

Proposing a Conservation Management Plan for Bara Katra

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ABSTRACT

 Dhaka, the capital of independent Bangladesh, since 1971 has a historical background of nearly 400 years which is expressed and traversed as a symbol of power, dignity and artistry. In this research the authors selected a unique historical and architectural monument of old Dhaka, named "Bara Katra". This historical artifact bears testimony to the style and design of Mughal architecture in Bengal that served the purpose of Caravan sarai. It is undoubtedly a magnificent edifice of grand scale and one of the most important historic remains playing an important role in representing the cultural heritage or glorious past of Bengal. Currently this structure is in poor condition and hidden within a dense settlement. In the light of the above situation, it has been felt that a conservation management plan (CMP) for Bara Katra is essential to make it sustainable. This study concentrates on the accomplishment of proposing the conservation management plan for such an outstanding historical heritage building. The overall research is focused on demonstrating possible directions of conservation strategies with degrees of intervention and action plans to integrate the artifact within the urban fabric by creating proper access and visual exposure. Therefore, the authors propose Conservation strategies that include degrees of intervention and action plans for the management of this historic building. These proposals are based on authentic documents and other historic evidence to prolong the life of the cultural heritage artifact symbolizing a belief system and historic values.

Keywords: *Bara Katra and heritage values, Conservation management plan, Conservation strategies or policies, degrees of intervention, Action plans.*

INTRODUCTION

“A city without old building, is like a man without memory”, Aldo Rossi.

Heritage is that which has been handed down from the past through our forebears. This heritage includes traditions, values, culture, language, history, lineage, bloodline, stories and personal traits, both physical and characteristics. However, it can also refer to more tangible assets as well, such as wealth, businesses, property and land, particularly that which has been in possession for multiple generations. (Farooq, 2015) For a society that values its past and cares for the posterity the preservation of architectural heritage is immensely important. In addition to architectural, aesthetic, historic, and iconic value, these artifacts have great emotional value as the symbol of our cultural identity and hence a part of the heritage. (Shaikh and Mowla, 2009)

For this research the authors selected a historical architectural monument named “Bara Katra” which is located in the city of Dhaka, the capital of independent Bangladesh. This artifact bears testimony to the style and design of Mughal architecture in Bengal that served the purpose of *Caravan sarai*. This magnificent edifice is situated at the southern part of *Chowk Bazaar* close to the north bank of the river Buriganga (Figure 1).

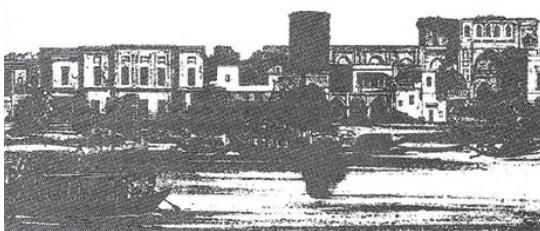


Figure 1:
Bara Katra pictures from Buriganga River around 1840.

AIM AND OBJECTIVES OF THE STUDY

Aim:

The aim of this research is to concentrate on the accomplishment of proposing the conservation management plan (CMP) for an outstanding historical heritage building Bara Katra.

Objectives:

- i To investigate and understand the significance or values of the artifact “Bara Katra” for accomplishment of proposing CMP.
- ii To investigate present conditions and the existing ruins, thus making suggestions to prolong the life of a cultural heritage as represented by the artifacts.
- iii To develop the recommended conservation strategies or polices with considering degrees of intervention for the artifact
- iv To propose the recommended steps, phases (short term & long term), and guidelines for developing an action plan that considers the degrees of interventions for the artifact.
- v To propose proper restoration works to revive the north, south, east and western wings that can be done on the basis of the existing ruin, authentic documentation with detail drawings and photographs, and archaeological (historical) evidence.
- vi To integrate the artifact with the urban fabric by creating proper access and visual exposure.
- vii To set a sustainable maintenance plan for the heritage building.
- viii To recommend adapting the original use, which will be established through guidelines, and make the building a tourist attraction.

METHODOLOGY OF THE STUDY

The methodology is primarily based on an empirical survey and thus the research method depends upon qualitative data through observation and documentation. To conduct the research the following sequential steps were used:

Step 01: Made a review of literature for understanding the historical and architectural importance of the Mughal monumental structures and the need to properly conserve the artifact, named Bara Katra.

Step 02: Conducted a field survey and photographic survey to observe existing conditions of the property, building, ruins, new developments, and the overall situations status of the historical Mughal monument.

Step 03: Developed a proposal for CMP concerning the conservation and management of Bara Katra based on existing ruin, authentic documentation with detailed drawings, photographs, and archaeological (historical) evidences.

Step 04: Finally proposed recommendations based on the findings in order to promoting tourism and create awareness among the peoples of the locality.

HISTORIC OVERVIEW

Dhaka's 400 years of rich history (exclusively old Dhaka) is something that cannot be forgotten because it has endured and encompassed a great deal. Be it the *Nawabs* with their wonderful architecture to the British rule and to the more recent Liberation war, Old Dhaka has seen it all and is still there to convey the tale.

Historical Dhaka is known as old Dhaka or *Puran Dhaka*. The history of old Dhaka begins with the existence of urbanized settlements dating from the 7th century CE. The city area was ruled by the Buddhist kingdom of Kamarupa before passing into the control of the Sena dynasty in the 9th century CE. After the Sena dynasty, Dhaka was successively ruled by Turkic and Afghan governors from the Delhi Sultanate before the arrival of the Mughals in 1608.

After the Mughals, the British ruled the region for over 150 years until the independence of India. In 1947, Dhaka became the capital of the East Bengal province under the dominion of Pakistan. After the independence of Bangladesh in 1971, Dhaka became the capital of the new state. The old parts of the city are full of heritage which marks the ancient Bengali culture. (Figure 2 & Figure 3) (Farooq, 2015)

Ancient edifices are the material evidence of the past. Old Dhaka, once the glorious capital of the



Figure 2:
Dhaka City across Buriganga River.
(Source: a painting by Frederick William Alexander de Fabeck in 1861)

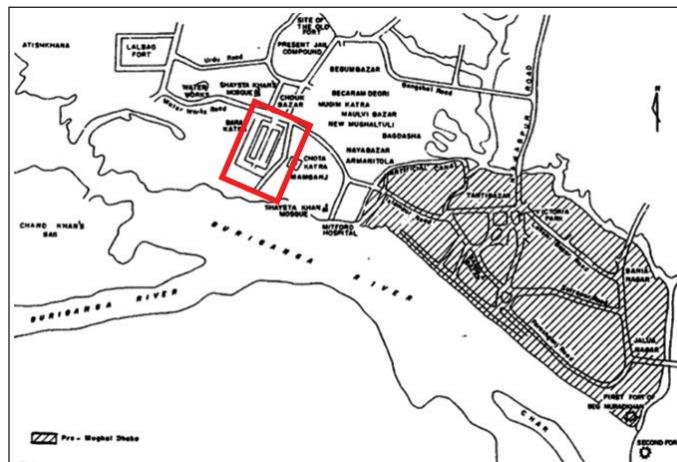


Figure 3:
Map showing the demarcation between Pre-Mughal and Mughal, Dacca with Bara Katra shown in red.
(Source: Department of Archaeology, Bangladesh)

7th century CE by Buddhist kingdom of Kamarupa.

The Sena dynasty in the 9th century CE.

