlée, which refers to hand-to-hand combat, a close quarters battle, a brawl, a confused fight, etc. Swords, knives, axes, mace etc. are the most common examples used in all around the world.
- b. Long range weapons: Weapons to make it possible to fight the enemy from a distance. The common forms in this category include bows, slingers, lance, javelin, spear etc.

- c. Siege weaponry: Used to destroy the defensive structures of the opponent. Catapult, trebuchet, ballista and battering ram are few examples.
- d. Armoury: Strong covering worn as a defense against weapons.
 Apart from the body coverings made of metals, shields are the most common form of Armour.
- d. Firearms: Hand carried weapon that fires either a single or multiple projectiles (bullet) using gas. In modern days, firearms are generally classified by its caliber, i.e. their bore diameter explained in millimeters or inches. However, in medieval context, it can be broadly classified in two types: small arms or handguns, like pistol and revolver and long guns that include muskets, rifles and carbines.
- e. Artillery: Modern version of long range weapons; a class of large military weapons built to fire munitions far beyond the range and power of infantry's small arms. Usually they are mounted and large bore projectile-firing guns or missile launchers. Cannons are the most common form used during the medieval period.

1.3 Research methodology to be followed

The research is mainly base on field data's collected from deferent museums and sites concerned and their interpretation. The methodology involves field survey as well as library based data collecting and processing. In analysis and documentation of the sources, historical methodology is given emphasis. Because of the nature of the topic, major primary sources include written records of contemporary historians, administrators and travellers along with various public records & legal documents, often found in archeological sources like copper-plates or inscriptions. The steps include conducting a background literature review, identify and locate primary and secondary data sources, evaluating the authenticity and accuracy of source materials, analyzing and developing a narrative exposition of the findings.

1.4 Evaluation of the Sources of Study: As stated above, the main sources of data for this research is two-fold, based on field survey and on written records. The field data is analyzed later, but before doing that, we need to review the written records available. To make it easier to understand, these sources may be categorized as contemporary and secondary or modern works.

a. Contemporary Sources:

The earliest available literary source on the history of Medieval India is Hasan Nizami's Taj-ul-Maasir. It covers the period ranging from 1192 to 1217 and even though the writer emphasize on Ghorid and Turkish rulers of Delhi, it throws some light on the first Muslim conquest of Bengal. Its author Khwaja Sadar Nizami has been quoted as a trustworthy writer and scholar of distinction by the later historians like Ziauddin Barani⁵⁷. His description, although extremely 'florid and ornamental' in style, and 'completely soaked in the spirit of Persian Fathnamas', ¹² contains names of numerous places and festivals and throws valuable light on the spirit of civil administration. The most significant event described by him is the arrival of Bakhtiyar Khalji at Badaon to meet Qutubuddin Aibak after his conquest of Bihar. It is one of the important notes considered to determine the exact date of the foundation of Muslim rule in Bengal, for which there is little historical evidence.

Barani has also cited another contemporary account of Sadid-ud-din Muhammad Awafi as one of the sources of his writings.⁵⁸ The book, Jawami-ul-Hikayat wa-Lawami-ul-Rawayat contains information on the

^{57.} Barani, Tarikh-i-Firuzshahi (Bangla tr.), p. 25

^{58.} Barani, Tarikh-i-Firuzshahi (Bangla tr.), pp. 25-26

rebellion of Balka Daulat Shah Khalji (1228-1230) against the Sultan of Delhi in 1229-1230. Awafi mentions about the emergence of the geopolitical unit of Eastern India, or the *Muluk-ul-Sharq* and Nasiruddin Mahmud (1228-1330) as its ruler, or *Malik-Muluk-ul-Sharq*. He also get refers to the development of certain institutions of cultural and political importance. Thus, references to the *karkhana* and *bimaristan* (hospital) are made in it, which has an important role in the military history. It also provides us with the information on the use of the scientific instruments like the compass (*sang-i-maqnatus*).⁵⁹

The most important early contemporary source on the history of medieval Bengal is undoubtedly the *Tabaqat-i-Nasiri*. Its author Abu Umar Minhaj al-Din Uthman bin Siraj-al-Din Juzjani, popularly known as Minhaj-i-Siraj, although did not come to Bengal, actually lived in the eastern region between of 1243-1244. It contains eyewitness account of Bakhtiyar Khalji's conquest of Bihar and Nadia-Lakhnauti. In fact, the base of all the historical accounts of the events, including the myth of Bakhtiyar's win over Bengal with only 17 cavalrymen is Minhaj's description. It is not only the earliest available source of the history of Bengal, the more important fact is that it contains detailed description of military events. K.A. Nizami

^{59.} I. H. Siddiqui, Perso-Arabic Source, p. 36

rightly opines that, "Minhaj's main interest lay in the military operations and the political maneuvers of the period (up to 1259)." As part of this scheme, he mentioned various minute things such as the trade of horses, Bakhtiyar's arival at Nadia through the thick jungles of Jharkhand, the establishment of capital at Lakhnauti and the reading of *khutbah* and coining of money that helps us determining the military dynamics of the period.

Many Persian poets who attached themselves to the Delhi court during the period in question have compiled *Diwans* or collection of poems. Among them, Amir Khusrau (1253-1325AD) is the most famous as well as most important source of historical informations. He had the experience to come to the eastern part of the Delhi sultanate more than once, and apart from that he may even had the chance to get valuable first hand information on Bengal and Bihar while accompanying Muizuddin Kaiqubad (1288-1290) on the sultan's expeditions towards the region. Amir Khusrau came to the bank of the river Sarju (Ghogra) and recorded minutes of the meeting between Kaiqobad and his father, ruler of Bengal Bughra Khan in his *Qiran-us-Sadain*. Though 'full of exaggeration and metaphorical

^{60.} K.A.Nizami, On History and Historians of Medieval India, Delhi: Munshiram Manoharlal, 1983, p. 87

description and written in the most grandiloquent style⁶¹, it provides us with valuable information of the contemporary historical as well as military events.

Malik Ikhtisan-ul Hindi, the *Dabir-i-Khas* of the Tughlaq court in Delhi has described the events of Muhammad bin Tuglaq's expeditions towards Bengal and Bihar, in his *Basatin-ul-Uns*, composed in 1325-26AD. Though *Basatin* is a book on the history of Ujjain, Kashmir, Qanauj and China and particulary of King Kishwargir of Kalayan and Queen Mulk Arai of Sarandip, it has some information on the events mentioned above and as the author was an eyewitness and participant in the events, it is a very important source of information. It also contains information on Ghiasuddin Bahadur Shah (1323-1332) of Sonargaon-Sylhet and the conquest of Tirhut by Muhammad bin Tughlaq, that neither Barani, nor Yahiya Sirhindi's accounts did. However, his records have little details of the military dynamics.⁶²

This dynamics are much more elaborate on the accounts of Abdul Malik Isami. His *Futuh-us-Salatin* or *Shah Namah-i-Hind*, composed in 1348-1349 is considered a very important source on the contemporary events.

^{61.} Md. Akhtaruzzaman, Society and Urbanization, p. 14

^{62.} *Ibid*

His references on the military events are trustworthy, because he had a chance to gather them first hand as his grandfather Izzuddin Isami was a *sipahsalar* in Balban's (1266-1287) army.⁶³

Isami's contemporary Ziauddin Barani is the most important chronicler, not only of the fourteenth century, his Tarikh-i-Firuz Shahi (compiled in 1358-59) is considered as the classical work on the entire medieval period in the history of India and of Bengal. He has also compiled two other important chronicles, Fatwa-i-Jahandari and Sahifa-i-Nat-i-Muhammadi. Barani himself was a noble in the court of Sultan Muhammad bin Tughlaq, although he was imprisoned for his involvement with the rebel Khwaja-i-Jahan after the former's death, was subsequently freed by the next sultan, Firuz Shah Tughlaq. He wrote his famous chronicle during his days in destitute, hence in a desperate effort to convince the sultan, he tried his best to praise him in all regards. Therefore, his narratives of the incidents, specially those involving Firuz Shah Tughlaq is somewhat one sided. But even after that, Tarikh-i-Firuz Shahi is the most comprehensive contemporary source on the military history of the fourteenth century Bengal, as it contains detailed record of Firuz Tughlaq's expeditions to

^{63.} Agha Mahdi Husain (eng. tr.), The Futuh-us-salatin or the Shahnama of Medieval India of Isami, Bombay: Asia Publishing House, 1967, vol. i, preface, pp. xiii-xiv

Bengal. According to P. Hardy, Barani treated history as a branch of theology and had seen the past as a battleground between good and evil⁶⁴, while K. A. Nizami opines that Barani's analysis of the situation is basically and essentially political.⁶⁵ Though not written in the context of Bengal, his *Fatwa-i-Jahandari* is even more important as it contains some details on administration, and as part of it military organisation.

There is another contemporary source with the title *Tarikh-i-Firuz Shahi*, written by Shams-i-Siraj Afif. Although it is a shorter chronicle than that of Barani, Afif's book is of particular importance in regard to the history of Bengal. The book has five chapters and in the second chapter Afif described in detail about the two expeditions sent to Lakhnauti and Jajnagar -Nagorkot by Sultan Firuz Shah Tughluq. Specific references to the geopolitically unified unit of *Bangalah*, the foot-soldiers of Bengal *(paika-e-bangalah)*, the influence of geographical features on the life of the people and in military techniques, the Hindu zaminders, the science of astrology and astronomy, the scientific instruments are found in his records.⁶⁶

^{64.} P. Hardy, Historians of Medieval India: Studies in Indo-Muslim Historical Writing, London: Luzac, 1960, p. 39

^{65.} K.A. Nizami, On History and Historians of Medieval India, New Delhi: Munshiram Manoharlal Publishers, 1983, p. 136

^{66.} Md. Akhtaruzzaman, Society and Urbanization, p. 16

Two more Persian works of the fourteenth century are worth mentioning here: Futuhat-i-Firuz Shahi of Firuz Shah Tughluq and Sirat-i-Firuz Shahi of an anonymous author. Both have substantial information on the thirteenth and fourteenth century Bengal and Bihar. Futuhat is a record of the achievements of Sultan Firuz Shah Tughluq, described under twenty-six subtitles. Among many other aspects of the society and culture, it has a description of the use of vessels and weapons made of precious metals during the period mentioned above.

An Arabic chronicle, written outside the South Asian region is worth mentioning here. *Masalik-ul-Absar-fi-Mumalik ul-Amsar* compiled in 1344 by Shihabuddin al Umari (1301-1348) is regarded as 'Encyclopedic in range'. The first part of the book which deals with diverse aspects of Indian life and culture during the reign of Muhammad bin Tughluq, based on reports made by merchants, travelers, scholars, pilgrims and envoys. Three of eleven reporters mentioned by Umari were Indian nationals, while another one had visited India and served in the Sultan's office. The importance of *Masalik* lies in its analytical description of boats and ships in

^{67.} I.H. Siddiqui, Perso-Arabic Sources, p. 102

the Ganges of Bengal that helps us in estimating the formation of the navy along with the rise of ship-building industries in the region.⁶⁸

The Tarikh-i-Mubarak Shahi, written between 1401-1434 by Yahiya bin Ahmad bin Abdullah Sirhindi, is the only available contemporary account of the post-Tughlaq era in Indian history. The book actually begins with the reign of Muhammad bin Sam and finishes in 1434. There is some rare information in this book that is important in the military dynamics of the period. It lets us know about the inclusion of the Hindus as commander in the army of Ilyas Shah (1342-1357) and about the importation of elephants. More important is the fact that Sirhindi's accounts were so reliable that almost all the subsequent accounts borrowed from it. According to J. N. Sarkar, "The whole account of the Sayyid period in Nizamuddin Ahmad's Tabaqat-i-Akbari is a mere reproduction of the statements of Tarikh-i-Mubarak Shahi, very often copied verbatim. Badayuni follows it very closely. Firishtah often borrows its very words". 69

Three important subsequent sources have been mentioned by Sarkar in his statement cited above. Among those, the *Tarikh-i-Ferista* is written by Muhammad Abul Kashim Hindushah, a military officer in the Nizam Shahi

^{68.} Md. Akhtaruzzaman, Society and Urbanization,, p. 17

^{69.} J.N.Sarkar in K.K. Basu (eng. tr.) The Tarikh-Mubarak Shahi of Yahiya bin Ahmad bin Abdullah Srhindi, Karachi, 1977, "Foreword", p. v

army of the Deccan during the late sixteenth century. Out of the thirteen chapters of his book, the seventh chapter is dedicated to the history of Bengal and Bihar. Although Ferishta had never been to Bengal, he used other contemporary accounts like that of Sirhindi to compile his chronicle. As he had first hand military experience, his accounts describes the military events elegantly.

More elaborate military information is cited by Abbas Khan Sherwani in his sixteenth century account *Tarikh-i-Sher Shahi*, where he described the events of the life of Sher Shah Shur, the Afghan hero who temporarily halted the Mughal rule in India as well as in Bengal.⁷⁰

By the end of the sixteenth century, a major turn-around happened in the Bengal- the Mughals had taken over from the independent Sultans as the rulers of Bengal. Mughals are famous for their love for history, almost all the Mughal rulers had either written their own autobiography or some-one else had done it for them. Among those records, *Babur Nama* of Zahiruddin Muhammad Babur (1526-1530), and *Humayun Nama* of

^{70.} H.M. Elliot and J. Dowson (eds.) Tarikh-i-Sher Shahi (an abridged translation by E.C. Bayley as part of the History of India as told by its own historians. The Muhammadan period; v. 4), Reprint, Delhi: Sang-e-Meel Publications, 2006; Also see, Abbas Khan Sarwani, Tarikh-i-Sher Shahi (tr. into English from original Persian by B.P. Ambashthya), Patna: K.P. Jayaswal Research Institute, 1974 and another translation by S.M. Imamuddin, Tarikh-i-Sher Shahi, Dhaka: University of Dhaka, 1964.

Gulbadan Begum had little information about the events in Bengal. However, *Akbar Namah* and *Ain-i-Akbari* of Abul Fazl and *Tuzuk-i-Jahangiri* of Nasiruddin Muhammad Jahangir are very importants sources of the History of Mughal rule in Bengal. Although he did not come to Bengal ever, Abul Fazal's records of the era of Akbar the great has thrown light on every aspect of politics and war during the period concerned.

More important is the account of a military officer in Jahangir's army, Mirza Alauddin Ispahani, who wrote his famous account *Bahristan-i-Ghayebi* in the disguise of Mirza Nathan. Mirza Nathan himself took part in the expeditions of Islam Khan Chisti in Bengal, and he recorded minute details of them. The war-policy of both the Mughal and those of the Bara-Bhuiyans during the early seventeenth century Bengal can be traced from his accounts. His words are supplemented by the account of another Mughal officer, Abdul Latif, who also had taken part in the expeditions of Islam Khan. His diaries have been translated into English and into Bangla by Sir Jadunath Sarkar. 22

^{71.} Abdul Karim, *History of Bengal, Mughal Period*, Rajshahi: Institute of Bangladesh Studies, 1992, pp. 7-21 (hereafter Abdul Karim, *History of Bengal Mughal Period*)

^{72.} The English translation was published in *Bengal Past and Present*, Vol. XXXV, Nos. 69-70, pp. 143-146, and the Bengali translation was published in *Prabashi*, Aswin, 1326 B.S. and *Shanibarer Chiti*, Ashar, 1326 B.S. For details see: Jadunath Sarkar, "Journey to Bengal (in Persian)-1608-1609 by Abdul Latif", *Bengal Past and Present*, Vol. XXXV, Calcutta, 1928, pp. 144-16 and Wakil Ahmed, *Banglae Bideshi Parjatak*, Dhaka, pp. 56-61, 117-122.

There are also a few journals and books written by the Mughal nobles including those cited above- Khwaja Nizamuddin Ahmad's *Tabakat-i-Akbari* and Abdul Kader Badayuni's *Muntakhab-ut Tawarikh*. Apart from that, the diary of Mulla Taqia, a noble in the court of Akbar is worth special mention. He wrote his famous *Bayaz* on the basis of his travel to the northeastern part of the Mughal empire at the end of the sixteenth century, where he also consulted many books in the libraries of Bihar and Lakhnauti. His accounts are mainly on the political situation of Bihar, however, those confirms the inclusion of non-Muslims among the nobility as well as military of the Sultanate era.⁷³

Finally, this evaluation of contemporary sources would remain incomplete without the mention of one book, *Riyaz-us-Salatin*, written in the second half of the eighteenth century. Written by Golam Hussain Salim, who was a local officer in the postal service under the East India Company government of Bengal, has compiled a complete history of Bengal until 1788 in Persian. This is the first comprehensive and systematic history of Bengal, and even though there are a few mistakes on the chronology of

^{73.} Part of Mulla Taqia's *Bayaz* has been translated and published by Ilyas Rahmani in his article "Ahd-i-Islamia mein Darbhanga par ek majmu'i nazar", *Maasir* (Urdu monthly), Patna, May-June 1949; See, Md. Akhtaruzzaman, *Society and Urbanization*, p. 27-28

events, *Riyaz* is considered as one of the most reliable source. Considering the fact that it was written in a later period, one may not tempt to call it a 'contemporary' source, however, it should be, because the writer has extensively used and quoted many contemporary sources, from where he has taken his information.

Contemporary literary works written in local languages are also very important source of the study of medieval Bengal. *Brihaddharma* and *Brahmavaivarta Purana*, reportedly composed in Bengal between the thirteenth and fifteenth centuries, yield valuable information about the expansion of various arts and crafts in thirteenth and fourteenth century Eastern India. They are also useful in studying the development of military technology. Among the contemporary literary sources in Bangla, *Srikrisna Kirton* of Chandidas, *Ramayana* of Kirtivasa, *Srikrisnavijaya* of Maladhar Vasu, *Manasamangal* of Vijaya Gupta, *Manasavijaya* of Biprodasa Piplai, *Mahabharata* of Kavindra Parameshwar and of Srikar Nandi, *Vidyasundara* of Dwij Sridhara, *Chitanya Bhagavat* of Vrindavan Das, *Chaitanya Charitamrita* of Krisnadas Kaviraj, all written during the Sultanate period are sources of information on the social history. A Muslim

^{74.} Md. Akhtaruzzaman, Society and Urbanization, p. 30

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poet, Shah Muhammad Sagir also wrote an epic *Yousuf-Zulekha* during the same period, where Yousuf's ability to fight in war have been highlighted.

Local histories of Kamrupa and Assam, called *Buranjis* also have considerable information on both sultanate and Mughal period. So does the history of the kings of Tipperah, *Rajmala*. Although the are short and brief and sometimes contain fables, the *Buranjis* offer important corroborative evidences on the Bengal ruler's relations with Assam and its neighborhood. Rajmala has important information on the early career Isha Khan and a long account of Subahdar Ibrahim Khan Fath Jang's expedition to Tippera. But the problem with this book, as pointed out by Abdul Karim, is that it was compiled later; therefore, the chronology of the events should be checked with caution.

Travelogues of many contemporary writers of foreign origin, who came to Bengal for different reasons from enjoying the pleasure of journey to pursue trade, or even to perform diplomatic duties, also provide credible evidences. Among them, sixteenth century Tibetan historian Lama

^{75.} Abdul Karim, History of Bengal, Mughal Period, vol. I, p. 21

^{76.} Ibid, p. 22

Taranatha has provided information on the early-medieval period. His account of India has been translated into English under different titles.⁷⁷

Marcopolo (1271-1294), the Venetian, did not actually visit Bengal, but while travelling through south-eastern countries he came to know many things about Bengal and its surrounding states of Burma and India. His reference to the horse-trade through land-routes between India and South-Eastern China, is very useful in our study.

Among the travellers who came to the medieval Bengal, Muhammad bin Abdullah bin Mohammad bin Ibrahim of Morocco, widely known as Ibn Battuta (1304-1377) is an authentic source for the history. His famous work in Arabic *Tuhfat al Nuzzar fi Gharaib al Amsar wa Adjaib al-Asfar* is better known as *Rehla*. He visited Bengal in 1343-1345, and has given a minute description of the life and conditions in Bengal during the fourteenth century on the basis of his personal experience. It is true that his information regarding political succession to the Sultans is not reliable, but besides containing many corroborative evidence of the socio-economic importance the *Rehla*, establishes the historiocity of Shaykh Jalal Mujarrad Yameni of Sylhet and provides us with information about the relations

^{77.} Lama Chimpa and Alaka Chattopadhaya, *Taranatha's History of Buddhism in India*, New Delhi: Motilal Banarsidass, 2010

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between the Sultans and the *Fakirs*, who often engaged themselves in military initiatives. Aga Mahdi Husain, English translator of the *Rehla*, describes it as 'a mine of history, an abundant source of information for almost all kinds of history of the period covered by it'.⁷⁸

There are quite a few Chinese records available of period ranging from the thirteenth to the early fifteenth century. Among these, the Chu-Fan-Che (the records of the foreign people) compiled by Chao Ju-Kua in 1225, Tao Yi Che Leo (a description of the barbarians of the Isle) compiled by Wang Ta Yuan in 1349-1351, Ming Shih-Lu (The Chronicles of the Ming dynasty, compiled 1397), Ying Yai Sheng Lan (records of the period from 1405 onward) compiled by Mahuan in between 1425 and 1432, Sing-Cha Sheng-Lan (an account of Houhein's visit to Bengal in 1415) compiled in 1436 by Feisin, and Lu Siyang Chao Kung Tien (contains the account up to 1438AD) compiled by Hung Sing Tseng in 1520 are worth mentioning. The Chinese accounts contain some first hand and important information about different aspects of the society of Bengal, such as the court etiquette, bureaucracy, state banquet, art and architecture etc. Md. Akhtaruzzaman rightly pointed out, "It appears that the study of socio-economic history of

^{78.} Aga Mahdi Husain, op. cit., p. xviii.

Eastern India during the thirteenth and fourteenth centuries will remain biased and one sided if these Chinese sources are not closely followed."⁷⁹

From the early sixteenth century onwards, we find a number of European travellers who came to this region. Their accounts are also notable. One of the earliest accounts in this category is the accounts of Tome Pires (1512-1515). Tome Pires was a Portuguese clerk working at Malacca. He never visited Bengal or Bihar, but he produced invaluable reports on the socioeconomic conditions of Bengal along with a host of neighbouring places in the first volume of his famous work, *Suma Oriental*. It was written on the basis of information given by merchants doing business with South Asia. It gives invaluable information regarding shipbuilding industry in Bengal while describing about the participation of Bengalee merchants in international trade.

Foreign accounts of Nicolo de Conti, (1444), Athansius Nikiten (1468-1474), Duarte Barbosa (1516-1581), Ralf Fitch (1586), Tavernier (1641-1667) and Bernier (1656-1668) are also useful in compiling any historical document on medieval Bengal.

^{79.} Md. Akhtaruzzaman, Society and Urbanization, p. 25

Another important source of information is the study of maps, compiled by contemporary travellers and geographers. Among them, Van Den Broucke's *Map of Bengal* (1660), James Rennell's *Memoirs of a Map of Hindoostan* or *the Mogul Empire* (1792) etc. gives valuable information and ideas, particularly, regarding the rise of territorial units which is highly essential for reconstructing the military history of Bengal. In a more recent study, Irfan Habib used all this sources to compile his classic *An Atlas of the Mughal Empire* (1982).

Along with these written sources, architectural, archaeological, epigraphic and numismatic sources have been extensively used in this study. Fortunately, a good number of inscriptions belonging to the relevant time and space have been discovered, read and explained with annotations. Likewise, coins of almost every ruler and Sultan and Subahdars are catalogued in collections, and analysed by experts in published books. The coins are important sources that help us tracing the process of urbanisation, because very often the name of the mints suggests about the existence of strong urban centres, obviously with enough measures of fortification.

b. Modern Works

From the survey of the contemporary sources, it is evident that both literary and archeological sources can be used extensively to determine the the historical understanding of medieval Bengal, however, they need modern approach of analysis. There have been many attempts in this regard, particularly in the field of political and social history of the period and those will be cited in the chapters to follow. However, it should be noted here that the military dynamics have hitherto been an unexplored field. There are very few attempts in this regard particularly there was very little effort in analysing the minor artistic elements other than architecture and coinage. Even in the field of architecture, religious monuments have always been in the limelight. Secular monuments, especially military architecture remained unattended. Ayesha Begum's PhD dissertation 'Fort architecture in medieval Bengal' is an exception. Md. Abul Hashem Miah protrayed some light on the use of cannons in his article 'Cannons in the sub-continent with a special reference to the historical Cannons of Bengal', published in the Journal of the Asiatic Society of Bangladesh, vol. XXXVI, No. 1. In recent times, Pranab Kumar Chattopadhyay and Sabikunnahar has attempted to trace the history of fire-arms, specially cannons as part of their study of the metallurgy of medieval Bengal.

On the broader aspect of military techniques in greater India or during the medieval period in general, however, there are a few examples of serious research. J.N. Sarkar's Art of War in India, can be considered as the pioneering effort in this regard.

1.5. Structure of the thesis

The findings of the study are explained in five chapters, apart from the introductory notes and the conclusion and recommendations at the end.

Chapter II examines the historical and geographical background of the study. Apart from a brief review of the literature available on the topic, this chapter includes a brief political history of the period concerned with special mention to the major battles fought. It also has a short reflection on the techniques and weapons used before the period under study.

In Chapter III, the concepts of war along with different techniques of war as adopted during the period under study are analyzed. The chapter is divided in to two different sections that analyze the attacking and defensive techniques.

Chapter IV has an analysis of the army administration during the period concerned. It consists of the description of the recruitment, maintenance and method of command in the army, beginning from the pre-Muslim period, running through early Turkish, Sultanate and Mughal Period. The chapter also deals with the divisions of army during the period under study,

i.e., the Cavalry, Elephant Force, Infantry and Naval forces as found in the contemporary records.

Chapter V describes the weapons and armoury used in war during the period under study. Classified under three categories, i.e., a) The Personal Weapon, b) The Siege Weapon and c) The Defensive Weapons and Armoury, this chapter actually followed the historical development in military technology through the course of time. This chapter is mainly based on field data and their analysis following the contemporary sources.

And finally, the last chapter before the concluding remarks examines the

role of forts and fortifications in the military dynamics during the period concerned. Dr. Ayesha Begum's study on *Forts and Fortification in Medieval Bengal*⁸⁰ serves as the basics of this analysis.

^{80.} Ayesha Begum, Forts and Fortification in Medieval Bengal, Dhaka: University Grants Commission, 2013. The book is based on her Ph.D thesis, Forts in Medieval Bengal: an Architectural Study, done in the IBS, Rajshahi University, 1992. (hereafter Ayesha Begum, Forts and Fortification)

Chapter - II

Geographical and Historical Background

Even though the term Bengal came into being in the fourteenth century, the medieval history of the land starts about one and a half century earlier. As assumed in the previous chapter, the medieval period is essentially the age of the Muslim rule in Bengal, and that starts with Ikhtiyaruddin Muhammad Bakhtiyar Khalji's conquest of Nadia by defeating Laksmana Sena, the famous king of Gaur. This study ends with another of the most decisive battles in history, fought in Plassey in 1757. The five and a half centuries under study stands at the crossroad of many developments in history: the downfall of the Sena Kingdom, rise of the Turko-Afghan rulers maintaining a torrid relation with that of the Sultan's of Delhi, then the rise and fall of the Sultanate of Bengal, Mughal conquest and the famous resistance of the local elites Bara Bhuyians, Mughal subjugation and finally, the rise of the English East India Company. There were many twists and turns in war strategy and those were actually conceptualized on the basis of two aspects. First, the geographical condition of the land and then the development of the technology of weaponry. Like any other aspect, the study of the military dynamics of the period also needs a

background study, i.e. a study of the conditions and development prevailed at the start of the period under study. It may be mentioned here, that this study can by no means be called a complete military history; however, as a work of a civilian student of history, it is an attempt to rediscover the developments it the field of military techniques and equipments as well as military thinking during the period concerned.

2.1 Geography of Bengal on the eve of Muslim Conquest

From the discussions on the previous chapter, it can be summarized that the geographical location of Bangalah during the medieval period should be traced as the territory under the independent Sultan's of Bengal and later the Mughal province of Subah Bangala, and it included the ancient janapada of Vanga, Samatata, Harikela, Gaur, Radha and Pundra. It even included the smaller principalities of Chandravipa and Pattikera, situated to the south of greater Vanga. Ever since Sultan Shamsuddin Ilyash Shah started to use the title of Sultan-i-Bangala, the identity of the region begun to be reconstructed as the country of Bangala. Before that, muluk al sharq or the eastern country was a popular name for it among the Muslim chroniclers.⁸¹

^{81.} See Chapter-One, pp. 22

The first Muslim conqueror Bakhtiyar Khalji had invaded only the western part of the country, not known as Bengal or its early predecessor Vanga. His expedition towards the Sena kingdom reflects an ample example of how the geographical conditions can be exploited in military expeditions. The same can be traced back in many of the battles fought thereafter. Therefore, it is really important to have an idea of the geographical conditions of the area to understand the military dynamics. The most important aspects of the geography for the military planning are:

- a. Rivers and Their Changing Courses
- b. Topography and Climate
- and, c. Communication System and Routes.

2.1.1 Rivers and Their Changing Courses

The most important aspect of the geographical condition of Bengal is its ever changing river-courses. There are several reasons behind that. The rivers formed the topographical boundaries of the region; they formed the most convenient communication system, and therefore were the lifelines of economic prosperity. The perpetual courses of the rivers contributed to the rise and fall of many populated towns and villages. But because of the ever

changing nature, it difficult to trace the river courses of Bengal.⁸² Md. Akhtaruzzaman⁸³ presented a detailed description of the changing river systems of Bengal and Bihar. Apart from a few points of disagreement, the following discussion is based upon his assumptions.

The river system of Bengal is centred on the two major rivers, Ganges and the Brahmaputra. Almost all the important rivers of this region are connected to these two rivers on the way to their long journey towards the Bay of Bengal.

Rising from the Gangotri, a glacier in the Himalaya Mountain, the Ganges (known actually as *Ganga* in Bangla) entered Bihar in the Shahabad district near its confluence with the Karmanasa. From time immemorial, the Ganga is regarded as a sacred river. Dharmasvamin (*Chag Lo-tsa-ba Chos-rje-dpal*), a Tibetan monk and pilgrim who travelled to India between 1234 and 1236 noticed that Hindus used to carry dead bodies to the banks of the Ganges and immerse their ashes in its water in order to purify their sins.⁸⁴

^{82.} Nafis Ahmed, An Economic Geography of East Pakistan, Second Edition, London, Karachi, New York: Oxford University Press, 1968, p. 32

^{83.} Md. Akhtaruzzaman, Society and Urbanization in Medieval Bengal, Dhaka: Asiatic Society of Bangladesh, 2009. pp. 44-48 (hereafter Md. Akhtaruzzaman, Society and Urbanization)

^{84.} George Roerich, Biography of Dharmasvamin (Chag Lo Tsaba Chos-rje-dpal), a Tibetan Monk Pilgrim, Patna: K.P. Jayaswal Research Institute, 1959, pp. 59-60

An idea about the wideness of the river can also be found from his chronicle as he mentioned that the river was 'so vast that one could not cross it by boat in a full day, i.e. from early in the morning to the evening and that the boatmen did not dare cross it when it got dark.'85 The importance of the river to the geography of Bengal has been compared with that of Nile to the Egypt as F. Bernier, the French traveler, writes that 'as it is often said in the language of Aristotle that Egypt is the workmanship of the Nile, so it may be said that Bengala is the production of the Ganges.'86 In its course in Bihar the Ganga met with many rivers such as Sarju (Gogra), Gandak, Kosi, Bagmati and Mohananda on its left and Karmanasa, Soane, Punpun, Phalgu, Koel and Damudar on her right flank. Amongst the rivers cited above, the importance of the Sarju (Gogra) and the Karmanasa is that they from the western boundary of Muslim rule in Eastern India, i.e. the sultanate of Bengal, with that of Northern India. Among others, the Gandak and the Kosi are also frequently mentioned in contemporary Persian sources. These two rivers had been used as a point of resistance against any military expedition from the sultanate of Delhi.

^{85.} *Ibid*

^{86.} Francios Bernier, Travels in the Mogul Empire, AD 1656-1668, Westminster, England: Constable, 1891, p. 453

Notable example of this can be seen during Firuz Shah Tughluq's invasion of Bengal in 1357, his failure was caused by the intervention of the rivers Gandak and Kosi.

The Ganga entered the territories of Bengal from Bihar at the point of Raimahal, and then divided into two courses: the southern and the southeastern. The southern course is called Bhagirathi and the southeastern stream remained to be known as the Ganga in the present-day Indian territory while the same river is called as the Padma when it entered Bangladesh. Minhaj's account of Lakhnauti suggests that in the thirteenth century CE, the Ganga flowed past the eastern side of the city of Gaur, known as Lakhnauti to the Muslim chroniclers.87 According to Abul Fazl, one of the two branches of the Ganges pursued a southern course and divided into three streams near Qazihatta in the sarkar of Barbakabad in the sixteenth century. They have been called as the Saraswati, the Yamuna and the Bhagirathi individually while together they are known as Tribeni (three braids of hair). He also records that the Bhagirathi had spread into a thousand of channels and finally united with the Sarswati and the Yamuna

^{87.} Minhaj, Tabaqat-i-Nasiri (English tr.), vol. 1, p. 437

near Satgaon or Triveni-sangam before heading into the sea. 88 Earlier sources suggest that the famous port of ancient Bengal, Tamralipti, was situated in the same place where this medieval urban centre grew sometimes after twelfth century.89 After Bakhtiyar Khalji's conquest of Lakhnauti, this was the region where his successors tried to expand their empire at first. Epigraphic sources confirm that this region was conquered in 1298 and the city of Satgaon-Triveni became a provincial headquarter under the Muslim rulers of Bengal.90 It also became a centre of trade and learning and culture in the thirteenth and fourteenth centuries and continued to be important up to the fifteenth century. However, because of the shifting of the Bhagirathi to the south, the port had declined in the sixteenth century. A new channel emerged during this period from the junction of the Jellinghi and the Mathabhanga down to the ocean and is called Hooghly. The port city of Hooghly on the bank of this new channel

^{88.} Abul Fazl Allami, Ain-i-Akbari, 3 vols in I. (1882, 1927; Reprint 1977-78), vol. I, translated by H. Blochmann, edited by D.C. Phillot; vol. 2 and 3 translated by H.S. Jarrett, edited by Jadunath Sarkar; New Delhi: Oriental Books Reprint Corporation. vol.1, p. 49 (hereafter Abul Fazl, Ain-i-Akbari)

^{89.} D. K. Chakrabarti, Archaeological Geography of the Ganga Plain: The Lower and the Middle Ganga, New Delhi: Orient Black Swan, 2001, p. 125

^{90.} C. B. Asher, "Inventory to the Key Monuments", in G. Mitchell (ed.), Islamic Heritage of Bengal, Paris: UNESCO, 1984, p. 135; For the details of the inscription, see Abdul Karim, Corpus of the Arabic and Persian Inscriptions of Bengal, Dhaka: Asiatic Society of Bangladesh, 1992, pp. 53-55 (hereafter Abdul Karim, Corpus of Inscriptions)

also emerged subsequently. During the sixteenth century, this port was actually built and controlled by the Portuguese, to the extent that even the mighty Mughals did not have any power over them. 91 As we shall see later, its downfall was somehow related to this extreme power, what prompted the Mughals to conquer it after a bloody battle in 1632. 92

However, as stated earlier, a channel of the Ganga, the Saraswati was moving towards the west from the Tribeni junction. There is a strong possibility that this was once the principal bed of the river, as often it is called the 'Aadi Ganga'. In the eighteenth century, Major James Rennell mentioned two more important rivers connected to the Ganges, the Roopnarayan and the Damodar. He opined that these two, along with the Ganges were the major rivers of ancient Bengal, they met together to feed the major channel from the Bay of Bengal to the ancient port of Tamralipti and the changing course of these three rivers ultimately caused the downfall of the port. 93 Greek geographer Ptolemy had mentioned about the courses of these rivers, along with the Saraswati and the Ganges, flowing

^{91.} Om Prakash, European Commercial Enterprise in Pre-Colonial India, New Delhi: Cambridge University Press, 1998, pp. 139-140

^{92.} *Ibid*

^{93.} For a discussion on the topic, see Aniruddha Ray, Towns and Cities of Medieval India: A Brief Survey, New Delhi: Manohar, 2015, pp. 152-53

towards the west and the east from Tribeni without mentioning their name. 94

Continuing towards the south-east, the Ganges, or the Padma as it is known in the eastern part of Bengal, met the other major river, the Brahmaputra at Langalbandh near Sonargaon. Major Rennell's map shows that the united course began to be called the Dhaleswari, and flowed upto Bhairab Bazar, where it met with the other course of the Brahmaputra and had flown in to the see being called as the Meghna thereafter. These courses, however, changed later in the nineteenth century and the current courses of the rivers emerged.

The other major river in the Bengal delta does not share such a rich connection to the historical events. However, the Brahmaputra is important because it and its tributaries such as the Tista, the Surama and the Kushiara have formed a network of water bodies in the eastern part of Bengal during the medieval period. The river was thought to be originated from the Chemayungdung glacier, about 97 km southeast of Lake Manasarovar in southwestern Tibet. But recent studies proved that it is actually originated

^{94.} Aniruddha Ray, Towns and Cities of Medieval India, pp. 152-53

^{95.} James Rennell, Memoirs of a Map of Hindoostan or the Mogul Empire, London, 1792, pp. 355-359 (hereafter Rennell, Memoirs of a Map of Hindoostan)

from another glacier, Angsi, located on the northern side of the Himalayas in Burang County of Tibet. Running through China (where it is called as 'Yarlung Tsangpo') and then the Indian state of Assam, the river has entered Bangladesh bisecting the greater Rangpur and Mymensing district. The map of Rennell shows that the river in its 400 miles journey flowed past the south-west of the Garo hills, keeping Dewanganj and Jamalpur on its south and Sherpur on its north bank. Running by the side of Madhupur, made way through the middle of Mymensingh and the eastern part of Dhaka, and finally joined the Ganga at Langalband in the south-west of Sonargaon. According to the English translator of Ibn Battuta's chronicle, Aga Mahdi Husain the river 'Jun' mentioned by the famous traveler is actually the

Husain the river 'Jun' mentioned by the famous traveler is actually the Brahmaputra. However, Md. Akhtaruzzaman showed that it was a mistake on Hussain's part. However, Ibn Battuta mentioned another river, Nahr-ul-Azraq, or the blue river in his account and told that he had used the river in his journey from Sonargaon to Kamrup (Habanq or Habiganj in Sylhet). It

 [&]quot;Scientists pinpoint sources of four major international rivers", Xinhua News Agency,
 August 2011, retrieved from http://www.assamtribune.com/aug2411/at096.txt,
 on 15-03-2017

^{97.} Rennell, Memoirs of a Map of Hindoostan pp. 355-359; Quoted by Md. Akhtaruzzaman, Society and Urbanization in Medieval Bengal, pp. 46-47

^{98.} Ibn Battuta, *The Rehla of Ibn Battuta*, (eng. tr.) Aga Mahdi Husain, Baroda: Oriental Institute, 1976, p. 239, f.n. [hereafter Ibn Battuta, *Rehla* (English tr.)]

^{99.} Md. Akhtaruzzaman, Society and Urbanization, p. 33

is likely that this blue river is actually the Meghna, which connects the Sylhet region through the channels of the Surma and the Kushiyara. His reference of the river being originated from the mountain of Kamru¹⁰⁰ is also important in this respect, as the Surma sprang from the Khasia-Jaintia hills and is the major source channel for Meghna before it joins the Brahmaputra near Bhairab Bazar.

Another important reference from a medieval source may be cited here, as the *Bahristan-i-Ghyabi* offers a number of references to a river called the Pankiya. M.I. Borah, the translator of the book believes it to be a scribe's misreading of the Meghna. According to *Bahristan*, the river was crossed by the Mughal troops proceeding from 'Gyar Sundar', most probably the modern day Egar-Sindhur, to Sarail, and again by Mirza Nathan on his way from Dhaka to Udaipur.¹⁰¹

Minhaj's reference of the river 'Bagmati' is also worth mentioning here.

According to the *Tabakat* Bakhtiyar Khalji crossed this river on his way to the Tibet expedition. Raverty suggests the Bagmati to be the

^{100.} Ibn Battuta, Rehla (English tr.), p. 141 & fn

^{101.} Mirza Nathan, Bahristan-i-Ghaibi, 2 vols. (English tr.) M. I. Borah, Guahati: Govt. of Assam, 1936, vol. II, p. 825 [hereafter Mirza Nathan, Bahristan-i-Ghaibi (English tr.)]

Brahmaputra. But Md. Akhtaruzzaman showed that it should be the Korotoya, which was quite a big river during the old days. Van Den Broucke's *Map of Bengal*, composed in 1660, shows that the river Tista was divided into three streams near Jalpaiguri, the south flowing easternmost course was called Karotoya, the middle stream was known as Atrai and the western stream was called the Punarbhava or Purnabhava. Mirza Nathan informs us that 'in rainy season this river (i.e. the Karotoya) near Goraghat (in Rangpur district) becomes uncrossable'. It is likely that the Karotoya during Minhaj's time was also a great river, and was called Bagmati (like a tigress), as the tradition ascribes to the naming of another river of the same name near Muzaffarpur in Bihar.

From the discussion above, it can be summarised that Bengal, specially its south-eastern region, was intersected by the mighty rivers Ganga, Brahmaputra and Meghna along with their numerous branches. This river system had formed easy form of navigation in the region; however, one has to be familiar with the network of channels. It is important to note that

^{102.} Minhaj, *Tabaqat-i-Nasiri* (English tr.), vol. 1, p. 562 footnote by the translator, MHG Raverty.

