



## Socio-economic Impact of Urbanization on Colonial Heritage - A Study on Colonial Elite Residential Area of Khulna City

*Dilshad Afroz*<sup>a\*</sup>

<sup>a</sup> Lecturer, Department of Architecture Northern University of Business and Technology Khulna, Bangladesh, E-mail: [dilshadafroz33@gmail.com](mailto:dilshadafroz33@gmail.com)

### ARTICLE INFORMATION

Received: 30.05.23  
Revised: 07.08.23  
Accepted: 26.08.23  
Published online: 08.10.23

*Keywords:*

*Colonial heritage buildings,  
Urbanization,  
Heritage vulnerabilities,  
Heritage adaptivity,  
Re-use.*

### ABSTRACT

*In the history of human settlement, heritage buildings are extremely valued. However, after decolonization to meet the need of an ever-increasing population and land demand, heritage buildings are being demolished to make way for multi-story buildings in urban areas of Bangladesh. In the previous couple of years, more than 12 colonial heritage buildings were demolished in order to construct mega projects related to the economy and housing in Khulna City. As a result, the architectural, social and cultural values held by those mesmerizing colonial build-forms are lost. These mesmerizing colonial heritages of Khulna City should be conserved and proved economically beneficiary as well through reusing them. This study aims to explore the socio-economic impacts of urbanization on the existing colonial heritage buildings within a contemporary time frame in Khulna City. To investigate the situation, periodic surveys, observations and documentation of several heritage buildings have been done in the southwestern region of Khulna city which was known as the VIP residential area of colonial settlements at that time. After both decolorizations of 1947 and 1971, most are found abandoned and waiting to be replaced. While working, we have found a few colonial heritage buildings that aim to preserve heritage buildings' values while adapting them to fulfill different contemporary functions. The survey sample studies reveal functional orientation, people's participation, reasons for demolition and the process of preservation of the colonial heritage buildings in the study area. Finally, it is suggested that Khulna's reused colonial heritage buildings are the ideal examples for us to follow to preserve the legacy of these important colonial structures rather than destroying or replacing them for rising urban socio-economic demand.*

### 1. Introduction

Our tropical delta has consistently been recognized for its diversified culture, history and heritage. From the Indus Valley civilization (3300 BCE) to the British colonial reign (1947AD) this territory experienced almost 5 thousand years of history of developed human civilization along with a lot of tangible and intangible heritages and they are priceless for our culture and history (Singh, 2008). But very few of them are still existing among us. After decolonization three principles are established as heritage doctrine- i) Universality ii) Significance and iii) Material

originality of heritage structures. Due to geo-cultural imbalance, these universal paradigms are not always applicable for the tropical regions of Asia (Silva, 2016). Also, being the most densely populated region with a small land area most of the heritage sites are demolished to extended human habitation, scarcity of livable land and unplanned urbanization. Heritage sites in urban territories face the most vulnerable conditions in present times (Yung & Chan, 2012). In small countries like Bangladesh, this scenario is more critical. Rapid and unplanned urbanization grabs almost all potential heritage sites for increased demand for residential and commercial uses (Huq et al.,

\* Corresponding author: *Dilshad Afroz, Lecturer, department of Architecture, Northern University of Business and Technology Khulna, Bangladesh*

*This article is published with open access at [www.seu.edu.bd/seuja](http://www.seu.edu.bd/seuja)  
ISSN No.: 2789-2999 (Print), ISSN No.: 2789-3006 (Online)*