Ruled by the Turkic and Afghan governors descending from the Delhi Sultanate.

The Mughals in 1608.

British ruled the region for over 150 years until the independence of India.

In 1947, Dhaka became the capital of the East Bengal province under the dominion of Pakistan.

1971, Dhaka became the capital of the new state.

Mughals in this region, is now on the verge of oblivion. Mughal glory faded and came to an end with the shifting of the provincial capital to Murshidabad in 1717A.D.

During the Mughal period a number of significant monuments were constructed of which the two Katras (Figure 4 & Figure 5), the Bara Katra and the Chhota Katra, have their own individual characteristics. The word possibly originated from the Arabic word *katrar* or *Katra*. *Katra* means a building having arches. In Arabic and Persian literature it has been called a 'Caravan Sarai' or simply a 'Sarai'. A *Caravan Sarai* generally contains a courtyard. An arched veranda would surround the courtyard and beyond the veranda would be the rooms where the travelers or pedestrians took shelter. The beasts of burden like horses and camels with carts and other articles necessary for a journey were kept in the courtyard. It is assumed that there were numbers of *Sarais* along the trade routes during the Muslim period. A Katra included sleeping rooms, kitchen, dining space, lavatories, mosque and even a hospital. *Waqf* (endowment) estates were created through private and public initiatives for the maintenance and operation of a *saraikhana*. (Shaikh and Mowla, 2009)

Uncontrolled growth since then is almost destroying the socio-cultural and historic settings of the urban fabric of old Dhaka. Encroachments are going on unabated, while open spaces and bodies of water are rapidly disappearing, the roads remain invaded and the overall situation continues to deteriorate. (Hossain, 2006)

According to Rennel's Map (1779) 'Bara Katra' seems to have a quadrangular courtyard enclosed by structures at its four sides. There were two magnificent gateways in the north and the south. The stately southern wing, extending along a river frontage, 223 feet long, is ambitiously planned and gorgeously decorated in the Imperial Mughal Style. D'Oyly (1823) described the building as magnificent and in good shape. (Shaikh and Mowla, 2009).

The Bara Katra contains two inscriptions (Figure 6) in Persian: one records that it was built in 1053 AH (1643-44AD) and the other contains the date 1055 AH (1645-46AD) and confirms that Shah Shuja gave the building to Mir Abul Qasim, who built it, to be used as a Katra on the condition that the officials in charge of the endowments (*waqf*) should not take any rent from any deserving person alighting therein. Twenty-two shops were *waqf* to defray the expenses

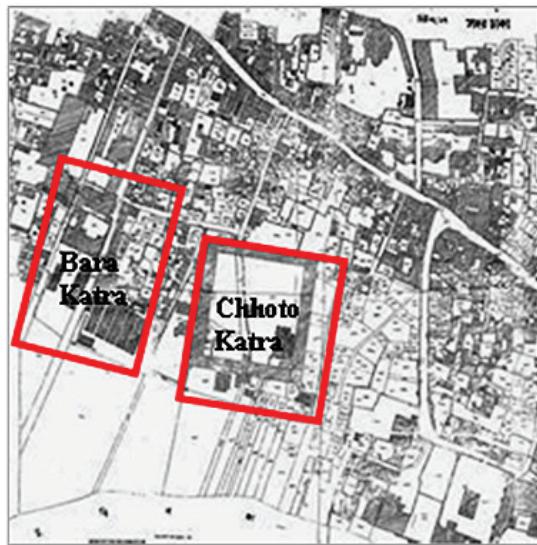


Figure 4:
C.S. map of Katras (1912-1915).

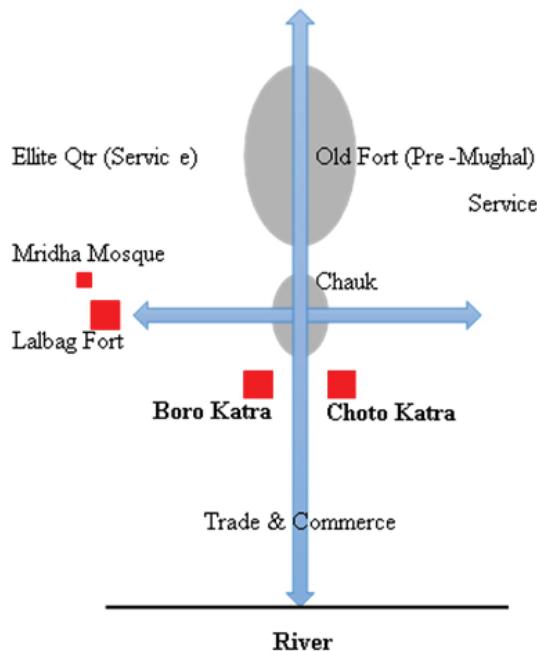


Figure 5:
City access road to the Bara katra & Chhoto Katra through Buriganga River.
(Source: Prepared by the authors)

of the Bara Katra. It therefore, appears that Bara Katra was a *caravan-sarai*, the northern part of which has completely disappeared now. (Hassan, 1958)

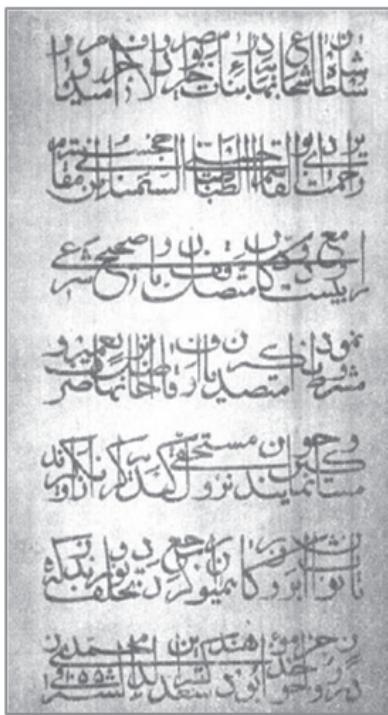


Figure 6:
Inscriptions on the northern gateway of Bara katra (now lost). (Source: Hossain, M.S., 2006)

Taifoor (1956) described the Bara Katra as an extensive building near the *Chawk* bazar with four lofty gateways (the gates to the east and west are now extinct). Its southern stately gateway, bearing three-storied rooms and flanked by four passages and the massive octagonal towers, had been a landmark of Dhaka from the river frontage (Figure

5). The three storied corner towers were hollow and could be approached from the subsidiary structures. Following the traditional pattern of the *caravan-sarai* of Central Asia, the Bara Katra was highly fortified and was embellished with all the features of the imperial Mughal style. In 1765 Nayab –e Nazim of Dhaka used the building as his residence. (Hossain, 2006)

In this research paper, the authors studied the status of Baro Katra from Historic Documents and their virtual reconstruction are stated below with photographic documentations (Figure 7, Figure 8 & Figure 9).

PRESENT STATUS OF BARA KATRA

General information:

The dense settlements around Bara Katra have resulted in it being visually obscured. Inadequate space around the structure restricts proper lighting and ventilation. The narrow road network doesn't permit vehicular access. Due to uncontrolled development and high land values, proper urban spaces for public gathering cannot be provided. The narrow street known as Bara Katra Lane runs through the gateways, created by the remaining ruins. The open-to-sky-spaces enclosed by the buildings are occupied by the newly built structures. The riverbank that once used to flow adjacent to it, has now receded from the structures. Moreover, land fill in the area has raised the ground level above the plinth of the existing ruins. (Hossain, 2006)



Figure 7:
Southern wing of Bara Katra (left) and ruin of northern gate (right). (Source: Painting of D'Oyly, 1823).

