Inquiry and Documentation of the "Ancient Khizirpur Fort" and Deciding about its Upbringing and Conservation for the Next Genesis

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Abstract: - Water Fort is one of the most important and first military structures of Bengal in Mughal Era. This water fort is different from the palace fort. In other words, although there is a presence of different dimensions in the palace fort, there is no splash in the water fort. However, the forts that have the slightest presence of any other structures are not of the Mughal period. This structure dates back to the later colonial period. Such ancient Khizirpur fort and Idrakpur fort are a combination of such versatile structures. An observation tower can only be seen in the Khizirpur fort in question. Subaddar Mir Jumla built 09 water forts in Bengal to defend Mughal Dhaka. Such as- Idrakpur Fort, Kalagachiya Fort, Sonakanda Fort (Subarnakandi Fort), Hajiganj Fort (Ancient Khizirpur Fort), Dapa Fort, Fatullah Fort, Pagla Fort, Beg Murad Fort, Jinzira Fort etc. All of these forts are riverine. That is located on the banks of the river. Water forts play a direct role in naval control. Which is a direct structure to ensure maritime security. And it's a very strong defense. Whose victory is certain. Water forts are growing with geometric linear management in mind. Only 03 of these forts survive. One of which is the ancient Khizirpur fort. There should be no doubt that Khizirpur fort is Hajiganj fort. Because the name of the place has changed only with time, so the naming of Hajiganj has been achieved from the naming of Khizirpur. Many people think that the present Hajiganj fort is a Mughal period fort with which Khizirpur fort has no connection. But no one can show any evidence in this regard. Rather, this Hajiganj fort is one of the linear and geometric water forts that can be seen and found to defend the city of Dhaka. At that time the name of this area was Khizirpur so the name of the fort was Khizirpur fort. However, many people think that there may be more installations around those forts. Which could be a large fortified city. A large fort surrounded by a small fort.

Many research works have been inserted in this paper. One of the ancient water forts, namely the ancient Khizirpur fort which is now known as Hajiganj fort has been described in detail. In the beginning, hands were given to determine the location and actual location of the water fort. Then the history of this fort has been highlighted. Extensive architectural documentation of the historic Khizirpur water fort has been done. This documentation is accompanied by the necessary photographs and drawings. It also sheds light on how to restore this water fort and sustain it for the future. In this article, historical issues, problem solving, key points for preserving these ancient patterns have been discussed in a great way. And so this structure will be ready for the coming days. In this way, every historical place should be prepared for the future. And in this way, their identity will be presented to the people of the future with historical values.

Keywords-Historical Water Forts, Documentation, Damage Mapping, Maintenance, Conservation, Reflected Photography, Restoration.

I. Introduction

1.1 Content and Preface of Ancient Khizirpur Fort



Figure 01 Shows:: The Totality of the Ancient Khizirpur Fort (Present Hajiganj Fort). Authors Photo

Hajiganj Fort also called Khizrpur Fort [01]. Khizirpur fort is the name of a water fort built during the Mughal period. Formerly this fort was called water fort as it was located at the confluence of Buriganga and Shitalakshya rivers. This fort is much bigger than Idrakpur water fort and a little smaller than Sonakanda water fort. The defense system and construction style of this fort is as strong as the other two. Hajiganj village has been built around this fort. Whose former name was Khizirpur village. The ancient name of this fort is "Khizirpur fort" as it is located in Khizirpur. Hajiganj's forename is "Khizirpur", the historical book written by the Mughal general Mirza Nathan "Baharisthan-i-Ghayebi" matches the truth of this information. The fort is located just 14.68 km south of the capital Dhaka. At present this water fort is located only in the area flooded by Shitalakshya river. The co-ordinates of this forts are, 230 38'00.24'N 900 30'46.45'`E[02]



Figure 02 Shows:: (a) Ancient Khizirpur Fort (Bird's Eye View), (b) Ancient Khizirpur Fort (Bird's Eye View) with Site Surroundings. Both (a) & (b) Drone Shot Courtesy By, Md. Mahbubur Rahman.

1.2 Location of Ancient Khizirpur Fort

Historic Narayanganj is one of the busiest commercial cities in the capital Dhaka. Khizirpur Fort is located in the present Hajiganj area under this city. The fort is located northeast of Narayanganj city and west of the historic Shitalakshya river. Its distance from Chashara, the heart of the city, is only 2.3 kilometers. The fort is located on the opposite side of the Sonakanda water fort (Ancient Subarnakandi Fort) on the east side of the Shitalakshya river. The two forts are centered on the river.

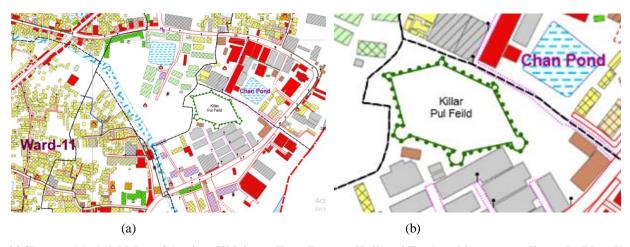


Figure 03 Shows:: (a) Arial Map of Ancient Khizirpur Fort (Present Hajiganj Fort) and its surroundings, (b) Blow Up Arial Map of Ancient Khizirpur Fort (Present Hajiganj Fort . Both (a) & (b) Source Moinul Islam, Urban Planner, Narayanganj City Corporation (NCC)

1.3 Site Surroundings of Ancient Khizirpur Fort



Figure 04 Shows:: The Panaromic View of Inside Part of Ancient Khizirpur Fort (Present Hajiganj Fort)

1.3.a To the West

To the west of the fort, there is a moat with a small width. This moat is located parallel to the water fort. The name of the moat is "Keller Pool" canal. The local people call this moat with the fort "Keller Pool" canal. It is known from ancient documents that Mughal emperors and rulers used to communicate with this canal by boat. The width of this moat adjacent to the fort was at one time much greater. Over time, these trenches have become disconnected from the necessary water supply and turned into piles and bins of waste in a state of dehydration. The river is still connected to the moat. So the existence of little water in the trenches matched. Only a highway has gone through the middle. The "Kellar Pool" moat is connected to a main road to the east. The name of this road is "Demra-Narayanganj Highway Road". It can be said that the capital Dhaka can be reached by this road from Narayanganj city. The distance from this road to Dhaka is about 16.6 kilometers.