^{103.} See H. Blochmann, "Contributions to the Geography and History of Bengal (Muhammodan Peirod)", No. III, JASB, 1875, pp. 282-284

^{104.} Mirza Nathan, Bahristan-i-Ghaibi (English tr.), vol. II, p. 828

^{105.} W.W Hunter, A Statistical Account of Bengal, vol. xv, 1877, p. 232

circumstances related to the huge river-routes constituted the main reason that led Sultan Balban to enter into a compact with Danuj Rai, the Hindu ruler of Sonargaon at the time of his expedition against the rebel muqta, Tughril in 1280.¹⁰⁶

2.1.2 Topography, Climate

The Bengal delta is one of the largest alluvial plain in the world. From the above discussion on the river system of the region, it is evident that the major topographical feature of the country is plain land, interconnected with many rivers and water bodies. However, there are a few hilly region in the north-west and south-eastern ends. Therefore, the topography of Bengal may roughly be divided into two main physical divisions: (a) the vast plain; and (b) the marginal hills and forests.¹⁰⁷

Since the ancient times, majority of the surface of Bengal was, and still now, consists of a vast and flat plain land. This plain can be broadly

^{106.} Ziauddin Barani, Tarikh-i-Firuz Shahi, translated into English in H. M. Elliot and Sir John Dowson, The History of India, as Told by Its Own Historians. Vol. 3 (The Muhammadan Period), London: Trubner & Co, 1871, Chapter XV, pp. 102-103 [hereafter Barani, Tarikh-i-Firuz Shahi (English tr.); The book has also been translated into Bangla by Golam Samdani Quraishi as Ziauddin Barani birochito Tarikh-i-Firuz Shahi, Dhaka: Bangla Academy, 1982, reprint, Dhaka: Divyaprakash, 2012, cited hereafter as Barani, Tarikh-i-Firuz Shahi (Bangla tr.)]

^{107.} Md. Akhtaruzzaman, Society and Urbanization, p. 48

divided into three classes: (a) the older deltaic and flood plain lying north of the Padma-Meghna axis; (b) the younger deltaic and flood lying axis and (c) the erosion and flood lying plain west of the Bagirathi-Hughli. Being fed by the numerous rivers and water bodies, the plains of Bengal are equipped to be agrarian in character. Since long, even the natural forest lands have been converted to be agrarian settlements. The trend continued during the middle ages, as reflected in Eaton's theory on how the Islamization of the eastern Bengal was accelerated during the Mughal era. 109

Contemporary sources refer to many such forest tracts and the marshy lands along with the mountains of this region. Referring to the mountain tracts of the northeastern region, Minhaj writes that from the territory of Kamrud to that of Tirhut there were thirty-five montain passes by which 'tanghan' horses were brought to Lakhnauti. Dharmasvamin, the Tibetan monk who visited India in the thirteenth century, writes that the big mountain tracts at Vaisali and Rajgir were called 'Rishisirsha Parvata', meaning lofty summit or big head. Ibn Battuta also refers to the hills and

^{108.} S.P. Chatterjee, Bengal in Maps, Bombay: Orient Longmans, 1949, p. 8

^{109.} For a detailed discussion, see R.M. Eaton, The Rise of Islam and the Bengal Frontier (1204-1760), Oxford: University Press, 1994

^{110.} Minhaj, Tabakat-i-Nasiri (English tr.), vol.1, p.437

mountains in the Kamru (Sylhet) region. He mentions that the Mountains of Kamru were very large, and ranged from China to Tibet, and its inhabitants resembled the Turks.

An idea about the climatic conditions of Bengal in the medieval age can be generated from various contemporary sources. According to Minhaj, 'in the rainy season the whole of the tracts in the either banks of the Ganges (about 200 miles around Lakhnauti) would become inundated and the route got filled with mud and morass'. 111 Ma-Huan, the Chinese traveller of the fourteenth century informs that the climate of Bengal is consistently hot in summer. 112 Abul Fazl echoes his thought in the sixteenth century and writes that, 'in Bengal the summer heats are temperate but the cold season is short.'113 Both Barani and Afif refer to the heavy rainfall in Bengal. While describing Sultan Balban's chase against Tughril in 1297 A.D. Barani writes that while crossing the river Sarju, Balaban had to face heavy rains; the passage through the low-lying country was so difficult that the army was delayed by ten to twelve days, struggling with water and mud and the pouring rainfall. Latter in his account of Firuz Tughlaq's siege laid to the

^{111.} Minhaj, Tabakat-i-Nasiri (English tr.), vol.1, p.437

^{112.} P.C. Bagchi, "Political Relations between Bengal and China in the Pathan Period", Visva Bharati Annals, vol. I (Cheena Bhavana), Calcutta: Visva Bharati, 1945, p. 117 (hereafter P.C. Bagchi, Visva Bharati Annals)

^{113.} Abul Fazl, Ain-i-Akbari, vol. II, pp. 49, 67

fort of Ekdala, Barani mentions that Ilyas Shah, the Sultan of Bengal had fortified himself in the 'island of Ekdala' with the belief that when the rains will come and the country will become inundated Sultan Balban would be obliged to retreat. Afif suggests that Bengal was a land of swamps and the nobles of the country passed their lives in islands. 115

The marshy land, numerous rivers, heavy rains and dense forests in Bengal bred many insects and wild animals. Mosquitoes are one of the most cited insects among them. Barani writes that the mosquitoes in Bengal were so large and numerous that even the horses could not bear their stings. Along the river channels, crocodiles used to create fear, as often 'they caused boats to sink and sometimes snatched away passengers from inside boats'. Ralph Fitch, who visited the region in the sixteenth century, mentions the name of some wild animals seen in Bengal. While a traveling from Patna to Satgaon he saw many buffes (buffaloes), swine and deere (deer), grasse (grass) longer than a man and many tigers'. The attack of

^{114.} Barani, Tarikh-i-Firuzshahi (English tr.), p. 86

^{115.} Shams-i-Siraj Afif, *Tarikh-i-Firuzshahi*, translated into English in H. M. Elliot and Sir John Dowson, *The History of India, as Told by Its Own Historians*. Vol. 3 (The Muhammadan Period), London: Trubner & Co, 1871, Chapter XVI, pp. 269-373 [hereafter Afif, *Tarikh-i-Firuz Shahi*] p. 297

^{116.} Md. Akhtaruzzaman, Society and Urbanization, p. 50

^{117.} Ralph Fitch, in *Early Travels in India* (edited & translated into English by W. Foster), London, 1921, p. 25

the wild baffalo was a common phenomenon. Dharmasvamin himself witnessed such an attack in Magadha in 1236 and barely escaped injury. According to the contemporary sources, three categories of people used to live in Bengal in the thirteenth and fourteenth centuries. They were:

- a. Tribal and nomadic people living in the hills and forests regions.
- b. People who lived in the villages of the plains.
- and c. The urban dwellers including the ruling elite class.

Obviously, the largest of the three groups were the agrarian people, living villages.

Most of them were farmers, while the self-sufficient community in the rural areas included a number of other professionals such as artisans and craftsmen, fishermen and the pottery-makers. The lifestyle of the tribal community were relatively backward, while the urban dwellers enjoyed better surroundings and facilities. Urban centres were sparse, and were dominated by the Brahmans and their associates belonging to the ruling class during the ancient time. However, the number of urban dwellers did increase in the region during the medieval period. The Muslim conquerors coming from outside the country created many new urban centres and lived

^{118.} Dharmasvamin, op. cit., pp. 59

there, but the towns and cities also welcomed migrations from the rural areas.

In the *Tabaqat-i-Nasiri* Minhaj has given an account of some tribal (indigenous) people living in the northeastern hill tracts stretching from Lakhnauti to Tibet. He names, in particular, the Kunch (Kuch), Mech, and the Tiharu (Tharoo) having a Turkish countenance. Referring to the inhabitants of the mountain region of Sylhet (Kamru) Ibn Battuta also writes 'these people resembled the Turks and possessed great capacity for strenuous work'. The famous traveller described that people known as Hindus living in villages on either sides of the *Nahar ul Azraq*, or the river Meghna. 120

Contemporary Muslim chroniclers tend to denote all the non-Muslims as a whole with the term 'Kafir' (infidel). However, like in the above mentioned instance, the term Hindu was also used. Hindu's and the Buddhists are mentioned as 'Idol-worshippers' and indigenous tribal people have been indentified as pagan. Even though the Muslims mainly formed the elite class, many Hindus had held high ranks in the Sultanate polity as well. Apart from these, a small community of Jains also existed. As urban

^{119.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. I, pp. 427, 429

^{120.} Ibn Battuta, Rehla (English tr.), p. 241

settlements were sparse before the middle ages, most of the non-muslim population were rural inhabitants. The elites of ancient Bengali society also did not treat this indigenous population very well; they were often mentioned derogatorily in Brahmanical literature. Even the inscriptions also did the same, as we can see in an epigraph belonging to the twelfth century. It refers to the province of Radha as 'pathless' and its inhabitants as 'rude and generally hostile to the ascetics'.¹²¹

Since the beginning of thirteenth century, a significant Muslim population started to grow. At the initial phase, most of the Muslims were outsiders, and they used to live in fortified cities. But their number grew quickly, curtsey to the ruling class as well as the sufi saints, followers of whom began to grow even in the remotest corner of the country, where they lived together happily with the non-Muslims. Ibn Battuta informs that the inhabitants of the locality at Sylhet, Musulmans as well as Hindus, used to visit Shaikh Jalal Mujarrad. The number of Muslims was growing fast, and by the late fourteenth century Muslims seem to have emerged as a distinct community, as we can find detailed accounts of the customs of both

^{121.} R.C. Banerjee, "The Vangalas", Indian Culture, vol. ii, 1936, p. 755 fn

^{122.} Ibn Battuta, Rehla (English tr.), p. 239

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the Hindu and the Muslim community in the early fifteenth century

Chinese accounts. 123

Another Chinese traveler, Wang Ta-Yuan, who visited Bengal in the mid fourteenth century, has given an idea about the lifestyle of the people of Bengal. He writes,

"These people (evidently the people of Bengal) owe all their tranquility and prosperity to themselves, for its sources lie in their devotion to agriculture, whereby a land originally covered with jungle has been reclaimed by their unremitting toil in tilling and planting. The seasons of heaven have scattered the wealth of the earth over this kingdom, the riches and integrity of its people surpass, perhaps those of Chiu Chiang (Palembarg) and equal to those of Chao-wa (Java)". 124

From the above description, an idea about the urbanization process in Bengal can also be drawn. Wang Ta-Yuan informs that the Bengali people used to clear jungles to reclaim lands for agriculture, and thereby create new human settlement. The process continued during the whole period under study as Richard Eaton has shown how this process was effectively used during the Mughal period to pacify the Islamization process.¹²⁵

^{123.} P.C. Bagchi, Visva Bharati Annals, p. 112

^{124.} Ibid, p. 99

^{125.} R.M. Eaton, The Rise of Islam, pp. 90-98

In fact, the arrival of the Muslims as ruling elites had caused quite a few changes in the topography of Bengal as well. The first of the changes was evident in the new administrative divisions- the janapadas of ancient Bengal were abolished to become a united country, while there were new provincial divisions as well as urban centres were established. During the thirteenth century, the policies of the Muslim rulers had initiated another change, as they tried to control the rivers to create better environment for living as well as means of military initiatives. Minhaj confirms that Sultan Iwaz Khalji had constructed embankment on either side of the river Ganges, because in the rainy season the whole of that tract of Lakhnauti becomes inundated. This policy of land development was supplemented by the process of clearing jungles to create new farmlands as stated above.

2.1.3 Communication Routes

Routes of communication are among the major factors in military science, its importance in military planning is manifold. First of all, swift movement of the troops is a key component in the success of any expedition. It is also important because it affects the economic life of the inhabitants, often the cause of dissatisfaction, friction and finally war.

^{126.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. I, pp.427

As we can see from the above discussion on the geography of Bengal, it appears that there were two major modes of communication in the region during the medieval period - water routes were as important as, if not more, land routes.

The rivers had been used as sources of military blockade as well. In fact, during the early years of Muslim settlement, often this blockade was effectively used to determine the relations between the Sultan's of Delhi and the governors or rulers of Bengal. The western boundary of the province was the rivers Sarju and Karmanasa. To arrive at the strongholds of the province, Lakhnauti, the troops from Delhi had to cross either of the two rivers and then take any of the following three routes: the Jharkahnd route, the Rajmahal or Teliagarhi route and the Dwarbhanga, or Tirhut route. 127 All the three routes are through the province of Bihar, often regarded as part of the region of Eastern India, regarded as equivalent to Bengal by some pundits. During his campaign towards Bengal Bakhtiyar Khalji must have followed one of these three routes. However, one of the major aspects of his war-planning was the choice of route. It is evident from Minhaj's account that Bakhtiyar crossed the Karmanasa and followed the route through Soane to reach Maner (Muner) on the right bank of the

^{127.} Md. Akhtaruzzaman, Society and Urbanization, p. 55

river at its junction with the Ganges, and arrived at the Udant Vihar (Bihar). 128 About an year later, during his expeditions to the stronghold of Sena kingdom Nadia, most probably he took the Jharkhand route, as it was shorter as well as strategically important from the military point of view. This route, extending from Teliagarhi to Birbhum merges with the jungles of the Santhal Parganas in Singbhum. From there, the route up to the urban settlements on the belt of Gaur (Lakhnauti) extended through a thick forest, and hence was neither popular among general travellers, nor was considered suitable for large army passage. Bakhtiyar, however, used a shrewd thinking to choose this route as it was normal for the army of the Bengal kings to guard the other, commonly used routes through Teliagarhi or Dwarbhanga. The same thinking also worked for Mir Jumla in 1659 when he was chasing Shah Shuja, and for later Peshwa Balaji Rao in the eighteenth century, both of whom are reported to have taken this route. This was kind of a 'camouflage', introduced in the history of the art of warfare in Bengal for the first time by Bakhtiyar. He was clever enough to choose local guides, as we see in the case of his later campaign to Tibet, where he is reported to hire a local guide Ali Mech from the indigenous

^{128.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. I, p. 427

tribe of Mech.¹²⁹ There is every possibility that he had also taken help from the local, tribal people to get past the forest route through the Santhal Pargana.¹³⁰

Relatively more commonly used route for this journey was the Teliagarhi route, that lies in the northwest of Rajmahal town. Starting from Bihar, this route passes via Bhagalpur along the southern bank of the river Ganges. Extending southwards through a hilly region for about eighty miles it reaches the northern boundary of Birbhum district, then follows through a narrow pass at Teliagarhi. Sher Shah Sur passed through this route in 1536 to the surprise of Sultan Mahmud Shah of Bengal. The early sultans of Bengal and Delhi followed this route in maintaining socio-political relations between themselves. According to Minhaj's account of Sultan Iltutmish's expedition towards Lakhnauti, both the Sultan of Delhi and his counterpart in Bengal Ghiasuddin Iwaz Khalji used the Teliagarhi route in their respective campaigns. Sultan Balban, who crossed the Sarju from the side of Awadh, might also have taken this route to reach Lakhnauti in

^{129.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. I, p. 427

^{130.} For a detailed review of Bakhtiyar's expeditions, see Abdul Karim, "Musunlmander Bangladesh Vijoy", *Itihas Patrika*, vol. II, no. I, 1376 BS, pp. 71-72

^{131.} I.H. Siddiqui, History of Sher Shah Sur, Aligarh: P. C. Dwadas Shreni, 1971, p. 46

^{132.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. 1, pp. 437, 470

1279. Therefore, it was not a stray comment on behalf of Abul Fazl, who writes that this was the 'gateway of Bengal',

'from the earliest time Teliagarhi was known as the gateway to Bengal. It had on one side a sky-ascending mountain difficult to surmount on foot and was impracticable for the cavalry. From the side of that mountain several rivers joined the Ganges and were torrential. Among them the later rulers constructed a fort to block the route.' 133

The other route along this path, was however, more commonly known as the 'gateway of Bengal'. This route extends across the river Gandak towards Tirhut and Lakhnauti. The Tirhut district of Bihar was known as 'Dwarbhanga' or Dar-i-Banga, meaning 'the gateway to Bengal' because it provided a common passage to enter Bengal. It is learnt from Mulla Taqia's Boyaz that Bakhtiyar also used this route once when he made Tirhut Raja a vassal on condition of paying tribute. This route is reported to be used frequently during the mid-fourteenth century. Shamsuddin Ilyas Shah might have used this route on his expedition to Nepal. There are more than one place along this route that can be called a testimony to his expeditions. Hazipur town near Patna on the banks of the river Gandak is supposed to

^{133.} Abul Fazl Allami, *Akbar Nama*, (English tr.) Henry Beveridge, 3 vols, Calcutta: Asiatic Society of Bengal, 1902-1939, reprint, Delhi: Low Price Publications, 1993, vol. iii, p. 151 (hereafter Abul Fazl, *Akbar Nama*)

bear his memories (he was known as Hazi Shamsuddin Ilyas), so is the little known town of Samastipur (Shamsuddinpur?) in the district of Dwarbhanga. Muhammad bin Tughluq, the contemporary Sultan of Delhi is reported to build a fort in this area during his campaign towards Bengal in 1326-44, which further indicates the strategic importance of this route during the medieval period.

Lakhnauti, the medieval capital of Bengal was also connected with its neighbours in the northwest- Kamrup (Assam), Nepal and Tibet. There was a well-known route from Lakhnauti that may have been extended upto the Himalayan mountains. Contemporary sources indicate that it was probably a common business route, as there are references of the trade of tanghan horses from Nepal and Tibet to Tirhut and Lakhnauti through this route. Minhaj's account of Bakhtiyar's expedition towards Nadia has one such note- as he mentions that when Bakhtiyar arrived at the gates of the city with only seventeen cavalrymen, the guards did not stop them as they thought the were horse-traders. He also records that on his way to Tibet Bakhtiyar had crossed a famous pass called Mahamhai (Mahanmhai) Darah to reach the city of Kar-battan (Kathmandu). According to him, there were thirty-five mountain-passes in between the routes from Kamrud to Tirhut,

through which horses were brought to the city of Lakhnauti. ¹³⁴ The existence of one such road is also confirmed Rennell's map, drawn in the eighteenth century that was originated from Lakhnauti and ended in Rangamati in the District of Jalpaiguri, having touched Deokot, Dinajpur, Rangpur and Kurigram on its way. ¹³⁵

Contemporary sources also indicate about the existence of another important land route from Lakhnauti to Jajnagar of Orissa. From Minhaj's account of Bakhtiyar Khalji's Tibet expedition, it is learnt that he sent two Shiran brothers to conquer the frontier post of Lakhnor just before the sets out on his failed expedition. The chronicler also informs that later in the same century, there have been chases and counter chases among the troops of Orissa and that of Bengal. During one such chase in 642 AH (1245 CE), the Orissan's had captured Lakhnor and advanced as far as to the gates of Lakhnauti. According to him, there was an embankment highway, constructed by Sultan Iwaz Khalji on the route and a ten days' journey

^{134.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. I, p. 430

^{135.} James Rennel, Memoirs of a Map of Hindoostan, p. 304

^{136.} Minhaj, Tabakat-i-Nasiri (English tr.), p. 437

connected the two cities.¹³⁷ Recent archaeological excavations in this region confirm the existence of this highway.

The place-name Jajnagar also appears in the accounts of Ziauddin Barani. While describing Sultan Giyasuddin Balban's expeditions against Tughril, the rebel 'mukta' of Bengal, Barani informs that Tughril 'took the road from Sonargaon to Jajnagar'. But this Jajnagar can not be the Orissan town, as it appears that Tughril had fled towards the east of the Brahmaputra river. Therefore, it is more likely that it was in Tripura where Tughril is reported to build a fort called Tarkila. 139

Bengal had rich traditions of international trade link through the sea-route. The stories of 'saodagor's going for business trips on their 'sapta dinga madhukar' appearing in the folk tales bears testimony to that. Contemporary sources also confirms evidence of having direct sea routes between Bengal and the countries of Arakan, Burma, Malay and Sumatra during the middle ages. Ibn Battuta's account is important in this regard, as

^{137.} Minhaj, Tabakat-i-Nasiri (English tr.), p. 470

^{138.} Barani, Tarikh-i-Firuzshahi (English tr.), pp. 85, 87-88

^{139.} Abdul Qadir Badaoni, *Muntakhb-at-Tawarikh*, vol. i, (English translation) George S.A. Ranking, Calcutta: Bibliotheca Indica, 1898; reprint, New Delhi: Atlantic Publishers and Distributors, 1990; p. 186fn; (Volume 2 of the book has been translated by W.H. Lowe, 1884, and volume 3 by Sir W. Haig, 1925; all three are available together in the 1990 edition, hereafter cited as Badaoni, *Muntakhb-at-Tawarikh*)

he informs that it took him forty-three days to arrive at the port of Chittagong from Hololi (Oluveli Island in North Maley) by ship. He also mentioned that from Sonargaon one could go to Sumatra (Java) by a Chinese ship in forty days.¹⁴⁰

Ibn Battutah also mentioned about one of the major internal water routes. He had traveled to Habanq (Sylhet) from Sonargaon through the river route along the 'blue river' that took him Fifteen days. There was a land- route of one month's journey between Chittagong and Sylhet (Kamru). The longest internal route had connected Chittagong with Pandua and it went through Sonargaon. Sonargoan was connected with Chittagong via both the land and water—routes. There was a long river route that connected the the cities of Sonargaon, Satgaon and Pandua. The most common and convenient means of transportation in these long internal routes were obviously boats. Contemporary sources mention various kinds boats. In the land routes, horses and bullock carts were the most common transport available. Elephants were also used by those, who could afford.¹⁴¹

2.2 The Political Developments

The beginning of medieval era in Bengal coincided with the arrival of the Muslims as a ruling class early in the thirteenth century. It brought visible

^{140.} Ibn Battuta, Rehla (English tr.), pp. 233, 241

^{141.} P.C. Bagchi, Visva Bharati Annals, pp.117,120-121

changes not only in the state-craft, the development in military dynamics was evident right from the incident of Bakhtiyar's conquest of Nadia, the stronghold of Sena kingdom in Bengal. Contemporary sources confirm that his expedition was not unexpected. Both Minhaj and Lama Taranatha indicated that Laksamana Sena had been warned by the astrologers in his court that a Turkish man with unusually long hands will destroy his kingdom. His spies confirmed that Bakhtiyar, who, by then had already captured Bihar was the person. Even after that, Bakhtiyar had managed to surprise the Sena army by his shrewd military planning to exploit the geographical condition of Bengal. 142

According to Minhaj, Nadia was the capital of Laksmana Sena, but the fact is not supported by any other sources. Bakhtiyar went on to capture Gaur, the traditional capital of Bengal, made it his capital as well. In the next two years he had settled the administration to establish kind of a clannish feudalism in his territory. He divided the kingdom into units of 'Iqta's and placed them in charge of his trusted generals, 'Mukta's. With the establishment of a new statecraft, the foundation of a new community of Muslims was also laid, as a large number of immigrants started to arrive to

^{142.} Minhaj, *Tabakat-i-Nasiri* (English tr.), vol. 1, p. 427; R.C. Majumdar, "Lama Taranatha's Account of Bengal", *IHQ*, vol. xvi, no. 2, 1940, p. 238

join the ruling elites. Minhaj reports that Bakhtiyar took initiatives on that, by establishing mosques, madrasas, and khanqahs for the Sufis. 143

It is to be noted here, that even though Bakhtiyar has been credited with the title 'Conqueror of Bengal', he actually did not manage to expand his territory in the eastern part of Bengal. In fact, he did not try it either. After consolidating in Lakhnauti, he had set out on a expedition to Tibet, but somehow his military genius had not worked on that occasion. It came out to be an absolute disaster, and on his way back as a dejected person he died about three months after arriving at Devkot. The reason was either fever or he was put to death by Ali Mardan Khalji, one of his trusted companions.

On the basis of the contemporary sources an idea of the geographical extent of Bakhtiyar's kingdom may be determined. Minhaj reports that he was awarded a jaigir in the Mirzapur district in southern Bihar and a strip of northern Bihar along the northern bank of the Ganges. From there, he went on to conquer the territories under the districts of Rajmahal, Malda, Dinajpur, Rajshahi, Rangpur and Bogra. The Tista-Brahmaputra-Karatoya river system may be regarded as the eastern limit of the Lakhnauti principality.¹⁴⁴

^{143.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. 1, p. 430

^{144.} Md. Akhtaruzzaman, Society and Urbanization, pp. 155-156

It was his former companion Hushamuddin Iwaz Khalji, who initiated the first campaign towards eastern Bengal, after he established himself as the successor of Bakhtiyar and took the title of Giyasuddin Iwaz Khalji. But before that, he had to get past a struggle with his fellow Khalji maliks, Ali Mardan and Muhammad Shiran. Bakhtiyar's death was too sudden to enable him to pay any attention to the question of succession. It took about six years of struggles for succession after Bakhtiyar's death in 1212.

Iwaz was the first Muslim ruler in Bengal whose coins have come to light, but he should get more credit for pioneering the expansion of Muslim territory in Bengal in a planned way. Like his predecessor Bakhtiyar, he was also a shrewd tactician, and he showed it in his struggle with the Sultan of Delhi, Iltutmish. He has given a new orientation to the mode of warfare and strategy by establishing a fleet of ships, which enabled him to make advancement towards eastern Bengal. He had succeeded in expanding Bakhtiyar's territory by a significant margin, towards the districts of murshidabad, Pabna, Nadia and northern Jessore in the south and those of Birbhum and Burdwan in the south-west.¹⁴⁵

^{145.} The districts should be considered in the sense of their pre-1947 position. See Md. Akhtaruzzaman, *Society and Urbanization*, pp. 41-44

Iwaz's achievements, however, could not be sustained by his successors. Rather, since his death in 1227 till the establishment of Ilyas Shahi dynasty in 1342, Bengal had been a reluctant province under Delhi. This was the period when the governorship of the province of Lakhnauti became a coveted ambition for the Amirs of Delhi who were anxious to call themselves Malik-us-Sharq (the master of the east). According to Barani, it was the habit and practice of the people of Lakhnauti to raise their standard of rebellion against the lords of Delhi and Lakhnauti henceforth came to be known as "Bulghakpur" or the city of rebellion to the Sultans of Delhi. 146 Muslim reign in the region, however, was on a steady path of expansion and consolidation. Seventeen rulers reigned over Lakhnauti as governors, on behalf of the Delhi Sultans, many of whom had rebelled and ruled independently also. Most of them were Mamluks, slaves of the sultans of Delhi except three- Nasir-ud-din Mahmud I and II and Rukn-ud-din Kaikaus, who were members of the royal family.

Prince Nasiruddin I, the succesor of Iwaz to the governorship of Lakhnauti, was also governor of Oudh and Bihar, but had chosen Lakhnauti as his capital. Iltutmish bestowed upon him the title of 'Malik-us- Sharq' (king of

^{146.} Barani, Tarikh-i-Firuz Shahi (English tr.), p. 82

the East). During his one and a half years of governorship, continued the policy of consolidation started by Iwaz. Contemporary sources, however, does not speak much about his military exploits.

His successor, Malik Ikhtiyaruddin Balka Khalji (1229-30), issued coins in 1230 in the joint name of himself and Iltutmish. Angered by his step, Iltutmish immediately led an expedition against Balka Khalji and killed him. Malik Alauddin Masud Jani, governor of Bihar, was transferred to take charge of Lakhnauti. He was again transferred from Lakhnauti only after a year and Saifuddin Aibak was appointed as the new governor in 1232. During his reign of little more than three years, Saifuddin is reported to lead an expedition to 'Bang' in which he managed to capture a number of elephants and sent them to Iltutmish as presents. 147

On Saifuddin's death, another governor of Bihar, Tughral Tughan Khan was appointed in the governorship of Bengal. However, before he could take over, one of Saifuddin's companions, Aur Khan Aibak assumed power at Lakhnauti. Tughan Khan marched against him, defeated and killed him and in a battle.

^{147.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. II, pp. 731-32

Tughan Khan ruled over Bengal for about ten years, and in this ten years, a major shift in the military planning occurred. He was more interested in expanding his territory in the northern end of the empire, towards Oudh and the adjoining regions instead of the marshy plain in the eastern Bengal. But this policy ultimately culminated in his downfall- he sought help from Delhi to resist Orissan king Narasimhadeva I in 1245, but after successful completion of the event one of the generals who came with help, Malik Tamar Khan forced him to relinquish the charge of the Lakhnauti.

Tamar Khan ruled for about two years and was followed by Malik Jalaluddin Masud Jani (1247-1251)¹⁴⁸ and Malik Ikhtiyaruddin Yuzbak (1251-1257), both appointed by Delhi.

In his early coins, Yuzbak called himself slave, but later he struck coins adapting the Kuniyat 'Abul Fath' and declaring himself as Sultan. He had managed to expand his territory upto Oudh in the northwest, and upto Mandaron in the district of Hoogly in the south. His tactics against elephant force of Shabantara, the feudal of Orrissa is worth mentioning here. He

^{148.} An Arabic Inscription dated 1 Muharram A.H. 647 (5 April 1249) discovered from Ganga Rampur, a small village in the Malda district in West Bengal confirms his appointment. See, Abdul Karim, *Corpus of Inscriptions*, pp. 30-31

^{149.} Md. Rezaul Karim, A Critical Study of the Coins of the Independent Sultans of Bengal (from 1205-1538 A.D.), unpublished Ph.D. Thesis, Department of Islamic History and Culture, University of Dhaka, Dhaka, 2001, p. 61

managed to overcome it by taking kind of guerilla warfare and killing the elephants first.¹⁵⁰ He also tried to advanced towards northeast, but his expedition against Hajo, the Koch ruler of Kamrup came out to be a total disaster, and he died himself after being held captive in 1257. Thus the second Muslim attempt to advance towards the northeast also ended in failure. ¹⁵¹

His successor Malik Izzuddin Yuzbak, was killed in an internal fight with another regent of Delhi sultanate, Malik Tajuddin Arslan Khan who had ruled over Bihar and Lakhnauti from 1259 to 1265. His son Tatar Khan (1265-1268) succeeded him, and was followed by Sher Khan (1268-1272), a member of Tajuddin Arslan Khan's family. Sultan Balban then appointed Amin Khan, governor of Oudh to administer Lakhnauti in addition to his original province, and associated with him Mughisuddin Tughral Khan as deputy governor. This was an innovation in the provincial administration, and it worked well at the begining. Tughral led several expeditions to eastern Bengal and extended the territory of Lakhnauti almost upto Sonargaon. He had bulit the fort Qila-i-Tughral at Narkilla, identified with Larikal about 25 miles due south of Dhaka. Tughral also led a number of

^{150.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. II, pp. 761-766

^{151.} *Ibid*

campaigns to the southwestern areas. Counting on these successes, he aspired to become independent and declared independence openly in 1277, assuming the title of Sultan Mughisuddin Tughral. He had managed to defer two expeditions sent by Balban against him. Balban, however, suppressed him in 1281 and placed hsi son prince Bugra khan in charge of the province. He instructed Bugra Khan to conquer Diyar-i-Bangala, meaning the remaining portion of eastern Bengal. After Balban's death in 1287 Bugra Khan immediately declared independence at Lakhnauti, and ruled independently until his death in 1290. He was succeeded by his younger son Ruknuddin Kaikaus (1290-1301), who must have managed to fulfill his grandfather's wish by expanding Muslim territory in the eastern region of Bengal, as is evident from his coin, issued and from the revenue of 'Bang'. 153

Kaikaus was succeeded by Shamsuddin Firuz Shah (1301-1322), who was erroneously thought to be connected with the Balbani family. When he assumed power, the dominion of Lakhnauti was confined within Bihar, north and northwestern Bengal, and upto Lakhnor in southwestern Bengal.

^{152.} Barani, Tarikh-i-Firuz Shahi (English tr.), p. 91-92

^{153.} H. C. Stapleton, "Contributions to the History and Ethnology of Northeastern India", Journal and Proceedings of the Asiatic Society of Bengal (hereafter JPASB), XVIII, 1921, p. 4101

During his long rule of about 20 years, Firuz completed the missions taken by Kaikaus and stretched the dominion upto Satgaon in the south and beyond Sonargaon upto Mymensingh and Sylhet in the east. ¹⁵⁴ Three of his sons have issued coins during his lifetime, defying their father's authority; ¹⁵⁵ therefore, it was obvious that there was a struggle for succession among his sons. Ghyiasuddin Bahadur, succeeded in that struggle and eliminated all his brothers except Nasiruddin Ibrahim. As he sought help from Delhi, Sultan Ghiyasuddin Tughlaq intervened. Ousting Ghiyasuddin Bahadur with a large army under his adopted son Bahram Khan, he established Tughlaq rule in Bengal in 1324.

The Tughlaq sultan reformed the administration and divided the principality of Bengal into three administrative units - Lakhnauti, Satgaon and Sonargaon. He confirmed Nasiruddin Ibrahim in the government of Lakhnauti with special power of issuing coins in joint names. Bahram Khan was made governor of Sonargaon and Satgaon.

^{154.} An inscription found in Sylhet of the time of Sultan Alauddin Husain Shah refers to the first Muslim conquest of the region during Firuz Shah's reign. Shamsuddin Ahmad described this inscription as of Firuz himself, however, Abdul Karim discussed the matter in detail, See *Corpus of Inscriptions*, pp. 59 fn, 296-298; Shamsuddin Ahmad, *Inscriptions of Bengal*, vol. 4, pp. 24-26

^{155.} Abdul Karim, Corpus of the Muslim Coins of Bengal, Dacca: Asiatic Society of Pakistan, 1960, pp. 30-35 (hereafter Abdul Karim, Corpus of Coins)

Assuming power in Delhi, Sultan Muhammad bin Tughlaq reinstated Ghiyasuddin Bahadur in 1327, as a joint-governor with Bahram Khan in Sonargaon on conditions that Bahadur should send his son to remain as hostage to Delhi, which he never obliged. He was however allowed to strike coins and read the Khutbah in the joint names of himself and the sultan. As many of his predecessors did, Bahadur also revolted in 1328, but Bahram Khan, assisted by other amirs, defeated and killed him.

For the next ten years (1328-1338) three governors of Muhammad bin Tughlaq Qadr Khan, Bahram Khan and, Izz-ud-din Khan Yahya ruled over Lakhnauti. Sunargaon, and Satgaon respectively. They issued coins in the name of the Sultan of Delhi. 156

The death of Bahram Khan in 1338 opened a new chapter in the history of medieval Bengal. His armour-bearer (Silhadar) Fakhruddin captured power and proclaimed independence assuming the title of Sultan Fakhruddin Mubarak Shah. Since then, Bengal remained under the independent Sultans for more than two hundred years.

According to Riyaz-us-Salatin, Fakhruddin Mubarak was killed in A.H. 741 (A.D.1340-41), however as his coins continued to be struck till A.H.

^{156.} Nelson Wright, *The Coinage and Metrology of The Sultans of Delhi*, Oxford: University Press, 1936. pp. 118, 120, 127-128 and 142

750 (A.D 1349-50), he must have ruled until that year¹⁵⁷ while Ali Mubarak assumed independence at Lakhnauti. It was during his reign that Ibn Battuta visited Sonargaon, and from his accounts along with the descriptions of Shihabuddin Talis, it is evident that Fakhruddin had extended his kingdom until Chittagong.¹⁵⁸

Iliyas Shah was a vigorous and ambitious ruler who earned for himself the titles of Shah-i-Bangalah, Shah-i-Bangaliyan and Sultan-i-Bangalah. He had led hss victorious forces as far as Chilka Lake near Puri and Kathmandu, the capital of Nepal. His ambitious expedition to Tirhut in Bihar and raids upon Banaras, Gorakhpur and Baharaich led to a fierce rivalry with the Sultan of Delhi, Firoz Shah Tughlaq. All the contemporary historical accounts *Tarikh-i-Firuz Shahi* of Barani and Afif and *Sirat-i-Firuz Shahi* extensively referred to him, especially about his encounters with Firuz Shah Tughlaq. It is obvious that those were biased towards Firuz Shah, the sponsor of the court historians. But even from those accounts, one can find out the military genius of Ilyas, who had successfully exploited the geographical conditions of Bengal to defy the invading army

^{157.} Abdul Karim, Corpus of Coins, pp. 36-37

^{158.} Ibn Battuta, Rehla (English tr.), pp. 233, 241; J.N. Sarkar, Studies in Mughal India, Calcutta, 1919, p. 122

of the Tughlaqs.¹⁵⁹ Edward Thomas rightly summarised, that Ilyas Shah's increasing power, 'excited the emperor Firoz III to proceed against him in all the pomp and following of an Oriental Suzerain, resulting only in the confession of weakness, conveniently attributed to the periodical flooding of the country - which effectively laid the foundation of the ultimate independence of Bengal.¹⁶⁰

Ilyas died at Pandua, his capital in 1358 after a reign of about sixteen years and was succeeded by his son Sikandar Shah. He ruled over Bengal for more than three decades and succeeded in maintaining the independence of the kingdom against the aggression of Delhi. The most memorable event of his reign was the second invasion of Firuz Shah, which he managed to defy like his father did. Afif claims that this second invasion, conducted in 1359-60, was 'planned in the lifetime of Ilyas Shah to free the people of Sonargaon from his tyranny.' However, the battle ended in a peaceful

^{159.} For a detailed discussion on the sources, see Abdul Karim, Banglar Itihasa Sultani Amal, pp. 182-199; A.M. Chowdhury, "New Light on Sultan Firoz Shah Tughluq's first invasion of Bengal", Journal of the Asiatic Society of Pakistan (hereafter JASP), Vol. VIII, 1963, pp. 47-54; A.H. Dani, "New light on Sultan Firoz Shah's expedition to Bengal", Journal of Pakistan Historical Society, Vol. X, Part II, 1962, p. 184

^{160.} E. Thomas, The Chronicles of the Pathan Kings of Delhi, Illustrated By Coins, Inscriptions, and Other Aniquarian Remains, London: Trubner & Co., 1871, pp. 269-70

^{161.} Afif, Tarikh-i-Firuz Shahi, pp. 305-06

treaty between the Sultans, and Firuz Shah retreated gaining '37 elephants and other valuables' and assurance of 'similar exchanges of good wishes' every year!

The long and peaceful reign of more than three decades of Sultan Sikandar Shah is evidenced by the architectural monaments of his age, such as the mosque at Adina but the last years of his life were not happy, he was killed in a battle with his rebelious son, Ghiyasuddln Azam Shah sometime around 1390.

Azam shah, a capable ruler with a profound regard for the law, ruled over Bengal for more than two decades. It is reported that during his rule Bengal had friendly relations with neighbors like Khaja Jahan, the ruler of Jaunpur as well as many other countries. There was also a very friendly exchange of envoys between the Bengal king and the contemporary ruler of China. Azam Shah is also credited with keeping good relations with Persia and the holy cities of Arab, Mecca and Medina. But this glorious period of Bengal came to an end with the tragic death of Sultan Ghiyasuddin in 1410.

^{162.} The accounts of Chinese traveler Ma Huan and others have extensive references about his rule, and they are full of praise. See P.C. Bagchi, Visva Bharati Annals, pp. 96-134

The next two and a half decades in the history of Bengal is marked with instability. Three descendants of Azam Shah succeeded him one after another. They are, Saifuddin Hamza Shah (ruled for about one and a half year 1410-1412) with the title of "Sultan us Salatin", his adopted son, Shihabuddin Bayazid (ruled between 815-817 AH/1412-1414) and Alauddin Firuz Shah, son of Shihabuddin (ruled for a few months only in 817 AH/1414). But, they were puppets in the hands of the nobles in their court and one such noble was Raja Ganesa who seized the throne in 817 A.H/1414-1415, putting on an interruption in the rule of the Iliyas Shahi Dynasty.

The sultans of Delhi were not in a position to intervene in the situation here in Bengal at that time, but the restoration of Hindu authority created a stir among the Ulama and saints, including Shaikh Nur Qutb-i-Alam, who appealed to Sultan Ibrahim Sharki of Jaunpur and sought his intervention. The Sultan of Jaunpur marched into Bengal and an agreement was concluded between the Sultan of Jaunpur and Ganesa. Ganesa's heir apparents, subsequently Islamised, ruled over Bengal for three generations. The first among them was Jalaluddin Muhammad Shah, son of Raja Ganesa, who ruled for a short period of just over one year in 819 AH/1416-

17.163 Numismatic sources confirm that a king with title 'Danuj Mardan Dev' ruled over Bengal from 819-821 AH/1416-1418, and Mahendra Dev ruled for a few months in 1418. They may be identified as Raja Ganesa and his son. In that case, Ganesa must have overthrown Jalaluddin, temporarily though. 164 Within a very short time Jalaluddin was reinstated, and had a peaceful reign of about fifteen years until 837 AH/1433. He was succeeded by his son Shamsuddin Ahmad Shah (837-839 AH/1433-1435). He was killed by conspiring amirs of his court, and after a few months of chaos, the nobles placed Nasiruddin, a descendant of Sultan Shamsuddin Iliyas Shah, on the throne of Bengal in 839 AH/1435-36. Reigning peacefully for about twenty-four years, he died in 864 AH/1459-60 and was succeeded by his son Ruknuddin Barbak Shah, who, during his fifteen year rule recruited a large number of Abyssinian slaves. The Habshi's, as they were called, subsequently became a powerful factor in Bengal politics. he was succeeded by his son Shamsuddin Yusuf Shah in 879 AH/1474, who reigned until 885 AH/1480. Contemporary historians does not mention much about him, or his successors, prince Sikandar who must have ruled

^{163.} Abdul Karim, *Banglar Itihas Sultani Amal*, pp. 222-263; A. H. Dani, "The House of Raja Ganesa of Bengal," *JASB*, vol. XVIII, 1952, p. 131

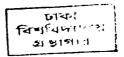
^{164.} Abdul Karim, Banglar Itihas Sultani Amal, pp. 222-263

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only for a few months and the last Sultan of the restored Iliyas Shahi family, Jalaluddin Fath Shah. 165

Fath Shah was killed by Shahzada, a habshi eunuch and the leader of the Abyssinian slaves, who usurped the throne in 893 AH/1487 CE. The next six years are often referred to as the 'Habshi Interregnum' in the history of Bengal. It was a period of turmoil, when four rulers rose to the throne, all killed in internal fighting. They are, Ghyiasuddin Barbak Shah (1488), Saifuddin Firuz Shah (1488-91), Qutbuddin Mahmud Shah (1491) and Shamsuddin Muzaffar Shah (1491-94).

With the murder of Muzaffar shah, another glorious chapter in the history of Bengal opened. Alauddin Husain Shah, an influential noble in the court of Muzaffar Shah was elected sultan in 1494 CE, and established the Husain Shahi dynasty. His reign was marked by territorial expansion of the Sultanate of Bengal in many fronts. He had conquered Kamarupa and Kamta and advanced further into the upper Brahmaputra valley of Assam. He had also gained success against the king of Orissa and inscribed the legend 'conqueror of Kamrup and Kamta, and Jajnagar and Orissa' on his



^{165.} Abdul Karim, Banglar Itihas Sultani Amal, pp. 222-263

coins.¹⁶⁶ A part of Tippera was also annexed by him, and he extended his dominion over Chittagong as well.