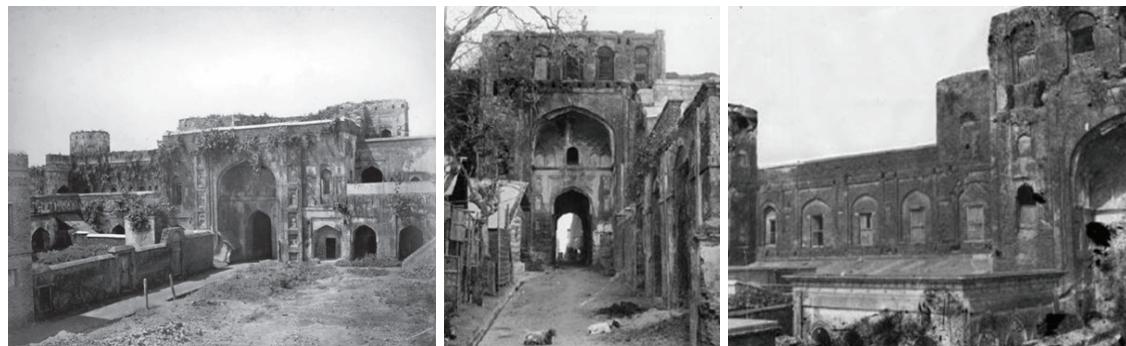


Figure 8:
Baro Katra south view- photo taken 1870 (Source: British Museum) (left); Entrance gateway of south wing (middle); north elevation of south wing ((right) in 1930 A.D.



Figure 9:
Entrance, south wing from the courtyard.1950 (left); Entrance, south wing, 1964 (middle); Entrance, south wing from the courtyard.1950 (left).

Baro Katra in their present state are in a serious identity crisis due to new settlements within and adjacent to the sites. The dense settlement in and around the artifacts is creating visual obstacles. The visual obstacles are more prominent in all the gateways (Figure 10). Moreover, there are several damaged walls, roof, floor, staircases, and corner turrets needing proper initiatives for repair and improvement (Figure 11 & Figure 12). The present use of Baro Katra and its surrounding areas is a great threat for its physical and visual existence. Open courts are occupied by incompatible functions (Figure 11). (Shaikh and Mowla, 2009)

Therefore, some important general information regarding the present status of the artifact "Baro Katra" has been indicated below in Table 1.

Morphological analysis

Existing drawings of Bara Katra:

The existing drawings of Bara Katra including the area occupied by the artifact and the surviving ground floor plan have been shown below in Figure 13 & Figure 14.

The Figure 13 describes the physical footprints of Baro Katra which can still be seen on the Ward map but the plots are used by newly constructed *pucca* or semi- *pucca* constructions which are obviously illegal as it is a large *waqf* property. (Shaikh and Mowla, 2009)



Figure 10:
Access pathway to southern entrance (left); Southern entrance of Bara Katra (middle); Inside the gateway with plaster details (right). (Source: Photographs taken by the authors).



Figure 11:
Existing situation inside the courtyard (left); Ruin condition of the staircase of 1st & 2nd floor of the artifact (right). (Source: Photographs taken by the authors).

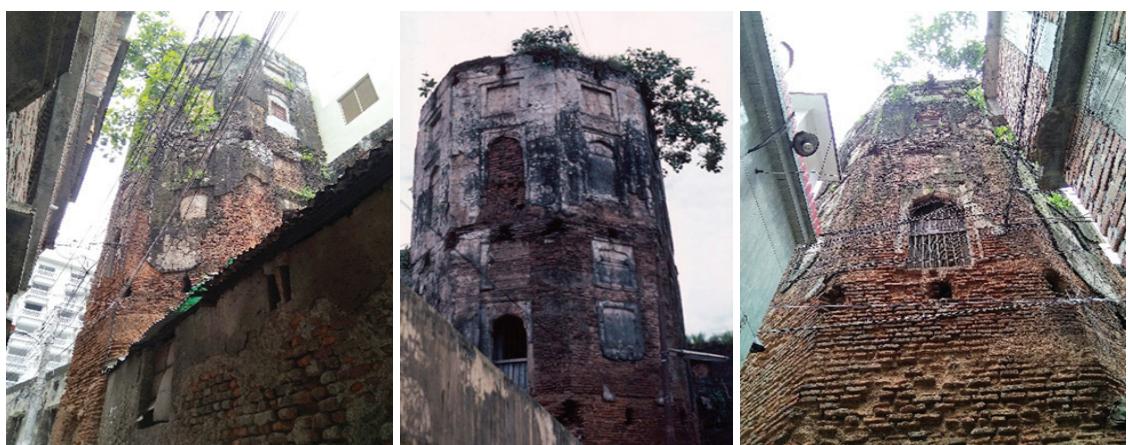


Figure 12:
Existing situation of the corner octagonal turrets (hollowed tower) of Bara Katra. (Source: Photographs taken by the authors).

Table 1: General information of Bara Katra (Source: Hossain, 2006)

Designation of the property:	"BARA KATRA"- Protected as Historic Monument by the Department of archaeology, Bangladesh.
Building type:	Mughal Caravan Sarai.
Area occupied by the structure:	57,8,70sft
Built in:	Commissioned in 1446 A.D And founded in 1644A.D.
Builder:	Abu Qasim, Chief Architect of the <i>Mughal</i> prince Shah Suja built it as the prince ordered him.
Ownership:	"WAQF" property belongs to the state.
Address:	holidngno.16, 17, 18,19,31,32, 32/1, 41/2, 38, 39, 40, 40/a, 40/b, 40/c, 41, 41/a, 14, 15, 33, 34, Chauk bazaar, Dhaka.
Responsible Authorities:	The trustee board of Jamiatul Husainia Ashraful Ulum, Department Of Archaeology Bangladesh, RAJUK, City Corporation, Dhaka.
User Group:	Jamiatul Husainia Ashraful Ulum-Madrassa and Mosque (South and West wing), East wing is occupied by shops and warehouses, North wing and central enclosed space is filled with different unplanned settlements.
Population:	Over 2000 people stay at the property.
Accessibility and Visibility:	Extremely Poor.
Physical Condition:	Extremely dilapidated condition, with inner court and surroundings extensively encroached.
Present Use:	Subdivided and used as a warehouse, school, shop, residence.

The Figure 14 describes the surviving structures of the artifact Bara Katra with present activities which are elaborately explained here. Except for the Southern wing with a gateway and some portions of the east and west wings, all other parts of Bara Katra have almost disappeared. There are traces of walls and foundations of east and west wings standing with the newly built residences (colonial structure) in the east and *madrasa* in the west side. The wings with entrance on north side have completely disappeared but the southern wings still exist as ruins. In the entrance hall there are so many incompatible additions of shops of different categories that they impede the visual quality. The additions of a newly built toilet and ablution spaces on the terrace of first floor have been made. Some tin shaded structures are also added on the terrace of second floor. Though the building has small openings in the traditional Mughal style entrance, ample natural lighting was ensured by windows. But currently on the ground floor and staircases most of the openings are sealed preventing the usual penetration of light. (Shaikh and Mowla, 2009)

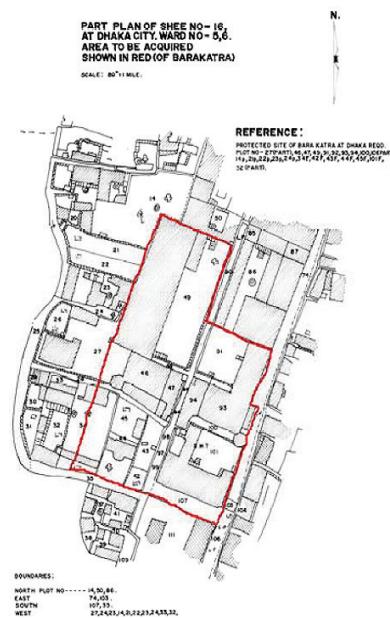


Figure 13:
Area occupied by the artifact Bara Katra shown in red (part plan of shee no.-16, at Dhaka city, ward no.-5 & 6).

