



# IMPACT OF SURROUNDING SETTLEMENTS ON THE HERITAGE AREA- A CASE OF THE ELITE STREET, KOLKATA

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**Abstract:** To have a sustainable, approachable environment with values towards the heritage and its authenticity, as it is a major characteristic feature of the city. The heritage and culture being a fundamental part of the city plays a vital role in defining the town as a City of Palaces. The heritage conditions, socio-economic importance and environmental conditions of the Kolkata district makes it the elemental criteria for the positioning selection process. The further analysis of the local area; their impact and effect on and around the heritage area is a very important criteria for choosing Kolkata city core for the study area. The change in settlement pattern over the years and its effect in heritage is prominent and isn't considered while making framework; plays a significant role in enhancing the diminishing nature of heritage. This research will provide a framework for reducing the further impact of the settlement pattern on the heritage in accordance to the visual hindrance, pollution, informal vending zones, building uniformity and congestion.

**Index Terms - Settlement, heritage, regulations, visual linkage, sustainability**

## I. INTRODUCTION

Heritage is the foundation of our lifestyle which and affects a critical part in our regulative issues, society, business and perspective. It enlightens, influences and spurs public conversation and system both clearly and indirectly. Kolkata is known for its lifestyle, people, food, music, and composing, which is moreover rich in its legitimate heritage with the allure of its plan significance, certain spots in Kolkata structure a central region of the city's movement industry.

History of Kolkata begins with the east India company spreading out its business base in Kolkata in the seventeenth 100 years and the city was declared the capital of british India. Kolkata went through speedy industrialization since the 1850s which has provoked the distinction in landuse all through some vague time period. This study will encourage the authenticity and qualities of heritage building/area/street which is being reduced due to fast infrastructural improvement around the heritage building/area/street thus deteriorating the social character of the area. The change of settlement pattern around the heritage affects the environmental factors due to rapid changes in regions which is caused due to the requirement for public.

The main aim is to assess the surrounding settlement effect on heritage building/area/street and to suggest a specified structure that protects the heritage value in the further improvement of the heritage area.

Objectives for the study area are as follows: - a) To study and understand the site area (w.r.t the Heritage and Surrounding settlements) i.e., to identify the important heritage areas w.r.t Kolkata, b) To identify the different heritage buildings/ Streets/Zones of the area Surrounding around the Heritage sites. i.e., to know the important buildings and know its importance and to analyse the evolution of heritage buildings/Streets/Zones, c) To identify the surrounding settlement and studying its effect on the Heritage area i.e., understanding the dependency of settlement on the Heritage area and vice-versa and d) To analyse and recommend different Strategies and Measures related to the effect in our study. i.e., depends upon the effect of settlement and the Heritage the recommendation will be given which has to be given in response to the public demand and need.

The limitations in the study area are it is completely limited to the core area i.e., within the KMC limit, interdependency on the secondary data and predominantly based on the observation and local review, inefficiency of relevant resources to identify the actual characteristic of the settlement pattern change over years, time constraints, location and language constraints.

## II. STUDY AREA

Kolkata city has six districts: - Nadia, Hoogly, North 24 Parganas, Howrah, Kolkata, South 24 Parganas while this is the urban core of the city; which is the ancient city with all prominent heritage areas. The number of wards of the Kolkata municipal corporation is 141 wards. The city is having four million population and twenty-four thousand persons per square kilometer population density. The total area of the KMC boundary is 206.1 sq.kms. The study area comes under the Kolkata municipal limit and also a major part of the presidency division. The study area has varied heritage sites, buildings and structures with significant characteristic features which contributes to the city's economy and growth.

The study area is selected due to its prominent heritage importance, being a megacity, it has socio-economic influence on the surrounding states and serves as one of the largest commercial hubs for the states of the eastern parts of India. Kolkata is one of the biggest urban agglomerations in the nation and most seasoned as per the tourist inflow. In the study area there are 43 heritage sites comprising of twelve natural heritage sites, thirteen cultural heritage sites and 18 religious heritages. The study area also includes six archeological sites under the provision of Archeological Survey of India (ASI).

### 1.1 Heritage value and its scenario

According to the world scenario India ranks 40. In terms of Indian context, the intangible heritage of Kolkata ranks fourteenth rank and the natural heritage ranks fourth.