2017). For example- Khulna city has already lost more than 12 historic buildings to construct various residential and commercial mega projects. This scenario is getting worst day by day. Few heritage structures of the colonial period still exist in Khulna city, but they are also threatened by demolition. Population density, land scarcity and increasing land value of these heritage properties are gradually making them pieces of gold for the owners and developers from seriocomic aspects. Their main concern is the best commercial use of these heritage properties in the main city. But from the point of view of heritage value, these structures are undoubtedly valuable heritage properties. Now both scenarios are just vice-versa. Only smart and timely planning can protect these heritage structures. Adaptive reuse practice is necessary if the heritage buildings no longer perform their original purpose. Also, adaptive reuse can ensure the sustainability of historic structures from all aspects of social, economic and environmental issues (Abdullah et al., 2017). Few heritage structures have already adapted some smarter approaches to adaptive re-use in Asia which have lost their main functions (Arfa et al., 2022) (Basha, 2016). This research mainly aims to investigate this adaptive reuse approach of a few colonial heritage buildings in Khulna city. Also, how this heritage re-using approach can act as a bridge between economic-urbanization principles and heritage preservation principles- is also a matter of discussion of this research paper.

## 2. Material and Methods

An observation based exploratory method is used for primary data collection and analysis. According to this research working flow-chart shown in Table 01- repeated site survey, evidence collection and documentation for following analytic phases was the prime concern in Phase one.

In phase two, national and international cases selection and study was an important part to understand the technical excellences and obstacles of re-used heritage sites related to colonial heritage structures. Obtaining experts' professional opinion to achieve group consensus. An open discussion with the site related stakeholders to draw a clear vision and findings to the possibilities of adaptive reuse of the concerned colonial heritage structures of Khulna city was also a definite step of this phase.

The final phase was all about our own discussion and findings based on the collected information and evidences from previous phases by focusing the study objectives of this research. Few recommendations are also come for preserving colonial heritage buildings through adaptive reuse in a rapidly growing urban dilemma like Khulna city.

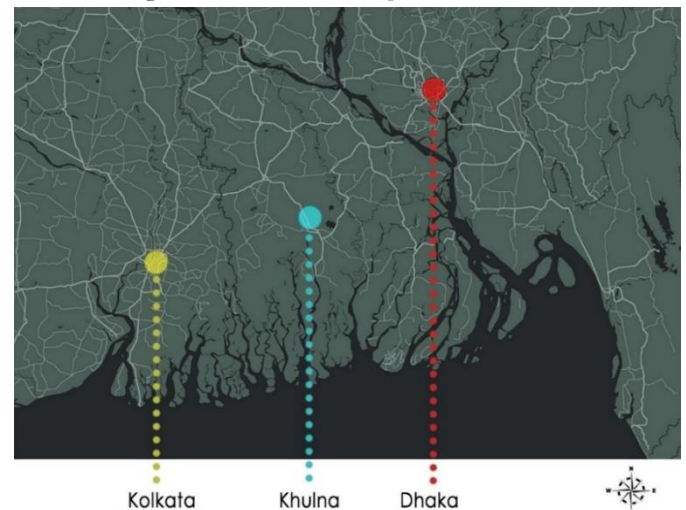
Table 01: The working flow-chart of the research

Phase 01	Survey	1. Selecting the vulnerable colonial heritage buildings of Khulna city. 2. Detailed site surveys with location mapping. 3. A semi-structured questionnaire session with the local stakeholders and users.
	Observation	4. Structural conditions, ongoing preservation process and spatial uses observation 5. Detailed documentation of the present uses of the colonial buildings with important architectural and spatial features.
	Documentation	
Phase 02	Case Study	1. Successfully reused heritage buildings around the world are being studied for more assessment and strategic analysis.
	KII	2. A bunch of related professionals including architects, archeologists, historians, urban planners, developers, and city administrative bodies were chosen for KII. 3. Topics-based open discussion with professionals to draw a clear vision and findings to the possibilities of adaptive reuse of the concerned colonial heritage structures of Khulna city.
	Open Discussion	
Phase 03	Result	1. Finally trying to draw a conclusion after a detailed discussion and analysis of the present scenario of colonial heritage buildings in Khulna city and their present uses.
	Recommendation	2. Recommendations have been discussed for preserving these heritage buildings through adaptive reuse in a rapidly growing urban dilemma.