During his 23 year rule, the country enjoyed unprecedented peace and prosperity. Due to the internal peace and security of his kingdom trade and commerce expanded, which led to the prosperity of the land.

After his death in 1519, his eldest son Nusrat Shah ascended the throne, and continued the prosperous journey his father started. During his reign in Bengal, the political situation in Delhi was in the changing mode with the arrival of the Mughals. Taking advantage of that, Nusrat extended his territory into Tirhut. But he cleverly tried to avoid any confrontation with Babur, who had appeared in the eastern Indian scene after his victory at Panipath (1526). However, he could not avoid a direct conflict with Babur, and in the wake of defeat in the battle of Ghogra, he had to conclude a peace with the Mughal Sultan that saved Bengal from an impending cataclysm. One of the other important developments during his reign was the arrival of two Portuguese missions. The Portuguese were reported to create 'menace' in the Bay of Bengal during this period.

^{166.} For the details about Husain Shahi rule in Bengal, See, M.R. Tarafdar, Husain Shahi Bengal 1494-1538: A Socio-Political Study, Dhaka: Asiatic Society of Pakistan, 1965

After 13 years in reign, he was killed by one of his slaves, and was succeeded by his young son Alauddin Firuz Shah in 1532. Firuz could reign only about nine months (1532-33) and was murdered by his uncle, Ghiyasuddin Mahmud Shah, the last of the Husain Shahi sultans. Having failed to take a correct apprisal of the situation Mahmud involved himself in a long-drawn war with Sher Khan of Bihar. Consequently Sher Khan invaded Bengal, Mahmud was defeated and the city of Gaur fell in the hands of the Afghan leader in 1538, thereby ending the two hundred years of independence of Bengal.

In the following 37 years, the kingdom of Bengal was in a state of turmoil and constant changes occurred in the political scenario. By the time Sher Shah conquered Bengal, many Afghans were recruited in the service of the Bengal Sultans. Sher Shah was an able administrator; he divided Bengal into a number of smaller units, each under a separate muqta, most of whom were Afghans. In the course of time these Afghan leaders familiarised themselves with the climate and culture of Bengal, and became defenders of the independence of Bengal, for which they yielded a fierce resistance against the Mughal along with the local chieftains called the Bara Bhuiyans. The struggle began during Sher Shah himself, with his famous

struggle with Humayun, the second Mughal emperor. Contemporary historians Abbas Khan Sarwani¹⁶⁷ and Jauhar Aftabchi¹⁶⁸ described the events in detail, and following the accounts of Sarwani's *Tarikh-i-Sher Shahi*, a fair idea about the successful war techniques of Sher Shah can be summarised.

After establishing himself at the throne of Delhi, Sher Shah had appointed Qazi Fazilat as the governor of Bengal. He was however replaced by Muhammad Khan Sur in 1545 by Sher Shah's successor Islam Khan Sur. He declared independence in 1553, after the death of Islam Khan Sur in Delhi and adapted the title of Sultan Shamsuddin Muhammad Shah Ghazi. His successors Ghiyasuddin Bahadur Shah, Ghiyasuddin Jalal Shah and another Ghiyasuddin ruled Bengal up to 1564 CE, when Taj Khan Karrani a new Afghan dynasty. Even though he could rule for only about a few months, Badauni calls him the wisest and most learned man among the

^{167.} A summery of Sarwani's account, Tarikh-i-Sher Shahi, or, Tuhfat-i Akbar Shahi, translated by E. C. Bayley can be found in H. M. Elliot & John Dowson (eds), The History of India, as Told by Its Own Historians, London: Trubner Company, 1867–1877, vol. IV, pp. 301-433; B.P. Ambashthya and S.M. Imamuddin has done more detailed translations, See, Tarikh-i-Sher Shahi (tr. into English from original Persian by B.P. Ambashthya), Patna: K.P. Jayaswal Research Institute, 1974 and S.M. Imamuddin, Tarikh-i-Sher Shahi, vol. II (english translation), Dacca: University of Dacca, 1964

^{168.} Jauhar Aftabchi, *Tazkiratul Waqiat*, (eng. tr. Charles Stewart), 1832; reprint. Delhi: Idarah-i Adabiyat, 1972

Afghans.¹⁶⁹ He was succeeded by his brother Sulaiman Shah Karrani in 1563, who sovereignly ruled till his death in 1572. The territory of Bengal expanded during his time once again, as he conquered Orissa by defeating Mukunda Deva in 1567 and then captured Kuch Bihar in 1568. He shifted his capital from Gaur to Tanda as the climate of Gaur became detrimental to the health.

Sulayman had maintained a clever diplomatic relation with the mighty Mughals of Delhi, and thereby avoided any clash with Akbar. However, his successors could not continue that policy.

After his death in 1572, his son Bayazid Karrani succeeded him but he was murdered in less than a month's time and replaced by his younger brother Daud Khan Karrani. Daud proclaimed absolute sovereignty by having the khutba read and coins struck in his own name, 170 which angered Akbar. The Mughal emperor was further aggrieved by Daud's steps to establish his authority over Bihar. Akbar was on his expedition to Gujrat, but he ordered Khan-i-Khanan Munim Khan to take necessary steps. The armies

^{169.} Badaoni, Muntakhab-ut-Tawarikh, vol. II, p. 177

^{170.} Wright, H.N. and V.A. Smith, Catalogue of the coins in the Indian Museum, Calcutta, including the cabinet of the Asiatic Society of Bengal, Oxford: Clarendon Press, 1906, p. 182; H. Beveridge, "Note on the Tarikh Salatin Afaghina", JPASB, 12 (1916), pp. 297-98

confronted at Tukaroi, and after a bloody battle agreed to sign a treaty in April, 1575, by which Daud is said to have committed to become a Mughal feudatory. Taking control of Bengal, which now become a Mughal Subah, Munim Khan shifted the capital back to Gaur. But he had retreat to Tanda because of a terrible plague, where he died soon after.

Husain Quli Khan Jahan, nephew of the famous Bairam Khan, was appointed as the new governor as the battle for supremacy continued. It finally ended in Daud's defeat in the battle of Rajmahal, faught in July, 1576. He was captured alive and later executed. Contemporary sources including the *Akbarnama* has step by step descriptions of this battle for supremacy, a careful review of the sources reveal many dynamics of military expedition during the time. 171

Daud Khan's defeat in the battle of Rajmahal ended the Sultanate rule in Bengal, but it heralded a new era of Bengali resistance to the imperial power. The famous Bara Bhuiyans, a brand of local chieftains tried to resist the Mughal supremacy for more than three decades. They managed to defy eight governors sent by Akbar, and two more by Jahangir, many of whom were famous generals like the legendary Man Sing.

^{171.} Abul Fazl, Akbarnama, vol. 3, pp. 153-55

The chief of the bara-bhuiyans was Isa Khan led them in the struggle against the Mughals till his death in 1599. His son Musa Khan took the leadership their-after. The resistance finally ended when Subahdar Islam Khan Chishti, appointed by Emperor Jahangir, subjugated them with his clever military tactics. The strategies include strengthening the flotilla of war-boats, placing this region under a new and efficient admiral, shifting capital from Rajmahal to Dhaka and focusing more on forts and fortifications. On his way to the new capital, he conquered the strongholds of the Bhuiyans one after another. For strategic reason, the defeated bhuiyans and chiefs were motivated to work under the Mughals. Later in his vice-royalty, he also made some advances on the eastern front towards Assam and Arakan. Contemporary chronicler Mirza Nathan, who himself took part in this battle, has given minute details of the events. 172

Since then, Bengal remained one of the most prosperous subah's under the Mughals till the death of Aurangzeb. Seventeen governors were sent during the period including Kashim Khan Jwini, Prince Shah Shuja, Mir Jumla and Shayesta Khan, who have made important military expeditions.

^{172.} Mirza Nathan, *Baharistan-i-Ghaybi* (English tr.); The book has also been translated into Bangla by Khalequedad Chowdhury, Dhaka: Bangla Academy, First Edition, 1978, reprint, Dhaka: Divyaprakash, 2004 [hereafter Mirza Nathan, *Baharistan-i-Ghaybi* (Bangla tr.)]

Kashim Khan Jwini, the first governor under Shah Jahan recovered Hughli from Portuguese occupation in 1632. Prince Shah Shuja served as subahdar for the longest period, twenty years (1639-1658) peacefully. But during a bloody battle for succession with his brothers, he was defeated by Mir Jumla, the general of Aurangzeb in 1660 and fled Arakan to take shelter where he met a tragic death being brutally murdered by his host, the king of Arakan.

Arriving at Dhaka, Mir Jumla first secured the capital by building a number of river forts around it. He then went on to recover Kamrupa, a part of which was captured by the King of Assam during the war of succession. He drove out the King of Kochbihar Raja Pran Narayan and then proceeded to Assam. But after arriving at the Ahom capital Garhgaon, he fell seriously ill and the Mughal army was compelled to retreat due to shortage of ration, and unfavorable weather condition. Mir Jumla died on his way back in 1663.

The next subahdar, Shayesta Khan, son of Asaf Khan and brother of Mumtaz Mahal, was a maternal uncle of the Emperor Aurangzeb. A great general with vast experience, he had served in various parts of the empire before being appointed as the Subahdar in Bengal. In two terms, he served in the position for twenty two years between 1664 and 1688. He was

already in his old days, aged 61 when he had arrived Bengal. But with the help of his grown-up sons Buzurg Umed Khan, Aqidat Khan, Jafar Khan, Abu Nasr Khan and Iradat Khan, he ruled the Subah with great vigor. The most important event of his long reign was his conquest of Chittagong in 1666. The reason behind that was the constant threat of the Magh King and the Portuguese pirates, who joined hands to attack whenever they found an opportunity.

Another important aspect of the subahdari of Shayesta Khan was his hostile relations with British East India Company, who had been doing business in Bengal since the time of Shah Shuja by paying only a minimum tax of 3000 rupies per year. Shayesta Khan had chased out them from their strongholds of Hoogly and Hijli. However, his successors did not continue this policy after he was called back to Agra in 1688.

One of his successors, Prince Azim-ush-Shan went on to permit the English company to purchase three villages - Sutanuti, Govindpur and Kalikata in 1698 where they laid foundation of the future city of Kolkata, paving the way to the ultimate establishment of British rule in India within the nex half a century.

It was during the subahdari Azim-us-Shan that the capital was shifted once again, this time from Dhaka to Murshidabad, where the next subahdar,

Murshid Quli Khan established the independent nawabi rule in Bengal. The Mughals remain the sovereign of Bengal in paper, but Murshid Quli and his successors, Shuzauddin, Sarfaraz Khan, Alivardi Khan and Sirazuddaulah ruled the Subahs of Bengal, Bihar and Orissa like independent kings, till Siraz was tragically defeated in the battle of Plassey in 1757 by the English.

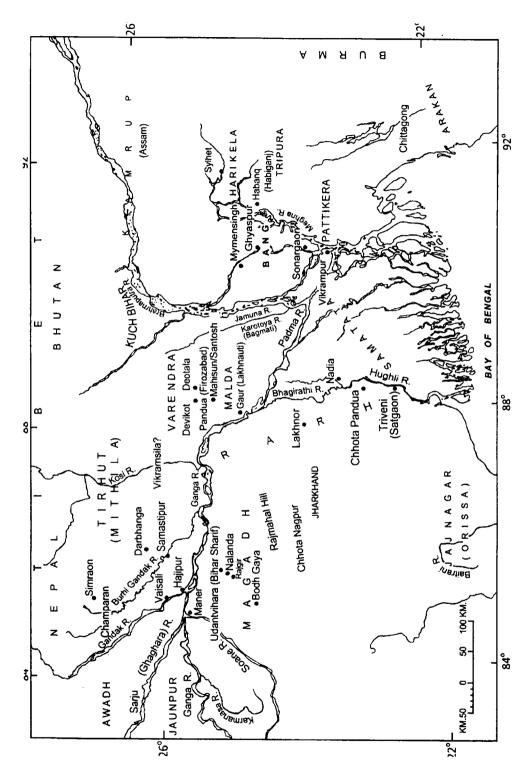


Plate 01: Map of Medieval Bengal (After Md. Akhtaruzzaman, Society and Urbanization)

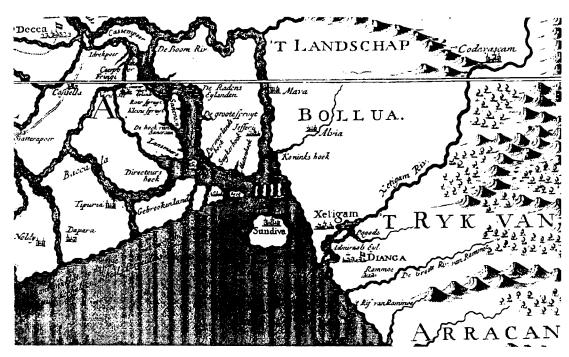


Plate 02: Bengal in Van Den Brouke's map, 17th Century

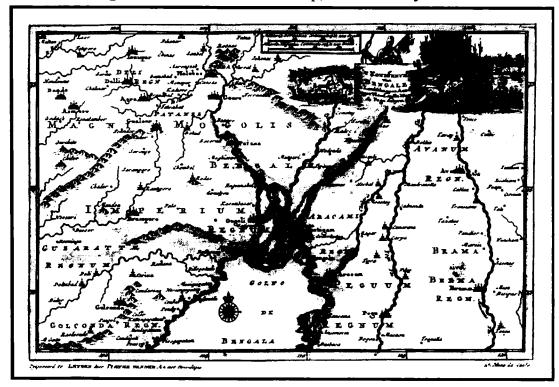


Plate 02: Bengal in a Portuguese map drawn after Nino de Kunha's description, 16th century



Plate 03: Map of Mughal Bengal (After Kamrun Nesa Khondker, Mughal River Forts of Bangladesh)

Chapter - III

The Concept of War

The history of human civilization is actually a history of fight, starting with the man's fight against nature but later continued as the fight among the species itself. This fight, often termed as a universal and ancestral aspect of human nature, is called war. Defining the term 'war' is not an easy task; in the popular sense, a conflict among political groups involving hostilities of considerable duration and magnitude. 173 Sociologists, however, treat war as 'an institution recognized in custom or in law, and military writers usually confine the term to hostilities in which the contending groups are sufficiently equal in power to render the outcome uncertain for a time.'174 The conceptualization of war is not as old as war itself is. Even though the great generals like Alexander, Hannibal or Julius Caesar had their own, definite understandings of the term, its formal conceptualization process started in the West during the fifth century CE in Rome and Greece. The first books on training of soldiers, tactics and war strategy were Onisander's Instructions to Generals and Vegetius' Brief Exposition of the

^{173.} The Encyclopedia Britanica, Online edition, https://www.britannica.com/topic/war, retrieved on 25 June, 2017

^{174.} Ibid

Principles of Military Action. The medieval era in Europe is, however, held to be a 'barren period' regarding the development of military strategy. Books like Machiavelli's *Dell' Arte della Guerra* was written, but they were based on the concepts developed in the past. The modern conception of strategy and tactics is usually dated from the mid-eighteenth century. Henry Lloyd, an Englishman serving in Russia, systematized some general principles of strategy in his history of the Seven Years' War. Since then strategy came to be identified with military science. 175

But in the East the concept of military strategy may have had an earlier beginning. Confucius (c. 551-479 BC) and Sun Tzu (c. 400-320 BC) had formulated important maxims on war in China before the birth of Christ. In India, it goes back to the Vedic era although it is sometimes believed that India suffered from absence of military literature and lack of professional military training institutions. It is true that there is hardly any literature dealing exclusively with military science or the art of war during the ancient periods, but it has to be remembered that war-craft was then regarded as a part of state-craft and so the various works on state-craft dealt also with the art of war. Therefore, concepts of war can be found in

^{175.} J.N. Sarkar, *The Art of War in Medieval India*, New Delhi: Munshiram Monhorlal, 1984, p. 3 (herafter J.N. Sarkar, *The Art of War*)

scattered references in ancient Indian texts of the *Vedas*, *Puranas*, Mythological Epics like *Ramayana* and *Mahabharata*, and treaties like *Dharmasutra*, *Dharmasastra*, *Arthasastra* and *Nitisastra*. Medieval India also had several works dealing with various aspects of war. Apart from the literary sources archaeological and artistic evidence, viz., remains of old forts, towns, etc., pieces of sculpture, painting, coins and inscriptions also help in understanding the extent of conceptualization of war.

Agnipurana, an encyclopedic book on various branches of learning, have a few chapters on the duties of kings and as part of it, commented on the art of war. Experts think that the text may have been written during the early medieval period, but it the descriptions are extracted from some older texts. In another of such treaties, *Manusmrti*, the duties of a King are defined. According to him, there are seven constituents of a kingdom, "The Master and the Minister, the Capital City, the people, the treasury and the army and the ally."

Some more detail in military thinking can be found in the Sukranitisara (c. early medieval period) and Nitiprakasika of Vaisampayana. The Sukranitisara, a well-known treatise on state-craft, is modelled on the Arthasastra of Kautiliya. It contains a section on the army which describes the principles of war, army organisation, battle array, maxims to be

followed and the laws of Peace and War. It also contains valuable instructions on the defence and the fortresses.

Vaisampayana's *Nitiprakasika* is perhaps based on more ancient and standard works. It classifies and describes various kinds of arms and weapons, the constitution of the army, military arrays, prescribes rules about marching, encampment, allowances and rewards etc. It also deals with architecture, building of towns and villages, construction of houses and only incidentally with machines of various kinds including flying machines and engines used for military purposes.

The ancient Indian concept of war is reflected in Sukracharya's view, 'the art of war is, in the last resort, the art of keeping one's freedom of action.' He added 'The affair that two parties, who have inimical relations with each other, undertake by means of arms to satisfy their rival interests is known as warfare.'

Well before the Muslims came as victorious ruling class in Bengal in the thirteenth century, they had already developed a concept of war of their own. The *Jihad* or the just war, as the Islamic concept of war is called, is often portrayed as unjust, and Islam is considered as a militant religion, spread by the might of sword. Linguistically, the word *Jihad* stands for "struggle." and it is etymologically related to the words *mujahadah*, which

also means struggle or contention, and *ijtihad* which is the effort exerted by jurists to arrive at correct judgments in Islamic law.

In the Qur'an and in later Muslim usage, *jihad* is commonly followed by the expression *fi sabilillah*, "in the path of God." The warfare against the enemies of the Muslim community is called as *jihad fi sabilillah*. In hadith the term *jihad* is used to denote armed action. There are 199 references to *jihad* in the most standard collection of hadith, *Sahih al-Bukhari*, all assume that *jihad* means warfare.¹⁷⁶

The jurists of Islam categorically divides the world divided into Muslim and non-Muslim zones, *Dar al-Islam* (Abode of Islam) and *Dar al-Harb* (Abode of War) respectively. Jihad is therefore an obvious option of fighting between Muslims and non-Muslims until the territory under Muslim control absorbs what is not. This was the main reason behind the quick and far-reaching Muslim conquests in medieval era. But extending Dar al-Islam does not mean the annihilation of all non-Muslims, nor even their necessary conversion.

^{176.} For a detail of Islamic views on Jihad, See Douglas E. Streusand, "What Does Jihad Mean?", *Middle East Quarterly*, September 1997, pp. 9-17

The inhabitants of Dar al-Harb (known as *harbis*) are subdivided into another two category: *Ahl al-Kitab* or the People of the Book and polytheists. In Qur'an, *Ahl-al Kitab* is used to denote the Christians, Jews, and Sabeans. They may live undisturbed under Muslim rule so long as they accept the status of *dhimmi*, and pay *jizya*. In theory, the law requires Muslims to offer polytheists the choice of Islam or death. But this was rarely followed after the initial Muslim conquest of Arabia. Rather, Muslims generally treated all *harbis* as People of the Book. The jurists first allowed Zoroastrians to be included in this category; Muslim conquerors of India (Bengal being a part of it) extended it to Hindus as well.

The war ethics of *Jihad* forbids Muslims to fight against women, children, old people, crippled, blind, handicapped, one whose right hand is cut off, lunatic, monks in monasteries, wanderer in mountains who is not mixed with people, people who are secluded in a house or a church worshipping in a locked door, as per *Hadith*. They are also not allowed to sabotage or destroy anything during the fight hence they should not demolish lands of the combatants of the other army, or burn their harvest, or slaughter their animals without a necessity, even burning or drowning beehives is not allowed.

It is thus, should not be equated with the European concept of Holy War, i.e., Crusade in theory. In reality, however, all through the medieval age the Muslim invaders all over the world were inspired by the religious zeal to fight Jihad. According to the jurists, even though jihad is not an obligation for each individual Muslim, it is a general obligation of the Muslim community and in emergencies, when Dar-al-Islam comes under unexpected attack, it is expected that all Muslims would take part in jihad warfare. Even in normal circumstances, the failure of the community to fulfill the obligation of jihad is regarded as sinful. On the other hand, if the believer takes part in it, he has the double benefit, being a Ghazi if he survives and wins, and have a share in the Ganimah, the looted wealth. If he dies while fighting Fi Sabiillah, he is promised of the status of Shahid. This was what drove the medieval Muslims to fight and conquer new lands. Bengal is no exception. Hence all the medieval chroniclers tried to justify the invasions as being holy war against the *Kafir*, or infidels¹⁷⁷. The indigenous tribes and rulers of Bengal are invariably termed by this word, even rebel Muslim generals are also termed as the same sometimes. For example, while describing about the battle of Ekdala, Barani repeatedly referred to the army of Sultan Firuz Shah Tughlaq as the Islamic army, his

^{177.} See, Minhaj, Tabakat-i-Nasiri (English tr.), pp. 594-5, 763

soldiers and generals as the *Ghazi's* and the 'Bengali Paika' of Iliyas Shah as the infidels even though he mentioned that the Delhi Sultan had ended the battle in the fear that 'many Muslim men and women' would be affected!¹⁷⁸

3.1 Strategy and Tactics

War is not a simple action, it is actually a combination of a series of complex actions. It is true that the arms and ammunition is the basic component for it, but possession of arms alone is not enough for the preparation of a battle. An army must know their effective use in order to accomplish political, military, strategic, operational or tactical aims. Therefore, there must be a plan and preparation to master the best methods to conduct warfare. For maintaining the success of an army, creation of new weapons and equipment and their introduction into the army is also important. Methods of warfare also depend on the political aims of the state and prevailing political situation, and also on the geography of the theatre of war.¹⁷⁹

The modern concept of military strategy represents the synthesis and integration of the military experiences through ages. There are three basic

^{178.} Barani, Tarikh-i-Firuz Shahi (Bangla tr.), 457-61

^{179.} Vasily Sokolovskii, *Soviet Military Strategy*, Englewood Cliffs: Prentice Hall, 1966, pp. 354-55

parts of this, strategy, tactics and logistics. These may be described as partners in war. But strategy dominates as it covers planning of war, and is the actually the art of conducting war: of projecting, directing, mobilising and coordinating the entire resources of an army and its campaigns.

3.1.1 Logistics

Logistics is considered as the practical art of moving armies. The main task of logistics is to lodge and camp the soldiers, direct the marches of the columns and locate them on the ground. There are many steps included in that. The major ones are ¹⁸⁰:

- (i) Preparation of itineraries with directions
- (ii) Arrangements of marches and attacks and issue of clear and easily intelligible plans and orders and instructions to subordinates, and supervision of their execution
- (iii) Calculation of time and distance
- (iv) An advance guard preceding the main army to collect information of enemy movements for the commander-in-chief.Movements are to be ordered only after this information
- (v) A good line of operations and of depots linking the army with the base
- (vi) To bring troops from order of march to the battle orders.

^{180.} C.V. Clausewitz, On War, English translation by Michael Howard and Peter Paret, Princeton: University Press, 1976, reprint 1984, pp. 85-86

Medieval warfare was comparatively a less complicated affair, because of the absence of modern gadgets. As the weapons of attack and the defensive armoury did not vary that much, the steps and actions of battles were mostly the same.

Ancient Indian literature have a few references on this. Kautilya entrusted the charge of the camp to the *Nayaka*. According to *Nitiprahasika* the army was followed generally by *harem*, some neighbours, financiers, chamberlains, eunuchs, the sick, wounded, maimed and weak; by civil officials, workmen, diggers, carpenters, surveyors, engineers, men acquainted with the field of action, hunters acquainted with forests and physicians.¹⁸¹

Kautilya's Nayaka's equivalent in the Muslim army was the Ariz, or minister. According to Ziauddin Barani the excellence of the army depended on that of the Central 'Ariz ('Ariz-Asl) or minister of war ('Ariz-i-mamalik) who looked after the general and detailed affairs of the army. In practice also the 'ariz, or 'ariz-i-mamalik was responsible for all preparations, and arrangements of a campaign, muster-rolls, supply,

^{181.} Kautliya, Arthasastra, English translation by R. Shamasastry, Bangalore: The Government Press, 1915, Book X, pp. 521-23 (Free E-book available online, http://libarch.nmu.org.ua/bitstream/handle/GenofondUA/19273/f2c8936431b9587a3448e1b3d8eff8e8.pdf?sequence=1, retrieved on 15 March 2017), pp. 66-68 (hereafter Kautliya, Arthasastra)

transport, commissariat, collection and division of booty. He was actually responsible for the duties of modern day Quartermaster-General. He was often assisted by a deputy, who was called as the *naib-i-'ariz*. ¹⁸²

During the Mughal era, an officer-in-charge of the march was called *Mir Manzil* (Lord of the Stages, Quartermaster). He had to fix the route and the marches, go ahead and select the camping site and settle the sites of camps and *bazars*. He was assisted by several *Mir Tuzaks* (Lords of Arrangement) and guards (*Yasawal*). 183

Kautilya, advises that the march should be organised on a consideration of supply of food, fodder, fuel and water. He, however, thinks that supplies could be procured by raids. Food and equipment were to be transported in double the quantity required, if possible; and if not, the task should be entrusted to the troops or stores should be set up on the way at intervals. *Sukranitisara* envisages the importance of keeping provisions ready, but according to Sukracharya, the troops are responsible for their own supplies.¹⁸⁴

^{182.} Barani, Tarikh-i-Firuz Shahi (English tr.), p. 203

^{183.} William Irvine, The army of the Indian Moghuls: its Organization and Administration, London: Luzac & Co. 1903, pp. 190-91 (hereafter Irvine, The army of the Indian Moghuls)

^{184.} Benoy Kumar Sarkar (tr.) 'Sukra Niti Sara', in *The Sacred Books of the Hindus*, Vol. XIII, Parts I & II, Allahabad: The Panini Office, 1913, p. 256 (hereafter Sukracharya, *Sukranitisara*)

Muslim thinker's ideas imitate these as Ibn Khaldun mentioned, "Soldiers travelling in regions other than their own have to requisition grain and livestock and to plunder the countries they pass through." Amir Khusrau also illustrated the vital role of supplies in the wars of his time, 'Man can bear all afflictions except that of a starving stomach. Fakhr-i-Mudabbir suggested that the government should provide food and fodder during the period of actual fighting; for two days. For the rest of time, the usual method in medieval times was to decentralize the commissariat, every man purchasing his daily needs from the *banias* of the markets accompanying the army, called the *banjaras* or corn-dealers. A shopkeeper with a permit from the *ra'is-i-shahr* (superintendent of the markets) could accompany the army.

The problem of supply sometimes become difficult as the often the people of the invaded country follow 'a scorched earth' policy and destroy everything while escaping. During the Assam campaign of Mir Jumla, the Ahoms closed the roads, and intercepted the transport of provisions. Garhgaon was completely isolated.

^{185.} Ibn Khaldun, *The Muqaddima: an Introduction to History*, (English tr.) Franz Rosenthal, in 3 vols, New Jersy: Princeton University Press, 1958, reprint, 1980, vol. I, p. 24

^{186.} J.N. Sarkar, The Art of War, p. 187

^{187.} Ibid

Apart from the supplies of food and arms conveyances to transport them were also very important, specially during quick expeditions. Indigenous means of transport in Bengal included animals like elephants, pack-ponies, buffaloes, bullocks and bullock-carts. The carts or wagons must be strong and light and fit to negotiate all roads. Manucci informed that the Mughals used to force the villagers to carry them. Because of the geographical condition of Bengal, supplies can easily be transported by water, through the rivers and canals. Rivers were crossed by bridges of boats or basket boats, or by fording.

3.1.2 War planning and Strategy

Proper planning is a pre-requisite to success in any assignment. In war, it depends on various elements, and the elements also vary according to time, space and aim of the war. Its scope includes general rules governing armed combat; conditions and nature of the upcoming war; theoretical principles of preparing the country and army; strategic utilisation of different branches of the armed forces; methods of conducting combat; material and technological base for combat; principles of directing the army and war in general; and strategic views of enemy potential.

^{188.} Nicolao Manucci, Storia de Moghur, p. 452, Cited in J.N. Sarkar, Art of War, p. 197

The matter has been discussed in both the ancient Indian literature and some medieval sources. Analysing them, a general character of the war planning and its elements can be summarised. A few of the points are discussed below.

Selection of Battle Ground

The principal quality of the selection of battle ground remains should be to put the enemy at a disadvantage. Both ancient and medieval sources prescribed detailed instructions for the site, for dispositions of troops and manner of encampment for men and animals. The site selection process is to be performed for two different reasons. The most important one is to select a suitable site for the fight, but selecting site for the base camps, i.e. the cantonment is by no means any less important.

The battle camp (*Shivira*, *Skandavara*, or *Kataka*) is the theatre of the war. Kautilya prescribed that the camp was 'to be pitched on a site declared to be the best according to science of building, to be measured by nay aka and others, to be circular, square or rectangular, to have four gates and nine divisions.' Muslim theorists like Fakhr-i-Mudabbir laid down certain guiding principles for encampment as explained before. In fact, the underlying principles would largely depend on a consideration of the

^{189.} Kautliya, Arthasastra, Book X, pp. 521-23

influence of terrain on war which has been explained beforehand. Therefore, the value of the topographical features of the battleground would depend on the spirit and ability of the general. For on him rests the responsibility of selecting the theatre of war. 190

It is also a very important task for a general is to guard against sudden assaults by the opponents; he needs to arrange for overall protection of the army from this. For this purpose, the lines of defence of the battle camp of the early 13th century usually started with a ditch and then a wall of wooden planks (kat-ghar, house of wood) or a mud wall supplemented it. Often the advance of the attackers was sought to be impeded by a medieval version of mine, hasaks or caltrops of different sizes, four-spiked iron and wooden balls were planted to wound the hooves of horses and elephants. Archers were kept ready to shoot arrows at the attackers; foot-soldiers with broad shields gave them protection. Kautilya prescribed careful regulations for disposition of the army round the camp so that kinsmen and officers were posted according to their rank and status. There was a distinctive standard (alam) for each group (guroh, khail), thus if a member of any group did get separated from his rank he could return easily. During the Mughal period similar devices of different kinds were adopted and

^{190.} V. Montogomery, A History of Warfare, London: 1968, p. 400

collectively called *murchal* or *malchar* in Persian sources. Round the battle-ground ditches or trenches were dug, entrenchments were made on the inner side with earthworks or with sandbags; redoubts or blockhouses were set up; and artillery was placed thereon.

The royal camp was usually a self-contained unit. Apart from the protections cited above, there were non-combatants, camp-followers, priests, prostitutes, merchants and minstrels, stores, physicians and surgeons who accompanied the unit. If the epic camp was like a miniature town, the later Hindu camp (*Sivira, Skandavara, Kataka*) in ancient and early medieval India was also a prototype of later Mughal camp. The Mughal camp, burdened with the paraphernalia of an army, court and civil administration was necessarily of immense size. Abul Fazl says: "On account of the crowding of camp followers, and the number of the troops themselves, it would take a soldier days to find his (Akbar's) tent; and how much worse would it be for a stranger?" 191

A base of operations is an area from where the army starts for offensive, gets its reinforcements and resources, and to which it retreats. It is extremely essential to have such a base or bases duly guarded for the success of the projected invasion or even for successful defence. A perfect

¹⁹¹ Abul Fazl, Ain-i-Akbari, p. 144

example is Shamsuddin Ilyas Shah's base at Ekdala, where he retreated strategically to defend his army from the mighty attack of Firuz Shah Tughlaq.

In a riverine country like Bengal, rivers are often regarded as lines of operations, of retreat and of manoeuvres. A base on a wide and rapid river, with well-defended banks, is very favourable. Mir Jumla had created a host of such bases around Dhaka, that served as the launching pad for his expeditions to Assam as well as being the line of defence against the attack of the Mogh pirates.

The Battle Array

The real battle begins with the attack on the opponent. For that, it is essential to adopt some kind of formation. There are three basic military formations, a line, a column and a square. A solid line of battle is the earliest available formation; warriors of primitive races almost invariably formed a phalanx, a solid line of battle, that can transform into a column during march. It possesses solidarity, moral and physical. As the ranks are deep, soldiers can see their comrades before and behind. As the files are close they feel reassured by comrades armed with shield on the right and with spears on the left.

Ancient and early medieval literature in India referred to a variety of phalanxes (vyuhas) or dispositions or theoretical deployments which became increasingly

complex with lapse of time. But it is extremely difficult to understand these formations. Without entering into the details of the various orders, it may be mentioned that tactical evolution is traceable in five stages in ancient and early medieval India. The number of basic formations increased from four in the time of Kautilya to seven in the *Agni Purana* and nine in *Manasollasa* and the *Sukranitisara* i.e., roughly during 11-13th centuries. There were numerous variations of each of the formations as well.

The ancient Indian formation of battle orders depended on certain factors. Composition of the forces is the first of those factors; if the army had only one arm, either infantry or cavalry or any other format, the order may be called *suddha*, or pure. If there are combined arms, it then forms a *misra* or mixed order.

Configuration of the battle ground is also a big factor. Kautilya advises that the nature of the ground: even, uneven, complex, in the front, on sides and in the rear, should be examined. The *Sukranitisara* urges the commander to march in well-arranged regiments wherever difficulties arise on the way through rivers, hills, forests and forts.

The strength and character of the battle order of the enemy is another such factor.

Kautilya suggests defensive antidotes to assail the enemy offensive. He further says: 'If the (opposite) arrays are equally matched, success (comes) from the

possession of suitable place, time and strngth.' The *Sukranitisara* has prescribed eight arrays according to obstacles or dangers apprehended:

- i. three for danger ahead
- ii. one for danger behind
- iii. one for danger on the sides
- iv. three for danger on all sides. 193

The Muslims had also developed their own order of battle well before they arrived in Bengal. It had proven a better option, as the indigenous battle orders of the Sena army failed against it. According to the Muslim order of war, there were five divisions or units (al Khamis): the Right, Centre, Left, Van and Reserve. The Turkish invaders of Bengal used to arrange these five divisions in a Crescent-shaped form. Without coming near or making a frontal attack, mounted archers would hover around in vast numbers and open archery fire, to start the fight. The five divisions were called as:

- (i) Quddam-i-Lashkar (Advance or Vanguard)
- (ii) Maimanah (Right)
- (iii) Maisarah (Left)
- (iv) Qalb (Centre)
- (v) *Khalf* (Rear)

^{192.} Kautilya, Arthasastra, Book X, Chap. 2, pp. 524

^{193.} Sukracharya, Sukranitisara, pp. 525-67

A detailed description of six lines of battle array (as well as the order in the camp) during early 13th century is given by Fakhr-i-Mudabbir, everybody knowing his place during fight.¹⁹⁴

First line: Vanguard (muqaddamah), with right and left wings (jinali or flanking parties).

Second line: foot-soldiers. The infantry was arranged in four rows as follows: (a) those with armour and shields, bows and arrows as a wall of protection; (b) those with breast-plate, shields, swords and spears; (c) those with swords, quivers, knives and iron-bound sticks; (d) those with maces and swords.

Third line: The main army included the centre (qalb), right (maimanah) and left (maisarah) wings with armoured elephants in front of the commander. The King or the Commander in the centre was surrounded by lesser commanders, sar-hangs, grooms, attendants and servants—all fully armoured; learned men, physicians, astrologers, nadims or boon companions. The right of the centre included guides, leading the army to unknown places, lasso-throwers, slaves and the wazir. The left of the centre included archers, attendants and napthathrowers.

Fourth line: the *harem*, kitchen, treasury, armoury and wardrobe.

Fifth line: Spare horses, camels, prisoners, the sick, etc.

Sixth line: the rearguard (saqqah or Khalf) facing outwards with the back towards the camp, to repel an attack. A select corps that could be

^{194.} Fakhr-i-Mudabbir was a Persian author and courtier under successive Ghaznavid, Ghurid, and Shamsī sultans. His Adab al-Harb wa-l-shaja□a (The etiquette of war and chivalry) has not yet been translated in English, however, his accounts have been analysed and quoted extensively by the military historians. See, Bernard A. Boit, The Fruits of Adversity: Technical Refinements of the Turkish Composite Bow During the Crusading Era, unpublished MA Thesis, Ohio State University, USA, 1991

spared, was kept as reserve near the camp for use in case of defeat. This was also in charge of baggage, supplies, arms and siege engines.

Each of the above mentioned sections used to be under a separate Officer. The leader of the first three were selected from the respectable Khans. There were different ranks of *Khan, Malik* (with 10,000 horsemen), *Amir* (1000), *Sipah-salar* (100), *Sar-i-Khail* (10). The leaders were called as:

Leader of the Van Muqaddam or Sar-i-lashkar-i-Muqaddama;

Leader of the Right Sari-fauj-i-maimanah;

Leader of the Left Sar-i-fauj-i-maisarah;

The Centre was usually under the King or the Commander (Sar-i-lashkar), who used to be either the Prime Minister or a noble, or a prince. A special cavalier contingent (Khassa-i-Khail) and boy-slaves (ghilman) remained with the King, and posted at the right and left wings respectively under a Sar-i-Jandar and Amir-i-Ghilman.

There were also officers for the infantry (Sahm-al-Hashm, Naib Sahm Al Hasham and Shimla-i-Hashm) but the title of the officer-in-charge is not definitely known.

Animals were supervised by respective officials: horses under Akhur Bak; elephants under Sahna-i-fil and camels under Sahna-i-Nafar. 195 The armoury was under Sar-i-Silahdar.

^{195.} A detail about the army administration of the Sultanate of Delhi can be found in I.H. Quraishi's *The Administration Of Sultanate Of Delhi*, Lahore: SM Ashraf, 1942, pp. 130-149. As there is little information available about the army administration of Bengal in contemporary sources, these descriptions can be taken as reflected in

There was a *Chaush* to ensure that every one stuck to his proper place on pain of condign punishment, even beheading. The *Naqib* proclaimed directions or orders.

There were some special squadrons for ambuscade on surprise or reinforcement.²

The battle order of the Mughals was based on the usual five main divisions, - the Van, Right Wing, Left Wing, Centre and Reserve but there were other units arranged as follows:

- (i) The scouts and skirmishers (*Qarawal*), a loose screen of mounted archers, without firearms, 'advancing and falling back, without disordering the Van, but skirting its flanks to the rear, if driven hard.'
- (ii) The Vanguard (hardwal) of specially selected brave and well-equipped troops. It had several lines:

Analysing all the available sources, speciall that of Fakhr-i-Mudabbir, J. N. Sarkar has compiled a few diagrams of the medieval battle orders. The diagrams show the basics of how the infantry was arranged for any battle. (see diagrams 1-6).

Artillery

Heavy cannon pieces mounted on carriages (arabah), were bound by iron chains and twisted hides to bar enemy assault; with turahs, gabions or mantelets or breast plates or nose bags filled with earth for protection between two carts to enable the gunners to fire in security. The personnel included topchi (cannoneers), tufangchi (gunners), deg-andaz (mortar-bearers), ra'd-andaz (grenade-throwers) and takhsh-

andaz (rocket-men). Apart from those, their were the animal force, an inseparable instrument in medieval warfare. They include: Camels carrying guns (shutarnals) and swivel-guns (zamburak); Elephants, each with two guns (gajndl or hathnal) and two gunners and Cavalry.

Behind the van stood the main army consisting of the Right Wing (baranghar or maimanah) and the Left Wing (jaranghar or maisarah). Each wing was again subdivided into three sections, the Van (harawal), the left (chapawal) and the right (shaqawal).

The Centre (Qul, or Ghol or Qalb), the strongest in number of men and officers, and inspired by presence of the supreme commander (King, prince or Sipahsalar), generally seated on an elephant so as to be visible to all. It was flanked by two wings (tarah), - the left wing (dast-i-chap- i-ghol) and the right wing (dast-i-rasti-i-ghol).

The advanced reserve of guard (*iltmish*) or commando troops, stationed on the two shoulders of the centre. It was an incredibly mobile corps, which was very useful as an enveloping agent. By timely addition of fresh troops and dashing gallantry, it often turned the scales in dubious battles.

The rearguard, *chandawal* or reserve, at some distance behind the centre to repel attack from the back and look after the camp and the *harem*.

The body of agile light cavalry placed in ambush for detour (taulqama) at the outer end of each wing, to wheel round the enemy and 'the two horns of the crescent closed in the rear.' 196

As in the Sultanate period, there were spaces in and also between each array to enable the combatants to see in front or the cavaliers to sally out.

Signaling

The greatest tactical difficulty is to arrange simultaneous execution of the decisive manoeuvre by different sections of the army. Without suitable and effective means of transmission of orders and correct vision of one part by the other parts, the control over the army would get lost. Kautilya suggested, 'With drum-beats, flags and banners, he (commandant) should establish signals for the divisions of the array, for dividing (themselves) into sections, joining together, halting, marching, turning back and attacking.' The Muslim war-expert Fakhr-i-Mudabbir echoes, 'during battle, the commander communicated his orders to his men by signals of flags, by sounding the drums or blowing the horn (buq) and through couriers.'