## III. METHODOLOGY

Kolkata ranks first being the fastest growing city in the eastern India. The study emphasizes on the impact assessment for the settlements on the heritage area/building/zone. Being a keen to observe heritage and its values in different cities it made me keen to understand the effect of the settlement on the heritage. The primary survey was done i.e., knowing the heritage area and the surrounding settlements which effects it. The assessment is based on the sample collected for 500 people and primarily based on the observation inferred from the study area. The survey focused on the opinion of the people towards the heritage and hindrances occurred due to high rise buildings in the site. There are three major types of heritage found in the study area which is the religious, cultural and natural heritage with Archeological Survey of India (ASI) protected sites. The approach to identify the impact is based on the on the objectives formulated for the study.

## IV. IMPACT ANALYSIS

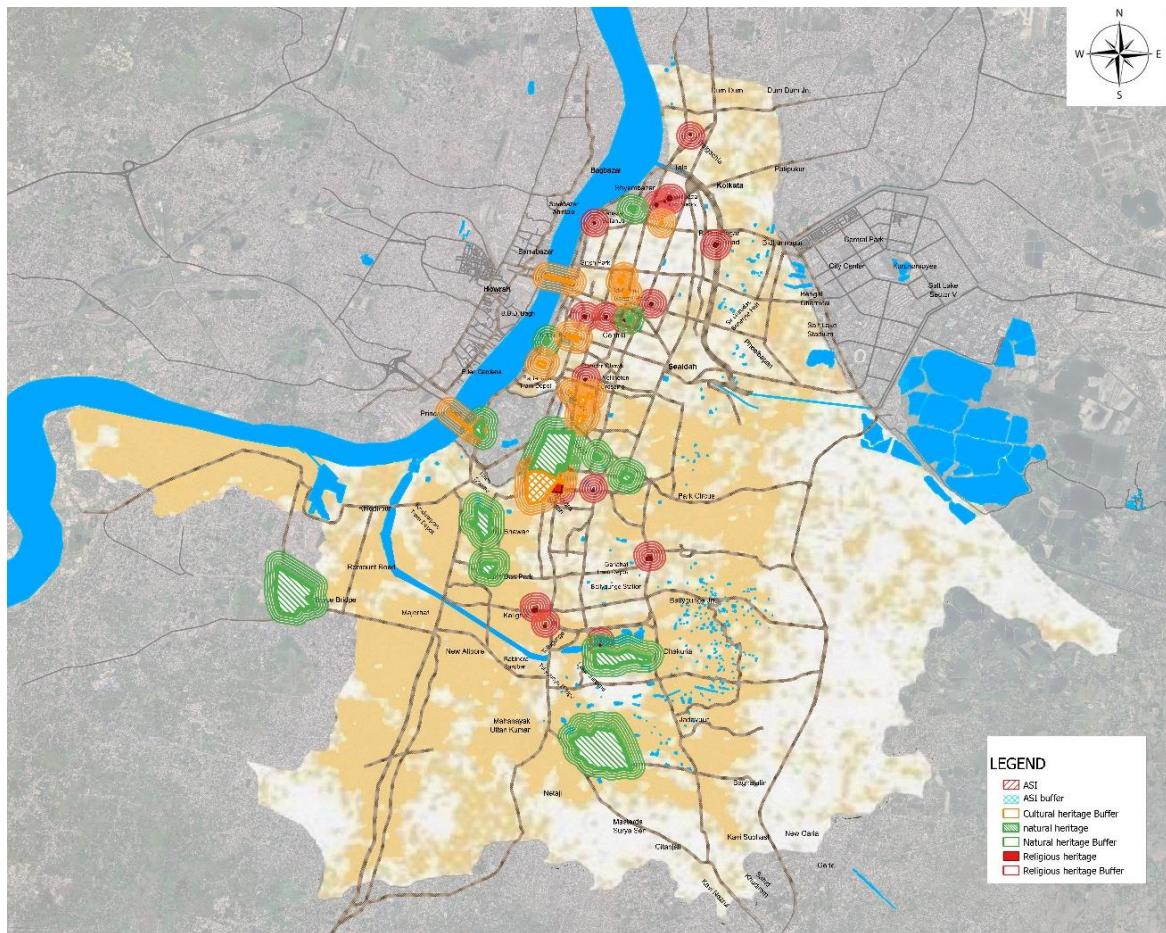
Table 1. Table showing parameter affecting study area.