The "Kellar Pool" was a Mughal-era bridge at the junction of the moat and the highway. Originally, this bridge was called "Keller Pool". At present this bridge of Mughal period does not exist. The bridge has been demolished and added as a connecting road to the highway. According to many local elders, there was a bridge built during the Mughal period. Which they saw with their own eyes, but not today. Not much information about this bridge is available anywhere else.

To the west of the fort is another magnificent Mughal tomb, the tomb of Bibi Maryam, the Mughal three-domed mosque, the reception hall, the arcade gateway and the quadrangular defensive wall. Built by the Mughal subaddar Shaista Khan, this architecture still stands tall, setting a shining example of glory. Subaddar Shaista Khan built these structures after the death of his youngest daughter Bibi Maryam (Turan Dakht). There was another mughal architecture to the north of the Bibi Maryam Complex built by



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Subaddar Shaista Khan. The school was later demolished and a school established. This school is named, Bibi Maryam School. History has nothing to do with this school. These architectures are just a two minute walk from the Mughal fort.

1.3.b To the East

The main road flows east of the fort. Walking along the narrow road opposite this road, you can see another Mughal mosque. Whose local name is "Hajiganj Shahi Mosque". The three-domed mosque still stands with tradition, but much has changed. At present, this mosque has fallen into a state of neglect and neglect.

1.3.c To the North

To the north of the fort is the flowing Shitalakshya river. On the other side of the river is the historic Kadma Rasul Dargah, Dargah Bari Mosque, many colonial structures adjacent to the Dargah, Eidgah and Bara Bari Mosque etc.

1.3.d To the South

To the south of the water fort was open space including the fort. Over time, this open range has deteriorated to the point of human eviction. Numerous structures have been built around the fort. Most of these establishments are mills. In addition, all other installations include houses, fire stations, warehouses, poultry breeding centers and school buildings.



Figure 05 Shows:: (a) Different Categories of Unknown Tombs, (b) Kellar Pool Canal, (c) Bibi Mariam Tomb, (d) Outer View of Hajiganj Shahi Mosque, (e) Inner View of Hajiganj Shahi Mosque, (f) Bibi Mariam Mosque, (g) Bibi Mariam Guest House, (h) Bibi Mariam Tomb, (i) Bibi Mariam Complex Courtyard, (j) Bibi Mariam Entry Gate, (k) Bibi Mariam Complex Play Ground, (l) Bibi Mariam School.

1.4 The Actual Location of Ancient Khizirpur Fort (Present Hajiganj Fort)

The actual location of the Ancient Khizirpur water fort was at the confluence of a very large but important military river connecting the rivers Buriganga and Shitalakshya from Fatullah. This information is still evident in many old maps, documents and academy figures. However, this position is no longer exists. At present the Shitalakshya river has moved a lot to the west. The intercourse near the fort is no longer visible. The Buriganga river has become a lot of fun in the past. Created a place in the middle. This place was like this many years later. These empty spaces around and in the middle were once evicted. Numerous small and large structures

were formed. These establishments include houses, industries, mills, factories, schools, mosques, mosque quarters, play ground, madrasas, shops, markets, houses, mixed use buildings, clinics, fire service station, car garage, breeding center, bus stands and other establishments. Over time, today's historic khizirpur water fort was buried in the ceremony of these surrounding structures. I don't know when this water fort will pass from this state. Who can proudly stand tall by introducing himself to the world as a historic Mughal architecture.

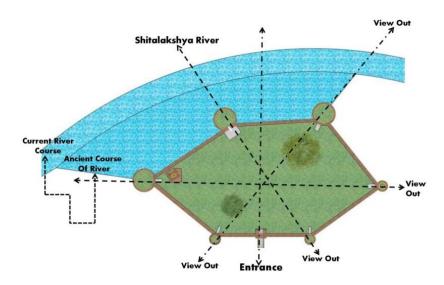


Figure 06 Shows:: The Exact Location of Ancient Khizirpur Fort (Present Hajiganj Fort). Drawing Development By Co-Author:: Afnan Hossain .



Figure 06 Shows:: The Exact Location of Ancient Khizirpur Fort (Present Hajiganj Fort). Drawing Development By Co-Author:: Afnan Hossain.



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Purpose of the Research

This would be wrong to call it only documentation paper. This is also a research paper. Here the actual location of the oldest waterfort, the current location, naming, name changing, highlighting this waterfort as a real Mughal structure and its adequate evaluation, the present transitional period and the future of this structure and for the future, the thinking has been expressed for the purpose of presenting it to the next generation. And that is the conservation technique. For the assessment of this paper in a real sense, the application and use of appropriate diagrams, photos, maps, transcripts, transcriptions, reasoning, formal expressions and different settings are highlighted.