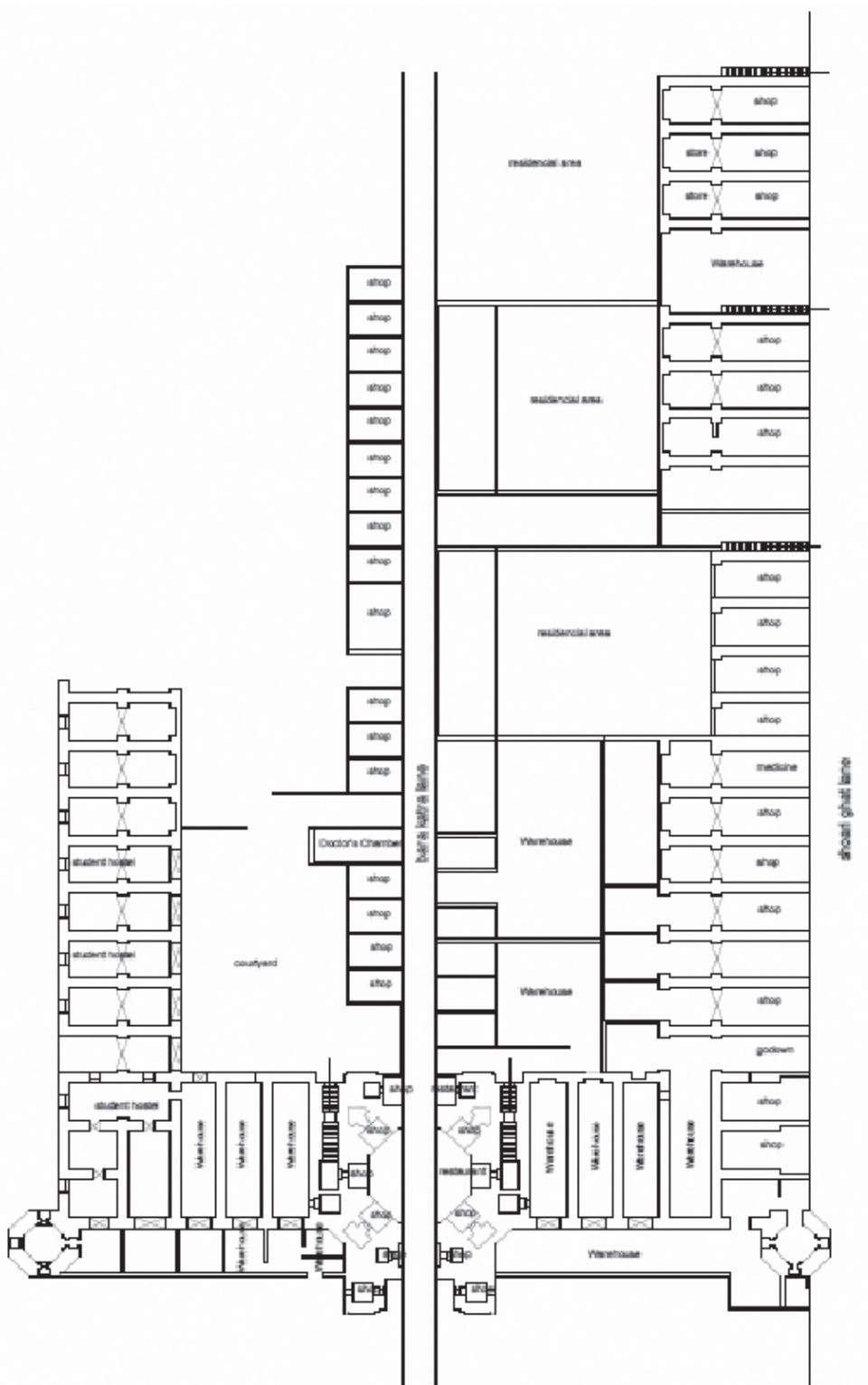


Figure 14:
Existing ground floor plan with use pattern of Bara Katra.
(Source: Field Survey, 2010, Department of Archaeology, Bangladesh).

Conjectural drawings of Bara Katra:

Here conjectural or hypothetical drawings of Bara Katra demonstrate about how the building will become in the future (as well as it was in the past) after proper conservation.

The Figure 15 describes the existing drawings of Bara Katra including areas to be acquired for the artifact. Areas to be acquired are those areas

which are currently illegally occupied. These illegal structures should be demolished as part of the restoration and conservation process of the artifact.

Conjectural drawing of ground floor plan, conjectural drawing of first floor plan, conjectural drawing of second floor plan, river front elevation of south wing, and sectional elevation of south wing (north elevation of south wing) have been shown below in Figure 16, Figure 17, Figure 18, Figure 19, & Figure 20.

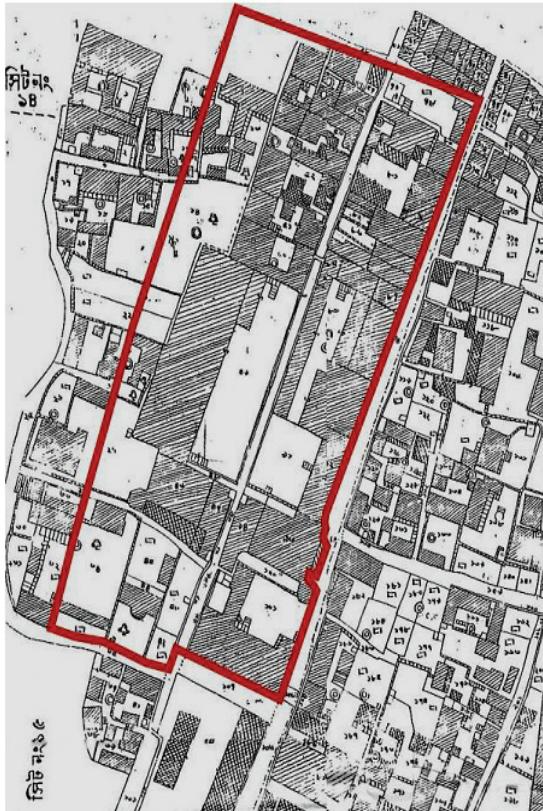


Figure 15:
Area to be acquired for katras shown in red, 1958.
(Source: Department of Archaeology; Reference- Mouza Shahar Dacca, Ward No: 5 & 6, Sheet No-16, C.S map 1912-1915; Protected site of Bara Katra at Dacca required plot no: 27 (part), 46,47,49,91,92,93, 94,100,101 (part), 14p, 21p, 22p, 23p, 24p, 34, 42, 43, 44, 45, 101, 32p.)