The technique of communicating signs for forming battle orders through bugle sounds was a military secret known to none except one's own men. Inaccuracy in transmission of orders for their wrong comprehension or inefficient execution will certainly affect the issue. Orders of the King or Commander-in-chief were

^{196.} Barani, Tarikh-i-Firuz Shahi (Bangla tr.), pp. 24, 30

communicated throughout the camp by messengers or adjutants (tawwcchi, yasawal, sazawal). They were also to see that no trooper was to quit his scheduled post. Violation was punished by death. 197

A battle usually lasted a day from morning to evening. During the sultanate period several stages marked its commencement: (i) the drum was beaten; (ii) the *takbir* was recited to alert the soldiers to prepare; (iii) the latter arrayed themselves in order with arms and horses at the second beat of the drum; and (iv) jumped on them at the third beat, awaiting orders; and advanced to fight when the *chaush* blew the war horn. In the Mughal period also the battle commenced with the beat of drums and the play of other war instruments.¹⁹⁸

^{197.} Ibn Khaldun, Muqaddima, Vol. II, pp. 42-43

^{198.} Islamic Culture, October, 1937, p. 483

<i>Tilāyah</i> Patrols		<i>Tilāyah</i> Patrols
Alamdaran dast-i-chap Standard-bearers Left wing	Shakal lashkar bādshāhan 'Ajam barin turtib safhaiipiyādagān tirandāz sardār Diagram of the army formation of the rulers of Ajam (Persia), arranged according to the following lines, infantry, archers and commander.	Alamdārān dast-i-rāst Standard-bearers Right wing

Bāzār lashkar o saudāgarān ākhar khās `ālam dohal zan O naubat saraiburdah o.. ankah jaras zandān pāsbānān

Market of the army and merchants, stall for special horses standards of drumbeaters and bearers of royal kettledrum, after that bell-beaters and watchmen.

Maisarah
Left wing
Khazināh-o-jāmkhānāh
Sarai haram matbakh
Treasury and Wardrobe, Court,
Seraglio, Kitchen
mardman besilah
dardmandān-o-zaifān
:n without arms, the sick & the infirm

Maimanah Right wing

Rikābkhānāh-o-zarādkhānāh Store of Strirtups and armoury

> Maweshi-o-piādgan Animals and infantry

> > Tilāyah Patrols

Tilāyah Patrols

Diagram 01: Battle Order of the rulers of Ajam (Compiled by J.N. Sarkar following Adab-al- Harb Was-shujaa)

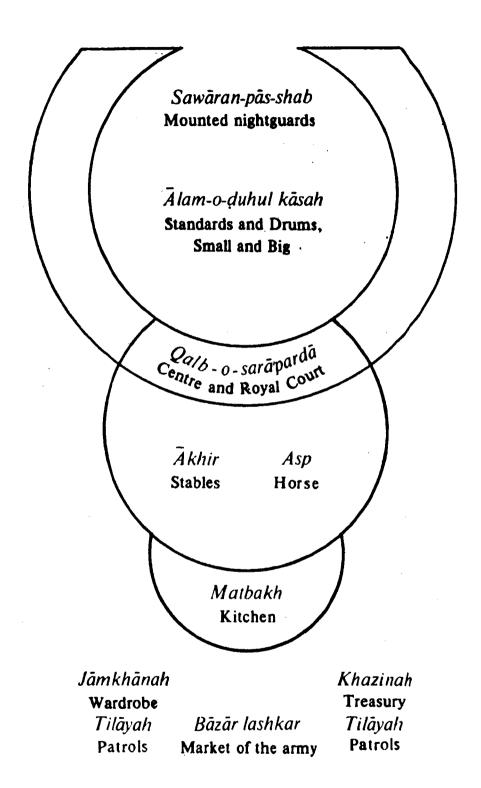


Diagram 02: Battle Order of the Mongols (Compiled by J.N. Sarkar following *Adab-al- Harb Was-shujaa*)

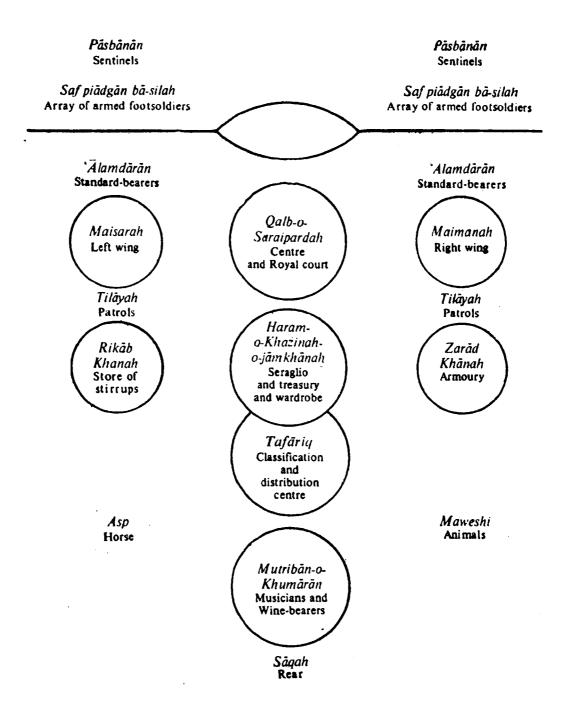


Diagram 03: Battle Order of the Hindu's (Compiled by J.N. Sarkar following *Adab-al- Harb Was-shujaa*)

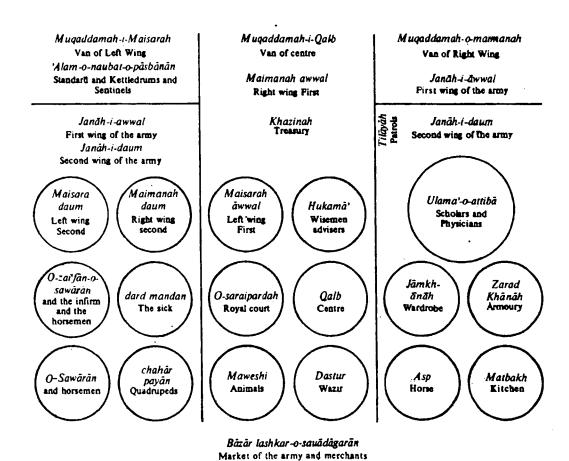


Diagram 04: Battle Order of the Turks of Rum (Compiled by J.N. Sarkar following Adab-al- Harb Was-shujaa)

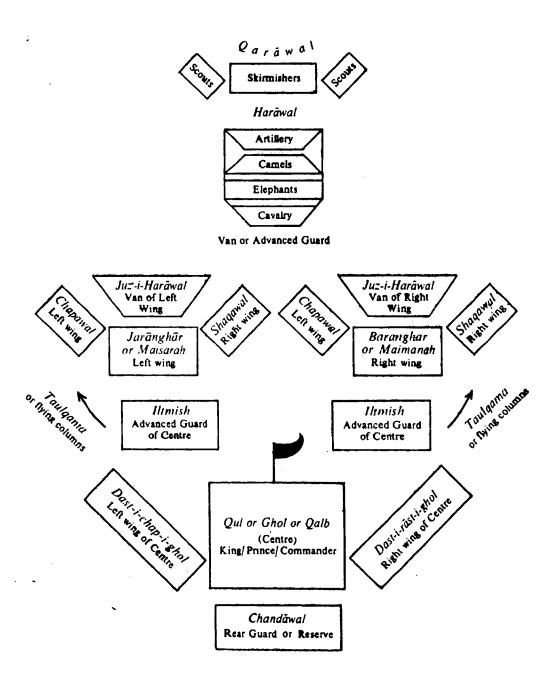


Diagram 05: Battle Order of the Mughals (Compiled by J.N. Sarkar following Adab-al- Harb Was-shujaa)

Chapter - IV

The Army and its Organisation

In the event of war, the players are the generals and soldiers, and with them is created the team, army. The military dynamics of any given country of a certain timeframe depends on the organisation and structure of its army. As is discussed above, the military history has begun its journey in the ancient period in the South Asia, and as part of it in Bengal. The ancient literary sources have described the war-craft as a part of state-craft; and authorities like Kautilya or Sukracharya has elaborated in detail about what the formation, organisation and structure of an effective army should be. During the medieval era, such specialistsmanuals were rare, but the Muslim chroniclers of India did write about the processes and events of the battles as part of the history they wrote. Special mention should be made of a few them here: Fakhr-i-Mudabbir, Minhaj-i-Shiraz, Zia-uddin Barani, Abbas Khan Sarwani, Abul Fazl and Mirza Nathan. Fakhr-i-Mudabbir's Adab al-Harb wa-l-shaja $\Box a$ or the etiquette of war and chivalry is a complete manual on the art of war. However, as he had no connection with Bengal, his accounts are not directly related with the military history of Bengal. But they are important, because the Muslim invaders of Bengal were actually

accustomed to the weaponry and technique discussed in his manual when they arrived here. The writings of Barani, Sarwani, Mirza Nathan and Abul Fazl are not like manuals, they all wrote historical accounts, but their accounts are full of military details.

Analysing these sources, many modern historians tried to compile a military history of the period in concern. Irvine's legendary book, *Army of the Indian Mughals* is a pioneering work. More recently, J.N. Sarkar has compiled minute details of the medieval warfare in India. Sarkar's descriptions of the army organizations is in the context of greater India, however, the same is also applicable in the context of Bengal as well, apart from a few minor differences. There is no such work specifically on the army organisation of the Sultanate era, even on Indian context. However, I. H. Qureishi's *Administration of the Sultanate of Delhi*, and S A Q Husaini's *Arab Administration* has some discussions on the topic as part of general administration.

The following classification of the army is based on Sarkar's study cited above. It should be noted here that in his *Art of war in Medieval India* as well as in Fakhr-i-Mudabbir's manual, the term 'army' is taken for the ground forces, i.e., the cavalry and the infantry. In Bengal, however, the

naval force was equally important. Therefore, in this study, the term army is used to denote all the forces, including navy. There was, however, no air force during the medieval age, as the technology was not invented by then.

4.1 The Recruitment and Types of Army

Since the ancient days, the recruitment and maintenance of army had gone through a gradual development process. The armies of the Vedic Aryans probably consisted of armed retainers of the King and the tribal host; later on the military profession was restricted to a special class or caste, the *Kshatriyas*. Kautilya refer to six types of soldiers, a classification most widely cited in Indian literary sources. They are:

i. The *maula-bala*, or the standing army of the state. It was the mainstay of the rulers in offensive and defensive wars. It might have been recruited from families of hereditary soldiers, depending on land grants and hence loyal to the ruling dynasty or 'the hard core of men bound to the ruling house by military honour and hereditary loyalty.' The standing army was usually small in size, consisting of feudal contingents, which constituted the bulk of the *maula* army, native force. Kautilya held that a

^{1.} U.N. Ghosal, A History of Indian Political Ideas: The Ancient Period and the Period of Transition to the Middle Ages, Bombay: Oxford University Press, 1959, p. 278

- standing army composed exclusively of Kshatriyas was superior to a heterogenous force.²⁰⁰
- ii. the Bhrita (Bhritaka-bala, Bhritya) or hired troops consisted of volatile mercenaries, coming from different regions.
- iii. the Sreni-bala has been differently interpreted as a kind of militia pressed into service by the king when necessary or as corporations of soldiers (ayudhajivisanghas) or 'companies of men of the same category under their own commanders' as Ghoshal explains.
- iv. The mitra-bala or Suhrid-bala or armies of a feudatory or an ally.
- v. The *amitra-bala* or *aribala*, wereled by *Arya* Commanders according to Kautilya. They were actually captive or enslaved soldiers of the enemy or those seduced by the aggressor state or deserters from the enemy, to be used to weaken the latter, but not to be trusted.
- vi. The atavi-bala (atavika), literally forest or wild tribes or hill men, e.g., Sabaras, Nishadas, Mlechchas under their own chiefs. This constitutes an irregular force of aboriginals and tribals. Kautilya advises the use of the last two categories for plundering enemy territory only, as it was dangerous to use them for other purposes.

^{200.} Kautiliya, Arthasastra, p. 364

Sukranitisara refers to two kinds of army: (i) the trained maula, the standing ary that was officered and manned by the State, supplied with weapons and conveyances at state expenses and (ii) the untrained sadyaska, improvised militia, enlisted by conscription or voluntary service, untrained and unregimented with their own captains responsible for their own arms, accourtements and conveyances. These two categories were respectively described as the efficient (sara) and the inefficient (asara). ²⁰¹

The Muslim army was also mainly of two types, regular and feudal. For the greater part of the pre-Lodi period of the Sultanate of Delhi, the government made recruitment directly, but under the Lodis, the army assumed a tribal basis and was commanded by the tribal chiefs and was not, therefore, under direct control of the sultan. For example, Jamal Khan SarangKhani maintained 12,000 horsemen. The Lodi*umara* also delegated their military authority to their subordinate chiefs and conferred on them military *iqtas*. Jamal Khan Sarang Khani had granted MiyanHasan the parganas of Sasaram and Tanda which could feed 500 horsemen. Data the parganas of Sasaram and Tanda which could feed 500 horsemen.

^{201.} Sukracharya, Sukranitisara, pp. 82-83

²⁰² Abbas Khan Sarwani, *Tarikh-i Sher Shahi*, translated and edited by S.M. Imamuddin, Dacca: University of Dacca, 1964, pp. 5-6 (hereafter Sarwani, *Tarikh-i Sher Shahi*)

^{203.} Sarwani, Tarikh-i Sher Shahi, p. 12

^{204.} Sarwani, Tarikh-i Sher Shahi, p. 12

Sher Shah Sur retained the tribal pattern of army organisation partly, but he also made recruitment directly. He, therefore, allowed his umara to recruit troops from their tribes: Azam Humayun Niyazi maintained 30,000 horse²⁰⁵ and Shujast Khan 12,000 horse.²⁰⁶

The Afghan *iqtadars*, therefore, commanded their troops in time of war and were coordinated by the supreme command of the Sultan. Abbas Khan Sarwani records that during the battle of Kanauz Sher Shah ordered each of his chief to return to his own followers and to remain with them and he himself went through the ranks of the army and set it in proper array.²⁰⁷ In the actual battle order at Oanaui, the Niyazis had their tribal commanders in Haibat Khan Niyazi and Isa Khan Niyazi, the Jalwanis were commanded by Rai Husain Jalwan the Sarwanis were led by Isa Khan Sarwani Kakbur, Miyan Ayub Kakbur Sarwani, Saif Khan Sarwani and Bijli Khan Sarwani. 208 The Kiranis under their tribal leaders Jalal Khan, (Kirani) son of Shah Taj Khan and

^{205.} Sarwani, Tarikh-i Sher Shahi, p. 194.

^{206.} Sarwani, Tarikh-i Sher Shahi, p.182.

^{207.} Sarwani, Tarikh-i Sher Shahi, pp. 12, 192.

^{208.} Sarwani, Tarikh-i Sher Shahi, p. 110.

SulaimanKirani²⁰⁹ faced Yadgar Nasir Mirza.²¹⁰ The Lodis had as their commander Qutb Khan ShahuKhail Lodi.²¹¹

This dichotomy in recruitment continued under the Mughals. The Emperor recruited only a few cavaliers called as the Ahadis, Dakhilis and Yasawals, some infantry and artillery, directly. But the troops were directly recruited by some chief or leader, whose rank varied with the number of recruits. In other words the army was recruited through the officers (mansabdars). This had a great bearing on the constitution and loyalty of the army. It became mercenary or opportunist in character, ready to desert to the winning side or the highest bidder. As the intending recruits were required to find a patron, they attached themselves to a leader of their own race. Thus the army was heterogeneous and came to consist of Persians, Central Asiatic Turks, Afghans, besides Hindus and Indo-Muslims. There was another dichotomy in the differentiation between the irregular (silahdar) and regular (bargir) forces.

4.2 The Personel

Due to the method of recruitment, the medieval army of Bengal was obviously heterogeneous in character. There were different groups,

^{209.} Sarwani, Tarikh-i Sher Shahi, p. 110

^{210.} Abul Fazl, Akbarnama, Vol. I, pp. 351-352.

^{211.} Tarikh-i Sher Shahi, pp. 110, 113.

consisting of different tribes, races and ethnic background. The first Muslim invader, Ikhtiyaruddin Muhammad bin Bakhtiyar Khalji himself was a mercenary and he had built his army with such mercenaries united under a religious zeal to conquer the land of non-Muslims. He, however, took help from the indigenous groups while marching with his army. One such name is of Ali mech, a local tribesman, who helped his army while of the Tibbet expedition.²¹² Barani, while describing the events of Firuz Shah Tughlag's expedition to Bengal, clearly mentioned that Ilyas's army mainly consisted of 'Bengali paika's' even though he was a bit harsh in his criticism of the ability of the paiks. He also mentioned that the royal army was accompanied by contingents supplied by Hindu rais and ranas. His contemporary Shams-i-Siraj Affif has mentioned the name of one 'Sahadev', who was a commander of the 'laskar-i-Bangalah.213 The Mughals also followed the trend. Mirza Nathan' description of Islam Khan's struggle with the Bara Bhuiyan's, the local chieftains of Bengal, is full of references of the use of 'amitra-bala' of Kautilya, he compelled the defeated chieftains to provide armies with ammunition to fight for the

^{212.} Minhaj Tabakat-i-Nasiri (Bangla tr.), pp. 12-13

^{213.} Affif, Tarikh-i-Firuz Shahi, quoted in Abdul Karim, Banglar Itihasa Sultani Amal, p. 413

Mughals. Raja Pratapaditya of Jessore was later punished for not keeping his promise to do so.²¹⁴

In the Delhi Sultanate exclusive dependence on one section was sought to be avoided. A separate unit of soldiers of each nationality was formed, asFakhr-i-Mudabbir opines that the essential unity and singleness of purpose would be lacking in a heterogeneous army. Slaves constituted an important part of the army of the Delhi sultanate, there was a separate establishment *diwan-i-bandagan* for that.²¹⁵ Many of them had rose to prominence, commander of the army, or even Sultan.

The same applies to the context of Bengal. In fact, the slaves of African origin, known as the *Habshi*s rose to the throne of Bengal at one point. Historical literatures confirm that RukonuddinBarbaq Shah, the later IllyasShahi sultan of Bengal (1459-1474) brought some 8,000 slaves from Abyssinia to create a regiment of his personal guards, as he could not depend on the Turkic military force. He also appointed them to other high posts in the state. ²¹⁶ M R Tarafdar suggests,

'From the first decade of this century, there was a struggle between the Ilyas Shahi rulers and their allies, the Turkic elites and the Bengali Hindu feudal

^{214.} Mirza Nathan, Bahristan-i-Ghaybi (Bangla tr.), pp. 106-108

^{215.} Barani, Tarikh-i-Firuz shahi (Bangla tr.), pp. 35-53

^{216.} John Briggs, History of the rise of the Mahomedan power in India till the year A.D. 1612 (English translation of Abul Qasim Ferishta's Tarikh-i Ferishta), reprint, New Delhi: Oriental Books Reprint Corporation, 1981, vol. IV, p. 199

class. The rise of Raja Ganesh, a Bengali Hindu landlord- his accumulation of power, taking over the throne and establishing his dynasty was possible through this power struggle. ... Barbaq Shah realised that the solid, devastated Turkic elites were not dependable any more, whereas the Hindu elites were on the rise. A hundred years ago, the IllyasShahis used the support of these powerful local feudal forces to combat with Delhi, and in this way they had gained immense power. ... It is evident that Barbaq wanted to establish the *Habshis* as a powerful opponent to this feudal force.'²¹⁷

After the arrival of the Europeans in the region, specially the Portuguese mercenaries were frequently hired. Ghiyasuddin Mahmud Shah, the Husain Shahi Sultan of Bengal sought help from the Portuguese duiring his battle with Sher Shah.²¹⁸ This tradition continued until the Mughal era; both the Mughals as well as the *Bara Bhuiyan*'s had employed the *Firingi*'s.²¹⁹ They were hired as the 'Gun-masters'. For the artillery the Mughals at first depended on foreign Turks and Persians. Abul Fazl mentions among the 'many masters to be found among gunmakers' in Akbar's reign, Ustad Kabir and Husayn, who were 'Rumi's, or Turks. Sher Shah's cannons discovered in Bengal also mentions one Syed Ahmed Rumi as the gunmaster. It was during Akbar's day that they started to be replaced by foreigners, among others, the Feringhi mercenaries from Bengal.²²⁰

^{217.} M R Tarafdar, 'Tome Pireser Biborone Bangladesh', in Salahuddin Ahmed et al (ed.), *Abu Mohamed Habibullah Smarok Grontho*, Dhaka: Bangladesh Itihas Parisad, pp. 188-189

^{218.} Abdul Karim, Banglar Itihas Sultani Amal, p. 363

^{219.} J.N. Sarkar, The Art of War, p. 62

^{220.} Ibid

4.3 Organisation of Army Command

One of the most important aspect of the army is its system of command.

There are two different aspect of it, unity of command and the office of the commanders.

i. Unity of Command

Both during the ancient and medieval age, the idea of unity of the command under a supreme authority was emphasized. Fakhr-i-Mudabbir and Amir Khusrau of the Delhi Sultanate period and Mirza Rajah Jai Singh during the reign of Aurangzeb. Fakhr-i-Mudabbir's observation is picturesque but expressive: no army should have two amirs and two mandate-issuing (commanders) lest contradictions might crop up, just as two swords cannot be contained in one scabbard. Amir Khusrau rightly observes that an army without a leader 'becomes a mere mob.' The seventeenth century military despatches (Haft Anjuman) of Jai Singh emphasize: 'In war there ought to be only one chief, or the work will be mismanaged.' No such reference on the context of Bengal can be cited, however, the principle must have been followed here as well, as all the

^{221. &#}x27;0 kechlashkar do amir o do farmandahnabayedkekhilafuftad o hech do lashkar bad tar azkhilafnistkehargiz do shamshirdarekmiyannagunjad' quoted by J.N. Sarkar, The Art of War, p. 63

three authorities or their masters were somehow related to the history of the period under study.

ii. Army Officers

The systematic organisation of the command of army was present in both ancient and medieval period. Ancient Indian literature refers to certain officers of different grades to assist the commander-in-chief; as Kautilya places below the trio of the *senapati*, *prasasta* and the *nayaka*, some other officers in charge of the separate units of the four wings under *mukhyas* and *adhyakshyas*. Under the Delhi Sultans and the Mughals there were, besides the commander-in-chief, the 'ariz and (later on) the *Bakhshi* respectively.

The senapati of Kautilya was expected to have a complete mastery of the art of warfare in theory and practice and apply his knowledge of all military matters, training and fighting tactics etc., in directing the four wings of the army. Sukranitisara also sounds an essentially modern note: 'Those who are well up in Nitisastras, the use of arms and ammunitions, manipulations of battle arrays, and the art of management and discipline, who are not too young, but of middle age, who are brave, self-controlled, able-bodied, always mindful of their own duties, devoted to their masters and haters of enemies should be made commanders and soldiers whether they are Sudras and Kshatriyas, Vaisyas or descended from Mlechchas." The passage is highly

significant as it emphasises that appointments in the military department should not be made on caste and religious considerations. It emphasises the non-caste and secular character of the army and merit as the sole criterion of military service.

Usually it is the head of the state who acts as the commander-in-chief. To fight for protecting the people and maintaining and enhancing his position constituted the main function of the King. Like the masterful rulers and military geniuses Chandragupta Maurya, Samudragupta, Mahmud of Ghazni, AlauddinKhalji or Akbar, the most successfull Sultans of Bengal including Alauddin Husain Shah were commanders themselves and appropriate for themselves the honour and glory of doing great feats. But if the ruler does not lead the army himself for any reason, his first duty is to select a capable commander-in chief as a suitable substitute like Man Singh, Mir Jumla or Shayesta Khan, who all held the post of Subahdar of Mughal Bengal. According to al Mawardithe special commander had, 222

- a. to lead the army, look after individual warriors, inspect horses and equipment;
- b. to conduct the war and encourage the army;
- c. to apply military skill and technique for victory, to defend the army from a sudden attack and to select the best possible strategic position for attack;
- d. to observe military duties, see that no soldier deserts the army.

^{222.} Quoted by J.N. Sarkar, The Art of War, p. 65

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During the Sultanate period there was no permanent commander-in-chief. The Sultan was in theory the commander-in-chief of the army and he often led it in person. In his absence a noble was appointed to do so and was called *Sar-i-lashkar*, whose tenure lasted during the span of any expedition. Amin Khan was such a temporary commander in chief during GhiyasuddinTughlaqs march againsTughril.²²³

During the Mughal period, the Badshah was the commander-in-chief in theory and practice. However, in provincial adminstration, the subahdar imitated the emperor. Sometimes, however, the emperor as well as the subahdar selected the commander-in-chief on particular campaigns.

The post of Sar-i-Laskar also existed in the Bengal sultanate. In an inscription of Alauddin Husain Shah, Rukan Khan is mentioned as both Wazirand Sar-i-Laskar and claimed that he had captured Kamhar. Contemporary epigraphs refers to two more posts of generals, Sar-i-Khail and Jungdar. Sar-i-Khail was a subordinate to the Sar-i-Laskar, as the Triveni inscription of Rukonuddin Barbak Shah mentions that Sar-i-Khail Ulugh Ajmal Khan was a subordinate to the Sar-i-Laskar Iqrar Khan.

^{223.} Barani, Tarikh-i-Firuz shahi (English tr.), pp. 114-15

^{224.} Abdul Karim, Corpus of Inscriptions, p. 270-71

^{225.} JASP, Vol. 3, 1958, p. 96

^{226.} Abdul Karim, Corpus of Inscriptions, p. 147

iii. The 'Ariz and the Bakhshi

A post similar to that of a Quarter-master-General existed in the *Mahabharata*. Its holder had to maintain a register of the soldiers, arrange for the food and pay and exercise general supervision. In the ministry of war of the Delhi Sultanate (*Diwan-i-'arz*) the 'arizi- mumalik (entitled *Imadul-Mulk*) was responsible for military administration of the central army of the Sultan,—recruitment, fixation and payment of salary, inspection or review (muster-rolls), supply, transport and commissariat. He also kept muster-rolls for the soldiers recruited by the *Iqtadars* in the time of Alauddin. He accompanied the army as Quarter-master-General but did not direct war operations and policy. He was next to the Commander.

In the Mughal empire the officer responsible for military administration was the *Mir Bakhshi* or *Bakhs'hi-ul-mumalik* (lit. Paymaster-General but really Inspector-General of the Forces, supported by assistant *Bakhshis* under Aurangzeb). He had to enlist soldiers, pay their salaries, and arrange for musters, array the army and draw up a scheme of offense, assign positions to each commander in different divisions (e.g., Van, Centre, Right, Left, Rear) and transfer an erring officer to another position.

iv. The Decimal Sytem

What little is known about the military organization of ancient period indicates that there were sections, platoons and brigades. The army was based on a

decimal system of organization which was known to them. According to Kautilya the army units in ascending order were (i) a squad of ten chariots and 10 elephants under a *padika*, (ii) a platoon of a hundred (i e., ten *padikas*) under a *senapati*, (iii) a regiment of one thousand (i.e., ten *senapatis*) under a *nayaka* (general). ²²⁷

A decimal system was also the one common characteristic of military organization among the Muslims. The army of the Sultanate (1206-1526) was hierarchically arranged under commanders of different grades. But their exact nature is not very clear. According to Barani, Bughra Khan advised Kaiqubad to keep a large army organised on the old Persian model. The lowest unit was 10 horsemen under a *Sar-i-Khail*; and then through *Sipah Salar* (100), over 10 *Sar-i-Khails*; *amir* (1,000) over 10 *Sipah Salars*; *Malik* (10,000) over 10 *amirs'*, the highest was 100,000 under a *Khan* over 10 *maliks*. ²²⁸ Similar arrangements are found in Assamese army, where the *Paiks*, arranged by *Khels* or squads with a hierarchy of officers, *Bora* commanding 20, *Saikia* 100, *Hazarika* 1000 paiks respectively. ²²⁹

The entire military system came to be re-organised by Akbar during the Mughal era. His mansabdarisystem was also based on the decimal system.³ In mansabdari system every member had a rank, place or status (mansab)

^{227.} Kautilya, Arthasastra, book X, chap 6, verse 45

^{228.} Barani, Tarikh-i-Firuz Shahi (English tr.), p. 145

^{229.} J.N. Sarkar's analysis based on the Assam Burunji. See, The Art of War, pp. 75-76

defined in military terms. Civil officers were awarded the same rank, he might not have any military duty. So the military connotation of the term mansab was merely a symbol. The term was used in Central Asia, but it did not mean any elaborate system. Again, the idea of putting civil servants on military payroll was not unknown in the time of Alauddin Khalji. Humayun grouped all his civil and military servants who contributted to the strength and prosperity of the state as ahl-i-daulat. But the institution of the mansabdari system was an innovation of Akbar.²³⁰ In theory there were 66 grades covering mansabdars or commanders of ten horsemen (mirdah, later of twenty or bisti) to those of ten thousand (later 12,000) of whom those above 5000 were earmarked for royal princes. But in practice there were only 33 grades. It is not the purpose here to enter into the various complexities and sources of confusion and controversy about the system. A mansab was merely a personal rank (zat). It did not indicate the actual number of troops commanded (suwar). The suwar, again, was a symbol, a changing multiple of the actual number of horsemen. The mansabdars were divided into three classes; first class, if the zat and suwar ranks were equal; second class, if the suwar was half of zat, or more; third class if the suwar was less than half. Sometimes the men under a

^{230.} Mansabdari system has been one of the favourite topic of research. There are many analysis available on it. However, apart from Irvine's book on the Mughal army, the most important one is done by Abdul Aziz, Mansabdari System and the Mughal Army, Lahore: Abdul Aziz, 1942.

mansabdar could have additional horses, indicating his additional rank and responsibility. Some mansabdars were given additional but conditional (mashrut) ranks, which ceased if they left the post.

4.4 Systems of Organisation

Of the traditional four limbs (*chaturanga*) of the ancient Indian army only three survived in the medieval period: infantry, cavalry and elephants. The other one, the wheeled chariot though at one time had introduced a revolutionary technique in peace and war and was decisive in battle, did not have that importance during the middle ages. Ancient and early medieval theorists considered the infantry to be numerically the main strength of the army, besides a medium quantity of horse and a smaller number of elephants. But in importance, elephants ranked the first, infantry and cavalry were subsidiary. This traditionally organised Indigenous army thus proved to be inferior to the Muslim invaders who had a predominance of cavalry.

4.4.1 Infantry

As is mentioned above, Infantry was the mainstream of the traditional Bengali army before the arrival of the Muslims. They were called the *Paiks*

during the sultanate era, and remained to be one of the most important organ of the army.

During the Sultanate period *Paiks* were mostly local Hindus and slaves. Bengal, according to Barani, supplied the best *Paiks*.²³¹ They were mostly armed with the sword and shields, lances and other weapons of Personal combat. A band of archers also included in the infantry. In later times, after the arrival of personal fire-arms, they were provided with match-lock guns. Barani, however criticised the ability of the Bengali paiks as well while describing the events of the battle of Ekdala. But that seems to be due to his partiality towards his master, Firuz Shah Tughlaq.

Mughal infantry was grouped by Abul Fazl into nine categories of persons under *Piyadagan*, also called *Ahsam*, a miscellaneous body including (i) matchlock-bearers (banduqchis), (ii) porters (darbans), (iii) *Khidmatiyas*(awaiting orders) belonging to highway robber caste (mawis), (iv) fast runners or couriers (mewras from Mewat); dakmewras were first instituted by Akbar; (v) swordsmen (Shamsherbaz), famous for their agility and bravery, (vi) wrestlers and boxers (Persian and Turani), Indian athletes, performers of Gujrat (mals), stone-throwers etc.; (vii) slaves (chelas),

^{231.} Barani, Tarikh-i-Firuz Shahi (English tr.), pp. 122-23; Quoted by Quraishi, Administration of the Sultanate of Delhi, pp. 137-38 and J.N. Sarkar, The Art of War, p. 96

originally prisoners of war or children rescued from famine, (viii) litter-bearers (*kahars*), best of whom coming from the Deccan and Bengal and (ix) *dakbilis* or state-paid foot-soldiers or supplementaries under mansabdars. But this arm differed from the semi-European trained *paltan* of the late 18th century and was not at all well-developed as a fighting force. "Until the middle of the eighteenth century, when the French and English had demonstrated the vast superiority of disciplined infantry, the Indian foot-soldier was little more than a night-watchman, and guardian over baggage either in camp or on the line of march."²³²

The Assamese army consisted of infantry and navy, besides elephants, artillery and cavalry. But on land the army mainly depended on the *paiks*. The *paik* system was the basis not only of the entire socio-political but also of the military organisation of the Ahoms as well. The *paiks* were grouped into *kheis* (1000 or 5000 men) at first (1607) on a functional and later on a territorial basis. They were not paid in cash. They were registered and placed under different officers, and their number was occasionally checked. But they could appeal against oppression. There was provision for regular training throughout the year, not only for the troops but also for their

^{232.} J.N. Sarkar, The Art of War, p. 96

officers, in use of firearms and other weapons like bow, arrow, spear, etc.

Many kings used to impart training to them.

During the late Mughal times, foot soldiers were often called the *Sipahi* or sepoy. The first mention of the use of Sepoy units in India was that by the French in Mahe (1740) and Mangalore (1742), The credit for first introducing them in the Eastern provinces belonged to the French (and not to the English) and to Dumas (and not Dupleix) in 1742. The Bengal native infantry was a loose mosaic of regiments each under a European officer. It was towards the end of the eighteenth century that the Company tried to transform the "laxly disciplined Indian mercenary troops of Mughal and Maratha days into a disciplined sepoy army."²³³

4.4.2 Cavalry

As compared to infantry the cavalry was tactically the more important constituent of the army in ancient and medieval India. But the emergence of the domesticated horse to importance as a war machine in ancient India was very gradual. Vedic and Epic cavalry without saddles or stirrups was ineffective. However, Kautilya envisaged its role alike in the beginning as well as in the thick and the end of the fight: "Disturbing the enemy's halt; gathering the troops; curving, circling, miscellaneous operations; removal

²³³ Irvine, The Army of the Indian Moghuls, pp. 106-7

of the rear; protection of the broken army; and falling upon the broken army."234 He refers to a state superintendent of horses (asvadhyaksha). Somesvara Chalukya, the twelfth century author of Manasollasa, spoke of the cavalry as the key to fame. A science of horses (Asva-Sastra) grew up. Horses came to be classified according to their breed, age, physical appearance, strength and proportions. Being of two types, heavy and light, cavalry was also very carefully trained for tactical war purposes; the first, deployed in the centre of the line to deliver charges, to break through obstacles, to penetrate the enemy lines from the front; the second to be positioned on the wings, to give cover to flanks, to ensure security of the army in entrenched positions, and expeditious communications with its different parts, to obstruct enemy supplies and reinforcements, cover retreats of infantry and artillery, and to encircle and pursue the enemy. In a word, the horse imparted mobility to the army.²³⁵

The cavalry needed an extensive supply of mounts, especially when a trooper had two horses, with one for riding and the other for equipment and food. The best horses were, according to *Manasollasa* either imported from Persia and Arabia or purchased from areas constituting Afghanistan and

²³⁴ Kautilya, *Arthasastra*, Book X, Chap. 22, p. 525

^{37.} Kautilya, Arthasastra, Book X, chapters 4, 5, p. 529-40

West Pakistan (Kamboja and Sindu). The Hindu kingdoms, both in Northern and Southern India, suffered from thefatal lack of good horses.

Bengal's natural but fundamental deficiency in well-bred horses came to be paralleled by another fatal defect in equipment and weapons. While the horses were protected by shields and armour-clad, their riders were tunics, breast plates or coats of mail and helmets and used long lances, spears, swords and nooses as weapons.

But the greatest weakness of the indigenous cavalry on the eve of the Turkish conquest was the absence of mounted archery (except, perhaps during the Gupta age). The Turkomans and the Turks, possessed an undisputed military superiority over the Indians in arms and horses, and stirruped horses to boot. The use of the stirrup gave the rider complete mastery of the steed and enabled him to stand thereon, use his bows, lances and matchlocks. They were military men and were mostly well-mounted archers. The Turkoman horse, excelling even the proverbial Arabian horse was like.²³⁶

...the noblest in the whole of Central Asia and surpasses all other breeds in speed and endurance, intelligence and faithfulness and a marvellous sense of locality. The Turkoman horse is tall with a long narrow body, long thin legs and neck ...

^{236.} J. M. Hussey (ed), Cambridge Medieval History, vol. I, p. 331

on their predatory expeditions the Turkomans often cover 650 miles in the waterless desert in five days They owe their power to the training of thousands of years in the endless steppes and deserts, and to the continual plundering raids, which demanded the utmost endurance and privation of which horse and rider were capable.

The Tartar hosts, like their Mongol predecessors, comprised a medley of cavaliers of the steppes of Central Asia and carried the same type of arms. Amir Khusrau says that the Turkish horsemen were so swift that "the crow of victory did not build its nest except on their bows." Horses were used also in carrying baggages and crossing rivers.

Under the Mughals the cavalry continuad to remain the most important part of the army. It was, according to Monserrate, "the flower of the army." In fact, "the army was essentially an army of horsemen. The Mughals from beyond the Oxus were accustomed to fight on horse-back only; the foot-soldier they despised; and in artillery they never became very proficient." Explaining Akbar's fondness of horses, Abul Fazl says that these were "of great importance in the three branches of the government, and for expeditions of conquest" and "a means of avoiding much inconvenience." The cavalry consisted mainly of mansabdars, their tabins (or followers), while the ahadis were a special class of horsemen recruited individually

^{237.} Father Monserrate, The Commentary of Father Monserrate, Society of Jesus, on His Journey to the Court of Akbar, (English tr.) J.S. Hoyland, Bombay: Oxford University Press, 1922, pp. 68-69

and moving round the Emperor's person, owing allegiance to none else, under a separate command. Individual troopers enlisted under some bigger or richer men, who in turn joined greater commanders.²³⁸

Good horses came to Akbar's court in large numbers from Iraq-i-Arab, Iraq-i-Azam, Turkey, Turkestan, Badakhshan, Shirwan, Qirghiz, Tibet, Kashmir and other countries with "droves after droves" from Turan and Iran, as Abul Fazl says. Suitable arrangements were made for horse-dealers under an officer called *Amin-i-Karwan Sarai*. 239

The main supply of horses in Bengal came from Kuch Bihar region, where the *tanghan* or *taghan* 'strong and powerful' horses were breed. Just prior to the arrival of the Muslims, horses were probably imported from the north-eastern part of the region to the capital.²⁴⁰ Hence, Balktiyar was mistakenly thought to be horse-trader when he arrived at the city gate of Nadia, as is claimed by Minhaj.²⁴¹

There were two classes of cavalry during the Mughals:

- i. The Bargir, state mounted and equipped
- ii. The Silahdar who brought their own horses.

^{238.} Abul Fazl, Ain-i-Akbari, Vol. I, p. 249

^{239.} Abul Fazl, Ain-i-Akbari, Vol. I, pp. 141-45

^{240.} For a detail on the trading and use of horses in early medieval Bengal, see, Ranabir Chakravarti, "Early Medieval Bengal and the Trade in Horses: A Note", *Journal of the Economic and Social History of the Orient*, Vol. 42, No. 2, 1999, pp. 194-211

^{241.} Minhaj, Tabakat-i-Nasiri (Bangla tr.), pp. 26-27

A unit of 25 troopers (bargirs) was under a havaldar. Five units (of 125 men) were under a jumladar', ten jumladars (or 1250 men) were under a hazari, five hazaris (or 6250 men) were under a Panjhazari. The whole was under a Sarinaubat, who obeyed only the King, the supreme military and civil head of the State. The silahdars (irregulars) were organized on a different plan but were under the same Sarinaubat. The superiority of the regulars contributed to better discipline.

In the Assamese army, the cavalry was under special officers called *Ghora Baruas* or Superintendents of horses. But gradually its importance declined and the Ahoms developed a horror of horses. As Talish says: "If a single trooper charges a hundred well-armed Assamese, they all throw down their arms and run away and if they cannot flee they put their hands up to be chained (as prisoners)." This decline was due to the peculiar geographical features of Assam. Vast forests, hills and rivers and rains made movements of horses difficult, while humid climate especially during the rainy season militated against horse-breeding. The same connotation applies to the context of Bengal.

^{242.} Shihabuddin Talish, Fathiya-i Ibriyya, (English tr.) Jadunath Sarkar, JASB, Vol. III, New Series, No. 6, June 1907, p. 420

4.4.3 Elephantry

There are references of the use of war elephants since the ancient times. But during the medieval age, it was the most important organ of the army in Bengal. Not only that, Bengal was the principal source of supply of elephants for the rulers of Delhi. There are many references of the 'Bengal elephants of Lakhnauti' by contemporary chroniclers.²⁴³ Abul Fazl mentions that elephants were found in the province of 'Bengal, Orissa and Satgaon'.

Grandeur apart, elephants in India, too, were considered indispensable as a fighting machine and as a vehicle or transport agent. They possessed strength and their appearance was frightful. "This wonderful animal," writes Abul Fazl, "is in bulk and strength like a mountain; and in courage and ferocity like a lion. It adds materially to the pomp of a King and to the success of a conqueror; and is of the greatest use for the army. Experienced men of Hindustan put the value of a good elephant equal to five hundred horses; and they believe that when guided by a few bold men armed with matchlocks, such an elephant alone is worth double that number." ²⁴⁴ In

^{243.} For a detailed study of the use of war elephants in India and in Bengal, see, Debraj Chakravarty, "Elephants in pre-modern India' in Kaushik Roy and Peter Lorge (eds.), Chinese and Indian Warfare - From the Classical Age to 1870, Oxford and New York: Routledge, 2015, pp. 74-90

^{244.} Abul Fazl, Ain-i-Akbari, pp. 213-215

siege warfare they with their heads sheathed in brass or steel plates, served as battering rams (divarafgan o darwazashikari) and as rank-breaker (safshikari), when infuriated (mast). Elephants provided with iron sheets or armour (pakhar), carrying iron towers or armour-plated canopied seat ('imari) supplied with holes, through which soldiers shot arrows, fiery as well as poisonous, and naptha bottles, served the purposes of modern tanks and armouries (zarradkhanas) and siege machinery. Manjaniqs placed on elephants hurled stones and liquid fire on the enemy. Sher Shah is stated to have 5000 elephants. Elephants were used in large numbers carrying musketeers or archers and small cannon (gajnal).

The elephant stables (pilkhana) were under Shahnah-i-pil. Elephant drivers (pil-banan) had to be men of unstinted loyalty. Trained Indian elephants were often driven by local Hindu drivers (under a muqaddam). Akbar divided the imperial elephants into sections under honest daroghas and some were for his exclusive or special use (Khasah). There was a Superintendent (faujdar) over a troop, ring or circle (halqah) of 10, 20 or 30 elephants. Several halqahs were placed under every noble.