Scope of the Research

Suggestions for developing and guiding research writing and research will be presented repeatedly throughout the paper. Where aesthetics will be applied. The text will therefore become historical, descriptive and creative. Every image used in a given letter has a story and purpose behind it. A thorough research and analysis of the writing of which recall is a difficult matter. All spatial patterns are used here. Critical imagery has also been used to analyze formal understanding. Even if it reveals negative aesthetics, so be it. All the structural features are illustrated in the documentation. Judging this paper as a strong literary medium on the whole is no exaggeration. Where as a research papers all kinds of archaeological, architectural, structural, historical, social etc. arrangements have been collected.

Research Methodology

In this paper we will mention the essential starting point and outline of fort architecture. Where only the main line of the fort architecture will be shown in the light of the architectural features of the country, era and Bengal. Although its origins were initially elsewhere. However, with the passage of time, this architectural style has gained a momentum. But the architecture of this country has become a remarkable addition compared to the countries of the world.

A Chronological Methodology

Question Making

Literature Reviewand Draw Some Research Questions

(Question Realted to timeline and figure out

When each stage of cultural, religion, and evolution took place)



Survey Method

Site Survey/Aerial Survey/Google Earth-Pro Survey/Mental Map



Findings

Findout the Definition, Surroundings and its Strengths, Actual Location of the Mughal Fort, Historical Amalgamation, Reasonable Documentation



Documentation:: :: 01(Historical Documentation)

(To figure out

The historical Phases and Development)

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Documentation: :: 02 (Archaeological and Architectural Documentation)

(Necessary Plans, Elevations, Sections and 3D Views for undersanding the Archaeological and Architectural Chrecteristics)

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Graphical Presentation

(Fort's and its Architectural Charecteristics and Detail Description)



Research Paper Writing

(Damage Mapping and Proposed Ultimate Solution)

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Attachments of Graphical Presentation:

To Be Mentioned with Necessary References

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Guideline::

Noted Some Tourists Guideline

II. Historical Analysis

2.1 Birth and History of Ancient Khizirpur Fort (Present Hajiganj Fort)



Figure 07 Shows:: Ancient Khizirpur Fort (Present Hajiganj Fort) and an Impeccable Moment at Dusk Moments .Photo Taken By, Mir Risalat Hossain

Ancient Khizirpur fort is considered to be the successor of Sonakanda fort in terms of antiquity. There is no history of writing the date of construction of this fort. There is no inscription. However, it is clearly believed that it was built in Bengal during the time of Mughal Subedar Mir Jumla (Born: 1591 AD - 1663 AD). The fort is considered to be of the sixteenth century as it bears a striking resemblance to other Mughal forts in and around Dhaka. The Mughal subaddar Mir Jumla built a water fort to strengthen the defenses of Dhaka. "Sonakanda fort", Khizirpur fort located in Khizirpur (present Hajiganj) on the eve of crossing the Shitalakshya river and reaching the mouth of the river Buriganga or "Hajipanj fort" Before crossing the river and reaching the mouth of the river Buriganga, the fort of Beg Murad as well as the unnamed fort, the fort of Jinjira in Keraniganj in the middle of the river Buriganga. These forts have many similarities in architectural features and aesthetics. Again, many historians claim that Isha Khan was the builder of this fort. They also presented a lot of information about him. However, judging by the overall data, Mir Joomla is the builder of this fort. Subedar (governor) Islam Khan, who in popular culture is thought to be the founder of the township of Dhaka, expanded and strengthened the naval forces (Mughal Nowara or the naval fleet) and appointed a Commander in Chief or Meer-i-Bohor. It is said that within a century, the Mughals probably built three forts along the



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rivers around the city at strategic locations with a view to securing the capital. Though there is a persisting controversy about whether it was Mir Jumla or Islam Khan who actually built them, there is no doubt about their purpose.[03]

2.2 Period of Construction of the Ancient Khizirpur Fort and Prehistoric Inscriptions

Inscriptions are one of the most important tools in the field of traditional architecture. Unlike other medieval fortifications, Khizirpur fort has no inscriptions. It is a matter of great regret. Once the inscription was found, the identity of this architecture would not have been in crisis. Considering the overall structural elements and architecture, this structure is considered to be a spectacular structure of the Mughal period. Like Sonakanda Fort, this fort is also built by Subadar Mir Jumla. Again, in the middle of the sixteenth century, the fort is considered to be another partner in the plan to fortify Dhaka and its adjoining defenses.

2.3 Khizirpur Water Fort vs. Isha Khan's Water Fort

Just as Isha Khan, one of the twelve Bhuiyans of Bengal, is closely associated with the historic Sonakanda Fort, so is Khizirpur Fort. However, there is no myth like "Sonakanda fort" around this water fort. Professor Swarup Chandra Roy in his book "History of the Golden Village" mentions that Isha Khan built new forts at the mouths of Tribeni, Hajiganj, Kalagachhia and other places".[04] Although this incident is nothing but a rumor. Again, according to many, the anti-Mughal Isha Khan captured the fort from the Mughals through war. Later this fort was developed with reconstruction.

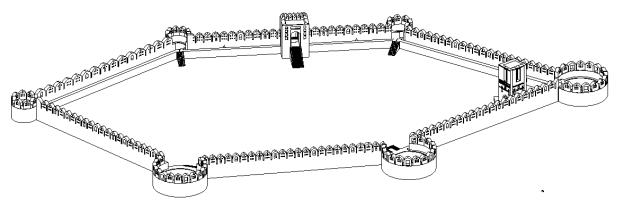


Figure 08 Shows:: 3D View of Ancient Khizirpur Fort (Present Hajiganj Fort).