## 3. Literature Review

### 3.1 Significance of Colonial heritage in tropical delta

The Bengal Delta area is the place where the British



colonial history of the Indian subcontinent began. Kolkata previously known as Calcutta, the influential capital of colonial period, beside the Hooghly River in 1773 by the British East Indian Company later eventually handed to the central British government. This part of Bengal was performed as major commercial and cultural hub for the British colony until 1912, when it was transferred from Bengal's Calcutta to India's Delhi. Colonial architecture, as a distinct style, grew in popularity dramatically throughout British administration (Kramer, 2006).

Figure 1. Geographical position of Kolkata, Khulna and Dhaka (Source: Authors)

The early colonial structures followed the popular architectural style of The Neoclassical and European Renaissance at that period, hence early colonial structures in subcontinent were built in this manner (Figure 01). The development of this new architectural style was intended to demonstrate Britain's supremacy in the Bengal climate and context (Enam Rabbi & Islam, 2018). But as the architectural tradition of the subcontinent began to influence colonial design, modifications in the vocabulary of colonial architecture happened through time (Islam &

Muntasir, 2020). Khulna continued to grow in population and became known for its elite and industrial urban culture. The British colonial structural extensions were seen to be attractive and tidy, which drew many aristocrats and zamindars to put up summer resorts there. For these reasons several colonial structures were built along Gagan Babu Road, Shamsur Rahman Road, Ahsan Ahmed Road and the surrounding areas as shown in Figure 2 (Mridha & Khan, 2002).

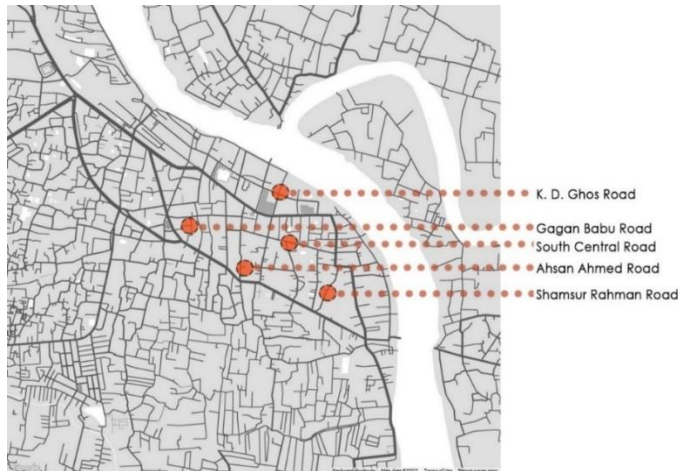


Figure 2. Partial map of Khulna city with major colonial heritage buildings. Source: (Mridha & Khan, 2002)

### 3.2 Current scenario of colonial heritage buildings in Khulna city

Khulna's colonial urban settlement in the early nineteenth century was mostly civil lines. This was, and still is, a low-density residential neighborhood that was designed and created according to metropolitan society values. According to Rahman's research, instead of being rich in colonial history and establishment, Khulna city is consistently vanquished lots of its colonial heritage structures for increased urban needs and vertical development (Islam & Muntasir, 2020). In the early 21st century, researchers identified that about 200 colonial structures in this important colonial area of Khulna city. These historic artifacts were mostly private properties and are scattered all over the city (Ioannides et al.)

As a result, the government lacks a framework for the preservation of historic colonial structures. Economic reasons have trumped tradition and inspiration in today's fast-paced metropolitan environments (Islam & Muntasir, 2020). This stunning architecture, with their unique aesthetic value, have long been an evidence of encouragements for new constructions as well as a way of

establishing a city's image for hundreds of years. But, after enriching the beauty and splendor of this city, these great monuments are now confronting increased demand and quick changes in use patterns, causing contemporary developments to beset these exquisite artifacts by entirely replacing or changing the current structures (Ioannides et al.)

The preservation method that is used to protect the heritage building from degradation by maintaining their values is called Adaptive reuse for Heritage buildings (Djebbour & Biara, 2020) (Mehr & Wilkinson, 2021). Adaptation is the conjunction of 'ad' (to) and 'aptare' (fit) which means the procedure of fitting in, which directs to change in functionality of the structure (Arfa et al., 2022). The performance change concept is also an acceptable one as the definition of Adaptive reuse. For example- changing a heritage building for a more contemporary use may differs from the previous aim of its construction (Austin et al., 1988). The process of adapting a building to meet the needs of new or existing owner is defined as adaptive reuse (Günçe & Mısırlısoy, 2019) which may require massive renovation or refurbishment of the heritage property.