Source: Primary

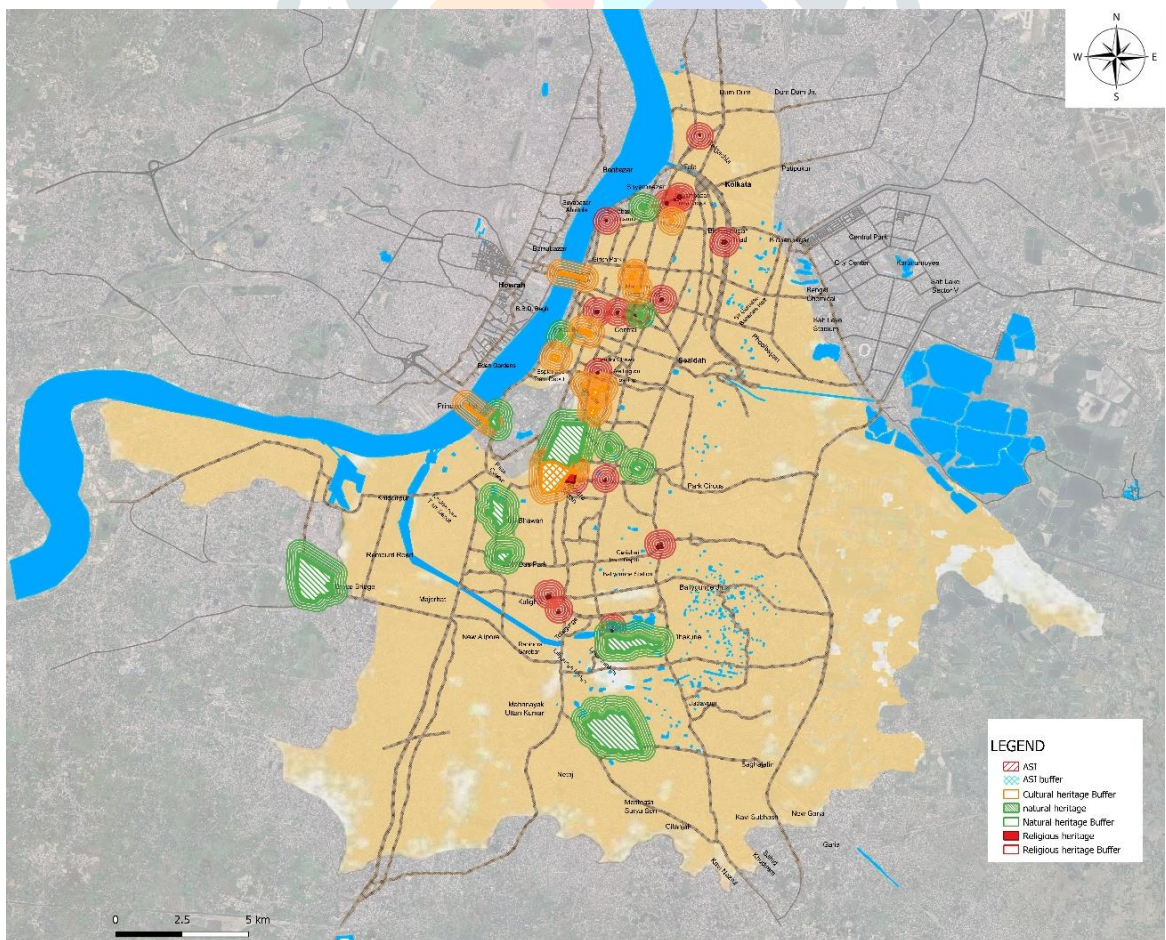
Parameter	Issues
Visual Linkage	Hamper the vision to the heritage Blocks in identifying the heritage for which the area is known. The high built-up area in the settlement has resulted in visual disturbance in the heritage area
Congestion	High vehicle movement around the heritage causes congestion around it. This leads to harmful gas emission around the heritage which affects the exterior of the Heritage.
Vending Zone	The unauthorized vending zones are increasing as it is commercial hub and the area with seasonal tourist inflow.
Regulations	The areas governed by the national and state governments do not effectively adhere to the rules. There is no public understanding of the need to protect cultural assets, and individuals do not abide by the rules that are set forth.