2.4 Irrefutable Documents to Determine the Exact History and Date of Construction of Ancient Khizirpur Fort (Documents 01 & 02)

2.4.a Documents-01

Baharisthan-i-Ghaibi Different people have different opinions about Khizirpur water fort. Some people are expressing their views. Again, some people's opinions match. It can be seen that if the dual opinion is agreed upon, it becomes heavier and heavier. Tayesh, Abdul Karim, Syed Mahmudul Hasan think that Mir Jumla is the builder of this fort. Again, Professor Dani, Syed Mohammad Taifur does not acknowledge Mir Jumla, the builder of this fort.

Apparently, the lack of information is hampering the construction of this fort. An irrefutable document in this case is that the historical books "Baharisthan-i-Ghayebi" and "Akbar Nama" contain a number of facts and evidence. The book "Baharisthan-i-Ghayebi" written by the Mughal general Mirza Nathan. So the dignity of this book is different. It is contained in the book "Baharisthan-i-Ghayebi" which is exactly what it is. "Islam Khan wrote a few lines to Ihtimam Khan. The letter reached him in the last hours of the night. Ihtimam Khan was instructed to remain there and Sheikh Kamal and Mirza Nathan to proceed to Khizirpur and Kumarsar. He advised Mirza Nathan to give up one of these two places for Sheikh Kamal. Accordingly, Mirza Nathan set out with a large land and navy including Sheikh Kamal. On the first day, Kopar stayed at the estuary. Four hours before dawn, they advanced to the banks of the river Laksha. In the morning Mirza Nathan reached Khizirpur and Sheikh Kamal reached Kumarsar. There they started building forts. Enemies come to fight with their navy and start firing cannons. Although the Imperial forces could not finish their fortifications, they fired their large cannons from wherever they could reach the high ground and threw the enemies from the boat into the river, Large-bodied boats with their riders sank in the river due to artillery shelling. The fort that Mirza Nathan started building on the banks of the river was completed towards the end of the day. Arranging cannons at different places, Mirza Nathan recruited his subordinates. At the confluence of the Khizirpur, at the confluence of the Dolai and Lakshya rivers, Mohammad Kha Pani deployed five hundred horsemen. The artillery built a bridge over the river by Katari and Maniki boats. Shahbaz Khan allowed Barij to stay in the moat with fifty soldiers on his left side. Sheikh Soleiman Usmani with forty horsemen on his left. Iladad Khan Kasi and seventy horsemen were deployed behind them. Sheikh Chamru Bakhtiyar with ninety soldiers, Fateh



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Jung, the son of Ulubaba Khan with one hundred and forty soldiers and Noman Bakshi with two hundred horsemen were deployed in a few lines behind Iladad Khan. Mirza Nathan with a large irregular force set up his headquarters at the mosque in Khizirpur. Outside the cannonballs he set up his peelkhana (elephant house). Sheikh Kamal built his first fort at Kumarasar. He was not able to advance to the river bank. On the second day he built another wall in the middle and later a third tower on the river bank. "[05]

2.4.b According to Information from Historical Book "Baharisthan-e-Ghaibi"

From the book "Baharisthan-i-Ghayebi" it is clear that Hajiganj fort is the Khizirpur fort which is on the banks of the river Shitalakshya.

2.4.c Document-02

Akbarnama Another reliable source about the construction period of Khizirpur fort is Akbarnama. According to the Akbarnama, Khizirpur (a direct route between the two sides of the river with open access to the river before the formation of a military camp on the banks of the old Buriganga near Hajiganj) had two strong forts for positional advantage. Both forts were captured by the Mughals in a short time.

2.4.d According to the Information Obtained from "Akbarnama"

"Before the establishment of Mughal rule in Bengal, there were forts at Khizirpur (Hajiganj) and Katrabhu (Nabiganj) across the river. Katrabhu was the capital of Musa Khan. A CS map has been found to prove that Khizirpur fort is very ancient. This CS map of the British period shows some more defense walls and designs around the present Hajiganj fort. It can be said that the plan or design of the fort seen at present is very different from the larger design of the fort. During the British rule, a land survey was once conducted in the historic city of Narayanganj. According to that survey, a large fort was found in the place of the fort in the mouza of Hajiganj. The entire installation is said to have been on about 25 acres of land." [06]

III. Architectural Documentation

3.1 Plan of Ancient Khizirpur Fort

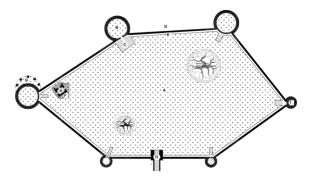


Figure 09 Shows:: Plan of Ancient Khizirpur Fort (Hajiganj Fort)

Legends -

- A. Central Courtyard
- B. Cannon Altar and Tower
- C. Cannon Altar Plaza
- D. Defensive Wall or, Fortified Wall
- E. Lobby
- F. Angle Observation Tower
- G. Outer Doric Column and Plaza
- H. Arcade Gateway or, Entry Approaches
- I. Small Corner Tower

Khizirpur water fort is bigger in size than other forts of Mughal period. This water fort is unequal. The length of an arm is not equal to the length of any of its arms. The fort is hexagonal in terms of geometric shape and architectural features. In the course of time, when the water fort collapsed, it looked like a quadrangle with a broken corner. Later, this pentagonal fort was renovated and converted into a hexagonal fort. But according to the original land design, this water fort is hexagonal. Such information is found in ancient documents and historical books. The north side of the fort, including the entrance, measures 44.04 meters. That is, according to the measurements of each arm, the sum of 19.43 m, 5.17 m and 19.43 m. Moreover, the other arms of the fort measure



about 3.60 m and 3.61 m. The height of the fort is about 1.63 meters. The interior of the fort is completely exposed. Like Sonakanda water fort, this fort is not a palace fort. At no time was this Jaldurg Palace a fortress.