Meanwhile adaptive reuse is not an easy process. Their cultural significance and involved stakeholders' various ambitions sometimes increase the complexity of adaptation (Langston & Shen, 2007).

### 3.3 Socioeconomic impacts of Urbanization

Potential urban areas are the center of changes, placed in an interlinkage and interdependence with social and economic growth. The emergence of the process of urbanization increases stress on land resources, community, environment, and overall land use pattern. Urban expansion and increased rate of migrated population have impactful influences on degree of use of land or infrastructure or market making. This process also interlinked with factors like labor market, domestic relation, living standard, access to civic facilities, diversification of economic activities and so on (Dociu & Dunarintu, 2012). In present times urban land use regulation maintains a strict regulation between private property rights and public interests (Wu, 2008).

As a rapidly growing metropolitan city with rich colonial heritages, Khulna is a very potential land of development from ancient period. According to the record of World Population Review (WPR, 2023) after liberation in 1971 the population of this area was 9.85% and the population growth rate was positive till 2001. After that Khulna faced a hard time in terms of economic and commercial growth due to its industrial shut down. But from 2021 to till date the population growth (57%) and the Khulna city boundary is increasing. The colonial elite residential and commercial zone was from Dakbangla to Rupsha Ghat area. At present this area is called old Khulna.



Since colonial periods this area has been performing as the most emphasized area with government offices, circuit house, schools, VIP-CIP residences and so on. The living cost, land demand, civic facilities, and social facilities are quite high here. As a result, the land of this area has become almost a piece of diamond (Ahmed, 2000). Both the public and private owners of land are trying to ensure the highest utilities of their lands to grab the best benefits. In these circumstances, heritage properties cannot be preserved as an art piece without ensuring any social or economic benefit.

### 3.4 The benefits of adaptively reusing heritage buildings in Urban area

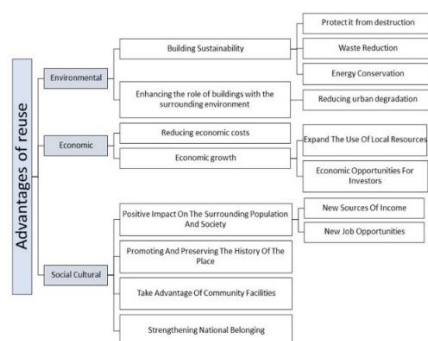


Figure 3 Advantages of adaptive reuse of heritage buildings

According to ICOMOS Burra Charter-2013, to conserve heritage buildings, adaptive reuse could be an effective strategy which maintain their intangible and tangible merits while increasing their usefulness and functionality for upcoming times (Truscott & Young, 2000). UNESCO also has recommended a 'conservation through transformation' approach for the heritage sites that highlight maintaining and managing changes in heritage structures in urban area (Albert et al., 2013). Adaptive reuse of historic buildings and properties are also focuses on the local community and stakeholder collaboration in urban historic areas (Veldpaus et al., 2013).

Also, for cities, demolition is always a wasteful process, where reconstruction and reuse deliver environmental advantages along with energy saving and social value upgradations. Recycling and reusing important tangible heritage properties can be an essential strategies of sustainable development (MELAVÉR & PHYLLIS, 2009; Othman & Heba, 2018). Adaptive reuse contains several positive aspects which are interlinked. For example, preservation, conservation rehabilitation, renovation and recycling. It is also prescribed as increasing building life with experimenting initial building usage (Othman & Heba, 2018). Also, adaptive reuse of heritage buildings is physically, economically and environmentally the most sustainable approach to preservation now-a-days (Kincaid, 2003). Apart from these benefits, adaptive reuse is a method which protects structures from demolition and to conserve their value contributing building a stronger identity (Mehr & Wilkinson, 2021).