4.4.4 The Navy

Because of the geographical condition of Bengal, naval warfare has always been a favourite mode of fighting in the region. Hence, the navy was one of the most important organ of the military organisation here, unlike it was in the contemporary north India. Bengal was actually considered as 'the home of Indian ship-building.' The region, crisscrossed with hundreds of rivers had a tradition of river flotilla, carefully nurtured by the activities of the 'Gaudas', the Palas, Varmans, Chandras and the Senas. The Pala navy was powerful and had some control over the sea. The naval chief was styled Nakadhyaksa, probably a mistake for Navadhyaksa or Naukadhyaksa (or Superintendent of ships), renamed Naubala-Vyapritaka, a term which denotes the real character of the fleet. The Bengal fleet advanced up the Ganges on a conquering expedition under Vijayasena (c. 1096-1158).²⁴⁵ The Muslim rulers, too, realised the importance of an admiralty department. During the six months of rains, there was no way to control the situation with cavalry in Bengal, boats and paiks (footmen) were the alternative. Sultan Ghiyasuddin Iwaz Khalji (c. 1213-27), was the one among the Muslims who "first built flotilla of war-boats as indispensable branch of his armament," which henceforth played an important part in the history of the country. The Delhi Sultans, weak in their naval power, could not make much headway against Bengal, as is

^{245.} B.K. Majumdar, The Military System In Ancient India, Calcutta: Farma KL Mukhopadhyay, 1960, pp. 46-48

proved by two naval expeditions of Sultan Ghiyasuddin Balban (1266-86) against Tughril Khan, governor of Bengal, who had become independent and also by Firuz Tughlaq's two expeditions against Lakhnauti (in 1353 and 1360) then under Ilyas Shah and Sikandar Shah respectively.

The nautical aptitude of the Bengalis was organised as a source of strength by Alauddin Husain Shah (and his successor) who used the Bengal flotilla in various engagements. The admiralty department seemed to have been under the *mir-i-bahr* (admiral). The navy grew weak towards the end of the Husain Shahi dynasty. The *Bara Bhuyans* also developed the naval activities in their struggle for independence against the Mughals. Mirza Nathan's account of the expeditions against the local chieftains shows that the Mughals, realising the importance of navy in the context of Bengal, had developed and used it with deadly precision. He mentioned that *Katari*, *Maniki* and *Batila* type of boats, armed with big cannons were used to make pontoon-bridges, *Kosha* boats were used to guard that bridge and *Thatari* boat was used for carrying arms and other equipments.

There were several crews involved in a traditional warship during the medieval period, some of them were²⁴⁷:

^{246.} Mirza Nathan, Bahristan-i-Ghaybi, Bangla version, pp. 52-73

^{247.} J.N. Sarkar, The Art of War, pp. 258

- i. The Nakhuda(Navakhuda) or commander, directing the course of ship;
- ii. The Mu'allim or captain, who knew the soundings of the ocean, astronomy (knowledge of stars) and guided the sea safe to the destination);
- iii. The *Tamdil*, the chief of the Khalasis or Kharwas or sailors.
- iv. The *Nakhuda-Khashab*, supplying firewood and straw to the passengers and assisting the lading and unlading.
- v. The *Sarhang* or mate, who superintended the docking and launching of the ship and often acted for the captain.
- vi. The *Bhandari* or store in charge.
- vii. The *Karrani* or ship's clerk or writer or accountant, who also served out water to the passengers.
- viii. The *Sukkangir* or helmsman, steering the ship according to orders of the captain, not more than 20 in a ship.
 - ix. The *Panjari*, the observer, looking out from the top of the mast and giving notice on sighting land or any ship or impending storm or any other thing.
 - x. The *Gumti* or a kind of *Khalasi* who throw out the water leaking through the ship.
 - xi. The *Topandaz* or *deg-andaz* or gunner, for naval fights, the number depending on the size of the ship.
- xii. The *Kharwa* or common sailors, who used to set and unfurl the sails, dive in water, stop leaks and release the anchor sticking fast to the ground.

The fleet of naval boats were called as the *Nawara*, and they were used mainly on three different purposes:

i. As a defence against their Turk overlords of Delhi,

- ii. To fight coastal wars against the Rajas of Arakan
- iii. To invade Assam along the Brahmaputra River.

The first one, as already mentioned is best illustrated in the two expeditions of Firuz Shah Tughlaq. Barani informs that his crossing of the Kosi River was blocked by the Bengal *nawwara* that patrolled the rivers and defended every crossing point—at last Firuz marched north and with help of a local Raja managed to cross the river at the foothills, where it was shallow. The Bengal ruler fled to the island-fortress of Ekdala, which was built of clay and lay between two looping rivers. Both of Firuz's efforts to take this fort but failed because he did not have any naval capability.

Due to the scarcity of contemporary documents, however, not much can be said about the navy during the sultanate period. Stray mentions in different sources only confirm that Sultan Husein Shah had successfully used his *Nawara* in his battles against Kamrup and Kamta.

During the Mughal era, a few sources are useful. Mirza Nathan's diary is one of them, as he himself was involved in the battles. Naval warfare of the Bengal subahdari continued to be used after him, as we can find some details in Shihabuddin Talish's diary. Talish mentioned that Mir Jumla used fleet of 323 ships and boats in his expeditions against Pran Narayana of Koch Bihar under *Mir-i-Bahr* Ibn Hussain. The contingent, apart from the locals, also comprised of Portuguese, English, and Dutch

sailors.²⁴⁸ But as this expedition ended in a reverse for the Mughals, the Bengal flotilla was almost ruined. It was again rebuilt by Shayesta Khan. Tavernier, the French traveler who visited Dhaka during Shaista Khan's governorship, had actually described the locality as a big and lengthy village inhabited for the most part by carpenters who built boats. Boats were also built at river ports such as Hughli and Balasore.²⁴⁹ Thus, in a short time, nearly 300 ships were built. Some Portuguese pirates of Chittagong, realising probably the growing strength of the Mughal navy, came over to the Mughals with 42 *jalia* boats. In the final count, the imperial fleet seems to have consisted of 288 vessels of all kinds: 21 of them being gun-boats or *ghurabs*, 157 fast-moving *kosa*s and 96 *jalias*. During the conquer of Chittagong, Mughal navy also captured 132 war vessels from the Arakanese, most of whom were longer, sea-going boats called *Dum* and *Khalu*.

The Bengali flotilla, however, did not match the fire-power the Europeans developed during the contemporary times. They sea-routes were completely dominated by the Europeans. A Danish report had attested that the Bengalis literally trembled when they came across the Danish ships in the high seas. The lighter and swifter Danish ships with better navigational facilities and instruments were fitted with formidable canons, more devastating than the rudimentary small canons of the Bengali ships. The report

^{248.} Shihabuddin Talish, Fathiya-i Ibriyya, p. 418-22

^{249.} Jean Baptiste Tavernier, *Travels in India*, English Translation by Valentine Ball, London: MacMillan and Co. 1889, Vol. 1. pp. 113-142

indicates that the Danish ships had recruited English sailors. Later, the English had become a more formidable power in the naval battle. They even tried to overpower the Mughal at one point, but Subahdar Shayesta Khan's clever thinking halted the process, at least temporarily. Shayesta Khan did not try to face the English force, heavily armed with six ships in the naval route at all. Rather, he decided to confront them in the land, with his superior cavalry and infantry which ultimately paid off as the English did not managed to get down from their boats.

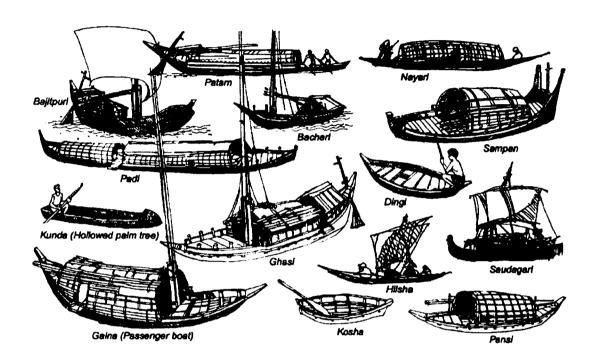


Plate 04: Different Types of Boats in Bengal

Chapter - V

The Weapons and Armoury

The history of the development of weaponry is actually a mirror of the development of human civilization itself. Since the earliest days of civilization, the greatest challenge in front of the human remained to protect themselves. Initially the fight was against the adversities of the nature, as well as from the possible attack of wild animals. In course of time, newer requirements were added, men needed to invent tools for hunting and processing hunted animals for meat. The early tools like the axe, javeline and arrowheads were then started to be used in war, when human civilization developed more, and they started to fight among themselves. They have become 'weaponry'. Military historians and experts tried to explain the term in many ways. However, to summarize, the term can be used as to define the items used by the military personnel during war. It includes combination of equipment, vehicles, structures and communication systems, used in warfare.

Before anlysing the weaponry in medieval Bengal, an idea of the development of weaponry in the ancient period is essential. According to ancient Indian tradition, weaponry is mainly of two kinds, *Astra* and

Sastra. The Astra corresponds to missiles of modern times, as they are thrown, by means of charms, machines or fire. On the other hand, Shastra includes short arms like sword, dagger etc. Weaponry is explained in many ancient Indian texts²⁵⁰. Among them, Kautiya, the Mouriyan pundit has given a detailed idea about it. He classifies weaponry into four categories:

- i. Yantra or machines
- ii. ayudha or weapons proper
- iii. avarana or shields

and iv. upakarana or other tool used in war

He also mentioned the purposes of *Shastra*, offensive and defensive reasons during fighting on the battlefield, for defending a fort and for battering down enemy ramparts. Another form of classification is found in *Dhanurveda*, where also four classes of weapons are mentioned.²⁵¹ They are:

- i. mukta or thrown
- ii. amukta or not thrown
- iii. *muktamukta* either thrown or not thrown
- iv. yantramukta (thrown by machines)

^{250.} For a detailed study, see, V.S. Shajan, Ancient Indian Artilleries: A Critical Study Based on Sanskrit Sources, unpublished PhD thesis, Sree Sankaracharya University of Sanskrit, India, 2012, pp. 56-127

^{251.} Purnima Ray (tr.), Vasihsta's Dhanurveda Samhita, Delhi: J.P. Publication House, 2003. p. 4; for an analysis of weaponry in Dhanurveda, see E. D. Kulkarni, "The Dhanurveda and its Contribution to Lexicography", in Bulletin of the Deccan College Research Institute, Vol. 14, No. 3 (December 1952), pp. 208-220

The Agni Purana mentions five classes²⁵²:

- (i) yantramukta or thrown by machines
- (ii) pani-mukta or thrown by hand
- (iii) mukta-sandharita or thrown and drawn back
- (iv) amukta or not thrown and
- (v) natural weapons like the fist.

Sukracharya²⁵³ has arranged the armed combats in order of excellence: the war with charmed instruments i.e. arrows or other arms is the best; that with mechanical i.e. use of balls and gunpowder is good, that with weapons (in absence of firearms or other missiles) e.g., by *kunta* (kind of spear) or sword is inferior and that with hands (i.e., duel or hand-to-hand fight) is the worst.

The same kind of classification can be done for the medieval weapons as well, because apart from the innovation of firearms the basics of armoury were the same. J.N. Sarkar, however, correctly opines that such classification does not appear to be helpful to the modern reader. Instead, he proposes arms and equipment to be divided into two broad categories:

^{252.} B.K. Chaturvedi (tr.), *Agni Purana*, New Delhi: Diamond Pocket Books Ltd, 2004, pp. 78-79

^{253.} Sukracharya, Sukranitisara, Chapter IV, Section VII, pp. 235-241

offensive and defensive.²⁵⁴ Muslim chroniclers of the medieval period often used the same word, *Silah*, to describe both defensive and offensive weapons. However, the division can be applied to classify the arms and armours throughout the period under study. Apart from that, fire arms like guns and cannon began to be used as special arms during the medieval times. Hence, the arms of Medieval Bengal can also be discussed under the same classifications.

5.1 Offensive Weapons

On a general understanding, it is the offensive weapons that are considered to be arms. Designed to harm the opponent, offensive weapons can again be classified under three distinct categories:

- i. Weapons for distant attack
- ii. Weapons for use at close quarters

and iii. Artillery

5.1.1 Weapons for distant attack

The earliest weapons human invented were the weapons of distant attack.

Stick and stone were the earliest form of missiles used by mankind. As the civilization advanced and so did technologies, discovery of metals like

^{254.} J.N. Sarkar, Art of War, p. 112

copper, iron, silver, gold, bronze and steel, arms and armours also developed into new forms. The stick was adapted for piercing or striking purposes in the form of the arrow, dart, sword, javelin, spear and the club etc. Among them, javelin, arrow and dart were the basic missiles, and they were also developed and used in Bengal.

The bow and the arrow

The bow (*Dhanusha* in Sanskrit and *Kaman* in Persian) is one of the oldest projectile weapons. Different types of arrow-heads have been discovered from the ancient archaeological sites such as Wari-Bateswar. It was always one of the most important weapons since the early days. Even after the invention and increasing use of firearms, it continued to be the most favourite weapon throughout the medieval era. In the marshy lands and riverine tract of Bengal, guerrilla warfare was always a very effective method to use, and "the treacherous noiselessness of the arrow" makes it a favourite. The Sanskrit texts cited above indicates its existence in early Bengal, so does many sculptures of specially Durga and her son Kartikeya, whose images were erected with bow and arrow as their *ayudha*. It was a favourite weapon of the invading Turkish army as well, they were actually one step ahead in this regard and the Turkish cavalry was famous for their

excellence in shooting while riding their horse. Both Irvine²⁵⁵ and Sarkar²⁵⁶ concluded that it was one of the main reasons for their success over the indigenous army. However, it does not mean that mounted archery was not known to the Bengali's. An eighth century terracotta plaque from Paharpur²⁵⁷ shows a horse-rider shooting an arrow, which confirms that from at least the Pala era the Bengali's were accustomed with mounted archery. However, Sarkar thinks the skill was on the decline during early medieval period among Indians, which is also true for the Bengalis.²⁵⁸ It was extensively used even during the movement of 1857, and Irvine believes the last occasion when it was used was in 1894.²⁵⁹

Various kind of materials were used to make the bow. According to the *Dhanurveda*, horn was regarded as the best material. However, thirteenth century account of Fakhr-i-Mudabbir²⁶⁰ informs that the most widely used material for it among the Indians was wood, specially bamboo and cane. The reason behind that is that both are flexible as well as strong, and as

^{255.} William Irvine, Army of the Indian Moghuls, pp. 90-95

^{256.} J.N. Sarkar, Art of War, p.112

^{257.} Uma Mukhopadhyay, Socio cultural life in Ancient Bengal as Depicted in Terracottas from Earliest Time to Twelfth Century AD, unpublished PhD Thesis, University of Calcutta, p. 223

^{258.} J.N. Sarkar, Art of War, p.112

^{259.} W. Irvine, Army of the Indian Moghuls, p. 91

^{260.} Fakhr-i-Mudabbir, Adab al-Harb wa-l-shaja □ a (The etiquette of war and chivalry). See, Bernard A. Boit, The Fruits of Adversity: Technical Refinements of the Turkish Composite Bow During the Crusading Era, unpublished MA Thesis, Ohio State University, USA, 1991

they were easily available in the marshy lands of Bengal, the statement may also indicate its use in Bengal. Later on, metals, specially iron and copper were also used.

There were three different varieties of bow, (i) self-bow: made of one material like wood; (ii) built bow: made of more than one piece of the same material; and (iii) the composite bow: shorter, stiffer and made of more than one such as wood, horn and metal together. The last variety was very poplar among the Iranian and the Turkish nomads. Fakhr-i-Mudabbir has given details of making the composite bow with two pieces of wood or horn joined together by a metal band, 'the most dreaded weapon of antiquity' according to him. The bow strings (*jya* in Sanskrit; *zih* in Persian) were made of hide, bamboo bark, silk, animal-tendons or cotton threads.

Even though archery was a favourite war-technique among the indigenous Bengali's, they could not match the invading Turks due to two different reasons; firstly, their technique and equipments of making bows were inferior. Minhaj, who has rarely given any detail of arms, did mention that while on his Tibet expedition, Bakhtiyar had to fight with 'an army of infidels whose arms armoury were all made with bamboo' and they were all

archers, who possessed large bows'. Secondly, the Turkish were better skilled in using archery. Especially their cavalrymen, known as the *Turk-Sawar* could shoot equally well when dismounted or at the gallop. Bows and arrows were their most preferred weapon, as these could be effectively used from a distance against men, beasts and birds. 'A whole army could be routed by a single arrow shot, if it could fatally hit the enemy commander or the eyes of his elephant'- opines Fakhr-i-Mudabbir. Secondly, the Turkish were better skilled in using archery.

The archers were known as *dhanuk* or *dhanuki* in Bengal. In Persian bowmen were known as *tir-andaz*, *oqchi* or *opchi*, *kamandar* or *tir-bardar*. The master archers were called *hukm-andaz*, and they were highly prized as an asset of the army. There was a regular profession of bow and arrow making in Bengal, and the craftsmen were known as *Dhanuskara*. Abul Fazl has given details of bow-making in the Mughal *Karkhana*. Copied in Persian model the Mughal *Kaman* was shaped in a double curve, usually four feet in length. Smaller versions were available and known as *takhsli kaman*. He has also mentioned a few varieties of the bow like *Kamtha*, or

^{261.} Minhaj, Tabakat-i-Nasiri (Bangla tr.), p. 34

^{262.} E. McEwen, 'Persian Archery Texts: Chapter Eleven of Fakhr-i-Mudabbir's Adab al Harb (Early Thirteenth Century)', The Islamic Quarterly, Vol. XVIII, 1974, pp. 76-99

Kaman-i-guroh that could throw clay bullets.²⁶³ Mughal archers were so skilful that Bernier found an expert archer 'could shoot six times before a musketeer could fire twice'.²⁶⁴ The use of the word Kaman to denote bow can be found in medieval Bangla literature as well. Fifteenth century poet Shah Muhammad Sagir, while describing the war-preparation of the hero Yousuf in his famous Yousuf-Zulekha epic mentions²⁶⁵,

দিব্য ধনু বান হাতে কনক ভূষিত,
সুবলিত সর্বতনু চন্দনে চর্চিত ॥
টোন ভরি দিব্য শর হাতেত কামান,
হেমমুষ্ঠি দিব্য খর্গ বিজুত সমান ॥
'With divine bow (Dhanu) and arrow (Vana) in his golden hand,
Strongly built body washed with sandal-wood.

Quiver (Ton) full of divine arrows (Sara) and bow (Kaman) in hand Twisted paw strong like the fiery sword'.

The words *Kaman* and *Sara* are also used in the same meaning in another Bengali epic, *Sati Maina Lor Chandrani*. Other words used for it in two

^{263.} Abul Fazl, Ain-i-Akbari, pp.

^{264.} Francios Bernier, Travels in the Mogul Empire, AD 1656-1668 (translated into English by A. Constable and edited by V.A. Smith), Oxford: University Press, 1916, p. 49

^{265.} Shah Muhammad Sagir, Yousuf-Zulekha, edited by Muhammad Enamul Huq, Dhaka: Bangla Academy, 1984, p. 111-112

^{266.} Kazi Daulat, Sati Maina Lor Chandrani, edited by Mazharul Islam & Abdul Hafiz, Dhaka, 1969, p. 91-92

epics of the same title, Rasul Vijaya by Zainuddin and Shabarid Khan includes Gandiva, the legendary bow of Arjuna in Mahabharata.²⁶⁷

There were many varieties of arrow as well. In the above mentioned poem of Shah Muhammad Sagir, two different varieties of arrows are mentioned-Sara, and Vana. Dhanurveda mentions ten such varieties, while Kautilya speaks of only five. The shaft of the arrow called tir or sahm was generally made of reed, wood or bamboo. The Sanskrit word sara stands for reed, hence, arrows made of reed were known as sara. Sometimes a punkha, feather or feather-like object was added at the back-end of it. Such arrows with a feather at the bottom of the shaft or barbed arrows were called tirpardar. The head of the arrow was of different shapes, and they were made of the horn, bone, wood or in most cases later, metal. Both the vedic sources and Fakhr-i-Mudabbir mentioned about the use of poisoned and flaming arrows, arrowheads wrapped with ignited mater. The Santals were experts in using poisoned arrows with deadly effect. Fiery arrows were also common to the Turks, Fakhr-i-Mudabbir mentioned them as tir-i-atishin. Following Abul Fazl's descritions in Ain-i-Akbari, Irvine has given a long

^{267.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", in M Siddikur Rahman Khan (ed.), *ABM Habibullah Smarok Bokritatmala-1*, Dhaka: Bangladesh Itihas Parisad, 201, pp. 82-84

list of varieties of the bows and arrows used during the Mughal period.²⁶⁸ Fakhr-i-Mudabbir speaks of several types of arrows some being so powerful as to penetrate shields, helmets and even coats of mail. Amir Khusrau echoes him, "The infidel cloud, like a Hindu in sable cloths, drew its Hindi rainbow to the full length and sent down its rain-drops like sharp arrow-points. They passed through the armour and the breast-plate; and though the bronze bodies of the holy warriors remained unaffected, they were nevertheless hindered from discharging their arrows."²⁶⁹

The quiver was called *tun* or *tunir* and *tarkash* and *qirban* in Persian was usually made of bamboo, sometimes decorated with cloth, velvet, leather or metallic. It was considered an art to pull an arrow from the body or the quiver, it was known as *paikankash* (arrow-drawer).

Spears, Javelins and Lances

Apart from the bows and arrows, another category of projectile weaponry was very common during the medieval period. They are normally thrown by hand, rather than by any machine like the bow. Both the indigenous people and the invading Muslims were familiar with weapons belonging to this generic class. Spears, Javelins and Lances fall in to this category.

^{268.} W. Irvine, Army of the Indian Mughals, p. 94-98

^{269.} Amir Khusrau, *Khazain-ul-futuh*, translated into English by Wahid Mirza, Lahore: National Committee for 700th Anniversary of Amir Khusrau, 1975, pp. 99-100

These are all basically made of a long wood or bamboo shaft with a metallic head. They were known as *Sinan* (derive from Arabic *asnain*) to the Muslims. Following Abul Fazl's descriptiom, J.N. Sarkar pointed out five varieties of this type.²⁷⁰ Though each of these had some special features, it is sometimes difficult to draw a clear line of distinction between them. They are,

- (i) Spear: A spear is a long pointed weapon. It has been in use alk over the world since pre-historic ages. It was widely used by the Macedonians, they called it *Sarissa*. Abul Fazl mentioned it as sank or sang (probably derived from Sanskrit Shanku, Shakti) with four-sided or three-sided heads entirely or iron (Sainthi) and selarah (Sanskrit Sula). The spear was especially popular with horsemen and elephant-riders. Both Shakti and Sula have been mentioned by Muhammad Khan, which proves its existence in the medieval Bengal.²⁷¹
- (ii) Javelin: Javelin is a light spear used for throwing. To this type probably belonged the ancient *risti* and the sharp pointed *tomara*.One of the varieties is called *danda*, with a wooden body and a

^{270.} J.N. Sarkar, The Art of War, p. 119-20

^{271.} Ahmad Sharif (ed), Madhya Juger Kavya Songroho, Dhaka: 1962, p. 152

metal point with edges like a ploughshare. The medieval *zupin*, a long spear or javelin, if struck forcibly, could pin a rider and the horse. There are a few references of *Danda* in medieval Bengali poetry as well.²⁷²

(iii) Lance: Lance is a horseman's spear. It is made with a small steel head on a long bamboo shaft. The nizah-i-mard gir was a long weapon like a polo stick with a sharp, curved blade. While the Turkish cavaliers preferred to rely on the long but light nezah or shel. Mughal foot soldiers and guards of the audience hall used other and heavier varieties of spear, e.g., Ballam, Sank (broadheaded lance), Barchhdh (the Hindusthani lance) etc. Among those, Ballam, a long spear with a bamboo shaft and leaf or diamond shaped blade, was very common in the region of Bengal. Other varieties of it found in Bengal included Barsha, arrow-headed spear and Sharki, the eastern Sinan. Barani's account of the foot-soldiers of Bengal in the army of Shamsuddin Ilyas Shah were equiped with this type of weapons.²⁷³ The weapon was very popular among the Bengali soldiers, hence

^{272.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", pp. 82-115

^{273.} Barani, Tarikh-i-Firuz Shahi (English tr.), p.

medieval war-poems are full of references on them. Almost all the epics has mentions of *Neja* and *Shel*. Of them, *Sikandarnama* of Alaol mentions a *Shel* that was thirty yards long!²⁷⁴ It must have been exaggerated, because it is not normal for a person to handle such a long weapon. However, as the poet mentioned it twice in the same stanza, most probably to denote the greatness of the hero, it should be taken as an indication that the *Shel* was usually a longer version of the weapon. A longer, bigger type of Barsha was known as *Raybashyan*, it was mentioned in both *Annadamangala* and *Chandimangala*, sixteenth century epics of Bengal.²⁷⁵

(iv) The *Kunta*, a six-edged iron lance or barbed dart of ancient India continued to be used during the medieval period. Abul Fazl called it *Barcliah*. It was made exclusively of iron or steel. A variety of it is called *Teta* in Bengal, and is particularly popular in the eastern part of the region. In the marshy lands, it is still in use as an weapon to catch fish.

^{274.} Sikandar prepared for a battle with "Thara Hari Loho Lohi, Jeno Analer Zihi/Trish gaz dirgho haate Shel" and then, after using many of the equipments, at last takes the *Shel*, "Sikandar Probhugiri, Nij Bhagyo Lokho Kori, Trish gaz Shel Loilo Kar", See, Ahmad Sharif (ed), *Sikandarnama*, Dhaka, 1977, p. 63

^{275.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", pp. 101 and 104

One of the earliest multi-pin headed long weapon is *Trisula*, the weapon of goddess *Durga*. It was mentioned in the Bangla translation of *Ramayana*, along with *Ankusa*, a sickle-headed stick used by the elephant-riders, *Mahuta*.²⁷⁶

(v) Short spears used in ancient India were known as *Kanaya* and *Karpana*, which were actually pieces of metallic rod, darted by hand. In Persian these short spears are known as *nimnizah* or *barbah* and were used by the royal bodyguards.

5.1.2 Personal Weapon

Swords and Daggers

If bows and arrows were the most favorite *Astra* or, missiles, swords were just the same as *Sastra* or personal weapon. According to the Encyclopedia Britanica, sword is a 'preeminent hand weapon through a long period of history. It consists of a metal blade varying in length, breadth, and configuration but longer than a dagger and fitted with a handle or hilt usually equipped with a guard.²⁷⁷ It is assumed that the sword is an extended and larger form of the earliest cutting weapon invented by the

^{276.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", p. 109

^{277.} Encyclopedia Britannica, online edition, https://www.britannica.com/technology/sword, retrieved on 15 March, 2017

human, dagger; the earliest specimens date to about 1600 BC, during the Bronze age. The primary use of the weapon is for slashing, cutting and thrusting but occasionally it is also used as missile during battle. Since the Vedic ages, sword is one of the major war-tools in the South Asian region, including Bengal. The ancient literary sources have many references on sword. It, along with the shield was the last resort for an warrior, if bow and arrow, chariot or the horse fails. According to *Agnipurana* the sword manufactured in Vanga were sharp and capable of cutting, famous for for keenness and power of standing blows.²⁷⁸ It also elaborates the attributes of sword, 'a sword with fifty inches of length is said tobe excellent. Half of that measure is known to be medium and one should not bear a sword shorter than that length.²⁷⁹

Kautilya mentioned three types of sword, *nistrimsa*, *mandalágra*, and *asiyashti*. Nistrimsa are swords curved with an inner cutting edge and handles made of horn. In eastern Bengal, these types of weapons are very common, not only in wars, but also in daily activities like cutting green

^{278.} The Agnipurana, English edition, New Delhi: Motilal Banarasidas Publishers, 1954, reprint, 2003, Part I, p. 640

^{279.} Ibid

^{280.} Kautiliya, Artha Shastra, p. 143

coconuts. It is often called *Dao*. ²⁸¹ A bigger, heavier version of is called *Ramdao*, a nineteenth century copy of it is in the Metropolitan Museum of Art, New York. ²⁸² It is 35.5 inch long and weighs about 625 gm; with a blunt edge this type of sword are more of ceremonial weapon than to be used in actual combat.

The *asi yasti* has handles of wood, and a straight and pointed blade. To this class perhaps belonged the *Khada*, a variety of straight, broad sword. The *dhup* (or *dhoup*) of Deccan and *Khanda* of northern India, like modern day *Kirich* are also of this kind. Both *Asi* and *Khanda* is mentioned in many of the medieval Bengali epics, based on famous battles.²⁸³ A variant of this type was the *Gupti* (concealed in Sanskrit), a straight sword sheathed in a walking stick.

The third variety, mandalagra are swords with a circular head perhaps combined the sword and the spear, with a hand guard and keen razor-like edge of copper or iron. The legendary Khadga, a fiery sword of wisdom, with flame-like groove at its head is carried by Krisna (also the weapon of goddess Kali and Yama, the god of death), is a variety of this type. The

^{281.} It should not be confused with Chinese *Dao*, also a variety of sword, but with a straighter edge.

^{282.} Accession Number: 36.25.1284, available at https://www.metmuseum.org/art/collection/search/24316, retrieved on 15 March, 2017

^{283.} See, Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", pp. 82-115

Khadga was probably the most widely used variety of swords by the Bengali soldiers in the medieval era, because almost all the medieval Bangla epics mentioned it every time the poets mentioned any war-preparation.²⁸⁴ The Khadga has however become more of a ceremonious instrument rather than a practical one in the course of time.

Sword had been a favourite personal weapon for the Muslims as well. Called as Saif or Tegh in Arabic and Shamsher or Khanjar in Persian, it was invariably used by the Muslim army. The shamsher was the famous oriental sword, made of the finest Damascus or Toledo steel it was a devastating weapon. It has a carved blade, with an outer cutting edge. The Indian variety of this is generally known as the Talwar or Tarabari. Both Talwar and Tarbari has several references in the medieval Bangla poetry, including Rasul-Vijaya, Yousuf-Zulekha, Sri Krisna Vijaya or the translated versions of Ramayana and Mahabharata. Indian swords were highly renowned and a coveted weapon among the West Asian and was frequently mentioned in early Arabic literature. Fakhr-i- Mudabbir considered the sword blades of hindi sword to be the best and sharpest and finest-damascened of all blades, the dearest variety being known as the mawj-i-

^{284.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", pp. 82-115

^{285.} Ibid

darya. 286 According to him, the long, curved sword was the weapon par excellence of the Turks and used by the Ghaznavids and Qara Khanids.

The Sirohi was also a famous Indian variety with a slightly curved blade. It was heavily praised in Ma'asir-al-Umara, 'Whoever was struck on the head by these Indian blades was cleft to the waist, or if the cut were on the body, he was divided into two parts.' There are many such fancied references on the use of swords by the Muslim heroes in contemporary sources, like the Tajul Ma'asir,

In compliance with the divine injunction of holy war, they drew out the blood-thirsty sword before the faces of the enemies of religion. That sword was coloured of caerulean blue, which from its blazing lustre resembled a hundred thousand Venuses and Pleiades, and it was a well-tempered horse-shoe of fire, which with its wound exhibited the peculiarity of lightning and thunder; and in the perfect weapon the extreme of sharpness lay hid, like (poison in) the fangs of a serpent; and (the water of the blade) looked like ants creeping on the surface of a diamond.²⁸⁸

^{286.} J.N. Sarkar, Art of War, p. 118

^{287.} Shahnawaz Khan and Abdul Hai, *Ma'asir-al-Umara*, translated into English by H. Beveridge and Baini Prashad, Kolkata: Asiatic Society of Bengal, 1896, Vol. III, p.152

^{288.} Hasan Nizami, *Tajul Ma'asir*, See, H. M. Elliot & John Dowson (eds), *The History of India, as Told by Its Own Historians*, London: Trubner Company, 1867–1877, vol. II, pp. 227-28

Barani has also mentioned about the use of sword. According to him, superior swords could cut an elephant's trunk and would neither be broken nor blunted when hurled against stone or iron.²⁸⁹

It was customary those days to give fanciful names to swords. Niccolao Manucci, a seventeenth century Italian traveler, mentions 27 names. Abul Fazl mentioned that Akbar had 30 different swords with different names, and he kept one of them by turn with him while sleeping at night.²⁹⁰

There are quite a few medieval swords in the Bangladesh National Museum, Dhaka. Most of them are curved type, varieties of *Talwar*. Syed Mahmudul Hasan has published four of them and he has mentioned two more varieties of the curved blade swords, *Yatagan* and *Arapusta*. The other sword²⁹¹ he published was a *Firangi*, a straight-blade sword copied from the crusaders sword, but lighter in weight. According to him, the 42.5 inches long sword was used by Nawab Siraj-ud-Dawla, the dating is however questionable.²⁹² *Yatagan* is a Turkish variety of curved blade

^{289.} Quoted by J.N. Sarkar, Art of War, p. 118

^{290.} Ibid

^{291.} BNM Acc No. B 1752

^{292.} S.M. Hasan, "Some Interesting Weapons in the Collection of Bangladesh National Museum, Dhaka", *Bangladesh Lalitkala*, Vol. 2, No. 1, 1994, pp. 25-28; Firoz Mahmud has made a detail study of the sword, and he thinks it can not belong to Siraj. See, "A sword of Nawab Siraj-ud-Dawla in Dacca Museum" *Bangladesh Lalitkala*, Vol. 1, No. 2, 1975, pp. 127-130

sword, the one at the Bangladesh National Museum²⁹³ is probably of eighteenth century. It is only 19 inches long, and has a double curve, inward near the grip and outward at the tip. The *Talwar* at the BNM²⁹⁴ is also of eighteenth century. It is about 30 inches long and has a deep outward curve. It has some kind of inscription that could not be deciphered yet. S.M. Hasan has read words like *Allah* and *Ali* in *Tuluth* calligraphy that does not have any historical information.

The fourth Sword²⁹⁵, *Arapusta*, even though belongs to a time beyond this study at nineteenth century, is a very interesting one. The 31 inch long sword is almost equal in length and shape as the *Talwar*, but its single outer edge is grooved like a saw. Hasan concludes that this type of swords had been in use since the medieval period.

In comparison to the sword, dagger is a smaller cutting weapon used in final thrust during the war. Various shapes of daggers and knives had been in use from the Chalcolithic times, and it was a common object of fighting during the medieval period. Many varieties of dagger was used in medieval India in general, J.N. Sarkar listed seven of them.²⁹⁶ The varieties are,

^{293.} BNM Acc No. B 1644

^{294.} BNM Acc No. B 1962

^{295.} BNM Acc No. B 1961

^{296.} J.N. Sarkar, Art of War, p. 121-122

- (i) The curved dagger: Katar, Katarah, Katdri (Hindi Kattar) i.e., with a curved blade. Ibn Batutah and Fakhr-i-Mudabbir refer to Katarah as a short sword, mostly used by the Hindus. And those Hindus must include that of Bengal, as another medieval Bangla epic, Dharmamangala, written in the sixteenth century mentions that the hero, Lausena could even divide water with his Katari. Abul Fazl calls it jam khak. It looks similar to the bent knife, bak. A long and narrow dagger was also called Katara. A bow-shaped short and narrow dagger was called narsink moth (narsingh moth?).
- (ii) The broad dagger: *jamdhar*, (perhaps *jam*, death, and *dhdr*, sharp edge or dhar, held by), with a broad and straight blade. With its handle resembling H, it was a weapon of thrust *par excellence*, used by the Mughals, Marathas and Sikhs. Rup Ram, in his *Dharmamangala* has also mentioned the *jamdhar*, to be hanged in the waist.²⁹⁸
- (iii) The bent dagger: *Khanjar* (Arabic) is a small dagger with a bent blade, a favourite weapon in southern Arabia. It was rarely used by the Turks, but was occasionally used in Persia and India. The Bengali army must have known this at least, as is evident from the writings of another medieval poet, Muhammad Khan. In his *Maktul Hussein*, he mentioned that Hussein's preparation for the Karbala war included a *Khanjar*. ²⁹⁹
- (iv) Peshqabz (lit. front grip), a pointed one-edged dagger.
- (v) Knives known as *Chhuras* or *Chhuries*. These were of different kinds. Kard, like a butcher's knife, was especially used by the Afghans and known as *chaqchaqi-i-wilayati* (from *chaqu*, a clasp knife). All three words, *Chhora, Chhuri* and *Chaqu* are still very common in Bengal,

^{297.} Dharmamangala "Katari Poroshe Jol Rosatol Jay", See A.K. Koyal (ed.), *Dharmamangala (Rup Ram Birochito)*, Reprinted, Calcutta, 1994, p. 212

^{298. &}quot;Komor kosia bandhe jamadhar tangi", Ibid, p. 278

^{299. &}quot;Khar borno Aurdha Chandra Ankausa Chakradhar/Asi Gada Dabos Khanjar Log Mar" See, Ahmad Sharif (ed), *Madhya Juger Kavya Songroho*, Dhaka: 1962, p. 152

- used to denote butcher's knife and kitchen knife. Abul Fazl mentions two varieties of knifes, *guptikard* (knife concealed in stick), *qamchi kard*, a whip, its handle serving as a sheath for a knife.
- (vi) Men from Kashghar used a knife (sailabah-i-Qalmaqi), as long as a sword.
- (vii) The *Maru*, used by the Marathas, had two double-edged blades, serrated at the end, while *Jafar Takiya* with a double-edged point and tapering towards the end was used by the Muslims, Sikhs and Marathas.³⁰⁰

The same classifications are also applicable in the context of Bengal. Among the above, *Chaqu*, the variety of clasp knife was popular in Bengal. Apart from that, a single bladed, slightly curved dagger called *Chhuri* is widely used in this region. It is known as the armour piercing equipment. In the north-eastern neighbors of Bengal, Assam and Nepal, *Bhojali* or *Kukri* is a more common and popular type of dagger. Considering its popularity, and availability, it must have been in use in medieval Bengal as well.

The Mace or War Club

One of the most primitive weapons of the south asian region is the mace or club. Archaeological sources confirm that it was known to the people of Indus valley civilization. Used in hand-to-hand fight, this formidable weapon was actually a solid ball with grooves or spikes, made of both

^{300.} J.N. Sarkar, Art of War, p. 121-122

wood and iron. Ancient mythological sources have many reference of it, in *Mahabharata*, there is an episode of a famous mace-fight between Bheema and Duryodhana and in *Ramayana*, Hanumana's weapon is the *Gada*.

J.N. Sarkat cited three varieties of it³⁰¹: the *mudgar* or *laguda* or *musala* was pestle-like club and *yasti* were pointed rods, while *gada* was a long and heavy iron rod with 100 spikes. The primary use of the weapon was for jabbing or smashing opponent, and only the strongest of heroes like Bheema and Hanumana could use it effectively.

Though it was a famous indigenous weapon of India, the Turkish cavalry was also habituated with the use of mace. There were many varieties and names for them like amud, gurz, chumaq, shashpar, shashbur or kupal. A Ghaznavid variety was reoprted to be used by Sultan Masud that was shaped like the bull's head ('amud-i-gay-sar). A Mughal variety was the gurz, 'a short-handled club with three large round balls,' the Gurz-bardar's held important positions in the Mughal army. Other varieties were the Shashbur (lung-tearer, with one round head formed of semi-circular cutting blades), the dhara (with a six-bladed head and octagonal steel shaft), the garguz with eight bladed heads and basket hilts, and the Khundli Phansi with a head of open steel scroll work, resembling a fakir's crutch.

^{301.} J.N. Sarkar, Art of War, p. 121

Sometimes sticks were used to hit the enemy and ward off his blows. Called as Lathi in Bangla, this stick was in all probability used with another variety of it, a wooden stick with brass nails or spikes that was called Sota. Often these two are mentioned together as phrase in Bangla Language. Even though there are not many archaeological remains conserved in museums, like many others cited above, the use of this type of weapon in the period under study can be proved by literary sources, especially the medieval Bengali epics. The vernacular synonyms like Gada, Musala and Mudgar have been mentioned many times in different war-poems, while

Battle-axe

the Persian synonyms like Gurz is also cited.³⁰²

The axe is also one of the earliest tools invented by the human. It is actually a hand tool meant to be used for chopping, splitting, chipping, and piercing since the Stone Age. It is basically a piece of sharp blade, fixed over a handle. Early axes were made of stone with the handle being made of wood. Metals replaced the stone blade in course of time. The tool is widely used for cutting down big trees, which made large jungles to be cleared for agriculture and habitation possible. Due to its usefulness and

^{302.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", p. 109

easy making process, it has become a favourite war tool. Battle axes are, however, usually lighter in weight, having thinner, sharper blades.

In South Asia, the history of axes goes back to the Harappan Culture. It was subsequently used as an war tool by the ancient Indians as well as the medieval Muslims. In ancient Indian tradition it is known as Kuthara. As it was an ayudha of Parasurama, it was also called as Parasu.. The Muslims called the axe tabar when it had a triangular blade with one cutting edge, and the pointed axe zaghrtol (meaning crow's beak, shaped like a bird's beak) when its head was pointed and had two cutting edges. The latter was widely used to cut the rings of armour. A mixture of the two was called tabar-zaghnol. An axe fixed to the saddle was called chamchag (chamkhaq) chakhmaq, chakhmagh. Perhaps the Khisht was a halberd, combining lance and battle-axe. The axe remained as common tool for the day to day activities in Bengal since the ancient time. Its use in battles, however, does not seem to be that popular, as there is no reference of it in any of the medieval war-epics of Bengal.

Other Personal Weapons and Tools

Apart from the above mentioned weapons, many tools, mainly used in day to day activities were also used in war during the medieval time in Bengal. Vedic sources cite of *Chakra*, a disc-like weapon. A prototype it must have

been in use by the Turks as well, as Abul Fazal mentions it as *chakar*. Fakhr-i-Mudabbir also has reference, as he mentions a *jak* 'as an iron disc with sharp edges'. He refers to two kinds of the weapon - a light disc with a big round hole in the middle, that could be flung from a distance to cut off the enemy's head; and a heavier disc without any hole that was thrown into the air and fell perpendicularly and cut the body of the victim into two. ³⁰³ *Pasa* or the lasso is another such legendary weapon that is also cited by the medieval chroniclers. It is kind of a string, to be thrown from the raised hand on the neck of the man and his horse or employed to the foot of the enemy. To the Turks it was known as *Kamand* (noose) and was reported to be used by Mahmud of Ghazni against the Indians. A mughal variety is cited by Abul Fazl, who calls it a sling (*gobham*).