According to the initial survey, the heritage area complies with 8 percent of the West Bengal Heritage Commission, 12 percent of the Kolkata Municipal Guidelines, 13 percent of the Urban and Regional Development Plans Formulation and Implementations (URDPFI), 45 percent of the Archeological Survey of India (ASI), and 13 percent of the UNESCO. The Archeological Survey of India (ASI) authorised sites successfully respect the bye-laws, rules, guidelines, and policies, but not in the regions governed by the state government. There are certain laws and regulations in place for areas having an economic influence, such as the major tourist destinations, however policies are often poorly managed in these areas. The general public's irresponsibility when visiting the location is mostly to blame for this.

Although the 1980 KMC laws did not set aside the necessary buffer for any additional development around the heritage, it is evident that the ownership of the property is being upheld today. Buildings with towering rises and mysterious qualities are the outcome of this. The lack of specific bye-laws and restrictions in the settlement zone surrounding the core region pushed to compact settlements. In 2021, it became apparent that the nearby communities were damaging the heritage through visual appeal, usage, traffic, toxic emissions, tourism, and quick modernization. As a result, the tradition and ethnicity of the country have lost importance throughout the years since it was founded. The value of legacy has decreased as a result of evolution and modernization and a more densely populated area surrounding it. Heritage grandeur and characteristics just weren't factors that could be taken into account in the assessment based on the regulations in that time period. There isn't any possibility for the existing structures to be dismantled.