## 4. Discussion and Findings

Upper Jessore road, South central road, Hazi Mohsin road, Ahsan Ahmed Road, Circuit House Road, Gaganbabu Road and Samsun Nahar Road are holding one of the oldest settlement part of Khulna city. During colonial period this area was renowned for elite residences (Jamidar Bari) and mixed-use buildings. 15 heritage colonial buildings are traced through field survey, Open discussion and previous published documentations. Few of them are already

demolished and few are in vulnerable condition (figure 4). Around 30% heritage buildings among these 15 is still in use and well maintained. The documented 15 colonial heritage buildings can be categorized in different three levels according to their structural conditions of last 10 years. After decolonization few buildings are being abundant and recently demolished for new construction. The thrive for continuous searching for identity causes the negligence and ultimately demolition of the colonial heritage building. From our study it shows that only adaptive reuse saves the colonial heritage from its demolition.

Table 1. Category 03 (Colonial heritage buildings under demolition)

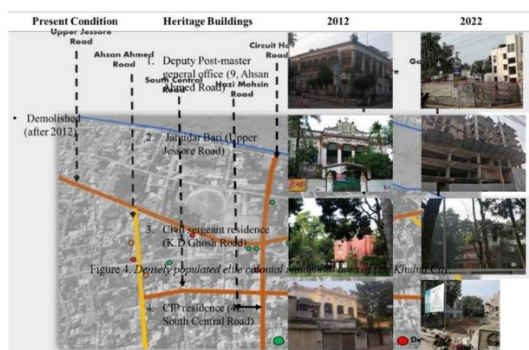


Table 1 shows the before and after scenario of selected colonial heritage buildings which are demolished and new construction on process. These buildings were abundant for years and as a result demolished at the end. The deputy post-master general office building (Table 2) could be use with adaptive reuse as Table 4 buildings. But to build contemporary buildings these colonial heritage buildings are being demolished. Decolonization impact on the socio-political aspect of the city planning and urban design. Which leads to new construction with contemporary style and function as shown Figure 5.



Figure 5: Before and After Jamidar Bari (Upper Jessore Road)

Many other colonial buildings are abundant and waiting for demolition (Table 3). All these buildings are abundant as state that unsafe structure. Some of them were not maintained as colonial heritage as a result they collapsed. From 2012 to 2022 in these 10 years no recorded maintenance has done to them. Even local governance doesn't try to put any use in them. The current users are being discouraged by authority to use these structures. It seems like these colonial heritages are burden to city and all are just waiting to be demolished.

Colonial heritage buildings, those are in good condition and in use are in Category 01. Few of them were old elite residence or Jamidar bari in British colonial period and now are using as educational institute, for example- Residence of Khan-e-Sobur and colonial VIP guest house (Table 03, level-1,2) are now using as pre- schools. On the other hand, the Ispahani building was used as residence of Divisional director of Ispahani tea state in British colonial period which is now using as divisional office of Ispahani Limited with small residential facilities for its employees. Another one is the divisional forest office on K.D. Ghosh Road which used as administrative building in colonial period also.

Table 02: Category 2 (Colonial heritage buildings are abundant)

Present Condition	Heritage Buildings	2012	2022
Abundant and structurally vulnerable	1. Sans Souci (50, South Central Road, Khulna)		
	2. Jamidar Bari (12, Ahsan Ahmed Road)		
	3. CIP residence (41, South Central Road, Khulna.)		
	4. CIP residence (4, Samsur Rahman Road)		

The colonial heritage buildings in this category are well maintained because they are properly reused in present compact urban settings. Their functions are well adapted and they served well to the surrounding communities and stakeholders. The heritage buildings in this category are also well maintained by their concerned authorities. But all are not properly listed as heritage property by Department of Archeology yet.