Spades were also used especially by the besiegers in damaging the walls of forts. In medieval Bengal, it was an important equipment in any war, because often the Bengalis either had to erect instant mud forts, or besiege them. Stones are also used, both to throw from the distance like the Maratha warriors, who called them *Hat Dhonda* and to fill enemy trenches while besieging.

^{303.} J.N. Sarkar, The Art of War, p. 123 fn.

War had been a complex thing, involving a large community of fighters and often the preparation and execution of any battle took months, even years. Therefore, the army always needs to maintain a band of civil employees who perform daily activities like cooking. The instruments they needed should also be considered as war-machines, but we have exempted them because they were not used as weapon.

5.2 Defensive Armour

Apart from the attacking weapons, defensive or protective armours were very important in medieval warfare. Warriors needed heavy protection as the attacking weapons were sharp and fatal. There were different type of armours for different regiment of the army, the infantry, cavalry of the elephant forces. However, all the protective gears can be devided broadly into two categories: the shield and the body armour.

The shield, called *Dhal* in Bangla and *Sifar* in Arabic was as inseparable from the sword as the arrow from the bow. It was expected to protect the body, and was used by all except archers. It had to be firm, light and tough, and shields were constructed in various sizes, with various objects including creepers, canes, bamboo, wood and metal, iron or steel. Leathers were also used often, and hence *charma* is as a synonym often. Tortoise

shell was a very good protective gear, while skin of snakes, tiger, ox, crocodile, rhinoceros and elephant were used. Shields were sometimes even made of silk by folding it forty or fifty times.

Fakhr-i-Mudabbir tells us that sometimes a besieged garrison used war prisoners as human shields on the top of fort walls to prevent shooting, while Minhaj claims that the defensive armour of the army of Tibet were made of bamboo. They were made by sewing pieces of bamboo closely with silk threads. This was probably the most widely used technique in Bengal since the ancient times. However, metal shields became popular after the arival of the Turks. Abul Fazl mentions four types of shields: *chirwah* and *tilwah*, carried by the emperor's bodyguards; *phari*, a small one of cane or bamboo; and *khera*, for fencing. Usually circular, the Muslim shields were between 18-26 inches in diameter. Often these were ornamented with gilt, painted and lacquered. Medieval Bengali war-poems have many references of the *Dhal*, while its Arabic synonym *sifar* is also found.

Protective armour for different parts of the body, have been in use since the ancient times. Kautilya has given a list of protective armours from head to foot. They were both Metalic and non-metal. There were two types of

^{304.} Minhaj-i-Siraj, Tabakat-i-Nasiri, Bangla edition, p. 34

^{305.} J.N. Sarkar, The Art of War, p. 125

^{306.} Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", p. 109

metallic armour: (a) helmets and plates of steel and (b) steel network used as shirt and netted steel hood. The different pieces were carefully fastened so that the warrion can move his limbs freely.

Headgear: Among the protective gears, helmet or headgear comes first. Kautilya called it sirastrana, Vedic sources also use the term Siprd, that was made of metals. The word Topor in Bangla also denotes headgear. It continued to be made of metals through-out ancient and medieval times. In Mughal documents there are mentions of Khud, Dubulgha or Dabalgah to denote headgear. Those were actually head pieces made of steel sheet together with a vizor or nose-guard, surrounded by small steel shafts. It was of different varieties and often decorated beautifully. Iron mask over the face was called chihrazirihi dhani. An one-piece mail coat for both head and body was also in use and was called ghughuwa. The metal guards were padded either with cotton or velvet. However, they were costly and often beyond the capability of ordinery soldiers. They had to be contented with skull caps with chain armours. Turbans of cloth called *Usnisa* or *pagri*) were also used. Minhaj's description of all armours being made of bamboo seems to be true, as it was corroborated by Alaol. In Sikandarnama he mentions about a headgear made of leafs ('Siropore Potrer Topor').307

^{307.} Ahmad Sharif (ed), Sikandarnama, Dhaka, 1977, p. 60

Neck-Protector: To protect the neck from imminent thrust of the opponent's sword, neck-protectors was also used often. It was called *Kanthatrdna*. The Mughal *Mighfar* was kind of a netted steel hood worn under the cap or hat. The use of long cap of mail, *zirihkulah*, hanging from the helmet over the neck and back was also common.

Body-Armour: Of all the protective gears used in ancient and medieval war, the most important one and the most widely used one as well is the body armour. Vedic sources often refer to it as the *Varma* or *Kavacha*. Among the Muslims, it was known by its Arabic name, *Jaibah* or *Jubah*. It can be classified in two varieties on the basis of its materials, metalic or non-metalic. The most common metallic armour was the hauberk of interlinked chain mail- *loha jal* or *lowha-jalika*. A mailed coat was called the *zirih* in Persian. Apart from it, protective instruments for different body parts were also available. Metallic corslet or breastplate including breast and back plates are the ones called *Kavacha*. They resemble the medieval European armours. The steel was the common material for it, copper and silver were also used.

Among non-metallic armour were wadded coats of velvet or quilted cotton, called *Sutraka* in ancient Indian sources; The Persian Synonym is *alkhaliq*, from which the Hindi *angarkhah* (long coat worn over armour) derived and

used during the Mughals. Leather vests were also common in the region since ancient times; medieval war-poems often refer to the protective gears as *Charma*. In Persian it is called *Khaftan* and was widely used in Sultanate period. A doublet used over the armour was called *chihilqad*. Adorned in mailed coats and with leather-covered or metal shields in hand, the early Turkish foot-soldiers formed a solid line on the battle-field 'like a fortress.' An overcoat of red satin over armour was a common gear for the army of the Delhi Sultans. They were either extended upto the knuckles (*kanchuka*), or without cover for the arms (*patta*). The metal armour, however, was out of reach for the common soldiers due to their costliness, they could afford only simple shields and quilted cotton coats.

Mughal body-armour was called *Baktar* or *Bagtar* in general. The cuirass had four pieces or plates of steel or brass for the breast *(joshan)*, the back and two sides, with steel hooks and fastened with leather straps. Together, they were called *chahar-ainah* or the four mirrors. The coat of mail, *zirih*, with helmet and plates, had mail sleeves, composed of steel links and reached to the knees except for the horsemen in which case it was up to the waist.

^{308.} J.N. Sarkar, The Art of War, p. 127

Protectors for Hand and Foot: The use of protectors for hand and foot was also common in ancient and medieval war-fare. Ancient Indian sources mentions about the finger gloves, *nagodarika*. Its medieval equivalent used by the Turks and Mughals was the gauntlet of two pieces— a long mailed glove or *dastwanah*, with a steel arm-piece from the elbow to wrist. The archers also used bracers to guard the arm from the blow of the string while discharging the arrow.

The leg or thigh was protected by iron leg-pieces or greave resembling a pair of trousers called as *pyjama-zira*. They were worn over cotton trousers, and small iron stocking called *mozah-lohani*. A palm-shaped device, called *pustakhar*, was often used for scratching the backs of armed soldiers who wore heavy tunic.

There were defensive armours for the animal as well, especially elephant and horse, frequently used in battle. Ancient Indian texts *Mahabharata* as well as by *Sukraniti* referred to these; and they continued to be used in the middle ages. The elephant armour was called *pakhar* by the Mughals. As war elephants were one of the main strengths of the Bengal army, it was obvious that they were also used in Bengal. The back and front of the warelephants were protected by tying steel plates on a carpet and red cloth with ropes, sometimes chain armour covered the hind part. Horses were the most

favourite war-animal of the Muslim army, and they were often clad in iron-protectors. Abul Fazl mentioned mailed covering for the back of the horse (Kajem or Kejam), the quilt beneath it (artak-i-kajem and its head protection (qashqa). 309

5.3 Artillery, Guns and Siege Weapons

War and fire are connected with each others since the days of early civilizations. The destructive power of fire is more effective in breaking any kind of defence; hence it was always an integral part of war technique. It is assumed that fire was at first applied at close quarters directly, later the war engineers invented technique to use it from a distance. The technique of throwing fire with missile is the basics of artillery. In modern sense, artillery is, "crew-served big guns, howitzers, or mortars having a calibre greater than that of small arms, or infantry weapons." However, medieval artillery, before the invention of modern fire arms, included all kinds of fiery weapons. In that sense, early hand guns like the flint-lock or match-lock guns, even pistols can be included in the category in a broader sense as they had more fire powers on those days than that of ancient and medieval fire arms.

^{309.} Abul Fazl, Ain-i-Akbari, vol. I, pp.

^{310.} Encyclopedia Britanica Online, https://www.britannica.com/technology/artillery, retrieved on 15 March, 2017

The development of fire arm has seen the use of various materials and devices to increase the effectiveness of burning missiles and make the flame effective and persistent. The common missile thrower, bow and arrow was used with the arrowhead soaked with vegetable oils carrying the fire. Such Burning arrow was called *tir-i-atishin* in Persian, and was a very common weapon. Petroleum and bituminous products were also used in carrying the fire. Another common fiery weapon was the Naptha. Invented by the Greeks, it was considered as the most distinctive and destructive missile of the Middle Ages and was used in both land and sea battles. Its basic ingredients were sulphur and quicklime; and fire ignited by it was so powerful that even water could not quench it.

Apart from those two, a few more techniques also developed in the course of time, even though they were not that popular. Those included fire in tube, fiery javelins and throwing fire-pots.

The invention of fire arms i.e., weapons which projected, through explosives, heavy bodies to a distance changed the scenario. The basic ingrdient is the gun powder, a composition of composed of sulphur (11.9%), charcoal (13.5%) and saltpetre (74.6%). The history of the invention of fire-arms is subject to debate. There are many claimnants,

including the Chinese, the Greeks, the Indians, the Arabs and the Mongols. The Chinese are said to have used cannon in 83 CE,³¹¹ even though Marco Polo does not refer to its use. If we rely on Ibn Khaldun, the credit of the discovery of the modern use of gunpowder should go to the Arabs. A Moroccan Sultan, Abi Yousuf, is said to have used, among other siege engines, a machine propelling iron pieces with gunpowder in the siege of *Sajilmasse* in 1273. They are also considered to have devised a crude type of fire arm (a *madfas*) as early as 1304.

The discovery of gunpowder is attributed by Englishmen to Friar Roger Bacon (c. 1220-92) while many other Europeans believe it was Berthold Schwartz (the Black), a German monk of 14th century who actually invented it. However, artillery became the prime object to the Europeans in the Fifteenth and Sixteenth centuries when new sciences of ballistics were developed.

The history of the development of artillery in India in general and in Bengal in particular is obscure due to the paucity of reliable contemporary sources. On the basis of the descriptions in ancient mythological sources like Mahabharata, Mudra Rakshasha, Agnipurana etc., a school of

^{311.} J.N. Sarkar, The Art of War, p. 127

researchers' believs that the ancient Hindus knew the art of manufacturing gunpowder, known as *Ranjaka*. Jogesh Chandra Ray even dated this invention in 7th century CE. The epic term *sataghni* (lit. hundred-killer), has been interpreted as cannon. Kautilya refered to *agnibana* and the *Sukraniti* tells about *nalika* and *naracha*, all interpreted to be either rockets or fire-arms like guns and cannon. *Sukraniti* has some details of the working of big and small *nalikas*. According to the ancient text, small *nalikas* were the weapon of horsemen and foot-soldiers. It prescribes that correct information of the total stock of gunpowder (*agnichurna*) in the arsenal should be kept in record. However, it has not been yet confirmed that those fiery weapons actually used gun-powder formula.

Other sources lead to different assumption. Analysing a sixteenth century Orissan account of Gajapati Prataprudradeva (1497-1539), P.K. Gode concludes that India learnt the manufacture of fire-works from China and the flaming shafts referred to in ancient literature was propelled not by gunpowder but by some other means.³¹³ The silence of Muslim historians and of the inscriptions of North Indian rulers supports this theory, and indicates that fire-arms were not familiar in India untill twelfth century.

^{312.} J.N. Sarkar, The Art of War, p. 128

^{313.} P.K. Gode, *The History of Fireworks in India Between A.D. 1400 and 1900*, Bangalore: Indian Institue of Culture, 1953, pp. 31-35

Analysis the primary and secondary sources, J.N. Sarkar has also concluded that gun-powder propeled fire-arms did not exist in ancient India in general. In Bengal and Tripura, he could not conclude on the introduction of fire arms. However, citing contemporary sources, he opined that the use of cannon and field artillery in Bengal dates back at least to the pre-Mughal times. Ma Huan, the chinses traveller of early fifteenth century who visited Bengal in 1406, found (1406) 'guns' as one of the items of export from the region. But it can not be concluded that these were actual fire arms, Sarkar opines that they may be the Vana, used frequently in the medieval Bangla literaure to denounce both arrows and a particular weapon. Vana is a rocket of about a foot long iron tube with diameter of one inch, fixed to a bamboo stick that can throw projectiles up to 1000 yards away. Baburnama's descriptions are worth mentioning here. At one palce the founder of Mughal empire in India remarks that "the Bengalis are famous for their skill in artillery"; But later he himself has given an explanation, "On this occasion we find a good opportunity of observing them. They do not direct their fire against a particular point, but discharge at random."

A more reliable account is found in *Rajmala*, the history of Tripura. It claims that Raja Dhanamanikya of Tripura had captured (c. 1513-17) a big

cannon and a metallic insignia from Husain Shah of Bengal.³¹⁴ Portuguese Accounts also cites another contemporary example; in 1517 when Joao de Silveira, the representative of the Portuguesc Governor, captured a boat full of rice near the coast of Chittagong, the Governor of Bengal opened fire (cannon) from land and Silvira defended himself with great difficulty.³¹⁵ Chattopadhaya, Lahiri and Sabikun Nahar confirmed that the earliest remaining example of cannons used in Bengal is also from the same period.³¹⁶ A number of other papers have discussed the development of gun-powder and cannon in Bengal including that of Stapleton (1909)³¹⁷, Banerjee (1911)³¹⁸, Sen (1926)³¹⁹, Sanyal (1927-28)³²⁰, Sharf-ud-din (1927-28)³¹⁹, Sanyal (1927-28)³²⁰, Sharf-ud-din (1927-28)³¹⁹, Sanyal (1927-28)³²⁰, Sharf-ud-din (1927-28)³²⁰, Sharf-ud-d

^{314.} N. C. Nath (tr), Sri Rajmala 1-4, Agartala: Tribal Research Institute, Government of Tripura, pp. 71-75

^{315.} J.A. Campos, *History of the Portuguese in Bengal*, First Edition, Patna :Janaki Prakashan, 1979, p. 29

^{316.} S. Naher, S. Lahiri, and P.K. Chattopadhya, 'Pre-Mughal cannons of Bengal: A Reevaluation'. *Pratna Samiksa*. New Series 5. Kolkata: Centre for Archaeological Studies & Training, Eastern India, 2014

^{317.} H. E. Stapleton, 'Note on Seven Sixteen Century Cannons Recently Discovered in the Dacca District, *JPASB*, New Series 5, 1909

^{318.} R.D. Banerjee, 'Inscribed Guns from Assam', Journal of the Asiatic Society of Bengal. vol. 8, no. 2., 1911

^{319.} Dineshchandra Sen, *The Ballads of Bengal*, Delhi: Mittal Publications, 1926, reprint 1988

^{320.} S. B. Sanyal, 'A Note on the Additions to the Society's Museum', Varendra Research Society, Annual Report for the year 1927-28, Rajshahi: VRM, 1927-28

28)³²¹, Mia (1991)³²², Santra (1998)³²³ and Kabita Devi and Chattopadhyay (2014)³²⁴.

Following the above mentioned researches, along with some archaeological evidences, a picture of the development of cannons in Bengal can be drawn.

Chattopadhyay, Lahiri and Naher has classified the cannons of Bengal as chronologically of three types: Pre-Mughal, Mughal including Post Mughal, and Indo-Europeans from seventeenth century onwards. The first category includes the beginning of cannons from the Husain Shahi periods and continued prior to fully capturing of Bengal by the Mughals. Mughal cannons are off forge-welded iron, composite cannons are also known with iron and copper alloys. Indo-Europeans cannons are mostly made with cast-iron.

^{321.} S. Sharf-ud-din, 'A Note on the Arabic & Persian Inscriptions in the Society's Museum', Varendra Resarch Society of Annual Report for the year 1927-28, Rajshahi: VRM, 1927-28

^{322.} Muhammad Abdul Hashem Mia, 'Cannons in the Subcontinent with a Special Reference to the historical Cannons of Bengal', *Journal of the Asiatic Society of Bangladesh*, vol. 36, no. 1. Dhaka: Asiatic Society of Bangladesh, 1991, pp. 61-90

^{323.} T. Santra, 'Banglar Dhatusilpa', Kaushiki, New Series, Calcutta University, 1998, pp. 192-220

^{324.} K. Devi, and P. K. Chattopadhyay, 'The Late-Medieval historical Site Dhubri: Studies Based on the Cannons of Neighbourhood', Chenna Reddy (ed.), Snehashree, Delhi: B.R. Publishing, 2014, pp. 214-30

^{325.} S. Naher, S. Lahiri, and P.K. Chattopadhya, op. cit. pp. 53-71.

Pre-Mughal cannons include that of Husain Shahi dynasty, Afghan rulers and Bara-Bhuiyans, the twelve powerful chieftains who resisted Mughal expansion and ruled their respective territories independently. Cannons of Shah Jahan and Aurangzeb were discovered in Bengal. A good number of English, French, and Dutch cannons are also available in Bengal.

Pre-Mughal Cannons

It has been discussed above that cannons were in use in Bengal from at least the sixteenth century. The material remains of Pre-Mughal cannons are however not profuse. A number of them are available in the collection of Bangladesh National Museum, Dhaka and Varendra Research Museum, Rajshahi. A comparison can be made with a few cannons of Dhubri and its neighbourhood Gauripur in Assam— now an open air site and the collections of Dhubri District Museum. Chattopadhyay, Lahiri and Nahar have also explored Koch cannons in the Assam State Museum, Guwahati and cannons of Tripura — preserved at Tripura State Museum, Agartala.

The most important cannons of the Pre-Mughal period are the hoard of Cannons of Dewanbagh or Manohar Khaner Bagh, located near the junction of the Akatia Khal and the Sitalaksha, 11.3 km north-east of

Narayanganj. In February 1909 seven brass cannons were unearthed and studied.³²⁷ Those seven cannons were in the possession of the Dewans and are now preserved in Bangladesh National Museum.

Before analysing them, a brief note on the affairs between Alauddin Husein Shah and Dhanya Manikya of Tripura is essential. According to *Rajmala*, Husain Shah had sent an expedition to Tippera in 1436 *shaka*, i.e. 1514-15 CE, and his general Gaud Mallik used cannons in that expedition, although he was defeated by the general of Dhanya Manikya, Chayachaga. The claim is supported by material evidence, one of the cannons located at 'Kaman Choumohani' of Agartala city, was captured by Dhanya Manikya.³²⁸

Husain Shah also claimed to capture Kamta-Kumrup, but how long he kept in his control is not known. The capture of Kamta-Kamrup and Jajnagar-Odisha reflected through Husain Shah's coins first from AH 899 (1493-94) and last datable to AH 924 (1518-19) indicate that he was the winner of Kamta-Kamrup.³²⁹ But Karim has doubted about the success and thought perhaps Hussain Shah had captured those areas while serving under his

^{327.} H.E. Stapleton, JPASB, New Series 5, 1909 p. 368; Dineshchandra Sen, op. cit.

^{328.} S. Naher, S. Lahiri, and P.K. Chattopadhya, op. cit. p. 54.

^{329.} A. Karim, *Banglar Itihash (Sultani Amal)*. Dhaka: Bangla Academy, reprint, 1993, pp. 315-316.

former Sultan. *Rajmala* suggests that the Arakanese King Rosanga took advantage of Husain Shah's preoccupation with Tripura and occupied Chittagong.³³⁰ It is evident that □usain Shah had brought a cannon from Kamta, described as 'Kuchmardan'.³³¹

The Assamese history (*Purani Assam Burunji*) refers to the relations between Husein Shah's son and successor Nasir-ud-Din Nusrat Shah and the Ahom kings. According to the accounts Bengal Sultans first attacked Assam with strength of 20,000 soldiers including cavalry and uncountable naval boats during the rule of Suhung Mung. Those naval boats called *nawwara*'s (in Assamese Hiloi-chara-Nao) are widely used in medieval wars in Bengal and Assam. The Bengal cavalry included cannons also but they are mentioned in the English translation of *Rajmala*, as guns.³³² However in *Rajmala*, and other sources they are mentioned as *hatnal* or *nornal*.

The first Muslim invasion of Assam, as mentioned in the *Ahom Burunji*, took place in 1527, where Muslims leaded by one 'Bara Ujir'. That invasion seems to be a naval raid, on the river Burai, accompanied by

^{330.} Ibid, p. 153

^{331.} S. Mukhopadhyay, Banglar Itihaser Duso Bachhar: Swadhin Sultander Amal. Kolkata: Bharati Book Stall, fourth reprint, 1988.

^{332.} Sri Rajmala 1-4, pp. 71-75.

efficient cavalry.³³³ In that war, forty horses along with some 'gun's were captured by the Ahom soldiers. That was the earliest reference in the Assamese *Burunji* about cannons; the period is contemporary to Nusrat Shah's rule.

The references cited above clearly suggest that the Bengal army of the Husain Shahi Sultans knew how to manufacture and use cannon, although they were not experts in aiming them. But due to lack of material evidences, this claim could not be established. However, the re-evaluation of a cannon preserved at the Bangladesh National Museum³³⁴ has changed the scenario. The cannon is quite interesting in the historical context of Bengal. It was brought from Nariya in the Shariyatpur district of Bangladesh. The BNM authorities marked it as a 'cannon of eighteenth century'. However, that date has now been proven wrong, because the cannon bears an inscription that claims it was built in AH 945 (1538).

The total length of the cannon is 172 centimeter (cm), circumference of the muzzle face is 39 cm, diameter of the muzzle face is 17.8 cm, bore of the cannon is 7 cm, and diameter of the vent is 2 cm. The cannon is attached

^{333.} Acharyya, N. N. (1984) (reprint). *The History of Medieval Assam*. Gauhati and New Delhi: Omsons Publications. p. 92.

^{334.} Accesion no. j-2003-250

with a set of trunnion's – whose length is 7 cm and diameter is 5 cm. The tail-end of the cannon indicates that definitely there was an attachment or rear handle at the back plate for vertical movement of the barrel. But it has not been found.

This unique cannon bears a number of inscriptions. The major Arabic inscription is written on the barrel of the cannon in of Thulth type, 'Farmaish Islam Shahen Shah Al-Sultan Shana 945'. The other inscriptions are on the muzzle face, transverse of the major one and three minor inscriptions at the muzzle swell. Except the major one all are written in shikastah scripts. Because of lack of diacritical marks it is rather difficult to read those legends. The second line of incomplete shikastah inscription reads as '... hazam one dan Akbar'. The word Akbar can create confusion, but it definitely does not represent the emperor Akbar, as the date of the cannon is well before Akbar's reign.

The major inscriptions clearly indicate the date (AH) 945 – that is 1537-8 CE. The date is rather crucial in the history of Bengal as it highlights the regnal period of Ghiyath-ud-din Mahmud Shah and end of independent Sultans of Bengal. The epithet *Shahen Shah Al-Sultan Shana* is a rare one,

neither used by Mahmud Shah or his contemporary counter-part Sher Shah in their coins and inscriptions.

An important aspect of the inscription is the epithet *Shahanshah*. It is rather close to the one used by the Mughals, *Badshah*. But, the next word is *as-Sultan*, which was never used by the Mughals. Moreover, as the year 945 AH is very clearly written, and there is no other source that can indicate that the Mughals had any control over Bengal on or before that date, it can safely be said that this cannon can not belong to the Mughals. The technology does not indicate that as well, Mughal cannons are normally made of forge-welded iron, while this particular cannon is made of brass and bronze.

The other words in the inscription, Farmais Islam Shahenshah as-Sultan Shana can draw attention to Sher Shah as his son Islam Shah Shuri. Sher Shah is a very interesting character in the history of India as well as of Bengal. He ruled for a very short period, yet he had several innovations many fields. The technology of cannon manufacturing is one of them. For developing his artillery pieces he took all the available copper from the market. Sher Shah possessed 4,000 light cannons, each of which weighed 4 mans within the range of 60-74 kg.³³⁵

^{335.} Balasubramaniam, R. op. cit. p. 157.

A number of cannons of Sher Shah are available in different parts of this subcontinent. In the Indore Museum collection, there are two cannons of Sher Shah, measuring 142 cm in length and 150 cm muzzle – one is made of bronze and the other by copper. The cannons bear the dates of 948 AH. The muzzle of the cannon is shaped to look like the face of a tiger (sherdahan).³³⁶

In Bengal and her neighbourhood the following cannon specimens of Sher Shah are found and worth mentioning: two unique cannons, discovered from Maldah district of West Bengal are displayed in the Varendra Research Museum, Rajshahi, Bangladesh.³³⁷ One canon was discovered near Maldah town and the other from Sher-shahi, Kaliachak police station.³³⁸ Both the cannons have Persian inscriptions. The cannon length was 142 cm and 154 cm respectively. Saiyad Ahmed Ruhmi was the designer of those two cannons in AH 948 (1541) in Jannatabad (Gaur).

Banerji reported one cannon of Sher Shah from the courtyard of the palace of Gauripur.³³⁹ The cannon is 132 cm in length and diameter of muzzle is

^{336.} *Ibid*, pp. 73-76.

^{337.} Accession no. VRM 729 and VRM 475.

^{338.} S. B. Sanyal, op. cit., pp. 1-7; S. Sharf-ud-din, op. cit. pp. 1-7.

^{339.} Banerjee, op. cit., pp. 44-52

10 cm. It has a Persian inscription with the name of the maker as Saiyid Ahmad Rumi during the reign of Sher Shah in 1542-43.³⁴⁰

In Bangladesh National Museum collection there are four cannons of Sher Shah, obtained from Dewanbagh. The striking feature of Sher Shah's canons is that they have a provision for long handles whereas the others have relatively short handles.

Another very interesting fact about the cannons of Sher Shah is that every cannon bears the names of both Sher Shah and the designer Khwaja Ahmad Rumi along with the year of manufacture. The inscription is in Persian, which was read and transliterated into English by Sharf-ud-din.³⁴¹ The last section comprises of a couplet in Persian. The scratches in *shikastah* script are also seen.

The cannon inscription clearly mentions that it was built according to the command of Khwaja Basharat Sultani, who was Sher Shah's governor of Jannatabad (Gaur). One cannon of Sher Shah datable to AH 1542 bears a Bangla inscription below its breach translated as *Tarap Raja*. According to *Rajmala*, Isha Khan and prince Rajdhar Manikya led an expedition to

^{340.} Ibid.

^{341.} S. Sharf-ud-din, op. cit., pp. 1-7

Tarap and conquered the Pathan chief, Fateh Khan. It must be the same Fateh Khan who secured Sher Shah's guns either by inheritance or force. It may be he who wrote on one of them; Tarap Raja³⁴².

Considering the circumstances, there is a strong reason to mark the above mentioned cannon of BNM as manufactured in Sher Shah's *Karkhanah* as well. The word *Islam* in the inscription can even suggest some link with his son and successor Islam Shah. But it should be noted that the region where the cannon was found, Nariya was never under Sher Shah's jurisdiction, while Islam Shah's regnal period falls well after 945 AH. Apart from that, the general structure of the cannon also does not match with the cannons of Sher Shah. The muzzle on the cannons of Sher Shah are tiger faced, but this one is off a simple character only. And the most important aspect to note is that almost all the cannons of Sher Shah bears the name of its manufacturer or designer Saiyad Ahmed Ruhmi, that is not present in this one. Therefore this cannon should not belong to him.

The mention of Alauddin Husain Shah's capturing of a cannon named Kuchmardan draws attention to the availability of cannons in Kochbihar and Kamta. Chattopadhyay, Lahiri and Nahar have published quite a

^{342.} Dineshchandra Sen, op. cit., p. 316

detailed study of the Koch cannons in the Assam State Museum.³⁴³ Koch dynasty originated from the Khen tribes. Visva Singha was the founder of Koch dynasty of Kamtapur kingdom. Visva Singha's sons Naranarayan and Shukladhwaj (Chilarai) spread the kingdom into North Bengal and Assam, sixteenth century onwards. Later this kingdom was divided into two parts. Shukladhwaj's son Raghudev Narayan became the governor of eastern part, known as Koch hajo which became an integral part of Assam's history. The western part of the kingdom became Koch Behar. The next Koch ruler, Parikshit Narayan possessed cannons. One cannon of Parikshit Narayan datable to 1532 saka era, now preserved at the Assam State Museum in Guwahati. This cannon was recovered from Kaklabari of North Kamrup district. The legend on it reads as Sri Sri Parikshit Narayan Karitamidang 2(?) Saka 1532. As there is no Persian script on the cannon, it can be presumed that it was not a captured one, but made for the ruler.

R. D. Banerji³⁴⁴ and Ahmed³⁴⁵ have made reference to the cannons of Gauripur. Banerji also mentioned that Gauripur zamindar, Prabhat Chandra Barua had two cannons in his possession belonging to Raghudeva Narayan.

^{343.} S. Naher, S. Lahiri, and P.K. Chattopadhya, op. cit., pp. 53-71

^{344.} Banerjee, R. D. op. cit., pp. 44-52

^{345.} A.R. Ahmed Khan Choudhury, Kuchbiharer Itihas (Bengali). Kolkata: Modern Book Agency, 1990, p. 139

Of these cannons, the first one, is now located at Hawamahal at Matia Bag³⁴⁶, however, we do not know the whereabouts of the second one at present.

From Ahmed, it is known that the barrel of that mentioned cannon was dodecagonal in shape. Its total length was 138.4 cm and the diameter of muzzle was 14.0 cm. The inscription on that cannon was Sri Sri Raghudeva Narayan Saka 1519. Both that cannons were made with bronze or gunmetal.

Cannons of Bara-Bhuiyans

The Bara-Bhuiyans are the local chieftains who had strongly resisted the Mughal conquest in Bengal during the end of the 16th and beginning of 17th centuries. The rise of these powerful zaminders are related to the political condition of the contemporary periods in Bengal. During the end of Husain Shahi dynasty the administration in Bengal was rather weak and it further weakened during the Afghan rule. In this context, both hindu and Muslim chieftains gained control of different parts of Bengal. Many of them, specially those from the Bhati region fought vehemently against the

^{346.} K. Devi, and P.K. Chattopadhyay, 'The Late-Medieval historical Site Dhubri: Studies Based on the Cannons of Neighbourhood', Chenna Reddy (ed.), *Snehashree*. Delhi: B.R. Publishing, 2014, pp. 214-30

Mughal occupation. From records of *Akbarnama*, *Baharistan-i-Ghaibi* and its contemporary records we come across several names of Bara-Bhuiyans.

There are three cannons in the collection of Bangladesh National Museum that can be marked as the cannons of Bara-Bhuiyans. All three are from Dewanbagh. One of them (no. j-2287), belonging to Isa Khan Masnadi-Ala bears a Bangla inscription "Sarkar Sriyut Masnadalvi San hizar 1002". This records the date, AH 1002 (1593-94). The legend on it is Masnad-i-Alvi. Karim has rightly suggested that it was built at least three years before the war with Man Singh. He has translated this Bangla inscription as "The government of the high born 'Isa Khan Masnad-i-Ali, in the year 1002 A.H" (1593-94). 348

There are a few naval cannons at the Tripura State Museum, Agartala, very similar to the cannons of Isha Khan. It is interesting to note that Isha Khan had close connection with Amar Manikya, the king of Tripura. The State Museum has five such cannons.

There are two hand cannons in the collection of Varendra Research Museum in Rajshsahi. The first one is made of iron (VRM 326) from an

^{347.} A. Karim, History of Bengal Mughal Period. p. 26.

^{348.} A. Karim, Corpus of the Arabic and Persian Inscriptions of Bengal, p. 424

unknown locality (Fig. 22). The second one (VRM 2750) was obtained from Sadarpur-Mirpur, near Kustiya. None of these cannons does bear any inscriptions, but the metalurgy suggests that they were made under pre-Mughal technology. The cannons of Pre-Mughal period were built with casting of brass or bronze; often zinc, tin and lead was used as alloying element. However, detailed Metallurgical compositions of the cannons are not available yet apart from one. The composition of the cannon of Sher Shah at the VRM was determined by the Museum authorities. It contained Cu 84.72, (Zn + Fe) 13.32, and Sn 1.83% respectively. The Composition basically indicate it is made of brass.

Mughal Cannons

The first reference of Mughal cannons used in Bengal is found in *Akbarnama*. According to Abul Fazl, during the first Mughal conquest, Zunaid Karrani, a cousin of the then Bengal Sultan Daud Karrani was killed in battle field when he was hit by a cannon ball. *Baharistan-i-Ghaybi* is full of such examples. According to it, in 1611, the army of Musa Khan fired cannon on the Mughal position from their fleet near

^{349.} Sir J N Sarkar, *Histiry of Bengal*, Vol. 2, Dhaka: University of Dhaka, Third Impression, 1970, pp. 194, 211

^{350.} Mirza Nathan, Bahristan-i-Ghaybi, 1936, p. 78

^{351.} Ibid, pp. 174-6

Khizirpur, located about half a mile to the north of Narayanganj known as Hajiganj. The Mughal army replied by discharging their big cannon⁴⁶ from high lands and threw the enemies down from the top of their boats. The large 'Kusas' which were struck by cannon shots sank in the river along with their men.³⁵²

By the time of Islam Khan Mashadi, the Mughal army had established *karkhana* in Dhaka that produced the heavy guns to be used against the Ahoms.⁵¹ One of the famous cannons produced in Dhaka was the *Jahan-Kusha* i.e., the world conqueror, made at Dhaka in the eleventh year of Shah Jahan's reign (1637 A. D.)³⁵³ A Persian poetical inscription confirms the date (1047 AH /1637 CE) and place (Jahangirnagar) of casting.³⁵⁴ The cannon, found at Murshidabad, is 18' in length with a circumference of more than 3.5' and an ignition hole 1'-2" in diameter, took a charge of 268 Kilograms of gun-powder at once. It has been made by method of welding.

Citing a newspaper article, Abul Hashem Miah referred to a 'famous' blacksmith, Janardan Karmakar of Sylhet, who was an expert in making

^{352.} Ibid, pp. 174-6

^{353.} M.K. Zaman, Mughal Artillery, Delhi: Idarah-i-Adabiyat, 1983, pp. 6-7

^{354.} Nikhil Nath Ray, *Murshidabader Itihas*, (History of Murshidabad in Bangla), Vol. I, Calcutta: 1309 BS, pp. 461-62

cannons. The above mentioned cannon, along with another one now kept in the Osmani Udyan is believed to be made by him. The statement, however, is subject to debate as there is no contemporary evidence to support it.³⁵⁵

There are a few more Mughal cannons preserved in different Museums. Among them, the one at Indian Museum, Kolkata has the most elaborate inscription. It has been studied by many, including Damnat, 356 Banerji, 357 Ahmed 358 and Miah. The brass cannon, discovered from Rangpur has a long Persian inscription, along with a Sanskrit and an English word also inscribed on it. Damnat, Banerji and Ahmed's reading of the inscription are not the same. While Damnat, who first published it, claims that it mentions the date as AH 1021 (1610-11) and the place of production as Jahangirnagar, i.e., Dhaka, Banerji and Shamsuddin does not mention the word Jahangirnagar and read the date as 21st regnal year of Badshah

^{355.} Md. Abul Hashem Miah, Cannons in the Sub-continent with Special Reference to the Cannons of Bengal, p. 66, fn

^{356.} G.H. Damnat, 'Inscriptions on a Cannon at Rangpur', *Indian Antiquery*, Vol. II, Bombay:1874, pp. 218-19

^{357.} R.D. Banerji, 'Inscribed Guns from Assam', pp. 47-48

^{358.} Shamsuddin Ahmed, Inscriptions of Bengal, Vol. IV, pp. 315-316

^{359.} Md. Abul Hashem Miah, Cannons in the Sub-continent with Special Reference to the Cannons of Bengal, p. 73-75

Jahangir. Analysing all three, Miah supported Damnat's reading, that appears to be³⁶⁰,

During the reign of the king of kings, protector of the world, Nuruddin Jahangir Badshah Ghazi, when the Khanzad Khan Firoz Jang was Subadar, and Akhand Moulana Murshid was Minister, and Hakim Haidar Ali Darogha, and Pir Muhammad and Sri Harihardas Amins of Bengal, this cannon was made of Jahangiri brass in Jahangirnagar by Surmanath in the Hijira year 1021. The weight of the cannon with its carriage, by Jahangiri weight, is 619, 5113. The master of the ordnance was Sayyid Ahmed."

The Sanskrit inscription bears the name of Gadadhara Simha, king of Assam and the Saka year 1604 (1683 CE), while the word 'Bundoola' is written in English.

From the Persian inscription in the cannon, it is clear that it was made by the craftsman Sri Harihardas (Bir Ballardas according to Ahmed), under the supervision of Sayyid Ahmad, the master of ordnace (*arzdar*), by order of Hakim Haydar Ali, the daroga, during the rule of Badshah Jahangir. The date is either 1610-11, or 1621-22.

The Sanskrit inscription indicates that it was under the posesion of the Ahom king in 1683, and then again under someone who knew English.

^{360.} G.H. Damnat, op. cit., p. 218

Damnat's assumption seems logical that it may have been used by the Mughals, (most probably by Mir Jumla) during their expedition to Assam and somehow left there. It was then recovered by Burmese general Dundoola when he conquered Assam in 1822 and probably this gun was anongst his cuptures. In in 1825 Assam was rectaptured by Colonel Richards; it must have been about this time that the word "Bundoola" was written on the gun.³⁶¹

The cannon is not very big, 4'-5" in length and the diameter of its open mouth is 4.5". The Muzzle of the, cannon is shaped like a lion's head.

Two other Mughal cannon with considerable inscription is now in Chittagong University Museum. Infact there are four cannons in their possession, however the other two does not have inscription. One of these inscribed cannons has been published by Shamsul Hossain.³⁶² On the top surface of this cannon, there are three short embossed inscriptions that read,

- i. This is the cannon of Shah Buland Iqbal.
- ii. This cannon was made under the Supervision of Barqundaz Khan.

^{361.} *Ibid*, p. 218

^{362.} Shamsul Hossain, 'Cannon of Shahjahan with the title Buland Iqbal', in *JASBD*, Vol. XXX, No. 2, December, 1985, pp. 9-11

iii. This cannon, "Sarjang" (i.e. Head of war) by name is the work of Muhammad Hussain Lazzat, dated 1066 AH/1655 CE.

The cannon is one of the four cannons purchased in 1966 by the then National Bank of Pakistan from Mrs. Karim-un-Nesa Begum a lineal descendant of Adhu Khan Hazari who was a Mughal Officer posted in Dohazari, Chittagong. The Bank later donated the cannons to the University of Chittagong for its proposed Museum.

The cannon, made of bronze is 6'-5" in length; its circumference at the breech is 36.6" and at the muzzle is 27". The cannon was probably used during the conquest of Chittagong in 1666 by Subahdar Shaista Khan and thus it was left there. The other three cannons are 7'-0", 6'-6" & 4'-3" in length. They also appear to belong to the Mughal period.³⁶³

The largest medieval cannon discovered in Bengal is now placed in the Osmani Uddyan. It is also popularly known as 'Sadarghater Kaman'. Built by Mughal Subahdar Mir Jumla (1661-63), it was originally named as 'Bibi Mariam'. Mir Jumla placed it along with another huge cannon 'Kale Jamjam' on either side of Buriganga river near Barakatra to defend frequent attacks of the Mogh and Arakanese pirates. Kale Jamjam, placed on a sandbar on the other side of the river was the prominent of the two, but

^{363.} Shamsul Hossain, op. cit., pp. 9-11

it was devoured by the river in the 18th century.³⁶⁴ British Collector Mr. Walter salvaged Bibi Mariam in 1832 and placed it at Chawkbazar. Later it was shifted in front of Sadarghat with initiatives from the then Dacca Museum authority in 1917. In 1957 it was again moved, this time initiated by the newly established Dacca Improvement Trust (DIT) and was installed at Gulistan in front of DIT avenue. The cannon was shifted to its current location during the late eighties. The cannon is 22'-10" long³⁶⁵, built on 12 pieces wrought iron tubes joined together with 3" thick iron rings. The barrel caliber is 1'-3" and it was capable of launching cannon balls of 1200 lbs each.

Taifoor observes that in his Assam expedition Mir Jumla captured a large number of big and small guns (cannon)³⁶⁶ which were all dispatched to Dhaka under the care of Mir Murtaza Khan, entitled Mujahid Khan. One of the guns was of a very large calibre and according to him, the above noted cannon called *Bibi Marium* was that 'big gun'. Miah believes that this

^{364.} S.M. Taifoor, Glimpses of Old Dacca, Dacca: 1956, pp. 177-179; James Taylor, A Sketch of the Topography & Statistics of Dacca, Calcutta: G.H. Huttmann, Military Orphan Press, 1870, p. 83

^{365.} According to Miah the measurement is 17'-10.5" in length, but in that case his own assumption that it was the largest cannon of Bengal proves to be wrong, because *Jahan Kusha*, the Murshidabad cannon is larger, 18' in length. See, Md. Abul Hashem Miah, op. cit., pp. 72, 73

^{366.} S.M. Taifoor, Glimpses of Old Dacca, p. 179

cannon was made for Khawaja Usman, the Afghan rebel who faught valiantly against Islam Khan by Janardan Karmokar. Baharistan-I-Ghyabi did mention that Usman used large guns in the battle of Daulambpur, but if this was one of those cannons, Miah's assumption that it was later captured by Mir Jumla has a missing link—it is not clear how it went to the hands of the Ahoms. Therefore, it can not be the same cannon used by Khawaja Usman.