3.2 Elevation of Ancient Khizirpur Fort

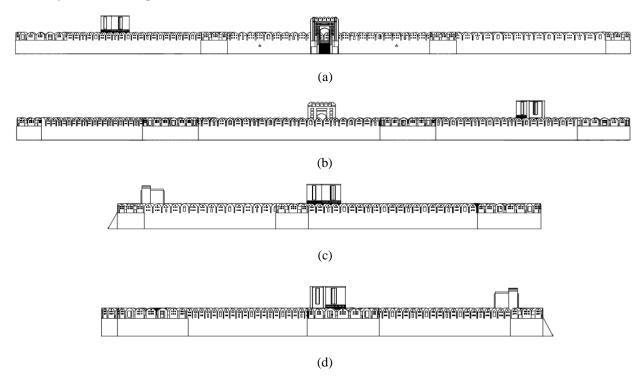


Figure 10 Shows:: (a) Front or, East Elevation of Ancient Khizirpur Fort, (b) Back or, West Elevation of Ancient Khizirpur Fort, (c) Left Side Elevation of Ancient Khizirpur Fort, (d) Right Side Elevation of Ancient Khizirpur Fort

3.3 Section of Ancient Khizirpur Fort

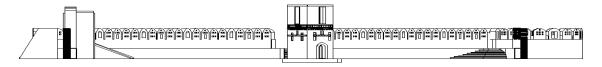


Figure 11 Shows:: Middle Section of the Ancient Khizirpur Fort (Present Hajiganj Fort)

3.4 3D View of Ancient Khizirpur Fort (Present Hajiganj Fort)

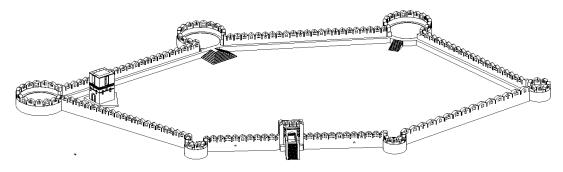


Figure 12 Shows:: 3D View of Ancient Khizirpur Fort (Present Hajiganj Fort) Medium - Autodesk Revit Architecture 2019

Elevation of Cannon Altar/Circular Drum::

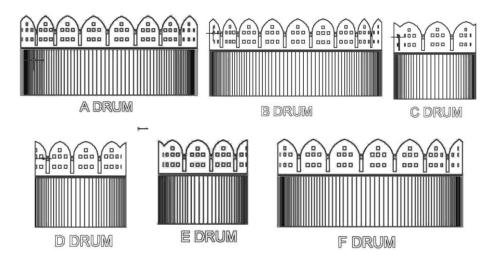


Figure Shows:: Elevation All of All Cannon Altar/Circular Drum

3.5 Architectural Features of Khizirpur Fort



Figure 13 Shows:: Internal Part of Ancient Khizirpur Fort (Present Hajiganj Fort). Photo Credit by Shiplu Sinha.

A review of the architectural features of Ancient Khizirpur Fort (Present Hajiganj Fort) shows that the fort has -

- 01. The Main Arcade Gateway
- 02. Defensive Wall Structue
- 03. Central Courtyard
- 04. Cannon Altar and Tower
- 05. Cannon Altar Plaza
- 06. Angle Observation Tower





3.5.a. The Main Arcade Gateway

Like Sonakanda Fort, Khizirpur Fort has only one gate. It can be said that in all the surviving Mughal forts in Bengal, there is only one gate. The height of this arc hway is higher than the height of the defense wall. The archway of Khizirpur water fort is located to the north like Sonakanda water fort. There are defensive walls of the fort on both sides and on the opposite side of this archway gate. The architectural style and decoration style of the archway gate of Khizirpur water fort can be easily identified as a Mughal period structure.



Figure 14 Shows:: (a) Sketch of Entrance Gate of Ancient Khizirpur Fort (Present Hajiganj Fort), (b) Sketch of Entrance Gate of Ancient Khizirpur Fort (Present Hajiganj Fort), (c) Outer Part of Main Arch Gate (scienceTamra21.blogspot.com),(d) Inner Part of Main Arch Gate.

The main entrance arch has only one arch. This arch is again quadrangular. Which is caused by a half-dome. Each archway is located in a rectangular structure. The outer entrance of the rectangular structure and the inner entrance have small and medium sized panels. Each panel is again enriched with different ornaments. In addition to the panels, small niches can be seen in every fort. Each niche is again, rich in notched design. The parapet at the top of the arch is decorated with small marlons. Which looks a lot like lotus petals. Each marlon has a follicle. Like the Sonakanda water fort, there is no gap between the two marlons. The space between the two marlons is empty. The outer part of the main archway is rich in decoration as well as the inner part. However, the presence of the panel can be seen on the inside, but it does not have a notched design. Looks like a box frame according to the geometric pattern.



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The entrance to this fort has a staircase on the outside as well as on the inside. The base of the main archway is 1.52 m above the ground. There are no sloping walls on either side of the stairs. Which has continuously risen from the bottom to the top. However this wall did not meet at the last point at the top.

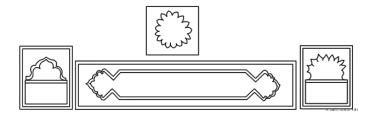


Figure 15 Shows:: Ornamentation of Entrance Gate of Ancient Khizirpur Fort (Present Hajiganj Fort)

3.5.b. Works of The Main Arcade Gate

The archway is the only way to enter the fort. So that iron gates exist. Marlon's hooks at the top of the archway were used to fire cannons.