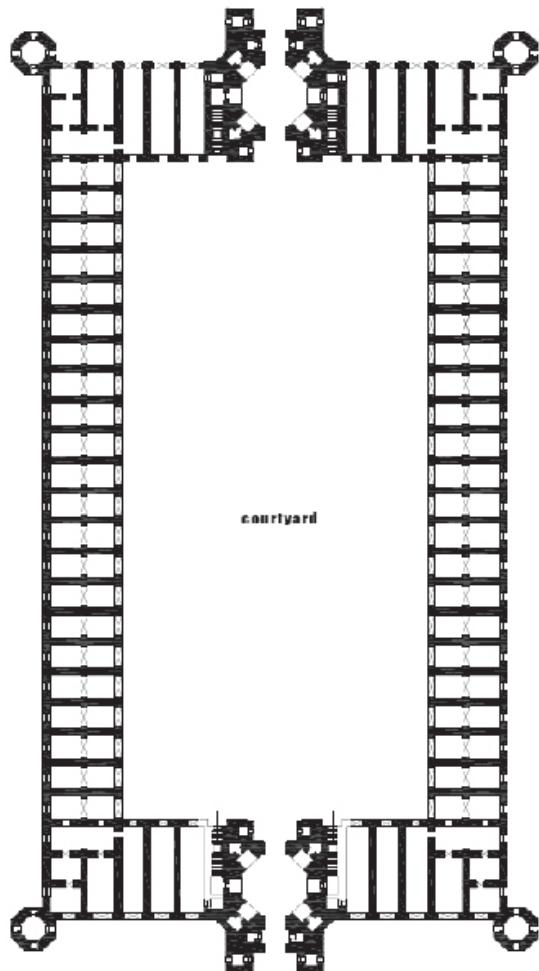


Figure 16:
Conjectural Drawing of ground floor of Bara Katra.
(Source: Department of Archaeology, Bangladesh)

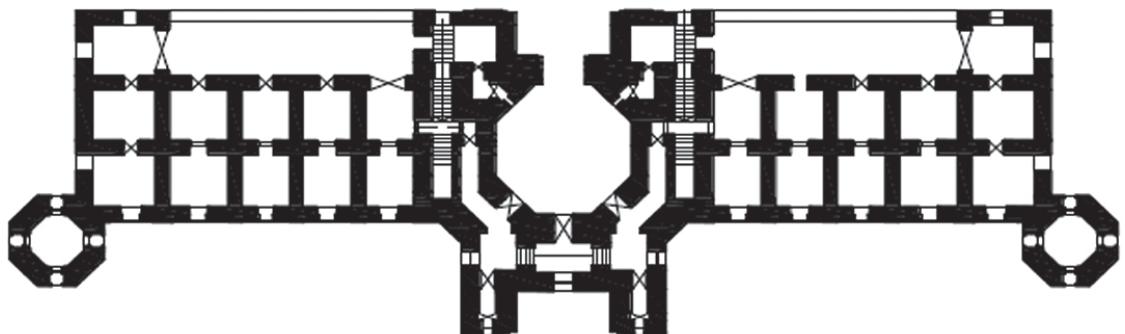


Figure 17:
Conjectural Drawing of first floor plan of Bara Katra.
(Source: Department of Archaeology, Bangladesh, 1981).

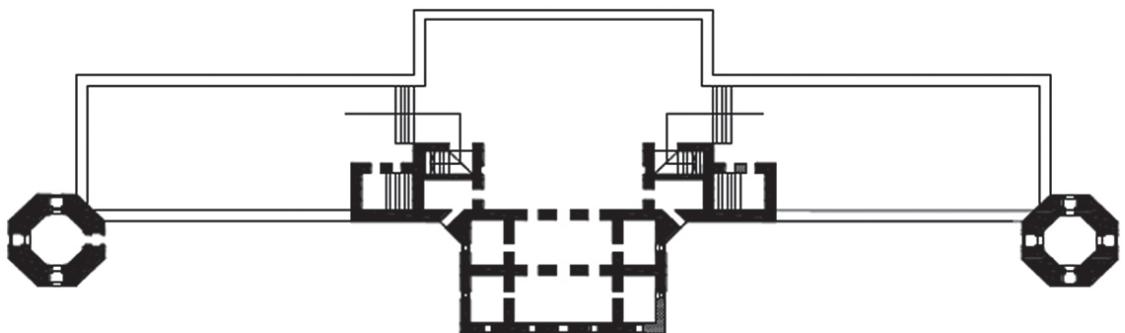


Figure 18:
Conjectural Drawing of second floor plan of Bara Katra.
(Source: Department of Archaeology, Bangladesh, 1981).

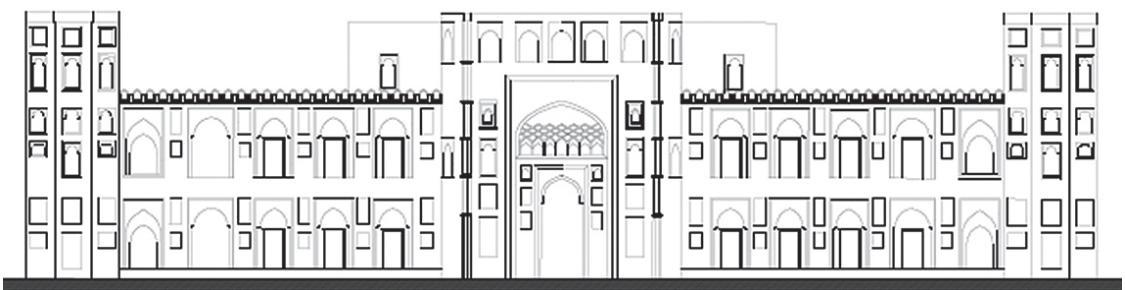


Figure 19:
River front elevation of south wing of Bara Katra.
(Source: Department of Archaeology, Bangladesh, 1981).



Figure 20:
Sectional elevation of south wing of Bara Katra (north elevation of south wing).
(Source: Department of Archaeology, Bangladesh, 1981).

CONSERVATION MANAGEMENT PLAN (CMP)

“Conservation not just making a museum of old buildings; it is making the best use of the existing elements to maintain and perpetuate the spirit of old city.” – Norman Foster

A Conservation Management Plan (CMP) is the principal guiding document for conservation and management of a heritage building or place. That means;



The main objective of the CMP is to ensure that decisions about a heritage building or place are carried out with regard to its cultural or historical heritage values or significance. The CMP should provide clear and justifiable policies or strategies and action plans for the sustainable future of that heritage building or place.

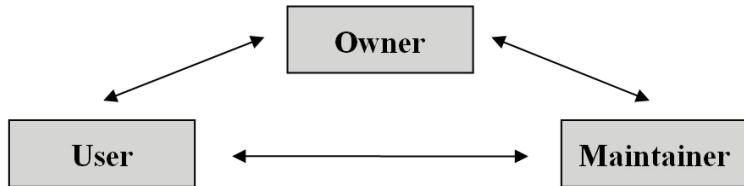
In this article the authors will present the proposal for the CMP of Bara Katra. The proposal will identify how to retain, conserve and enhance the socio-economic, historical, and cultural aspects as well as its physical character. Generally, a Conservation Management Plan is a document as well as a theoretical process. It answers five vital questions; Where, Who, What, How and When. Most importantly, the co-ordination among these

five answers enables a successful CMP to be developed.