About the lost cannon, 'Kale Jam Jam', Taifoor cited a reference of Nicolas Manucci, who, in his list of Aurangzeb Alamgir's big guns mentioned a field piece named Jham Jham. Taifoor thinks it was the same cannon.³⁶⁹

There are quite a few more Mughal cannons found and preserved in different collections of Bangladesh and India. Miah has published most of them, and from his study and the above discussion, it can be summerised that the technology of cannon making must have arrived at Bengal prior to the Mughal rule, most probably during the fifteenth or sixteenth century. From the time of Badshah Jahangir (1605-27 CE) onward, cannon and other war ammunitions were made in "Jahangirnagar" (Alias Dhaka). Early

^{367.} Md. Abul Hashem Miah, op. cit., p. 68

^{368.} Mirza Nathan, Bahristan-i-Ghaybi (English tr.), p. 78

^{369.} S.M. Taifoor, Glimpses of Old Dacca, p. 179

master gun-makers were generally Turkish, but later the art was mastered by the locals as well. Most of the Bara Bhuiyas of Bengal such as Isa Khan Kcdar Roy, Khwaja Usman, Pratapaditya and Sitaram Roy had their own cannon made by the local blacksmiths. Even the striking of Mughal cannons were often done by the local craftsmen, many of whom were Hindus while they may have taken help from the Europeans as well. Taifoor thinks, at the time of Nawab Mir Jumla war-boats and other ammunitions were made in Dhaka under the supervision of one Thomas Pratt, who was the English trade Agent in Dhaka.³⁷⁰ In Dhaka Mir Jumla recruited a large number of crews for the flotilla which carried artillery and big guns (cannons) and many of his Naval officers and men were Dutch, Portuguese and Englishmen.

Apart from the bigger, heavier guns, smaller fire-arms were also making grounds during the midle ages. Infact, during the late medieval Bengal, it eventually started to replace the favoured corp of bows and arrows. Light artillery was called *top-khanah-i-jinsi* or *top-khanah-i-rezah* (small artillery) or *topkhanahi-jambishi* (moveable artillery) by the Mughals. Babur is reported to use light artillery pieces resting on forks as well as hand guns, carried on back of camels. Jahangir refers to *topkhanah-i-rikab*

^{370.} S.M. Taifoor, Glimpses of Old Dacca, p. 179

or horse-drawn arms. Bernier speaks of Aurangzeb's horse artillery (hazir-i-rikab) numbering 50 or 60 field-pieces and chests of ammunition mounted on horse-driven carriage.³⁷¹ There were varieties of light artillery: swivelguns were called jazails. Some of them were carried on the backs of elephants and thus called gajnal or hathnal, similar pieces carried on camels called shutarnal. Matchlocks carried by one man were called narnal. Lighter matchlocks were called tufang or banduq. There were different types of them, matchlocks (toredar banduq), flint-locks (pathardar or chaq maqi banduq), multiple barrelled guns and revolving guns. Match-locks were the older technique, flint-locks or the musket guns may have been introduced by the Europeans working for the Mughal army. However, not many of these small arms survived to be studied in detail.

In the siege war-fare, military engineering adapted many innovative ideas and eqiupement; they will be discussed in the next chapter along with the engineering of fort architecture.

5.4 Signaling Equipments

Communication is an integral part of every human activity. Warfare is no exception, military communication is thus a very important component in

^{371.} J.N. Sarkar, The Art of War, p. 127

army organisation since the ealiest days of human civilization. Hence, signalling equipments are considered as equally important as the weapons of attacking and defence. In modern warfare, methods of communication has changed revolutionary since the invention of mechanical communication devices. Before that, musical instruments and flags were used for that. Since human voices are inaudible in battle, drums and bells have to be used while flags and banners were used to focus their attention. Music had another spectacular usage as well, to arouse the ardour of the troops, as Abdul Fazl b clearly mentions that the bands of musicians and experienced warriors encouraged the army to fight.³⁷² However, its main purpose was to beat time during march and to give signals. Various kinds of musical instruments used in warfare have been mentioned in both ancient and medieval sources.

A perfect example can be cited from the Rasul Vijaya: 373

দুই সৈন্য মুখোমুখি হই গেল যবে।

বিবিধ বাদ্যের ধ্বনি উঠি গেল তবে 1

ঢাক ঢোল কাড়া শিঙা বিউল কত্তাল।

মৃদঙ্গ ঝাঁঝরি বাজে নানা শব্দে তাল ॥

ঝাঁঝরি খঞ্জরি বাজে দোহরি মোহরি।

সারি সারি মধু বেণু অমৃত লহরী ॥

^{372.} Abul Fazl, Ain-i Akbari, p.

^{373.} Ahmed Sharif (ed), Rasul Vijaya, Dhaka: Bangla Academy, 1968, pp. 34-35

বীণা বেণু বাজে জঙ্গ উঠে ঝক্কারিয়া।

যুদ্ধ মাঝে বীর সব উঠে পলটিয়া ।

পিনাক বাজএ ঘন রুদ্রক বিলাস।
জথঢোল শঙ্খধ্বনি শুনিতে উল্লাস।

সারি সারি সানাই সুস্বরে করে রাও।

যুদ্ধ মাঝে বীর সব উল্লসিত গাও।

বাজএ বিজয় ঢোল তবলা নিশান
দগরেত দিল কাঠি, ভূমি কম্পমান।

কম্পিত পৃথিবী হৈল দুন্দুভির ধ্বনি।

হস্তীপৃষ্ঠে দমা বাজে জঙ্গ ধ্বনি শুনি।

Almost all the musical instruments used in medieval warfare in Bengal have been mentioned in the stanza. They include, *Dhak, Dhol, Kadha, Shinga, Beul (Bugle?), Kottal, Mridanga, Jhanjari, Khanjari, Veena, Venu, Pinaka, Sankha, Sanai, Tabla, Dagara* and *Dhunduvi*. In *Sikandarnama* there are references for some more, viz., *Damama, Bheri* and *Bheur*.

Among them, bheri, dhak, dhol, kadha, naqadha, dundhubhi, damama, dagara, mridanga and tabla - all are different kinds of drums and kettledrums. Dundubhi, damama and dagara is the most cited of them, and often it is mentioned that the earth trembles when these war drums are beaten.

Beul, sanai and venu are different types of flute and trumpets, often horns (singa) and conches (sankha) are also used to create loud musics. Kottal,

Jhanjari and Khanjari are metal plates beaten to make sound. Many of these are mentioned in Ain-i-Akbari, where,

Abdul Fazl has given details of the instruments used in Mughal army. He has also mentioned the rules of *naubatkhana*, where drums were beaten at certain intervals. Throughout the journey (from departure to arrival at destination) the drummers "would not cease their hands from beating the drums placed on the elephants." It was also an usual practice to beat the drums at every *Kos* of the journey (according to the number). Cannon (*top*) was fired at the time of entering the royal tent. The drum was also beaten to sound the alarm of enemy attack.³⁷⁴

Flags have been both a symbol, and an emblem of war since the ancient days. However, the idea of a single 'national' flag did not exist in ancient India, but references to different kinds of flags (dhvajas, ketu, patakas) are found in ancient Indian literature. The standards and emblems along with the band added grandeur to the army, as well as serving the purspose of differentiating the different divisions of army. The standards had various animals or other figures in them. During the medieval period these were under the charge of a special officer called Qurbegi. Abul Fazl mentions and illustrates seven kinds of ensigns and flags: (i) Jhanda or Indian flag,

^{374.} J.N. Sarkar, The Art of War, p. 127

(ii) Kawkaba, (iii) Sayaban or Aftabgir, (iv) Tumantoq, (v) chatr (royal umbrella), (vi) 'alam (standard), (vii) chatrtoq or chuturtoq, adorned with hair of tails and sides of Tibetan yaq. Medieval Bengali epics also mentions about victory flags (Vijaya Nishan) being hoested, and prepartion of war with Min-dhwaja or flag with fish emblem over the chariot. The symbol of fish was a popular emblem, it was the emblem of Nawab Siraj-ud-Dawla as well, as Ghulam Husain Salim informed. 376

^{375.} Wakil Ahmed, Wakil Ahmed, "Modhyojuger Bangla Kavye Judhyo o Judhyastro", p. 109

^{376.} Ghulam Husain Salim, *Riyaz-us-Salatin*, translated into English by Moulovi Abdus Salam, Calcutta: Asiatic Society, 1902, p. 364 [hereafter G.H. Salim, *Riyaz-us-Salatin*; The book has also been translated into Bangla by Akbar Uddin as *Banglar Itihas*, Dhaka: Bangla Academy, 1974; reprint, Dhaka: Abosor, 2008, cited hereafter as G.H. Salim, *Riyaz-us-Salatin* (Bangla tr.)]

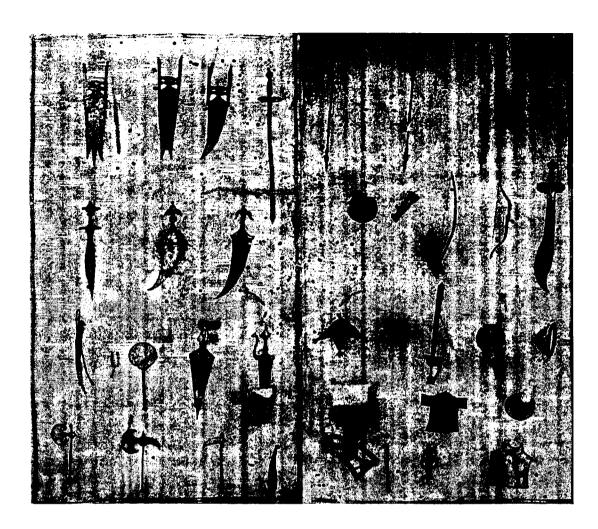


Plate 05 : Different types of Mughal Weapons in Ain-i-Akbari manuscript, (17th Century)

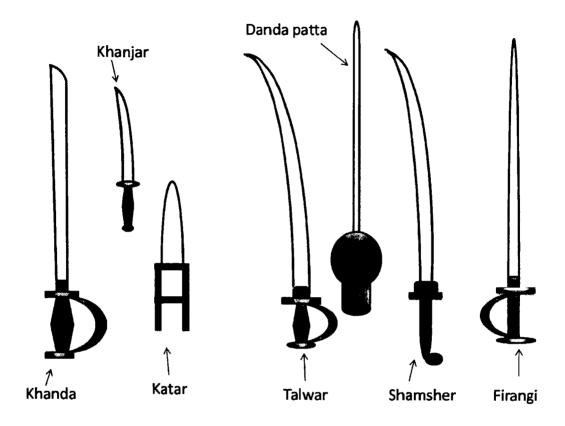


Plate 06: Different Types of Swords and Daggers

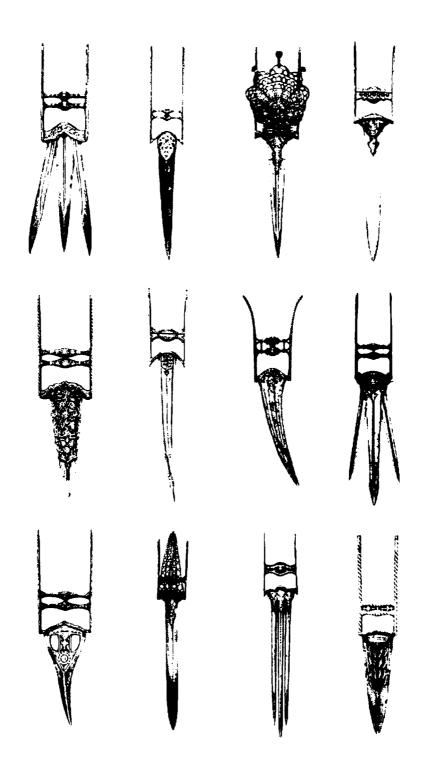
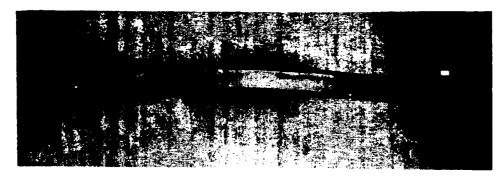


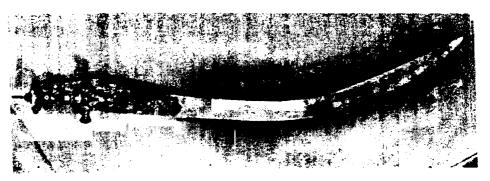
Plate 07 : Different Types of Daggers in Metropoliton Museum of Art, New York (Curtesy: Metmuse Website)



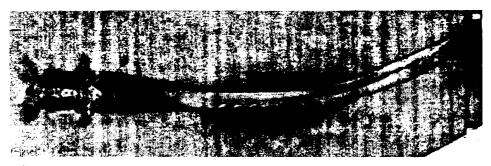
Firangi



Yatagan



Talwar



Arapusta

Plate 08 : Swords in Bangladesh National Museum

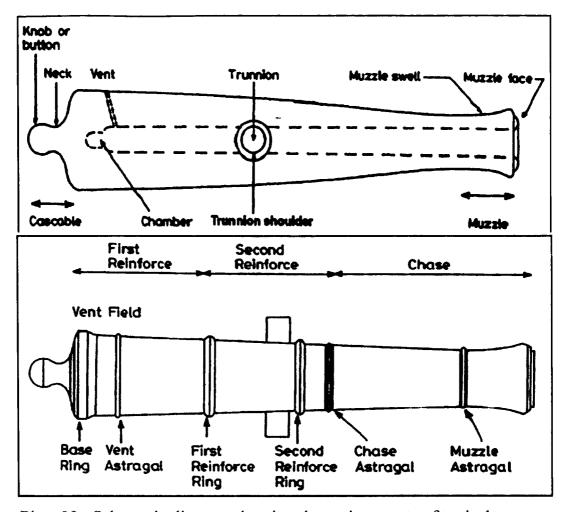


Plate 09: Schematic diagram showing the various parts of typical cannon

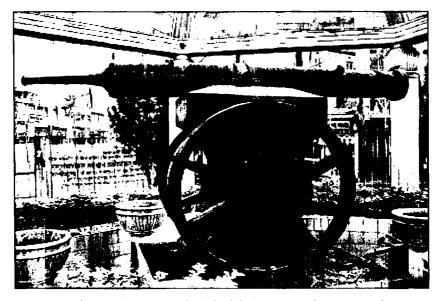


Plate 10: Hussain Shahi Cannon, in Agartala





Plate 11 : Cannon of Ghiyasuddin Mahmud Shah, Bangladesh National Museum and inscription on it

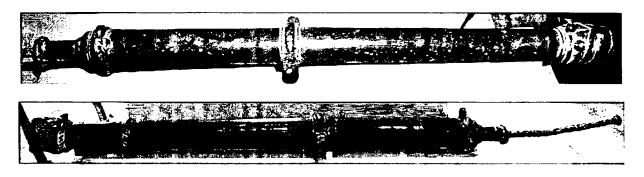


Plate 12: Cannons of Sher Shah, Bangladesh National Museum

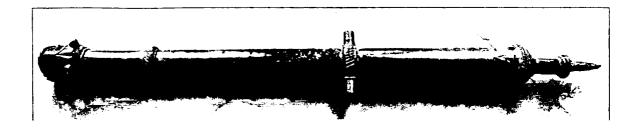




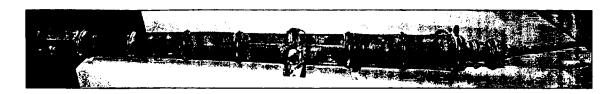


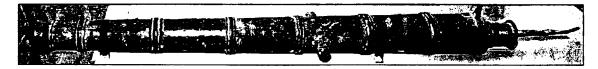
Plate 13: Cannon of Sherd Shah, Varendra Research Museum





Plate 14: Cannon of Sherd Shah, Bangladesh National Museum (left) and Varendra Research Museum (right)





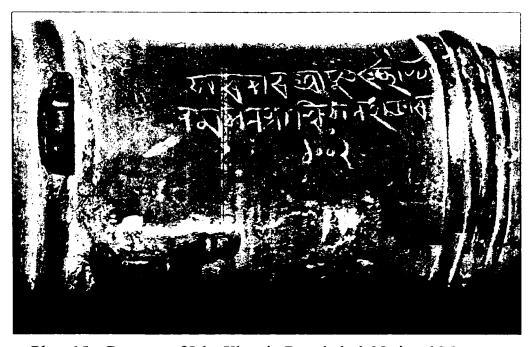


Plate 15: Cannons of Isha Khan in Bangladesh National Museum





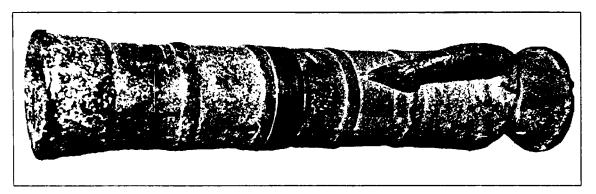
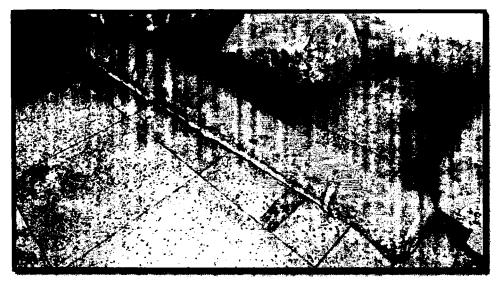


Plate 16: Hand cannons in Varendra Rsearch Museum (1 & 2) and Bangladesh National Museum (3)





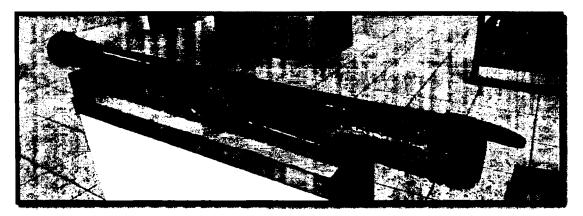
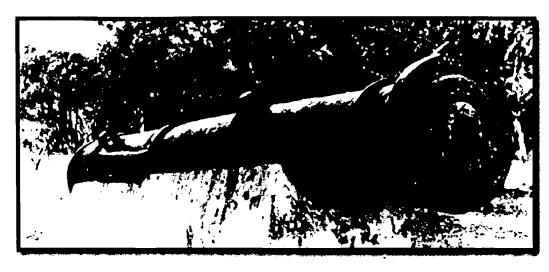


Plate 17: Mughal Cannons in the Chittagong University Museum



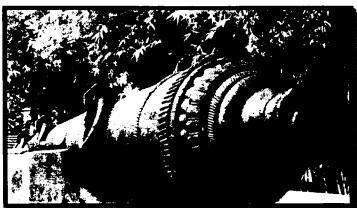




Plate 18: Mughal Cannons Bibi Marium at Osmani Udyan, Dhaka (top), Jahan Kosha in Murshidabad (middle) and an unnamed cannon in Lalbagh, Dhaka (bottom)

Chapter 6

Forts and Fortification

Forts and fortifications are integral part of war planning and strategy since the ancient times. The history of humankind starts with their struggle for existence with the wild animals. The idea of fortification stems out of this struggle, as the early hominids sought for ways of self defence. When the hunters and gatherers started to settle as agrarian communities, this urge for security and protection generated the idea of fortification. The earliest kind of forts may have barriers made of whatever materials they had; most common of those were mud, stone and wood. So, the earliest kind of fort was 'a barrier of earth on a stone base surmounted by a timber stockade constructed around the area to be protected. In the course of time, men tried to invent new, innovative ideas to strengthen this barrier; masonry walls replaced the mud ones, protective towers and ramparts were added, so did machicolation, arrow slits, gun-stands and many more.

The history of fortification in Bengal also dates backs to the ancient times.

Long before the arrival of the invading Muslim army in the early thirteenth century, ideas about fortification can be traced back in ancient Indian

^{377.} The Encyclopedia Americana, New York: American Corporation, 1967, p. 515

literature. According to the ancient Indian treaties Vastushastra³⁷⁸ fortification existed in India around three thousand years ago. The writer, Manasara, mentions eight different types of villages, i.e., Dandaka, Sarvato Bhadra, Nadya Varta, Padmaka, Swastika, Prasasta, Karmuka and Chaturmukha - based on their plans. However, many of the plans he mentioned contained gates on them, which indicates that they were actually fortified.379 He had also mentioned eight groups of towns, Shibira, Vahinimukha, Sthaniya, Dronaka, Samvidha, Kolaka, Nigama and Skandhavara, all having clear defensive protections. Other Ancient Indian literatures such as the Rigveda, Puranas, Ramayana and Mahabharata all contain descriptions of royal households and towns known as 'Pur', having fortifications like the ramparts and ditches. Kautilya, the Mauriyan pundit of third century BC had given extensive descriptions of the forts, or 'Durga' as he called them. 380 He classified them into six categories as Dhanva Durga (desert fort), Mahi Durga (mud fort), Jala Durga (water fort), Giri Durga (hill fort), Vana or Vriksa Durga (forest fort) and Nara Durga (fort

^{378.} P.K. Acharya, Architecture of Manasara: Translated from Original Sanskrit, Mansara Series volume IV, London: Oxford University Press, 1939, p. 39. The book has also been translated by D. N. Shukla, (Vastu-Sastra: Hindu Science of Architecture, New Delhi: Munshiram Manoharial Publishers, 1993) and Vijay Kumar (All You Wanted to Know about Vastu Shastra, New Delhi: Dwan, 2002).

^{379.} P.K. Acharya, "Villages and Towns in India", in, D.R. Bhandarkar (ed.), B C Law Volume, vol. 2, Poone: Bhandarkar Oriental Research Institute, 1945, p. 276

^{380.} Kautilya, Arthashastra, pp. 66-68

protected by men). His direction of creating a two-stage security system with two boundary walls, one within the other, remained as the basic of fortification in the region ever since. The ancient Silpashastra also have reference on the methods of fortification, as it classifies two types of forts-Akritrima or Prakritika Durga (natural fort) and Kritrima Durga (man made fort). It emphsises on erecting boundary walls containing ramparts and parapets (prakara) and around the Kritrima Durga. 381 The wall should be too high to be jumped over by attacking enemies, it mentions. Other measures to be taken, as mentioned in the ancient text are, digging of trenches and ditches around the area and creating forest. As most of the settlements in early India had been built on river-banks or on sea-coasts, water always played vital role in the planning of forts. So did other aspects of geography, as we can find mentions of natural fortifications like hills or forests, high walls and man-made forests supplemented them in Kritrima Durga.

Apart from those, the 'Garh' was also used extensively to denote fortified enclosures. Thus we find many cities in ancient Bengal by the name of garh, like Mahasthangarh, Chandraketugarh, Bangarh, Bhitargarh,

^{381.} Uday Narayan Roy, "Fortification of Cities in Ancient India", *Indian Historical Quarterly*, Vol. XXX, No. 3, 1924, p. 237

Dharmapalergarh etc. In the northern part of Bangladesh, many ancient sites are known as *Duar*, meaning gateway in Bangla. Those may also be identified as kind of a fortified area.

As we have seen while examining the geographical factors³⁸², that there were not many such fortified cities in Bengal during the ancient and early medieval period. Dr. Ayesha Begum has pointed out 48 such names that suggested existence of fortified cities, towns and places; many of whom has not yet been identified.³⁸³Among those that have been identified, *Pundranagara* in *Pundravardhana Bhukti*, identified with modern day Mahasthangarh in Bogra is the earliest known.³⁸⁴ It was probably a provincial township, constructed on the banks of the Karotoya during the Mourya era (3rd century BC) but later declined due to the shifting of the Karotoya. The same fate was borne by the port city of Tamralipti, identified near Tamaluk in Medinipore district in West Bengal due to the shift of the river Sarswati, as we have already discussed in chapter - 2. The

^{382.} See Chapter 2, p.

^{383.} Ayesha Begum, Forts and Fortification, pp. 97-135

^{384.} D.R. Bhandarkar, "Mauryan Brahmi Inscription of Mahasthan", *Epigraphia Indica*, Vol. XXI, 1931, pp. 84-85. For a detailed analysis of the fort city, see AKM Yakub Ali, "Pundranagara: an Emporium of North Bengal", in *JASBD*, Vol. 53, No. 1, 2008, pp. 77-89

name of the city of Kotivarsha is found in Gupta inscriptions³⁸⁵, identified to be in Devkot in West Dinajpur. Seventh century Bengal King Sasanka's capital Raktamrittika was arguably situated in Rajbaridanga in Murshidabad, while the city of Vikrampura of the Sena and later Chandra and Varmans was in the presentday Munshiganj district in Bangladesh. The Most important of the cities of late ancient Bengal is the capital of the Pala and the Sena kings, Gaur. In Narayana Pala's Badal Pillar inscription the Pala kings are called as 'Gaureswar', 386 which indicates that the famous city was the capital of the Pala's. It was still capital until the reign of king Laksmana Sena, who, in all probability renamed it as Laksmanavati, the Lakhnauti of the early Muslim chroniclers.

Most of these forts or fortified cities and areas did not survive until the arrival of the Muslims in Bengal. The reasons are two-fold: first, the change in course of the rivers which caused a scarcity of water sources; and the second, as secular buildings, they did not get enough priority for conservation as did the religious structures. Whatever the reasons may be, as there is not enough surviving examples of old forts, the meagre information available from the literary sources, excavation reports and

^{385.} J.N. Sarker, *History of Bengal*, Vol. I, Dacca: University of Dacca, 2nd ed. 1963, pp. 320-21

^{386.} Badal Pillar Inscription, verse 13, Epigraphia Indica II, p 160; Bhagalpur Charter of Narayanapala, year 17, verse 6, The Indian Antiquary, XV p 304

extant remains makes it very difficult to make any hypotheses and general observations about the character of forts and fortifications of ancient Bengal.

The Muslims also had their own understanding of forts and fortification from the time well before they had arrived Bengal. They had erected a fort early in the eighth century when Mohammad bin Kasim, the first Muslim conqueror of South Asia invaded Sindh. Excavations at Bhambore exposed the fortification.³⁸⁷It resembled the early Islamic proto-type of military settlement, with a mosque at the centre and garrison or encampment of soilders near it. During the Umayad period, another form of fort was popular. Umayads, the first dynasty of Muslim rulers used to build 'Badiya' (meaning edge of the desert in Arabic), fortified palaces and caravanserai's in the midst of desert, taking the basic structural plan from Roman Castra or frontier posts.

The Muslim rulers, after arriving at the beginning of thirteenth century, combined both the forms and ideas to recreate fortifications here. Early Muslim forts had very little difference from those seen in Ancient Bengal.

^{387.} For details of the report, see F. A. Khan, Banbhore; a preliminary report on the recent archaeological excavations at Banbhore, Karachi: Dept. of Archaeology and Museums, Govt. of Pakistan, 1963

The general character followed Kautilya's theory of erecting two enclosures the outer one for the protection of the city, and the inner and the stronger one for the protection of the palace where the ruler, his family and close associates lived. The security personnel and other inmates of the city usually had separate quarters designed for people of different professions and class. Thus we find the names like Tanti Para, DhunichawkPara, the Chamkatti Parain the early Muslim city of Lakhnauti. The outer enclosure of the city was generally high mud walls, and in most cases, had rivers on any particular side. In case of the absence of river protection, moats were dug to create some extra protection. The inner enclosure used to be heavily built with high brick walls, and they usually contained arrow-slits and other defensive devices like rampart walks, towers and heavily fortified gateways on them. The gateways had further defensive arrangements like bent entrance, machicolations and placement of armed guards.

Ayesha Begum has made an extensive study of the development of forts in medieval Bengal in her PhD thesis Forts in Medieval Bengal: An Architectural Study, later published as a book Forts and Fortification in Medieval Bengal. In her thesis, she had categorised five types of forts

during the pre-Mughal era in Bengal, and another five during the Mughal era. They are:³⁸⁸

Pre-Mughal Forts:

- i. Damdama Fort
- ii. Capital Fort
- iii. Border Outposts
- iv. Katra Forts
- v. Hammam Forts

and Mughal Forts:

- i. Border Outposts
- ii. Palace Forts
- iii. River Forts
- iv. Katra Forts
- v. Hammam Forts

She, however, dropped the Katras and Hammams as categories of forts when she published her book,³⁸⁹ which is a more reasonable approach. Therefore, from her study, we can point out five major types of forts in medieval Bengal as a whole; and they are:

- i. Damdama Fort
- ii. Capital Fort

^{388.} Ayesha Begum, Forts in Medieval Bengal: An Architectural Study, PhD Dissertation, Institute of Bangladesh Studies, Rajshahi University, 1992, pp. 175-257, 258-380.

^{389.} Ayesha Begum, Forts and Fortification, pp. 185-204, 251-292

- iii. Palace Forts
- iv. River Forts
- v. Border Outposts

Ayesha Begum described in details 41 such forts of medieval Bengal in her book. Every one of the forts had played important roles in the war planning in different situations under the period of this study. Therefore, a brief descriptions of the forts is essential here.

6.1 Pre-Mughal Forts of Bengal

6.1.1 Damdama Forts

Damdama is an Arabic word, also used in Persian in the same meaning, i.e. a mound, a drum or a raised enclosure.³⁹⁰ But the word has been used often to mention garrisons of the early Muslim armies in Bengal, comprised of a solidly built raised platform.³⁹¹ Minhaj mentioned that the first Muslim conqueror of Bengal, Bakhtiyar Khalji had built such damdama.³⁹² Before the advent and widespread use of gun powder and modern firearms, almost all the defensive centres were actually siege forts, damdama is a very common form of those siege forts in Bengal. The advantage of this type of

^{390.} F. Steingass, A Comprehensive Persian-English Dictionary, London: Trubner & Company Ltd, 1947, pp. 535

^{391.} A.H. Dani, Muslim Architecture in Bengal, Dhaka: Sufia Dani, 1961, p. 24

^{392.} Minhaj, Tabaqat-i-Nasiri (English. tr.) pp. 560-568

forts is that they can defy even a large army with minimum efforts by defending. The besiegers might have to wait for long, and only the threat of being out of rations finally compels the defenders to surrender.

Damdama of Bakhtiyar Khalji

Minhaj did not elaborate on the details of Bakhtiyar's Damdama, or even its location. Alexander Cunningham identified it to be on the eastern bank of the Punarbhava, '33 miles (55.1 km) to the nort-east of Pandua, 18 miles (28.97 km) to the south-west of Dinajpur and 70 miles to the north-east of the citadel of Gaur. 1393 The fortified area consisted of three distinct parts, separated by wide moats and surmounted by heavy mud walls. Two separate citadels of the same size, with two-stage security walls are found there. However, the exact location and character of Bakhtiyar's Damdama is yet to be confirmed. As Bakhtiyar advanced towards north after his conquest of Nudia and halted at Devikot making it his headquarter, it is likely that might have built a fort there. This damdama must have served the purpose of both a residence of the conqueror and his military barrack. Bakhtiyar later made Lakhnauti his headquarter of administration, so the damdama at Devikot might have remained as a military outpost.

^{393.} A. Cunningham, Archaeological Survey of India Report, 1879-80, vol.xv, p.145.

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Contemporary sources do not elaborate on the physical description of Laknauti, but as the capital it must have had a fortified area with camps in and around it.

Ekdala

Strategically the most important damdama fort in medieval Bengal was probably the fort of Ekdala. Literally, Ek-dala meaning one-leafed fort. The fort was located somewhere between Pandua and Gaur to their north-west. It was built by Sultan Shamsuddin Iliyas Shah, the founder of the Iliyas Shahi dynasty in the fourteenth century on the wake of the expected attack by Sultan Firuz Shah Tughlaq of Delhi. Contemporary chroniclers of Delhi has cited many references of this fort and from those references, the character of a damdama, or siege fort of medieval Bengal can be summerised. According to Shams-i-Siraj Afif Ekdala was an island, and the Jajair-i-Ekdala was encircled by the Ganges. 394 According to Ziauddin Barani it had jungle on one side and water on the other.³⁹⁵ There is no extant remains of the fort, but from the literary sources, it is assumed that the stronghold of Iliyas Shah was fortified with massive ramparts made of adhesive clay and by a 18.3 meter wide moat running round it. The

^{394.} Afif, Tarikh-i-Firuzshahi. pp. 308

^{395.} Barani, Tarikh-i-Firuz Shahi (Bangla tr.), pp. 457

characteristic feature of its being built behind double enclosures of water made it looking like an island, hence Afif called it as the *Jajair-i-Ekdala*. Sultan Firuz Shah Tughlaq's army was not familiar with this type of fort, and it was a curious sight for them. Firuz Shah had sieged the fort twice but he was actually unable to dislodge the army of Bengal, or capture it. According to the chroniclers, the fort was large enough to easily accommodate all the forces of Iliyas along with the entire population of Muslim elites of the capital, Pandua. Both Afif and Barani's descriptions emphasises on the impregnability of the fort, as Afif claims, 'the sultan (Firuz Shah Tughlaq) having blockaded the island of Ekdala, 'arradas' (small balustrades) and manjaniks were erected on both sides, arrows and darts were discharged and the business of the siege went on, and conflict occurred every day.'396 According to Barani, Firuz started from Delhi on the month Shawal, 754 AH, and the siege ended in Shaban, 755 AH. That means, the siege went on for at least nine to ten months if we consider that it took them a month to arrive at the Bengal capital. Afif also mentioned it as the Fort Sikadariya, and informed that at one point, 'one of the principal bastions fell apart because it was unable to bear the men and the immense weight placed upon it' and further added that the people of Bengal 'laboured

^{396.} Afif, Tarikh-i-Firuz Shahi, pp. 307

all night and restoring the ruined fort, was again prepared for the attack.¹³⁹⁷ Following his description, it is quite obvious that the fort had a massive rampart on its boundary wall, and the defending army used to take position over the bastions with heavy equipments. Another important point to note is that the local people were capable of restoring it over the night, which indicates that the artisans and materials of construction were readily available, even when they were under the siege.

6.1.2 Capital Forts

From descriptions found in literary sources, it is evident that early forts of Bengal were actually fortified places of living, villages and later especially urban settlements. The capital forts are this kind of urban settlements, with arrangements of residential and military requirements. Capital cities are always vulnerable to external attack, as it is obvious that the fall of the capital often means the fall of the kingdom. Therefore, security arrangements are indispensible in the planning of a capital. Two different types of the capital forts have been classified— (a) those with outer enclosing that protected the general inhabitants and (b) only having the

^{397.} Afif, Tarikh-i-Firuz Shahi, pp. 307-308

royal palaces, heavily fortified and guarded by magnificent gates.³⁹⁸During the medieval period, Bengal had quite a few such city-forts. Gaur, the ancient capital of Bengal is the best example of those; however one would need to look at other capital forts as well to understand the military dynamics of the period under study.

Gaur-Lakhnauti

As is mentioned earlier, the city of 'Gaur' was a capital city since well before the Muslim conquest of Bengal. The city, situated in the district of Maldah, West Bengal, remained at the centre of administration throughout the pre-Mughal period even though the name of the site was changed through the ages. The exact location of the ancient city of Gauris yet to be fully defined. A city of 'Gaudapura' is mentioned by Panini and, as a name of the country, occurs in the *Arthasastra* of Kautilya and other ancient Sanskrit texts.Ptolemy and Strabo also mention Gaur as 'Gouro'. Pala copperplates indicate that it was the capital city during the ninth and tenth centuries, and it was the 'Metropolish of Bengal' when they were replaced by the Sena kings.³⁹⁹Ramavati of Rampala (1077-1120) must also have been somewhere within this city-belt. Jaina writers of the thirteenth and

^{398.} Ayesha Begum, Forts and Fortification, p. 187

^{399.} W.W. Hunter, Statistical Account of Bengal, p. 51

fourteenth centuries mentioned about Gaur and Laksmanavati together, indicating that the two were the same city. The trend continued during the Muslim rule as well, as the city was situated in strategically a very important location. According to Minhaj, Bakhtiyar Khalji himself had chosenthis city as his capital. 400 However, while he went on with his expeditions towards the north-east, Devkot somehow became more important. His successor Ghiyasuddin Iwaz Khalji bring back the capital to Gaur again, and it continued to be the capital until the accession of Sultan Shamsuddin Firuz Shah (1301-22 CE), who had transferred the capital to the newly built Pandua, about 32 kilometers north-east of Gaur-Lakhnauti. He renamed the site as Firuzabad after his own name. However, due to scarcity in contemporary sources, very little is known about the expansion or reconstruction process of Gaur during the years. What happened to the traditional capital when the seat of administration was changed is also obscure in contemporary sources.

Like Gauda, Pandua was also probably an old historical site, and Firuz built the new city alongside the old one. He transferred the capital there because Pandua was regarded strategically more important, safer place to defy any possible invasion from Delhi.It was a healthier site as well.Pandua, however

^{400.} Minhaj, Tabakat-i-Nasiri (English tr.), vol. 1, p. 430

remained the centre of administration for a very short period. The capital was brought back again to Lakhnauti during the period of the Tughlaq governors (c. 1324-42 CE) but soon Shamsuddin Iliyas Shah, the Shah-i-Bangalare-transferred again to Pandua-Firuzabad. It remained as the capital of the Iliyas Shahi Sultanate (1342-1415 CE) for about ninety years. ABM Habibullah thinks Jalaluddin Muhammad Shah (1418-32 CE), the son of Raja Ganesa once again transferred it back to Gaur-Lakhnauti. But there is no concrete evidence to supports this view, even if he had done it, he must have done it either during the last years of his reign, or he may have retransferred it at some point to Pandua. Chinese sources confirm that his capital was in Pandua, and archaeological remains also prove that had he built many splendid buildings. Whereas at Lakhnauti, he could build only 'one mosque, two tanks, and one sarai'. 401 Archaeological sources confirm that the later Ilyas Shahi Sultan Nasiruddin Mahmud Shah brought back the capital to Gaur again, 402 and it continued to remain as the centre of administration until the Karrani's shifted the capital to Tanda due to geographical reasons late in the sixteenth century.

^{401.} Ayesha Begum, Forts and Fortification, p. 188

^{402.} The first dated inscription of Gaur is off 1457, during the reign of Sultan Nasiruddin Mahmud Shah (1435-1459), on a bridge erected by him on the road from the kotwali' darwaza (gate) in the south to the north of the city. See, Abdul Karim, Corpus of Inscriptions, pp. 131-32

The long history cited above proves that the site of Gaur and its Suburbcity Pandua remained strategically very suitable to be the capital of Bengal. The main reason behind that was its geographic location, as Alexander Cunningham suggested,

The site of Gaur was a narrow strip of land between the Ganges and the Mahananda River, would appear to have been selected chiefly for the convenience of water communication with all parts of the country.⁴⁰³

It is to be noted that river Ganges is actually represented by its channel called Bhagirathi, and Cunningham confirmed that in his map. 404 There are many places in and around the Muslim city of Lakhnauti that still bears testimoni to its pre-Muslim origin. 'Phulwari' and 'Fatal Chandi'are two such native names. Cunningham also suggests that the site of Vallalbari was actually a palace fortress of the Sena kings. It is an irregular square area about 6.44 km to the north of the Phulwari Gate, surrounded by a massive embankment that is 15.24 meter broad at the top and 45.72 meter broad at the base with a height of 6.10 meter. There is a 22.86 meter wide deep ditch on every side, internally and externally. But there are no remains of structures within. There were some causeways crossings at right angles which seemed to have been pathways within the fort.

^{403.} A. Cunningham, op. cit., p. 42

^{404.} Ibid, Drawing-8.

As is stated earlier, Bakhtiyar had chosen Gaur, renamed Laksmanavati by the Sena kings and as such known as Lakhnauti to the Muslims as his capital. Contemporary sources does not provide any details of his constructions, and there is no archaeological remains either that can bridge the information gap. His successor Ghiyasuddin Iwaz Khalji (1211-1227 CE) was actually the first Muslim ruler who is credited with making any construction within the city. He was trying to build a naval fleet for his planned expedition towards east, and may have found Gaur as a suitable place for his naval headquarter. That was probably one of the reasons behind his re-transfer of capital to the ancient city from Devkot. He strengthened the defence of the capital by erecting a fort nearby known a Hisr Basankot, with a palace inside for his own residence. The new fort was designed as a lock (bus in Arabic) or a cover (basn, meaning body in Persian) of the city of Lakhnauti. The exact structural position of Basankot, however, could not be identified yet.

Most of the remaining architectural features of the famous city and its fortification was constructed after Nasiruddin Mahmud Shah had retreated from Pandua, and started to develop his capital, renamed 'Jannatabad' in his coins. He is credited to be the builder of the palace of Gaur, and the later

developments and strengthening of the fort centred on it. Cunningham, Henry Creighton⁴⁰⁵, G.H. Ravenshaw⁴⁰⁶ and Abid Ali Khan⁴⁰⁷ surveyed the ruins of the medieval city during the colonial period, and recently the Archaeological Survey of India has done another extensive survey⁴⁰⁸. From those studies, an idea about the city of Gaur-Lakhnauti and it fortification can be drawn.

Creighton found the ruins of the city in the nineteenth century about ten miles in length and one and half mile in breadth. Among the two rivers that served as the lifeline of the city, Ganges and the Mahananda, the latter became a lagoon by the end of the fifteenth century. In all probability, it was the one Abul Fazl described as Chatia Patia. There were two big paved

^{405.} Henry Creighton, The Ruins of Gaur: Described and Represented in eighteen view with a topographical map, London, 1817, pp. 4-5

^{406.} J.H. Ravenshaw, Gaur: its Ruins and Inscritptions, London 1878

^{407.} Khan Sahib M. Abid Ali Khan, Memoirs of Gaur and Pandua: Edited and revised by H.E. Stapleton, (reprint and revised), Calcutta: 1986

^{408.} Detailed report of the survey has not been published yet. But some of the findings can found in the writings of people involved in it. See, Sutapa Sinha, "Settlement Pattern through Archaeological Finds", in Gaur The Medieval City of Bengal c. 1450-1565, special issue of a Journal of Archaeology Pratna Samiksha, New Series, Vol. 3, Kolkata 2012, pp. 127-137; and "Rediscovering Gaur: A Medieal Capital of Bengal", in JASBD, Vol. 58, Number 1, 2013, pp. 27-65; also see, Bimal Bandyopadhyay, 'Recent Excavation at the area adjacent to Baisgazi Wall at Gaur and Scientific Clearance at some adjooning areas, District: Maldah, West Bengal', Journal of Bengal Art, Vols. 9&10, 2004-2005, Dhaka 2006, pp. 15-33; Indian Archaeology2002-03- A Review, "Excavation at Palace Area, Gaur, District Maldah", New Delhi, 2009, pp.324-331; Indian Archaeology 2003-04- A Review, "Excavation at Baisgazi Wall Known as Palace Area of Ancient Gaur, District Maldah", New Delhi 2011, pp. 329-34

roadsin the north-south direction, and they were crisscrossed by smaller lanes and canals.