3.6.a Defensive Wall Structure

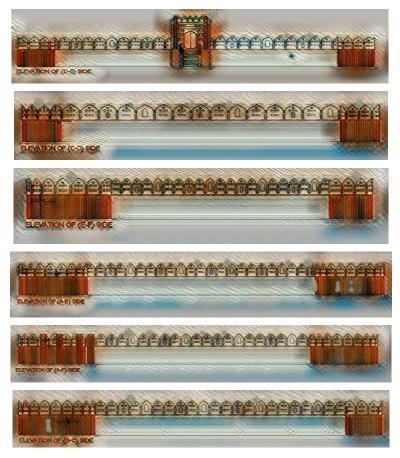


Figure Shows:: Differentiate Defencive Wall of Hajiganj Fort

The defense wall means the surrounding wall. Like Sonakanda water fort, Khizirpur water fort is also rich in enclosure wall. Since the fort is hexagonal in shape, it has a six-armed defense wall. The wall of Ancient Khizirpur Fort (Present Hajiganj Fort) is thick and thick. The wall exists in two parts. One part is just the wall, the other part is the veranda surrounding the village. The thickness of the wall without this verandah is about 2'-6". The thickness of the verandah part is about 2'-6". In all, the total thickness of the wall is about 5'-0". There are numerous marlons on the surface of the wall, but not all of them are of the same length and width,



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but of the same height. Each marlon is attached to the same shape. The order of the geometric follicles can be seen in Marlon's row. Seen from the outside of the water fort, the first marlon has five follicles in a row, the second marlon has three small folks and a square shaped long follicle, the third and fourth marl has five follicles in a row and the fifth marlon has a large follicle. This hole is similar to Marlon and is relatively large in size. From the first to the fifth, the continuity of this fokar can be seen again and again. Seen from the inside of the fort, the first marlon has three folks, the second marlon has two small folks and a large follicle, the third and fourth marl has a follicle like the first marlon, and the fifth marlon has a follicle with a relatively large marlon. The elongated square panel at the junction of each of the two marlins has only one hollow. This hole is located a little higher.



Figure 16 Shows:: (a),(b),(c),(d) Details of Ancient Khizirpur Fort (Presnet Hajiganj Fort) Defensive Wall Structure.

3.6.b Works of Defensive Wall Structure

Marlon's Fokker, located at the apex of the defensive wall, was used to conduct battles by placing guns in battle.

3.7.a Central Courtyard

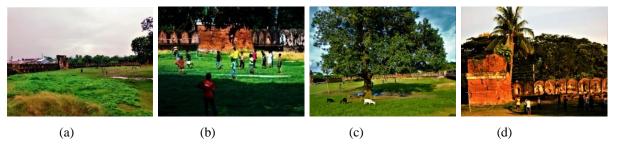


Figure 17 Shows:: (a),(b),(c),(d) The Central Courtyard of Ancient Khizirpur Fort (Present Hajiganj Fort)

There is a central courtyard inside the Ancient Khizirpur Fort (Present Hajiganj Fort). The central courtyard of Ancient Khizirpur Fort (Present Hajiganj Fort) is smaller in size than Sonakanda Fort and slightly larger in size from Idrakpur Fort. This courtyard is currently a playground. The courtyard of this fort is adorned with green grass. Again two large trees can be seen. A litchi tree can be seen on the east side of the fort, and a large mango tree can be seen on the west side.

3.7.b Works of Central Courtyard

During the Mughal period, the courtyard of Hajiganj fort was used as a battlefield. Soldiers lived in tents here.

3.8.a Miniature Tower

The hexagonal fort has six defensive towers at the six corners. These towers are not of equal size. On the front, that is, the two towers that can be seen on either side of the main archway, and the tower on the west side is small in size. They are about 8'-0 "in diameter, which is smaller in size than the other towers. The towers are much higher than the ground. About 9 steps have to be climbed up to the top. So that the rainwater does not freeze anymore. The walls of the tower are rich in marlon and small puffs.

3.8.b The Use of Tower

This tower was used for conducting war.

3.9.a The Massive Tower

In addition to the small towers on the north and east sides, there are three more towers on the large side. The east-facing tower was wiped out when the fort looked pentagonal in the run-up to the renovation. According to the geometric pattern, the east-facing tower was renovated to resemble the south-west-facing tower. At present, the three towers are the south-west corner tower, the south tower and the north tower. They are large in diameter, about 12'-0 "to 14'-0". Their height is much higher than the ground. You



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have to climb about 9 steps up the stairs. The circular altar that is found after ascending is filled with green grass. This circular altar, full of green grass, is surrounded by a circular lobby that is very small in width, about 1'-6 "to 2'-0". The walls of the tower are rich in marlon and small puffs.

3.9.b The Use of Towers

This tower was used for conducting war.



Figure 18 Shows:: (a),(b),(c),(d) The Corner Tower of Ancient Khizirpur Fort (Present Hajiganj Fort)

3.10.a Cannon Altar

These towers of the water fort were an altar for cannon placement. Especially in the middle, that is, the altar on the south is raised a few steps by plaza. Cannons were placed at this place along the river.

3.10.b The Use of Cannon Altars

This altar is made by the river. So that the cannon can be placed and the aim can be kept right towards the river.



Figure 19 Shows:: (a),(b),(c),(d) The Cannon Altars of Ancient Khizirpur Fort (Present Hajiganj Fort)

3.11 Cannon Altar Plaza

To reach the cannon altar, one has to go through many steps.