Table 03: Category 01 (Colonial heritage buildings in Use)

Present Condition	Heritage Buildings	2012	2022
In satisfactory condition and adaptively reused	1. Jamidar bari and VIP rest house. (33, Upper Jessore Road)		
	2. Residence of Khan-e-Sobur (34, Upper Jessore Road)		
	3. Ispahani Building (28, Upper Jessore Road)		
	4. Divisional Forest office (K.D Ghose Road)		

Between 2012 to 2022, the overall urban scenario of Khulna city has changed drastically. Heritage buildings are in vulnerability. But the current situation is not out of hope. Between 15 colonial structures around 4-5 are in use (Chart 1). Most are well maintained. Their heritage essence is also preserved. This is only because they are serving the city like the other structures. They are landmarks, different in space arrangement, very much climate friendly and very much elegant. One Jamindar bari is now being preserved as VIP guests of Circuit house. Another is a well-known preschool with fantastic indoor and outdoor space quality. Both the heritage buildings were elite residences and now re-used as different but suitable functions in this location. Which increases their acceptance & keeps them useful in compact urban neighborhoods. On the other hand, The Ispahani building in upper Jessore road is continuing its previous functions elegantly. It is maintained by the Ispahani company limited. Still, it is used as the divisional headquarter and distribution center of Ispahani. Another colonial structure is Divisional Forest office. For Sundarban, this area was always full of forest resources. From British period to present time the forest office plays an important role for forest management.

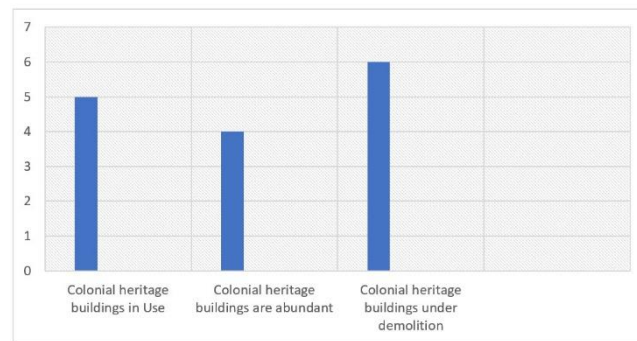


Chart 01: Present condition of colonial heritage building of Khulna (sample 15)

### 5. Conclusion

A heritage structure has value only when it has socio-economic and socio-cultural significance. Specially a high dense urban setup always demands the maximum utilization of urban property. So, to preserve a heritage building in urban setup adding property value by reusing it is must. In Khulna city, few colonial heritage structures are still persevering because they still serve the community and city. Other heritage structures in this high dense residential area are demolished or abundant within 10 years because they lost their property value due to lack of proper reuse. So, in the end the abundant colonial heritage buildings can still be preserved if they can adaptively reuse. The three connected roads of old Khulna city are evidence of elite colonial settlement in this region. Still this area has 10-12 colonial heritage buildings left. This route offers an interesting heritage journey as colonial heritage trail in this region. By connecting this route with the old Khulna Dakbango commercial belt, the overall settlement history

can be recalled. This heritage trail development is the upcoming research extension of this research.

## 6. Acknowledgement

It is impossible to extend enough thanks to those who were directly impacted my work-

- a. Sourav Zaman. Lecture, Bangabandhu Sheikh Mujibur Rahman Science & technology University.
- b. Ishmat Ara. Lecturer, Northern University of Business & Technology Khulna.