James rennell, Alexander Cunningham and Ravenshaw later modified the imformations provided by Creighton. According to their assumptions, the area of the city should be around twenty miles in length and four miles in breadth, extending beyond the boundary wall in the south, that has been confirmed by aerial survey and explorations. However, Creighton's sketch of the fort and palace is perfect.

The citadel is an irregular pentagon, with its principal gate, Dhakil Darwaza in the north. The gate was probably built in early fifteenth century and later restored and extended by many of the successive rulers till the early sixteenth century. According to Ravenshaw the palace inside had three compartments enclosed by the Baishgazi wall. The western side of the fort was guarded by the Ganges, while on the other three sides; there was a protective ditch, connected to the Ganges. According to the description of an unknown Portuguese traveler⁴⁰⁹, the road from the Dakhil Darwaza to the darbar had nine well-guarded gates at least two of which could be identified today. They are the Chand Darwaza and the Neem

^{409.} See Aniruddha Roy, *Towns and Cities of Medieval Bengal*, New Delhi: Routledge, 2015, pp 188-189

Darwaza. An inscription of Sultan Ruknuddin Barbak Shah mentions another gate, halfway from the Dakhil Darwaza, under which flowed a channel of water to supply a fountain. The first compartment from the north was the darbar, the second one is termed the living quarter of the sultan and the third compartment has been termed as Harem ladies chamber, as was attested by the visiting Frenchman Vincent Le Blanc in 1575.

There are two gates in the eastern boundary wall of the citadel. Off the two, Gumti gate is dated from the reign of Alauddin Husain Shah, while the Lukochuri Darwaza is a Mughal construction. It is generally ascribed to Shah Shuja, but possibly was built by Munim Khan after his victory over Daud Karrani in 1575.

On the northern side of the citadel, outside its boundary there is a tower, the Firuza Miner probably used as a watch tower. The Portuguese interpreter informs that the entry from that side to the Dakhil Darwaza was barred for ordinary people by a heavy iron chain.

Inside the citadel, in a straight line to the west of the Gumti gate, is a building, generally called chika bhaban. According to the Portuguese

^{410.} Abdul Karim, Corpus of Inscriptions, pp. 165-67

account, it seems to be the Diwan-i Mazalim, where the Portuguese was tried as a spy. There may be a gateway on the southern side as well, ruins of which can hardly be traced. The Portuguese account also describes a port in the city, where they found about 130 boats on anchor. The port is yet to be located exactly, however, the Jahaz Ghata, southwest of the citadel on the river beyond the walls can be the site.

Pandua-Firuzabad

The ruins of Pandua city are now scattered on both the sides of the Indian National Highway leading from Gaur-Lakhnauti to Shiliguri, with the Sataisghara citadel on the east and the great Adina Jami on the West. The Sataisghara (of twenty-seven houses) was an enclosed fortified area of 14 km in circumference, the measurement being a little more than seven and a half-kilometers north and south, and a little more than six kilometers eastwest. The earthen wall was traced by an air photograph in 1930 and drawn by Pemberton a cartographer of the Archaeological Survey and raised by H.E. Stapleton, the Director of Bengal Public Instruction. From the photograph the citadel of the city could be traced along with the surviving important monuments and tanks. Two gates of the city are known to have existed; one on the south known as the Makhdum Shah's Gate dedicated to

the memory of Makhdum Shah Jalal the saint, and the other on the north known as the *Garh Duar* or Fort Gate. Buchanan Hamilton in his survey of Dinajpur in 1808 CE noticed ruins of scattered buildings on either side of the gates. The centre of the city is represented by the Adina Masjid and the Palace marked by an earthen rampart and an outer ditch. The Adina Masjid was outside the citadel to it's north-west corner and must have been approached by the Sultan and his entourage through the main street with a right turn to the east and then to the royal gallery through the platform-structure facing north with an ascending ramp from the west.

Within the palace area nothing now remains for accurate identification except parts of walls and remains of few structures. A broken round tower of several metres height known as 'Minar' seen from the highway is considered to have been a *burj* (tower) of an entrance gateway to the palace. There is another burj, halfway between the cities of Pandua and Lakhnauti, known as the Neem Sarai, owing its name to its exact location. This must have been a watch tower, most probably built in Mughal period though.

Other Capital Forts

Apart from the twin cities of Gaur and Pandua, there were not many places in Bengal that could have been indentified as capital during the medieval

period. There are stray information about Nadia, the capital of Laksmana Sena according to Minhaj. His records suggests that it was a fortified city, with the two-stage security system of the city and palace, as he mentioned that only seventeen cavalrymen could keep pace with him to arrive at the city gate, where they were mistaken as being horse-traders. They did not try to make any attempt to fight either; only after arriving at the palace gate the opened their swords and fights broke out simultaneously at the palace and at the city door. The location and details of the city is not identified yet. Another important place to be known as capital during the period of study is Sonargaon. Barani mentioned about erecting a fort called Qilla-i Tughril during the time of Sultan Ghiyasuddin Balban by his deputy governor (naib) Tughril Tughan Khan which has been identified to be near Sonargaon. After he built this fort, sometime also known as Narqila, Tughril had declared himself independent. Although suppressed by Balban, the fort continued as an important defensive outpost for the subsequent Sultanate history. The position of Qila-i-Tughril was on the north bank of Buriganga near it's confluence with Sitalakhya and was protected by the jungle of Bhawal on the northern side and a tract of marshy land of the Areal Beel on the southern side with an artificial water reservoir in the middle. It was one of the earliest mud forts of early Muslim rule in Bengal. The famous fort of Tughril in subsequent periods was used against the advancement of the Mughals by the local Bhuiyas. The fort was most probably destroyed by the Mughals at sometime, and was reconstructed by Mir Jumla for the defence against the Portuguese pirates in later times. It should perhaps be noted here that Rennell's (1776 CE) identification of the place with the important Firingi stronghold of 'Lorical' situated about 40.23 km due south of Dhaka and about 16.09 km south west of Rajbari is not identical with *Qila-i-Tughril* or *Narqila* because their topographical situations are completely different from each other.

Some information are also found about the 'Bhita-Azampur', most probably the residence of the Sultan in Sonargaon. Besides its being built in between the rivers, the fort was known to have been surrounded by moats on three sides and the south by the river Brahmaputra. The gate of the palace area was on the west side and was known an 'Sharan Duar' or memorial gateway. The remains of 'Damdama' as a synonym of the fort, and other structures such as tombs, mosques etc. around Mograpara and Baranagar area testify to the existence of the enclosed city and it's fort.

6.1.3 Border Outposts

Qilla-Mubarakabad

There may have been many border out-posts during the Sultanate era in Bengal, however, from contemporary sources and archaeological remains, very few can be traced. 'Oilla Mubarakbad' is one of them. Citing many sources Ayesha Begum opines that it was most probably located in and around the old Central Jail in Dhaka. 411 The remnants of Naswalagalli Masjid in the site support this idea. The mosque is situated in a road called Girda-i-Oilla and an inscription in the mosque claims that it was situated in Iglim Mubarakabad and was 'rebuilt' in 1459.412 When Islam Khan, the Mughal Subahdar came to Dhaka at the beginning of the 17th century, he is reported to order 'reconstruction' of the old fort, which may be this Girda-i-Oilla or Oilla Mubarakabad. 413 Ayesha Begum also assumes that this fort may have been built by Ghiyasuddin Azam Shah, who was the builder of Bhita Azampur. The character of the fort although is not known, the very name of the fort suggests its strength and impregnability on the bank of the Buriganga.

⁴¹¹ Ayesha Begum, Forts and Fortification, p. 208-209

Abdul Karim, Corpus of Inscriptions, p. 134-135
Ayesha Begum, Forts and Fortification, p. 208-209

Ruaylbari Fort

The department of Archaeology, Government of Bangladesh has excavated a small fort in Ruaylbari under Kendua Upazila of Netrokona District, one of the remotest borders of Sultanate Bengal. No inscription was found at the site, however, on stylistic ground the fort is assumed to be a structure of the 14th century. However, the *Ribat* style structure is the only extant example of such a border out-post.

Khalifatabad and Bara Bazar

Khalifatabad and Bara Bazar are vast areas through which a large number of monuments still survive prove beyond doubt that these two were important urbanized centres. There is every possibility that they had some kind of protective structures. The traditional name of *Jahajghatas* associated with these sites strengthens this view and emphasizes the importance of the cities on the bank of the river Bhairab as of much commercial potency. Since Khalifatabad is known to have been founded by Ulugh Khan Jahan, a *ghazi* or warrior saint, it is likely that the city started with a *ribat* type of structure to guard the southern frontier, like the one at Ruaylbari.

⁴¹⁴ Muhammad Abdul Qadir and Habibur Rahman, Excavation at Ruaylbari: A preliminary Report, Dhaka: Department of Archaeology, Government of Bangladesh, 2001

Ayesha Begum, Forts and Fortification, pp. 205-206

6.2 Mughal Forts and Fortification

The fort and fortifications of the Mughal period are different form those of the Sultanate Bengal. Ayesha Begum opines that the difference is primarily in conception, and secondarily in architecture. 416 During the Sultanate era, Bengal was an independent sovereign state, that was subjugated by the Mughals to create a province of the great Mughal Empire. The Bengal Sultans built their forts for defence and protection of the inmates, the main focus was to resist the threat of the great neighbours of Delhi and occasionally from the other neighbouring state of Jaunpur. On the other hand, the Mughal Subahdars did not have to worry for such threats. Their concern was mainly to resist the local chieftains in the early years, and then the Portuguese and Arakani pirates along with that the Marathas. Therefore, the architectural protection they created were not as strong and gigantic as those of the Sultanate period. The Mughal Forts in Bengal also imitated the forts in their capitals; however, they were on a smaller scale and built in different materials of bricks and adhesive mud. The extant examples of Mughal forts suggest that the inner area of the enclosures remained always without or little structures. The vacant spaces in the event

Ayesha Begum, 'Inventory of Structure types', in ABM Husain (ed), Architecture: A History Through The Ages, Cultural Survey of Bangladesh Series-2, Dhaka: Asiatic Society of Bangladesh, 2007, pp. 245

must have been filled up by tents or utility structures not that much solid or of architectural importance.

Another invention in fort types of Mughal Bengal are some garrison forts. These garrisons were smaller in size and erected on strategic points. They were mostly of mud-built enclosures with functional structures within or were occasionally built within the old fortified areas. Innumerable forts in Bengal of this type are known from local legends or from the names of unexcavated mounds. Contemporary sources also refer to such mud forts, although most of them have now disappeared. The Andar Qila of Chittagong is probably one such example.

The general character of fort architecture remains always the same: a circular enclosure supported by an outer one with moats surrounding wherever necessary. An important feature of the Mughal forts, imitating those in the northern India, the gateways and the corner towers were built as the strongest parts. There were guard-rooms equipped with both defensive and offensive devices in the elaborate gateways. The broad boundary walls also have enough space to run the guards, and they were usually capped by battlemented parapets, often having holes on them to fire arrows and gunshots. The gateways have oriel windows as an additional attractive feature. The gateway opening spanned by a four-centred arched

alcove with a semi or half domed vault overhead is a feature initiated by the Mughals in imitation of Persian iwan-portals.

AH Dani opines that the Mughals had introduced two new types of forts in Bengal: the palace forts and the water forts. Ayesha Begum further subdivided the water forts as river forts and border outposts. The Lalbagh Fort in Dhaka is one of the most elaborate palace forts; riverine forts around Dhaka are examples of the protective type of structure while the garrison forts, now mostly ruined and disappeared, are scattered throughout the province.

6.2.1 Capital Forts

Rajmahal Fort

The earliest reference of a Mughal fort in Bengal appears to be that of Rajmahal, built by Raja Man Singh, the general of Badshah Akbar in 1595. When the Mughals claimed victory over the territory of Bengal, the region was under the Karrani Sultans, and their capital was in Tanda. Mughal general Munim Khan tried to bring back Gaur as the capital, but that effort was failed due to the natural obstacle as the changing river course made Gaur unsuitable. Hence, a new base for the Mughals, and Man Singh

⁴¹⁷ AH Dani, *Muslim Architecture in Bengal*, p. 24 ⁴¹⁸ Avesha Begum, *Forts and Fortification*, p. 249

choose the strategic entry-point of Bengal as the place for it. He renamed it as Akbarnagar. However as the capital was soon transferred to Dhaka, Rajmahal lost its importance. When Prince Shuja became the governor of Bengal in 1639 he decided to stay at Rajmahal. The famous palace Sang-i-Dalan (stone palace) was built as his residence with an attached Diwan Khana (audience hall). However, there is little structural evidence survived to make conjectural reconstruction of the fortification of the city.

Gaur

Gaur was abandoned as a city of importance soon after the Mughals came. But still there are few Mughal structures along the city of Gaur. Of them, the Gumti gate is the most notable. The iwan-type portal of four centred central arch flanked by similar arched doors on the sides reflects the Mughal style. The three storeyed building had a *naqqar khana* heralding the governor's entrance into and exit from the citadel. In the top storey, above the central arch occupying the space of the ground and first floors are three oriel windows typical of Mughal architecture.

Lalbagh Fort

Although claimed by many as an incomplete project, the Lalbagh Fort in Dhaka is the only surviving example of a Mughal fort in Bengal that can give an idea of the nature of fort and fortification in the province. The

construction of the fort was initiated by Prince Muhammad Azam in 1678, but was left unfinished as he left Dhaka at the call of his father, Emperor Aurangzeb to Delhi in the next year. Azam's successor Shayesta Khan lived there till 1688, and it is thought that he left the fort because of the death of his daughter Pari Bibi. It should perhaps be noted here that the Mughal governors lived in the old fort known as the *Qilla Mubarakabad*.

The Lalbagh Fort, recently reconstructed by the Department of Archaeology, occupied an area of approximately 18 acres of land. D'Oyly's paintings of 1809-11 shows that the fort was situated on the bank of the river Buriganga, but now the river has shifted a long way. The plan of the fort is oblong, with the long-arms running east-west, and had two closing brick wall on the south side the outer measuring about 6.10m high and 1.37m thick, and the inner 13.72m high with about the same thickness. The regular openings in the upper part of the inner wall indicate about the existence of a rampart walk along the wall. The outer wall was strengthened by bastions, now seen on the southern and western wall. The largest bastion at the south-eastern wall was connected with an underground channel, perhaps a postern in times of necessity. Two ceremonial gateways are still extant, one on the south-east corner and the other on the north-east. The three-storied southern gateway is approached though a four-centred archway of an iwan-type portal, a common feature of Mughal gateways.

The central area of the fort is dominated by three structures- a diwan building on the east, a three-domed Mughal mosque on the west and the tomb of Bibi Pari in between. The excavations have revealed remains of more utility buildings within the fort area such as stables, hammams, kitchens, water reservoirs and fountains as subsidiary structures.

Lalbagh is however, a fort less related to the war-techniques of Bengal. It was more of a palatial endeavor, with protective measures for its royal residents.

The palace fort and the city of Murshidabad, built after the capital was shifted there in 1704 is another such example. There were quite a few such forts, smaller in scale in different parts of the subah. Zinzira fort, just on the opposite bank of Buringanga from the Lalbagh Fort is one of them. It was built by Nawab Ibrahim Khan, the successor of Shayesta Khan (1689-97) as Subahdar. The Hammams found at Mirzanagar in Jessore and Haraspur in Brahmanbaria indicates about the existence of such fortifications there as well.

River Forts around Dhaka

The river forts around Dhaka are of more importance than the palace forts in regard to the warfare during the Mughals. To keep the capital free from the attack of the Mogh and Firingi pirates, they created a belt of secuirity with a series of forts. Three such forts around the city of Dhaka are still in existent. An analysis of these three, i.e. Haziganj Fort, Sonakanda Fort and Idrakpur Fort shows the depth of Mughal war-planning. Kamrun Nesa Khondker has analysed them in her thesis, *Mughal River Forts in Bangladesh* (1575-1688): an Archaeological Appraisal. 419 The Following discussion is based on her analysis.

Hajiganj Fort

Situated at the juncture of the Buriganga and the Sitalakhya, the Haziganj fort is basically a pentagonal walled area with rounded bastions in the corners or the boundary wall. A rectangular high gateway with all Mughal characteristics towards the river suggests that the medium of communication with it was by the river. There is a rampart walk on the inner side of the wall. The rampart is curtained with merlon tops, pierced at

⁴¹⁹ Kamrun Nessa Khondker, Mughal River Forts in Bangladesh (1575-1688):an Archaeological Appraisal, unpublished M. Phil thesis, School of History, Archaeology and Religion, Cardiff University, 2012

regular intervals with holes for muskets. The holes on the bastions are wider, probably for 'gun firing at the pirates proceeding up the river'. In a corner of the fort enclosure there is a tall free standing square column of brick which must have been used for observation and placing guns in the rainy season. There was no provision for an inner second wall, and with no living quarters inside, it is likely that the fort was used as a garrison. The vacant spaces may have been used to make tents for the soldiers' stay. There are confusions on the exact date of the fort. However, as there is an indication in *Bahristan-i-Ghayebi*, it can be assumed that it was built shortly after Islam Khan's arrival in Dhaka early in the 17th century.⁴²⁰

Sonakanda Fort.

Like the Haziganj fort, Sonakanda fort was also constructed at the juncture of two rivers, in this case Shitalakhya and Brahmaputra. Due to the changing river courses, it, however, is now a little away from the rivers. The fort also consists of a single boundary wall with a number of regular bastions but with an additional projection consisting of a raised platform towards the river side. A round drum of huge dimension, it was

Mirza Nathan states that he along with a large army, constituted his headquarters at Khizirpur (the name of the place where the fort is situated), raised battlements on the bank of the river in the face of numerous difficulties and drove the enemy away in a lamenting plight. This place is also mentioned in his book as an important defence centre of some of the most influential 'Bhuiyans' who fought against the Mughals. See, Bahristan-i-Ghayebi, (Eng. tr.), p. 79

probably meant for placing a big gun appropriate to shoot the pirates at a distance. The inner side of this fort is also vacant, used probably to make tents for soldiers. There is no inscription it this fort as well, but on stylistic ground it is also attributed to the 17th century, probably a little latter during the subahdari of Mir Jumla.

Idrakpur Fort

The third of the series of river forts around Dhaka is the Idrakpur Fort, situated in Munshiganj on the bank of the river Ichhamati, now dried up. Built on heavy foundations in marked stages, the fort has the familiar Mughal appearance with bastions at the corners and battlemented merlons at the top. An interesting feature of this fort is the existence of a huge drum within surrounded by curtain walls, but accessible from the outer open space around it. It was probably an open place for observation and placing long-range guns to drive away the approaching pirates. Dani has suggested it to have been built by Mir Jumla in or about 1660.⁴²¹

Garrison Outposts

A large number of garrison outposts are now dotted in various parts of Bengal, particularly in the northern areas. Many of these appear to have occupied the earlier fort areas of ancient or medieval times, but some might

⁴²¹ AH Dani, Muslim Architecture in Bengal, p. 259

have been built in a new site, developed from *badiya* or temporary halting place. A large number of them has been catalogued in Bangladesh by the Department of Archaeology such as at Selimgarh (Sherpur, Bogra), Chatmohar (Pabna), Bokainagar (Gouripur, Mymensingh), Egarasindhur (Kishorganj), Jangalbari (Kishorganj), Quella Tajpur (Netrokona), Ghoraghat (Dinajpur), Sujabad (Barisal), and Andar Qila (Chittagong). Structurally this type of forts consisted of outer walls on both sides of gateways in their fronts. The main emphasis was carried out by the bastions within which guard houses, were provided for watching the approach of the attackers. They were built both overland or on the bank of the rivers at strategic points.

6.3 Fortification and Siege Technique in Contemporary Sources

The most important aspect of the fortification of Bengal is its numerous mud forts. Contemporary sources have many references of these. During the sultanate period, Firuz Shah Tughlaq's two invasions ending at the mud forts of Ekdala was an ample example of the strength of it. Mughal generals Mirza Nathan and Shihabuddin Talish have mentioned of many such mud forts. Mirza Nathan informs that there were not many ancient

⁴²² Ayesha Begum has described this forts in details. See, Forts and Fortification, pp. 251-263

forts when they arrived except for 'Gaur, Akbarnagar (Rajmahal), Ghorghat and Dhaka and few other places', but in case of necessity even the boatmen could build such forts that took months, even years to besiege for experienced generals. While on their way to Dhaka, Mirza Nathan himself had seen the boatmen of Musa Khan building one such fort in Jatrapur in just one night. One of the major features of such forts was the protective moat outside the mud-walls. The Mughal army soon adopted the technique themselves, and on their way to Bhati, dug many such ditches around their camps. The men who dug these trenches were called as *Bildar* in *Bahristan*. The craft were also used to create new routes for the Mughal navy where it was essential and sometimes to dig trenches under the fort walls for trespassing.

If erecting such forts overnight was a part of defensive technique, besieging the forts was also a big challenge. Siege-craft represents military thinking as well as military practice of breaking the resistance of fortifications and their defenders. Medieval siege-craft reflected three broad streams of thinking, coming down from earlier times, Indian, West and Central

⁴²³ Mirza Nathan, *Bahristan-i-Ghayebi*, (Bangla. tr.), p. 60
⁴²⁴ Mirza Nathan, *Bahristan-i-Ghayebi*, (Bangla. tr.), p. 251

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Asiatic, and later on European. 425 Kautilya mentioned five tactics for capturing a fort:

i. intrigue (*upajapa*)

ii. feigned retreat (apasarpan)

iii. winning over the people (ivamanam)

iv. actual siege (paryuvasanam)

and v. assault (avamartha)

According to him, the siege must never be started suddenly but it must be preceded by depletion in enemy's numerical strength.⁴²⁶

The actual siege needed many kinds of weapons and other accessories. The oldest of the kind is ladders, used to climb opponent's wall. Both wooden and rope-ladders were used, but the Mughals were week in using rope ladders. A popular means to batter fort walls and gates used in Bengal was the use of elephants. Elephants were specially trained for this purpose. Before the arrival of gunpowder-based heavy weapons, elephants were the most trusted siege engines. However, the Muslims were habituated to use different siege engines as well. They were mainly machines to throw heavy projectiles. The *manjaniqs, maghribis* or *arradas*, used during the sultanate era could throw heavy stone-balls almost as effectively as cannon balls. In Mughal era, they were replaced by real cannons. However, as the openings

⁴²⁵ J.N. Sarkar, The Art of War, p. 160

⁴²⁶ Kautilya, Arthasastra, Book XIII, chapter 1, pp. 563-67

are made by those missiles, real soldiers were needed to besiege the fort. To counter the defending soldiers and march towards the fort, many techniques were applied. Mirza Nathan refers to the use of *Sabat*, a technique where soldiers make heavy shields to protect from the bombing of the defenders with baskets full of earth and covered with leather to make way for their comrades. Once arriving near the high wall, those earthen materials were used fill up the ditch, and even to make *Khakriz*, a kind of battered wall for climbing the fort-wall.⁴²⁷

From the discussions above, it may be summarized that forts constructed a major element in the medieval war-planning in Bengal. During the Sultanate era, the Bengal sultans successfully used the techniques of erecting and defending the forts against foreign invasion. During the Mughal era, the Mughals mastered the technique to break the defence of the mud-forts, while they themselves introduced new methods of defending by erecting the river-forts and garrisons and used them with deadly effect.

⁴²⁷ Mirza Nathan, Bahristan-i-Ghayebi, (Bangla. tr.), pp. 251-53

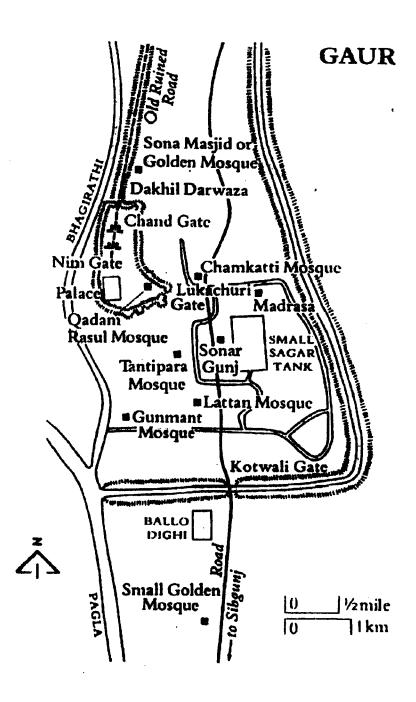
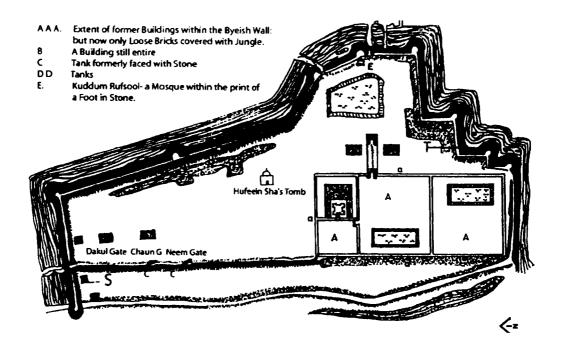


Plate 19: Site plan of Gaur (Curtesy: Ayesha Begum, Forts and Fortification in Medieval Bengal)



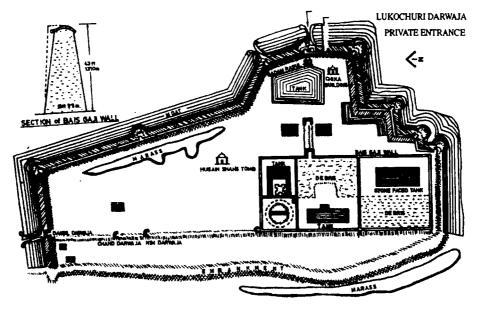


Plate 20: Site plan of the Citadel of Gaur After A.H. Dani (top) and after J.H. Ravenshaw (below)

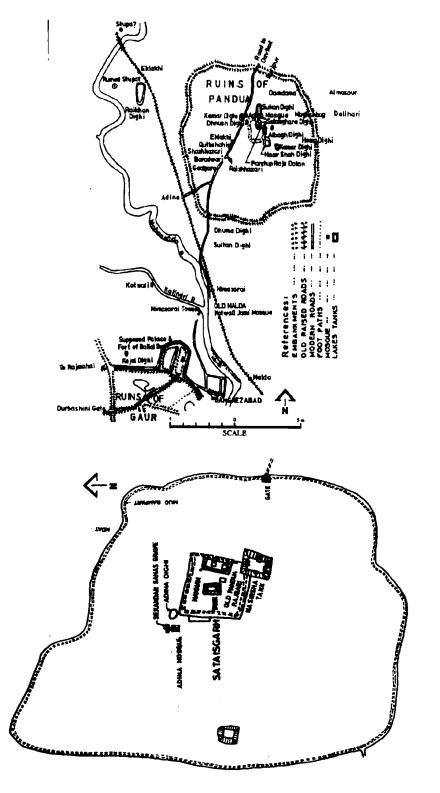


Plate 21 : Site plan of Pandua and its Citadel after Abid Ali Khan

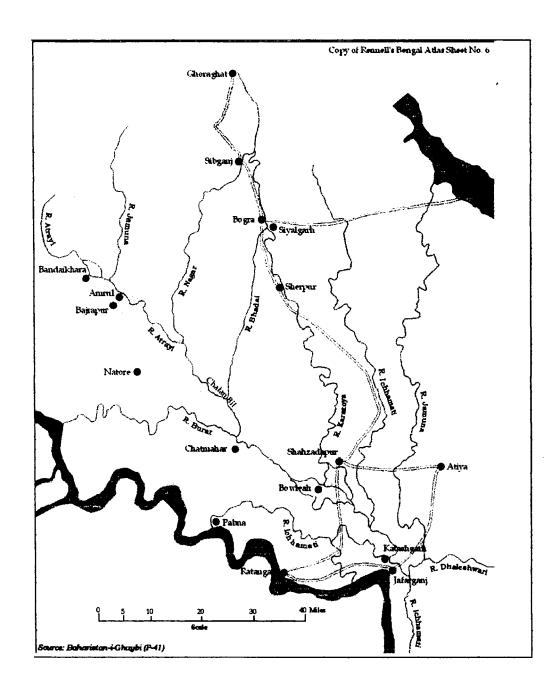


Plate 22: Some Forts During Islam Khan's Invassion of Bengal, based on Rennell's Bengal Atlas sheet 6
(after Khondker, Mughal River Forts of Bangladesh)

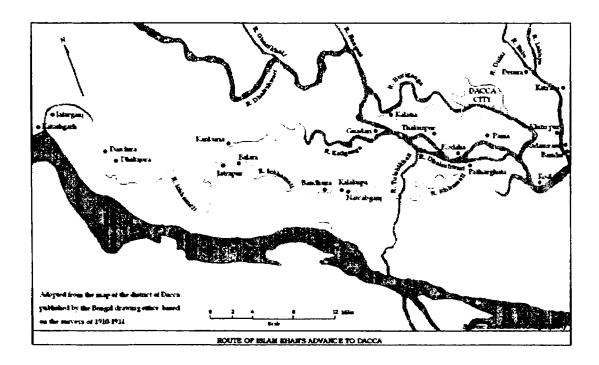


Plate 23: Route of Islam Khan's Advance to Dhaka (after Khondker, *Mughal River Forts of Bangladesh*)

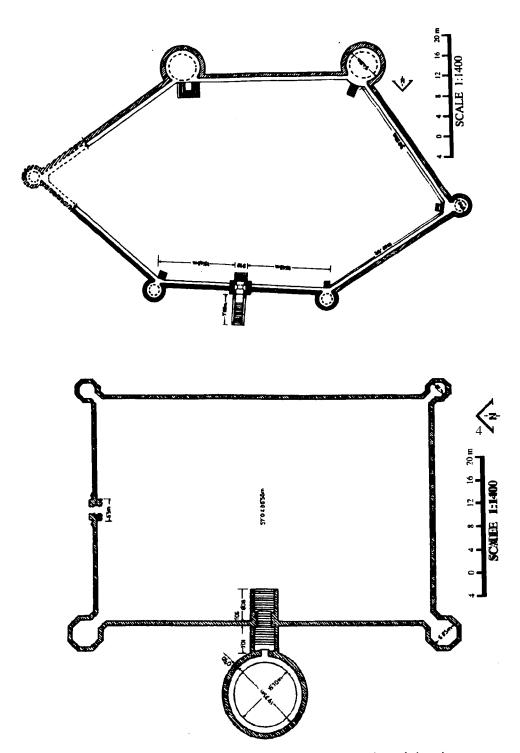


Plate 24: Plan of Mughal River Forts: Haziganj (top) and Sonakanda (below)

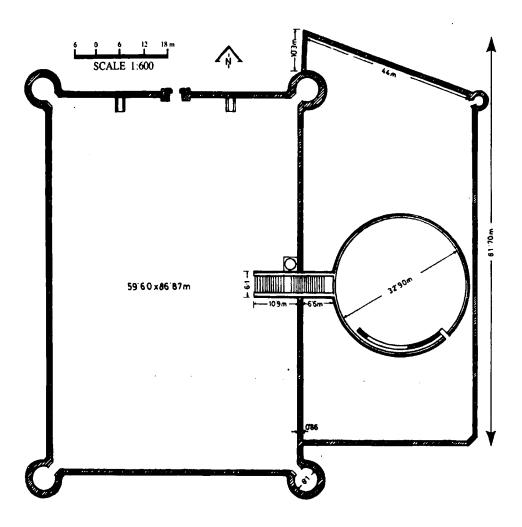


Plate 25: Plan of Mughal River Fort Idrakpur

Chapter - VII

Conclussion

The analysis of the materials along with some critical discussions under different headings and sub headings in the preceding chapters leads us to conclusively hold the following view:

Megasthenes, the Greek diplomat and Indian ethnographer and explorer in the Hellenistic period mentioned about the people of the region that they were brave and indomitable in character, centuries before the period under study. But this study shows, that it had remained the same even during the medieval age and the reason behind that included their skill in mastering the geographical condition with innovative weaponry and war techniques. The period under study saw quite a revolutionary turn around in the field of weaponry, with the arrival of modern fire arms that gradually replaced the traditional weaponry based on sharp objects. The people of Bengal showed their ever present mastery in developing skill in that field also in the beginning. But the scenario changed after the arrival of the Europeans with their superior technique and the subjugation of Bengal at the hands of the British in 1757.

7.1 The Nature and Characteristics

The study ofweaponry and war techniques in Medieval India during the medieval Bengal reflects that actually there was not any single or unified theory of War. It may be said that the traditional art of war of ancient India continued to flourish under the various local dynasties prior to the arrival of the Muslims in the thirteenth century. Foreign elements came with the Turko-Afghan rulers, and they continued to mingle with the indigenous techniques and weapons being adopted by the ruling Muslims. Infact, unlike what happened in Northern India during the same period, the rulers of Bengal, be them the governors of Delhi or later the independent Sultans, invariably adopted the indigenous techniques and took help from the local people. Even though the Turkish Mujahidin had their own understanding of war, as they fought to 'extend the land of the believers', once they established their power they tended to transform themselves being a part of the people of the land they conquered. Hence, the Jihadi zeal had very little influence on the development of the concept and rationale of war in medieval Bengal. Rather, it centered on kind of a nationalistic approach. This approach culminated in the development of the Bara Bhuiyan's, who, during the early days of Mughal rule had vehemently fought against them.

But the Mughals had more powers, and with the arrival of master generals like Islam Khan Mashadi, Mir Jumla and Shayesta Khan, they finally managed to defy it and establish Mughal authority over Bengal.

The Mughals had also incorporated the local ideologies. It was a common phenomenon for them, as J.N. Sarkar opines, that 'Mughal military organisation came to be imitated more or less by all other powers in India with local variations due to race, terrain and state income. But, generally speaking, throughout the greater part of the period under review what existed was a medley of several co-existing yet competing systems of war in practice.

From about the middle of the 18th century the European powers came to introduce their superior and more well-organized military organization, many of which had been adopted by the Bengali's, but ultimately the superiority of European technique prevailed, and even the indomitable character of the Bengalis could not defy it.

There were some reasons behind this. The First and foremost was that the basic conception of an army organized and acting as a unit as in Europe was totally absent. Secondly, the battles were tumultuous and disorderly,

^{428.} J.N. Sarkar, The Art of War, p. 320

the soldiers being inspired not so much by the spirit of a co-operative victory over the enemy. Thirdly, fighting formations were also absent. Fourthly, it can be said that the composition of the army was so stereotyped that a war of maneuvers was almost impossible. Of the four main branches of the army, the elephants were heavy and slow-moving, while the cavalry and infantry were not organized for tactical purposes. Only the navy comprised of different types and sizes of ships and boats were better equipped as to maneuver, but they also lacked the fire-power the European sea-going vessels had.

The effectiveness of the defensive techniques was another important aspect. From the ancient period, forts constructed a major element in the war-planning in Bengal. During the Sultanate era, the Bengal sultans successfully used the techniques of erecting and defending the forts against foreign invasion. During the Mughal era, the Mughals mastered the technique to break the defence of the mud-forts, while they themselves introduced new methods of defending by erecting the river-forts and garrisons and used them with deadly effect. However, even though the ploy was successful against the guerilla-style attacks of the pirates, it could not match the trained, organised and heavily equipped army of Europeans.

7.2 Limitations and Weaknesses

While studying the military dynamics of the period under review, it is found the failure of the local Hindu and Buddhist powers in Bengal to withstand the Turkish invaders was not merely a military affair. Rather, it constituted a deep and complex sociological problem on which opinions of scholars are divided. The usual explanations given are political weakness, an enervating climate, military inefficiency, caste system, social or moral degeneration, religious degradation and economic malaise etc. In other words Bengal on the eve of the Turkish conquests presented, as is usually believed, a picture of general decay. The ruling class displayed a woeful lack of idea in geo-politics and in political strategy. They had no scientific and well-organized system of defence against foreign invaders.

On the other hand the system of the invading Muslim army was theocratic with the religion of Islam at the centre; they had in practice a unified, ruthless military despotism, while everyone from the ruler to the private was electrified to activity by the spirit of *jihad*. The indigenous rulers could not stand comparison with some of the invaders whose real strength lay in a happy combination of military talent and administrative capacity.

The victory of the Muslims in early thirteenth century can easily be explained by their 'superiority in equipment and art of war.' In fact, Sena armies suffered from some fundamental weaknesses in organisation, discipline and equipment, strategy, logistics and tactics. The core of the armies was formed by the raw, armed levies of feudatories or vassals under their respective leaders, which, meeting on the spur of the moment without previous combined exercises, and lacking unity of command, could not in discipline and equipment, match the regular armies of the Turks under one undivided command and at times degenerated into a disorderly mob. Unlike the Turks whose favourite weapons were bow and arrow, the Bengalis were equipped with the swords and lances. The cavalry was a weak spot, though horses were imported. On the other hand the mail-clad Turkish archers, mounted on fleet horses, and using Parthian tactics, standing on their stirrup, possessed remarkable mobility so essential for swift action.

However, as the Turks themselves became defenders of the region after conquering, it contributed to the development of war techniques in Bengal. A few hundred years later, the same thing repeated again, the medieval war machine of Bengal had to confront with the modernly equipped European military. But this time the story was different as the conquerors had become

colonizers, not letting the indigenous war machine to develop for their own sake.

7.3 The Changing Technology and its impact

The most important factor in the period under review is the changing of technologies. In fact the middle ages saw two different stages of the changing technologies. First, during the early thirteenth century the Turkic forces arrived with superior cavalry, and with horse mounted archery along with their sharper, smoother metal weapons they out dated the ancient war techniques dominated by heavier swords, shields and lances and slower infantry-based archery.

In the second phase, during the fifteenth and sixteenth centuries gun powder based fire arms arrived and gradually became the dominant technology in war. The Bengal army also had to become familiar with it, they did follow suite. Even though the history of the development of artillery in Bengal is obscure due to the paucity of reliable contemporary sources, it can be said that the Bengali's at least knew it before their interactions with the Europeans. On the basis of the descriptions in ancient mythological sources like *Mahabharata*, *Mudra Rakshasha*, *Agnipurana* etc., a school of researchers' believs that the ancient Hindus knew the art of

manufacturing gunpowder, known as *Ranjaka*. Jogesh Chandra Ray even dated this invention in 7th century CE. The epic term *sataghni* (lit. hundred-killer), has been interpreted as cannon. Kautilya refered to *agnibana* and the *Sukraniti* tells about *nalika* and *naracha*, all interpretted to be either rockets or fire-arms like guns and cannon. *Sukraniti* has some details of the working of big and small *nalikas*. According to the ancient text, small *nalikas* were the weapon of horsemen and foot-soldiers. It prescribes that correct information of the total stock of gunpowder (*agnichurna*) in the arsenal should be kept in record. However, it has not been yet confirmed that those fiery weapons actually used gun-powder formula.

Other sources lead to different assumption. Analysing a sixteenth century Orissan account of Gajapati Prataprudradeva (1497-1539), P.K. Gode concludes that India learnt the manufacture of fire-works from China and the flaming shafts referred to in ancient literature was propelled not by gunpowder but by some other means. The silence of Muslim historians and of the inscriptions of North Indian rulers supports this theory, and indicates that fire-arms were not familiar in India untill twelfth century.

^{429.} J.N. Sarkar, The Art of War, p. 128

^{430.} P.K. Gode, *The History of Fireworks in India Between A.D. 1400 and 1900*, Bangalore: Indian Institue of Culture, 1953, pp. 31-35

Analysing the primary and secondary sources, J.N. Sarkar has also concluded that gun-powder propelled fire-arms did not exist in ancient India in general. In Bengal and Tripura, he could not conclude on the time frame of the introduction of fire arms. However, citing contemporary sources, he opined that the use of cannon and field artillery in Bengal dates back at least to the pre-Mughal times. Ma Huan, the Chinese traveller of early fifteenth century who visited Bengal in 1406, found (1406) 'guns' as one of the items of export from the region. But it can not be concluded that these were actual fire arms, they may have been the Vana, used frequently in the medieval Bangla literature to denounce both arrows and another particular missile weapon. Vana is a rocket of about a foot long iron tube with diameter of one inch, fixed to a bamboo stick that can throw projectiles up to 1000 yards away. Baburnama's descriptions are worth mentioning here. At one place the founder of Mughal empire in India remarks that "the Bengalis are famous for their skill in artillery"; But later he himself has given an explanation, "On this occasion we find a good opportunity of observing them. They do not direct their fire against a particular point, but discharge at random."

A more reliable account is found in *Rajmala*, the history of Tripura. It claims that Raja Dhanamanikya of Tripura had captured (c. 1513-17) a big

cannon and a metallic insignia from Husain Shah of Bengal.⁴³¹ Portuguese Accounts also cites another contemporary example; in 1517 when Joao de Silveira, the representative of the Portuguesc Governor, captured a boat full of rice near the coast of Chittagong, the Governor of Bengal opened fire (cannon) from land and Silvira defended himself with great difficulty.⁴³² Chattopadhaya, Lahiri and Sabikun Nahar confirmed that the earliest remaining example of cannons used in Bengal is also from the same period.⁴³³

Therefore, it can be safely assumed that the fire arms were known to the Bengalis well before their contact with the Europeans. But, once they had to compete, they failed to match the pace with which the European war technology advanced. In the earlier case, they were made to adopt with the better techniques of the Turks after they had been introduced with it. However, even after several years of contact with the new technology of fire arms, they could not master it. The reason behind this is simpler, as is stated above, the Turkish did not want to dominate the region, rather they

^{431.} N. C. Nath (tr), *Sri Rajmala1-4*, Agartala: Tribal Research Institute, Government of Tripura, pp. 71-75

^{432.} J.A. Campos, *History of the Portuguese in Bengal*, First Edition, Patna :Janaki Prakashan, 1979, p. 29

^{433.} S. Naher, S. Lahiri, and P.K. Chattopadhya, 'Pre-Mughal cannons of Bengal: A Reevaluation'. *Pratna Samiksa*. New Series 5. Kolkata: Centre for Archaeological Studies & Training, Eastern India, 2014

mingled with the locals, adopted their technology and developed a new war machine by combining both their and the indigenous peoples technologies. On the other hand, the Europeans did not want that, they wanted to dominate as colonizers. Therefore, they were not ready to make the indigenous war machine to be developed, as they wanted to dominate themselves. That is why, the transformation from medieval to modern was not as smooth as it was in the case of ancient to medieval.

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