3.12 Observation Tower

There is only one palace-like structure in the fort premises. That is this observation tower. This tower is taller than the main gate of the fort, the wall of the circular altar and the defense wall. Its height is about 28'-6". Although the observation tower has no direct connection with the fort. It has been built for the ever new development of the fort. It cannot be called a fort. Looking at the master plan of the fort, it can be seen that this tower is located in the eastern corner of the fort premises. The tower is only an observation tower.



Figure 20 Shows: (a),(b),(c),(d) The View of the Observation Tower from Different Directions,

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3.13 History of the Observation Tower

It has not been possible to determine the exact construction period of the observation tower. The Department of Archeology of Bangladesh called the tower "A huge circular drum" in their "Protected Monuments and Mounds in Bangladesh" published in 1975. But in real sense this installation is not circular. Again, not too big. Judging by the architecture of the observation tower, it is one of the later Mughal installations. Although the architectural features of the colonial period match with this structure, it is not a completely colonial structure.

3.14 Observation Tower in Terms of Structural Elements

The observation tower is made of ordinary brick. The size of these bricks does not look like the size of the bricks of the fort built during the Mughal period. So it is easy to guess, this observation tower is for observing the path of the river adjacent to the fort.

3.15 Plan and Elevation of the Observation Tower

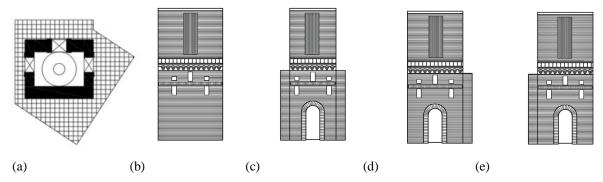


Figure 21 Show's the (a) Plan of Observation Tower, (b) South Elevation of Observation Tower, (c) North Elevation of Observation Tower, (d) East Elevation of the Observation Tower, (e) West Elevation of the Observation Tower

3.16 The Architectural Style of the Observation Tower



Figure 22 Show's the (a),(b),(c),(d) The Inner Part of the Observation Tower of Ancient Khizirpur Fort (Present Hajiganj Fort)

The observation tower is placed curved in the eastern corner of the fort. Much of the north-south face. The size of the tower is square and small. It is about 14 feet in length and width. The wall of the tower is about 1'-6". The tower looks completely square from east-west and north, but there is an extended wall on both sides on the south side, which is not clear from the north side, but it is exactly the same in terms of area. Observations show that there were three entrances on the east, west and south sides of the tower. This entrance was surrounded by semi-circular arches. Whose ruins still survive. The length of this entrance is about 2'-6 "and the height is about 7'-4". On the outside of this arch, another arch of 1 foot is seen. A spiral staircase could be seen inside the observation tower. This ladder does not currently exist. The spiral staircase is made entirely of wrought iron.

3.17 The Decoration Style of the Observation Tower

The observation tower is rich in ornamental style. The upper part of the tower is rich in panels from every side. Its shape is square, rectangular and rhombus. On the top of the tower you can see some more decorative styles with a panel on the top.

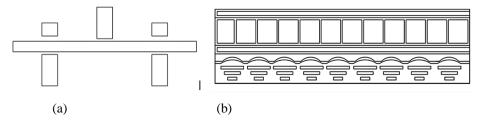


Figure 23 Show's the (a),(b) The Colonial Ornamentation Style In Observation Tower at Ancient Khizirpur Fort (Present Haijganj Fort)

IV. Damage Mapping and Proposed Solution

4.1 The Old Use of Ancient Khizirpur Fort

The ancient Khizirpur fort was once a historical site. There is a guard at the main gate. Rows and rows of tents are pitched inside the fort. The location of cannon balls somewhere. The defensive wall of the fort, the corner towers and the cannon altar stand in the place of innumerable soldiers everywhere. One by one the soldiers surrounded him. Soldiers are fighting with cannon fire. More can be seen, the location of numerous horses. The soldiers are fighting on horseback. All in all, a warlike environment.

4.2 Current Use of Ancient Khizirpur Fort

Today's water fort has surpassed all the traditions of the past, heroism, soldiers and feudal lords. At present, all that can be observed is called water fort. Although these ancient forts were used as a defensive wall to conduct war and repel piracy, the present fort is in a state of neglect. For decades, the green field inside the fort has been used by the local people as a playground. For example, ancient Khizirpur fort (present Hajiganj fort) and Sonakanda fort. Since sports are played inside the fort, a lot of damage has been done to the fort due to the boys. Inside the Idrakpur fort, there is a pond of the colonial period, so this place is not used for sports. But the locals bathe in this pond. Which is also a difficult thing to accept. As it is used as a sports environment, the towers of the fort and the altars for the structures of cannons are used for defecation. Moreover, the new structures that have been built next to each water fort, such as dwellings, schools, mosques, factories, have ruined the setback of the ancient water fort. The interior of the fort is like a cattle pasture. Many leave their pet cows, goats, sheep for the whole day inside the fort. This fort is a reservoir for animal toilets. Somewhere on the walls of the fort can be seen the existence of various carvings. He is writing all the inaudible messages on the wall. Moreover, the fragility of the cannon altar, plaza, marlon and the condition of the faded forts remind us that these forts are neglected.



Figure 24 Show's:: The Present Condition of Ancient Khizirpur Fort. Photo Taken By, Mir Risalat Hossain.





4.3 Administration Initiatives and Work of Ancient Khizirpur Fort

Recently, a joint eviction drive of Narayanganj City Corporation (NCC) and the Department of Archeology (DAP) was carried out around Khizirpur fort under the Department of Archeology in Hajiganj area of Narayanganj City Corporation (Nasik) 11th Ward. Evictions were carried out by demolishing many illegally constructed godowns around the fort and hanging instructional notices. Later, measures were taken to ensure that there were no more irregularities. At present the Hajiganj fort is in the aftermath of the eviction drive. A narrow paved road has passed in front of the water fort. However, the entrance to the fort is in a dangerous condition due to this road. Which is also having trouble determining the setback of the fort.