In-depth, these five vital questions are stated below in relation to the CMP of Bara Katra;

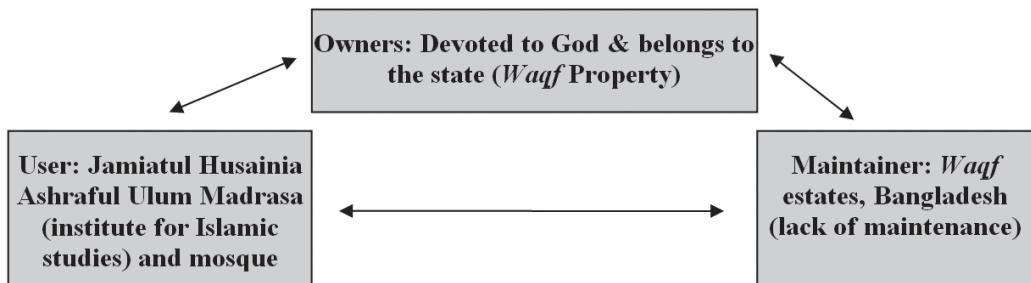
Where:

An understanding of the significance of a heritage building or site is important. That means, “Why is a site significant?” For a site or heritage building to retain its meaning and importance its value defining attributes should not be reformed or destroyed. For any significant site the CMP depends upon the co-relation among the three components. These components are shown in the following diagram;



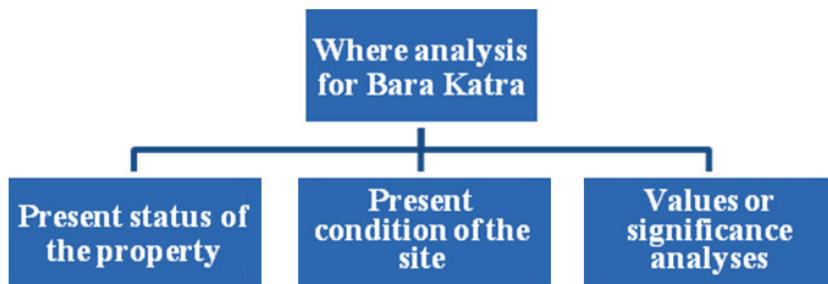
The present co-relation situation among these three components for Bara Katra, is not in good condition

due to lack of maintenance which is shown in the following diagram;



To propose a CMP for Bara Katra the above situation should be considered sophisticatedly. The overall present status of the property, the present condition of the site, and most essentially, the significance

or value analyses of this heritage building is to be thoroughly investigated. These issues are explained briefly in the following;



Present status of the property:

The south and west wing is a *waqf* property and the rest is possessed and controlled by different parties for different uses; hops, residences and warehouse. So the whole property is a synthesis of different forms of submission which is shared by these three parties.

Owners: The property is devoted to God and belongs to the state.

User: Jamiyatul Husainia Ashraful Ulum Madrasa (institute for Islamic studies) and mosque.

Maintainer: "The trustee board", an appointed body by the department for *Waqf* estates, Bangladesh looks after the property.

Present condition of the site:

The present situation around Bara Katra is shown in the following.



Figure 21:
Existing situation of the dense settlements around the artifact.
(Source: Hossain, M. S., 2006).

Values or significance analyses of Bara Katra:

After considering the analyses of emotional values, cultural values, use values, and the significance values of Bara Katra's artifact are stated below:

Emotional values:

a) Identity: This is one of the significant remaining typical Mughal style buildings of the Mughal period (1608-1764A.D) When approaching from the river the artifact is a landmark for Dhaka city.

b) Respect and veneration: The civic society has a great deal of respect for historic structures and the importance of being able to trace Mughal rule.

Cultural Values:

a) Documentary values: The building is a Mughal monument of Katra typology that is considered as the bigger and older of the two structures that served as *caravan sarai* in Bangladesh. It has significant documentary value enriching the history of architecture in Bangladesh.

b) Historic value: The structure is historic evidence of the Mughal rule in the city. Two written inscriptions of 1644A.D are found on the building. The inscription declares the rule of the Mughal prince Shah Suja in Dhaka and also the purpose of the building.

Figure 21. describes how the newly built structures are creating visual obstacles as well as more complicity for the artifact.

c) Archaeological and age value: The building is more than 350 years old and it is valuable from an archaeological point of view. The department of Archaeology, Bangladesh, has already declared the structure a protected historic monument.

d) Architectural value: The building was planned on a grand scale following the traditional patterns of Central Asia's *caravan sarai* and it was embellished with all the features of the Imperial Mughal style. Harmonization of various elements through repetitions testifies the skill of the architect who succeeded in producing a magnificent sense of composition from this simple plan of *Caravan sarai*. Selection of materials and application of decoration with color and texture reflects the majestic aesthetic sense.

e) Urbanscape: The artifact is significant as it represents an important structure of the historic Mughal city development process. The structure has a profound relationship with other important structures, urban spaces and road networks developed during the Mughal and the colonial period.

Use values:

a) Functional values: The building is still in use. Though the building used to serve as a *caravan sarai* and 22 rooms of it were shops, it is currently used as a mosque and *madrasa* and the ground

floor is occupied by shops. Thus, the structure is still functionally important.

b) Social value: The social structure of the area is highly related to the historic development of the city. So, the building has immense impact on local society. In fact, the grand structure is now a matter of pride for the local people as it acts as historic evidence.

c) Economic value: The building could attract huge numbers of tourists and generate funds as it could play a vital role in spearheading and identifying the area as a tourist spot as there are other historic buildings in proximity.

d) Educational value: The artifact is important for research and study of the history, architecture, politics, archaeology, and urban design of the city.

Who:

“Who are responsible for preparation, implementation and monitoring of CMP?” The ‘who’ are the decision makers and different stakeholders directly involved in the preparation stage and implementation stage of a CMP.

The decision makers are those who are intricately involved in developing the CMP, in both the early planning and implementation stages. They need to identify key issues, and the different stakeholders, who are directly involved in the investments as well as sponsorship for the conservation process of the artifact.

Decision makers:

- a) the local government
- b) the conservation board; such as Department of Archeology, RAJUK, City Corporation etc.

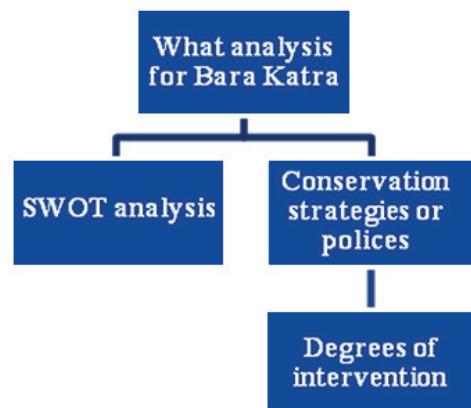
Stakeholders:

local community, trustee board, housing development authorities, roads and highways, academics, professionals etc.

What:

It is about developing the necessary conservation strategies or polices to create action plans, which will guide, implement, maintenance and change the (if necessary) CMP.

As part of the research of developing the CMP of Bara Katra, the authors initiated a SWOT analysis. This was done in order to recommend appropriate conservation strategies or polices with considering degrees of intervention for the artifact. These findings are stated below:



SWOT analysis:

For any cultural heritage conservation management plan SWOT analysis; i.e. Strength, Weakness, Opportunity and Threat; is essential and very helpful. The SWOT analysis of the artifact are as follows:

Strength: The building morphology and spatial characters of Bara Katra can be adapted for re-use that could ensure better social interaction within the adjacent community. It is a *waqf* property, which is governed by definite rules.