## 7. Reference

- Abdullah, F., Basha, B., & Soomro, A. R. (2017). Sustainable heritage: analytical study on the viability of adaptive reuse with social approach, case study of asia heritage row, Kuala Lumpur. *Advanced Science Letters*, 23(7), 6179-6183.
- Ahmed, M. (2000). A critical evaluation of city development attitude in Bangladesh-a case study of Khulna city. *The University of Naples Federico II, The human being and the city. Towards a human and sustainable development. Naples, Italy*, 6-8.
- Albert, M.-T., Bernecker, R., & Rudolff, B. (2013). *Understanding heritage: Perspectives in heritage studies* (Vol. 1). Walter de Gruyter.
- Arfa, F. H., Zijlstra, H., Lubelli, B., & Quist, W. (2022). Adaptive reuse of heritage buildings: From a literature review to a model of practice. *The Historic Environment: Policy & Practice*, 13(2), 148-170.
- Austin, R. L., Woodcock, D. G., Steward, W. C., & Forrester, R. A. (1988). *Adaptive reuse: Issues and case studies in building preservation*.
- Basha, B. (2016). *Viability of adaptive reuse with social approach: case study of Asia Heritage Row, Kuala Lumpur* Gombak, Selangor: International Islamic University Malaysia, 2016].
- Djebbour, I., & Biara, R. W. (2020). The challenge of adaptive reuse towards the sustainability of heritage buildings. *International Journal of Conservation Science*, 11(2), 519-530.
- Dociu, M., & Dunarintu, A. (2012). The socio-economic impact of urbanization. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2(1), 47-52.
- Enam Rabbi, A., & Islam, T. (2018). Late colonial period merchant houses at Birulia: a study on architectural features.
- Günçe, K., & Misirlişoy, D. (2019). Assessment of adaptive reuse practices through user experiences: traditional houses in the walled city of Nicosia. *Sustainability*, 11(2), 540.
- Huq, F. F., Akter, R., Hafiz, R., Al Mamun, A., & Rahman, M. (2017). Conservation planning of built heritages of Old Dhaka, Bangladesh. *Journal of Cultural Heritage Management and Sustainable Development*.
- Ioannides, M., Addison, A., Georgopoulos, A., & Kalisperis, L. THE LEGACY OF COLONIAL BUILDINGS IN KHULNA CITY-AN APPROACH TO DIGITAL DOCUMENTATION.
- Islam, M., & Muntasir, H. (2020). Tropicality of Colonial Heritage Buildings in a Deltaic Landscape: British Colonial Architecture in Khulna. *eTropic: electronic journal of studies in the Tropics*, 19(2), 72-96.
- Kincaid, D. (2003). *Adapting buildings for changing uses: guidelines for change of use refurbishment*. Routledge.
- Kramer, K. (2006). Applying the Lessons of Indian Vernacular Architecture: the bungalow as example of adaptive climatic response. The 23rd Conference on Passive and Low Energy Architecture.(6-8 September). Geneva, Switzerland,
- Langston, C., & Shen, L. Y. (2007). Application of the adaptive reuse potential model in Hong Kong: A case study of Lui Seng Chun. *International Journal of Strategic Property Management*, 11(4), 193-207.
- Mehr, S. Y., & Wilkinson, S. (2021). A model for assessing adaptability in heritage buildings. *International Journal of Conservation Science*.
- MELAVÉR, M., & PHYLLIS, M. (2009). The Green Bottom Line: the real cost of sustainable building. *Estados Unidos: McGraw Hill Companies*.
- Mridha, A., & Khan, M. (2002). LEGACY OF COLONIAL ARCHITECTURE IN KHULNA CITY. *Khulna University Studies*, 713-724.
- Othman, A. A. E., & Heba, E. (2018). Adaptive reuse: an innovative approach for generating sustainable values for historic buildings in developing countries. *Organization, technology & management in construction: an international journal*, 10(1), 1704-1718.
- Silva, K. D. (2016). Paradigm shifts in global heritage discourse.
- Singh, L. (2008). *Indian cultural heritage perspective for tourism*. Gyan Publishing House.
- Truscott, M., & Young, D. (2000). Revising the Burra Charter: Australia ICOMOS updates its guidelines for conservation practice. *Conservation and management of archaeological sites*, 4(2), 101-116.
- Veldpaus, L., Pereira Roders, A. R., & Colenbrander, B. J. (2013). Urban heritage: putting the past into the future. *The Historic Environment: Policy & Practice*, 4(1), 3-18.
- WPR. (2023). <https://worldpopulationreview.com/world-cities/khulna-population>
- Wu, J. (2008). Land use changes: Economic, social, and environmental impacts. *Choices*, 23(4), 6-10.
- Yung, E. H., & Chan, E. H. (2012). Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities. *Habitat international*, 36(3), 352-361.