4.4 Renovation of Ancient Khizirpur Fort

This is the only fortress that has been renovated many times over. As a result of repeated editions, there has not been the slightest change in its embellishment. The fort is currently in its original land design. The "List of Ancient Monuments in Bengal" of 1896 mentions the ruined condition of this fort. It is mentioned in the book that there was a fence and a tower at that time. In 1920-21, a proposal was tabled to bring the Ancient Khizirpur Fort (Present Hajiganj Fort) under the protection of the then Archaeological Department. At that time, according to the British CS map, the 25-acre area was claimed to be a fortified city or, fortified area. In 1950, the Ancient Khizirpur Fort (Present Hajiganj Fort) was brought under the purview of the Department of Archeology and Museums of Bangladesh. Since then, the present condition of this fort has been renovated at various stages. Although the fort is in good condition at present, the condition of the observation tower on the east side of the fort is very bad. The cast iron frame around the stairs of the observation tower has already been stolen. The stairs are crumbling and fragile. The observation tower could collapse at any moment.

4.4 The Immense Tourism Potential and Future Surrounds the Historic Khizirpur Fort

Today's Narayanganj city has so much history, tradition, prestige and transit system but it is not made in a day. Today's Narayanganj city has gone through many ups and downs. The distant historical period has passed and the present is going on. Yet every layer of this city has a touch of history. People have learned to move forward by cherishing history and tradition in their hearts. If we look at the history of Kherokhata, we can see that the melody comes from the Hindu and Buddhist eras. The city has a small number of historical sites from the Hindu and Buddhist periods, but many from later periods, namely the Sultanate, Mughal and Colonial period. Each installation is aesthetic and visually pleasing. These historical sites include ancient forts, bridges, paths, ghats, temples, crematoriums, mosques, tombs, reception halls, khanqahs, dargahs, palaces, royal buildings, monasteries and court shrines. The attraction of these installations is now beyond borders. From one country to another. Hundreds of well-wishers and tourists visit these places every day. Religious places became a hotbed of people devoted to religious pursuits. People of one religion are also going to pilgrimage places of other religions in search of different jobs. A large number of foreign tourists visit Narayanganj to see these historical sites. Although everything is going on without a plan. So here, tourism has immense potential. Considering the overall situation of these historical establishments, Narayanganj should be declared as a historical tourist city. Moreover, it is possible to earn income through tourism. With this income, the original condition of the water fort is maintained and future maintenance is ensured.

4.5 The proposed Ancient Khizirpur Fort (Present Hajiganj Fort)



Figure (25) Shows:: The Proposed Ancient Khizirpur Fort (Present Hajiganj Fort) and Bibi Mariam Mosque and Tomb Complex In Narayanganj.



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The historic Khizirpur water fort has been renovated many times. Yet its current state is now very fragile. In this situation, we have to look at the development of this water fort. Now is the time to save this fort. People from different walks of life have to work together to save the fort. People in these quarters include the government, various ministries, especially the Ministry of Culture, the Department of Archeology, the City Corporation and various agencies. Everyone has to work together in unison. One has immense potential for tourism around a water fort. So we have to work with tourism. First of all, we need conservation and compilation system. Beyond which nothing else can be thought of. Besides water forts, there are small and big reservoirs and bridges. Complex design should be done by including these issues. Of course these thoughts will be epoch-making. Setbacks around the castle have to be recovered according to the rules of the gadget. These setbacks are still evicted. It is not possible to restore these setbacks with words. Legal action required. There is a lot of work to be done for the tourists inside and outside the fort. All kinds of facilities have to be created. Moreover, we have to think and work on the new address of some important structures located in the setback. Need to be restored. Design in the landscape and a ticket counter alone may not be the only way out of this setting. Much more is needed. So there is a lot of work to be done keeping in mind the Mughal period to keep pace with the times. In this case, the method of preservation and compilation of historical architectures of the neighboring countries can be followed.



Figure (26) Shows:: The Proposed Ancient Khizirpur Fort (Present Hajiganj Fort) and Bibi Mariam Mosque and Tomb Complex In Narayanganj.

V. Conclusion

5.1 How to get to the water fort

Ancient Khizirpur Fort (Present Hajiganj Fort) is located only 14.7 km away from the capital Dhaka. From Gulistan in Dhaka, you can go by AC, non-AC transport. The buses leave Bandhan, Utsav, Himachal, BRTC, Ananda, Shital before boarding at the south gate of Baitul Mukarram Mosque or, Stadium Gate 1, 2 or, Mayor Hanif Flyover. You have to reach Chashara by this bus first. The rent will be only 30-36 rupees. Ancient Khizirpur Fort (Present Hajiganj Fort) as soon as you reach Kellerpool by rickshaw from Chashara. In this case the rent will be only 20-30 rupees. If you go to Laguna, it will cost only 5 rupees.

5.2 Where to stay

It is said that it is possible to come back from Dhaka day by day. So far it is said that the only thing to think about is to stay. Then if you have to stay, you have to go to Narayanganj Sadar. You have to go there and take the hotel.

5.3 Conclusion

Preservation and compilation should not only preserve the old installations, but also enhance the cultural and traditional value of the historical installations. It is the responsibility of all of us to maintain the tradition for the next generation. All principles and strategies must be applied to maintain and preserve heritage installations as a masterpiece. It should also be recommended that there is a need to change the mindset of the people and to reuse the historical structure, with a balance of professionals and experts for the reconstruction work.

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