Map 1: Settlement affecting the heritage in 1980

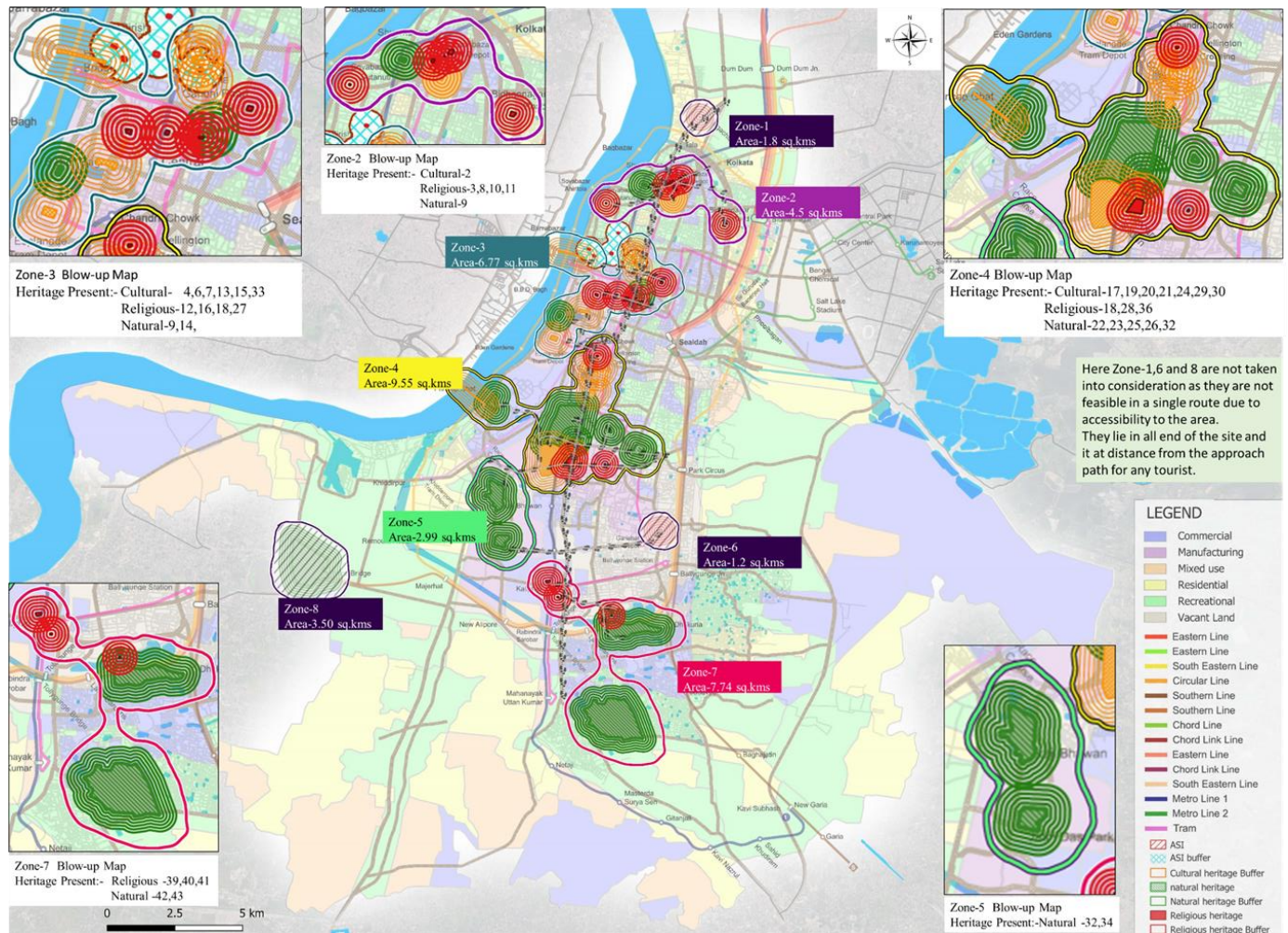


Map 2: Settlement affecting the heritage in 2021

**V. OUTCOMES AND RECOMMENDATIONS**

The expected outcome of the study should be a) have further height restriction around the heritage area so as to prevent visual disturbance b) there should be homogeneity of the building around the protected area, or to have architectural harmony with the protected area. c) encourage walking and other pollutant-free forms of transportation while restricting vehicle traffic in the area designated as a heritage landmark d) provided designated areas for vending around the heritage neighborhood e) illegal encroachment should be avoided so as to reduce the formation of slums around the heritage area and f) improving pedestrian movement with provision of sit-outs and installation of urban design elements around the sidewalks.

On the basis of the analysis, it is observed that the heritage areas were not affected majorly in the 1980s as there was no regulation regarding the construction around the heritage and no major development was taking place in that period. After the regulation in the year 2010 it is found that the settlement has affected the heritage area in a large amount and are affecting the character of the heritage city.



**Map 3: Showing the Recommendation for Heritage Area in KMC**

The map-3 shows the effect of the settlement in the major heritage in accordance to the buffer taken into account. The map helps in analysing major heritage zones which helps in identifying tourism flow in the city during peak season and helps in providing preventive measures for controlling it. The location of the city's most significant historical structures is indicated on the map. The map displays various symbols depending on the concentration of the region's cultural history, which also helps an outsider decide which region to visit first and with the most understanding and familiarity. In a buffer of three hundred metres surrounding the heritage, the presence of commercial, public, and semi-public building in the heart caused massive congestion. The criteria for the impact assessment are determined by the problems discovered during site surveys and public consultations. The recommendations are based upon the parameters affecting the heritage area in a greater level.

The main thoroughfares of transportation, including metro stations and other forms of public transportation, are depicted on map 3 as they have evolved through time.

Table 2. Table showing recommendations for the parameter affecting study area.

Parameter	Possible Recommendation
Visual Linkage	Further height restriction around the heritage area should be incorporated in the regulations, which will reduce the visual impairment caused due to high rise buildings.  The cultural and heritage identity will be gained if the height restriction is done around the heritage area.
Congestion	Improving pedestrian movement by dedicating pedestrian path and initiating environment friendly modes of transport i.e., e-rickshaws, totos with addition of urban design elements in the pedestrian pathway.  The increase in local mode of transport around heritage area will increase the economic standard of people using it till date.  Parking area around the heritage area should be demarcated so as to reduce congestion.
Vending Zone	Provision for authorized vending zone should be given as it is the major commercial hub in the eastern India.  Growth and rise of vending zone around the heritage area leads to the loosening of the character of the city.
Regulations	Further regulation should focus in strengthening of the heritage character of the city.  Height restriction should be mentioned in the regulations of KMC.  Illegal encroachment and slums formation regulations should be focused on.

## VI. CONCLUSION

As the evolution and development around the heritage area is increasing, it is observed that the core area with the major heritage area affected a tremendously. The impact of the settlement is being reduced/ managed by implementing further height restriction around the heritage area; done to prevent visual disturbance. There should be homogeneity of the building inside the protected area; so as to have architectural harmony in response to the heritage building. To encourage walking and other pollutant-free forms of transportation. Lastly to have designated areas for vending around the heritage neighborhood. The existing settlements cannot be disturbed whereas any further development around the heritage can be prevented by the implementation of regulations in the bye-laws. The active participation for people along with the help of government and private agencies helps in reducing the impact assessed in the heritage area.

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