Weakness: There is no local community participation or awareness to preserve the site. Lack of awareness among the inhabitants to realize the historic values of Bara Katra resulted in a shortage of provision or facilities for the tourists.

Opportunities: It is enlisted by the department of Archaeology. If properly maintained and conserved, this Bara Katra can still attract a huge amount of

commercial return from local, regional, domestic and international tourist as well as tourist related businesses. Connecting Katra with the nearby water works road to the north and the embankment road to the south and developing road networks near the artifact would make it accessible to tourist.

Threat: Unplanned, uncontrolled and incompatible development around the neighborhood is gradually swallowing the Bara Katra, creating adverse effects on physical and visual quality of the historic area. The physical quality is fast deteriorating due to lack of conservation initiative.

Conservation strategies or polices:

Recommended conservation strategies or polices for developing a CMP of Bara Katra will be considered in some degrees of intervention regarding this historical and architectural monument which are briefly defined in the following;

a) Prevention of deterioration:

Prevention entails protecting cultural property by controlling its environment, thus preventing agents of decay and damage from becoming active.

Here, preventive maintenance can serve as a primary guideline for the historic remains Bara Katra.

b) Preservation:

Preservation deals directly with heritage property. Its object is to keep it in its existing state. Repairs must be carried out when necessary to prevent further decay. Damage and destruction caused by water in all its forms, by chemical agents and by all types of pests and micro-organisms must be stopped in order to preserve the structure.

For Bara Katra, most retention and least intervention should be done to preserve the aesthetic and cultural quality of the heritage building. The preservation of patina in the existing ruin should be given priority.

c) Consolidation:

Consolidation is the physical addition or application of adhesive or supportive materials into the actual fabric of cultural property, in order to ensure its continued durability or structural integrity.

Application of the supportive or adhesive material like grouting should be considered in fabricates to ensure continued durability and structural integrity.

d) Restoration:

The object of restoration is to revive the original concept or legibility of the object. Restoration and re-integration of details and features occurs frequently and is based upon respect for original material, archaeological evidence, original design and authentic documents. Replacement of missing or decayed parts must integrate harmoniously with the whole but must be distinguishable on close inspection from the original so that the restoration does not falsify archaeological or historical evidence. In a sense, the cleaning of buildings is also a form of restoration, and the replacement of missing decorative elements is another.

For Bara Katra, proper restoration to revive the north, south, east and western wings can be done on the basis of existing ruin, authentic documentation with detail drawings and photographs (which are stated in this study at the historic overview with the present status of Bara Katra) and archaeological (historical) evidences.

e) Reconstruction:

Reconstruction of historic buildings and historic centers using new materials may be necessitated by disasters such as fire, earthquake or war. Reconstruction cannot have the patina of age. As in restoration, reconstruction must be based upon accurate Documentation and evidence, never upon conjecture.

Here, as in restoration for Bara Katra, the reconstruction is essentially needed which must be based upon accurate documentation and authentic historic evidence. Conjectural documented drawings should be prepared with the help of existing documented drawings of Bara Katra explained previously in the present status of Bara Katra in this research study.

f) Rehabilitations:

The best way of preserving buildings as opposed to objects is to keep them in use—a practice which may involve what the French call *mise en valeur*, or modernization with or without adaptive alteration. The original use is generally the best for conservation of the fabric, as it means fewer changes. The present use of Bara Katra – Islamic school (madrasa) with hostel on 1st and 2nd floor, different shops, and warehouses at ground floor.

Proposed use of Bara Katra – it is highly recommended for adapting the original use, i.e.,

during Bengal period this artifact served the purpose of *Caravan sarai*. Taking the justification of original use, it is best to rehabilitate Bara Katra by adapting the building as 'rest house' for promoting tourism facilities in old Dhaka and that should be established on particular guidelines. Some shops facilities will also be accommodated on the ground floor of Bara Katra, which continues to show the historical-cultural tradition of old Dhaka for encouraging and attracting tourism.

How:

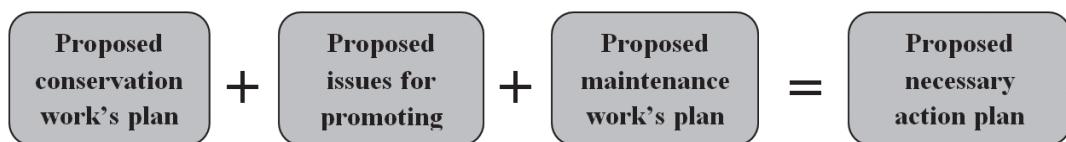
The 'How' is about understanding the circumstantial question of, "How will the significance of the heritage building or site be retained in the future?" This means to develop or propose the necessary

steps, phases, guidelines and so on for developing a recommended action plan which helps to implement the CMP. Basically, the action plans are used as tools to argue the case of benefits in having a CMP.

For the research on Bara Katra's proposed CMP, the authors investigated and propose the recommended steps, phases (short term & long term), and guidelines for developing an action plan considering the degrees of interventions which are stated below:

Proposed necessary action plan:

Proposed necessary action plan is briefly designated in the following;



Proposed conservation work's plan:

- i The first step for the conservation work is a sensitive assessment of its history and merits through literature and archival research. Therefore, it is necessary to find the original building layout with furniture details, patterns etc. (if possible) of the artifact Bara Katra's time period with the need to keep its original reflections in the restoration work.
- ii After that, the whole property has to be recovered with the help of historic evidences of Bara Katra.
- iii To restore the original morphology, all the illegal structures within the property (also including the temporary and permanent extension like toilet, bathroom, and ablution space on 1st and 2nd floor) should be removed and the enclosed courtyard should be recovered.
- iv The next step in this conservation proposal is de-plastering of all interior and exterior walls that were plastered with cement mortar. This would be done to expose the original masonry wall plastered with lime mortar. De-plastering will be done primarily to ensure the structural stability of all masonry wall which will help prepare an authentic intervention plan.
- v Necessary repair works includes; cracks and damages of structural elements like load bearing brick walls that are partly destroyed, arches, vault roofs that are damaged by leakage and could possibly collapse. These repairs may be carried out to protect the monument (Figure 22).
- vi Wet wall or dampness is a common problem in old buildings. To prevent the rising damp in properties, it will be considered to insert or inject a new physical membrane damp proof course (DPC) into the existing plinth, walls, and floors (Figure 23).
- vii The growth of several strangler figs and vegetation on the exterior and interior masonry walls and other parts of the building, (Figure 24) should be removed properly as well as very sensibly.
- viii If required, proper drainage system in and around the building may be developed or may be established.
- ix Proper restoration work may be carried out to revive the broken parts of the north, south, east



Figure 22:
Major cracks on exterior, interior, arch in the artifact, Bara Katra.
(Source: Hossain, M. S., 2006).



Figure 23:
An example of insertion of damp proof course (DPC) into the existing wall.
(Source: Ahmed, "Unfolding the past: Conservation of Baro Sardar Bari", Published in 2015).



Figure 24:
Biological growth of several strangler figs in the artifact, Bara Katra.
(Source: Photographs taken by the authors).



Figure 25:
Existing door-window analyses for restoration work in the artifact, Bara Katra.
(Source: Hossain, M. S., 2006).



Figure 26:
Damage of plaster detail on the southern gateway of the artifact. (Source: Hossain, M. S., 2006).

and western wings of the building, staircase, especially the stairs at the terrace of the 2nd floor (Figure 19), door and windows (Figure 25), walls, parapets, etc. can be done on the basis of existing ruin, archaeological evidences, and authentic documentation with detail drawings and photographs.

x As the north wing is totally demolished and its proper documentation (existing drawings, Figure 11 and Figure 12) is also absent, reconstruction as a part of restoration work may be done on the basis of historic clues and morphology analysis of the artifact and the other Mughal artifacts of same typology. As symmetry is strongly followed and the walk way is developed along the central axis. The repetition of the southern

gateway may be considered which is shown in the conjectural documented drawings (Figure 13, Figure 14, Figure 15, Figure 16, and Figure 17).

- xii Necessary repair work and reconstruction work to recover missing ornamentation as well as decoration details on the plaster at the outer and inner walls should be carefully handled by the proper investigation from the historical evidences (Figure 26).
- xii Electrical wiring, fittings like switch sockets, fans, and lights should be properly checked and replacements of defected fittings and entire wirings are recommended to ensure safety.

Proposed issues for promoting tourism:

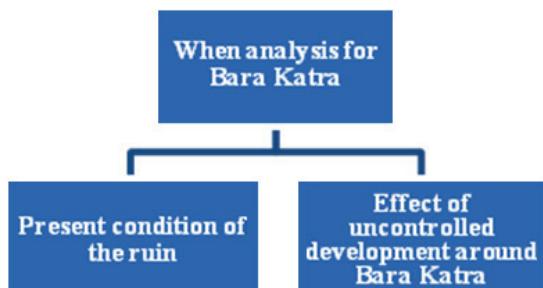
- i Adapting the original use is highly recommended due to its historical use during Bengal period when this artifact served the purpose of *Caravan sarai*. Taking the justification of original use, it is best to rehabilitate Bara Katra by adapting the building as 'rest house' for promoting tourism facilities in old Dhaka. This function should be established based on particular guidelines.
- ii Vehicular and pedestrian entry into the site with parking facility may be included in the proposal.
- iii Existing road network with Buriganga River may be developed to ensure easy pedestrian access for the visitors or tourists using river routes and should be developed to integrate the artifacts with the urban fabric.

Proposed maintenance work's plan:

- i Any interventions for maintenance should be carried out by the department of archaeology and approved by the stakeholders.
- ii "Preventive maintenance" must get priority, as a strategy necessary steps should be taken for emergency maintenance.
- iii Repeated maintenance may be ensured, such as; monitoring as required, routine housekeeping and maintenance, periodic maintenance like monthly, annually and according to suggestions of the experts should be considered.
- iv Community participation and public awareness programs may be taken up to protect and conserve the heritage artifacts.
- v Facilities should be provided for the access of tourists, researchers, study group, journalists and other visitors.
- vi The rooms at ground floor should be rented out to the shops and part of the income from the shops may be set aside behind the maintenance work.
- vii The income generated from the rest house by the tourist and visitors may also be utilized for maintenance purpose.

When:

"After generating the CMP, when will the historical, cultural heritage building or site be conserved and managed?" This is the best stage for developing a CMP, before the heritage building or site is permanently destroyed, ruined or lost its heritage characteristics and nothing is left to preserve for future.



For the research on Bara Katra's CMP the authors investigated the present condition of the ruin and the effects of uncontrolled development around the selected artifact for developing a conservation work's plan. This was done as stated below:

Present condition of the ruin:

Bara Katra's present condition of some of the alterations, as a ruin, and the additions of newly built structures are shown in the following Figure 27.

Effect of uncontrolled development around Bara Katra:

Currently, Bara Katra is still in use. But the way the artifact is being used, is very unsympathetic and hazardous to the building's physical and visual existence. Unaware of the value of the building, the users are frequently demolishing the walls to build new structures. They also add new floors ignoring the building morphology and structural safety. The eastern and western wings are either demolished or altered in a manner that makes it beyond recognition of its historic past. The boundaries are occupied by small factories which are harmful to the brick wall of Bara Katra. The only surviving southern gateway is fully occupied by shops (Figure 28). Bara Katra is listed as national antiquities of Bangladesh. But this Mughal edifice is in a terrible condition and is also in danger of extinction due to the lack of care by the authorities.

RECOMMENDATIONS FOR A CONSERVATION MANAGEMENT PLAN (CMP)

In this study, the authors recommend five steps in developing a conservation management plan (CMP). These steps are stated below:

Step 01: A team (decision makers) should be formed that will initiate and coordinate the project, along with a project leader and a management committee. All relevant stakeholders (investors) should be identified.

Step 02: All necessary information about the identity of the selected heritage building, Bara Katra,



Figure 27:
Present conditions of some alterations, as a ruin, and the additions of newly built structures in Bara Katra.
(Source: Photographs taken by the authors).



Figure 28:
The artifact is fully occupied by shops, factories, warehouses in the dense settlements of Chowk Bazar, old Dhaka.
(Source: Photographs taken by the authors).

such as building boundaries and photographs, should be gathered. Additionally, all available information about Bara Katra must be gathered, including; oral histories and intangible heritage, present users and management authorities, as well as information regarding development, such as development plans and legal documents from archaeology department. A condition survey of the state of conservation of this building should be conducted.

Step 03: Values and cultural significance associated with the artifact are determined and key issues identified along with the authenticity and integrity of the artifact. Guiding principles are determined and a SWOT analysis undertaken.

Step 04: Specific objectives must be developed, along with strategies for meeting the objectives. An action plan and implementation plan should be developed, including a monitoring and evaluation strategy.

Step 05: The CMP is implemented with clearly defined short-term and long-term actions. Resources required for the implementation of the plan should be identified, including the institution or office that will be responsible for the implementation of the CMP. The CMP is communicated to all stakeholders. All actions need to be documented accurately.

There is a worthy possibility for Bara Katra to be enlisted as world architectural heritage sites. Every

year many foreign tourists visit this site to have a closer view of this Mughal edifice. Parallel to the existing National Antiquities Act 1968, International Guidelines should be followed to conserve the antiquities so that these can become part of world architectural heritages.

There may be promotional activities at national levels for social awareness about the value of this heritage artifact and why it should be persevered. Community participation and public awareness programs may be initiated to protect and conserve the heritage artifacts.

CONCLUSION

From the discussion as well as the revealed situation, it is apparent that the historical and architectural monument of old Dhaka, named "Bara Katra" has an individuality and identity of its own. As a reflection of Mughal architecture, this unique building has undoubtedly made a profound contribution to the socio-cultural history and heritage of Bangladesh, which makes it a strong and glorious image of the past. Presently, this historical artifact of old Dhaka is striving to survive among the face of contemporary developments, climatic adversaries, misuse and scarcity.

Due to the above circumstances, it has been felt that a conservation management plan (CMP) for Bara Katra is essentially needed to conserve and manage the artifact. In this regard the authors developed a proposed contextual action plan with management policies for the architectural conservation to revitalize this unique heritage building. The authors' proposals for the guidelines and implementation of CMP for Bara Katra can play an effective role for its sustainable existence. Moreover, this will be considered as a part of the urban conservation proposal of the historical and architectural heritages of old Dhaka. It can be recycled to earn revenue by tourism and will also help the present and future generations to tell the true socio-cultural historical past.

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