Ancient cities of riverine Bengal:
In search for 'the soul' of the settlements

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Abstract:

A town or city makes significant contributions to humanity. The city changes as a result of memory, aspiration, adversity, and success. A city has life to offer because of its unique personality. The city framework's understanding of the human condition is intrinsic, producing a collective awareness that embraces the concept of civic identity and encourages true empathy among its residents. This deep sense of belonging and interconnectedness is delicately woven into the fabric of the built environment, where the interaction of temporal, spatial, and material factors merge to create such an ambiance. Furthermore, despite the disputed and ever-changing nature of urban centers and human habitations, it is critical to recognize that recognizable and tactically organized progressions defined the city's genesis on deltaic terrain. Topography, the presence of resources, proximity to a commercial center, and religious conviction all affect the colony's potential. This phenomenology does not exclude the old cities of Bengal. Bengal has a long history of having many famous cities, suburbs, educational hubs, and villages. Bengal, followed by the riverine linkages, became a crucial trading route as these cities and settlements were connected to other inland ports. The geographic position of the delta land creation and the results of this position are appreciated; an old city's origins may provide a novel idea or narrative. However, the goal of this research is to comprehend the history and character of Bengal, an old metropolis. Additionally, the research would aim to define the "soul" of the city in its genuine and logical context. This study focuses on the desire to elaborate on the character of the historic cities in the riverine delta. Since rivers were once a prevalent feature of this particular landform, river-supported settlements were also created. Rivers bring wealth, but they can also bring misery. Rivers support trade. Since the Riverine Excel, all of these potentials have developed. A comprehensive study endeavor will be conducted to provide evidence for the significance of rivers and to capture the character of the historic towns in Bengal. The optimal approach for this scholarly inquiry would involve the exploitation of cartographic data and visual representations.

Keywords: City image, inland port network, ancient settlement, cartographic mapping, settlement pattern.

1. Introduction

Bengal has had numerous cities and notorious settlements since the beginning of civilization. These cities and colonies have connections to other inland ports. Bengal arose as a major economic route, followed by riverine linkages. The delta land formation is valued for its geographic location as well as the implications of that location. The origins of an

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ancient city may reveal a new story and a new perspective. The purpose of this research is to understand the history and character of old cities near the rivers of Bengal, a historic metropolis. It will also attempt to explain the true meaning of the city's soul. This study addresses the desire to delve further into the spirits of other ancient cities in the riverine delta. Rivers were originally a prevalent part of this landform, and a river-supported population grew up alongside them. The river brings people prosperity, yet it can also bring us pain. The river serves as a commercial and trade route. Our religious beliefs are inspired by the water. These potentials are all descended from the Riverine Excel.

2. Objective of the research

The primary objective of this research endeavor is to discern the distinctive characteristics and elemental components inherent in the ancient urban settlements situated within the Ganges Valley[1], specifically those oriented towards the Bay of Bengal. The validation of this study's methodology would entail the identification and analysis of historical river channels in conjunction with a comprehensive examination of the surrounding geographical context. The research endeavor would additionally incorporate the utilization of antiquated cartographic mapping techniques in order to enhance comprehension of commercial dynamics and river-based networks. On the contrary, the observed phenomena elucidated in the scholarly article may pertain to the prevailing and contemporary contextual conditions of the site. The primary emphasis would be placed on the examination of historical literary works in order to reassess and reestablish the appropriate methodology for the research endeavor.

3. Methodology of the research

General approach:
- The ancient historical literature or the epigraphic
- Statements of the ancient voyage made by the philosophers and explorers,
- Ancient pictographic information, cartographic information, ancient photographs
- Ancient trade route identification
- Existing Site surrounding and the remains of the ruins
- Study of the ancient river course
- Intense recourses of the archaeological remains and evidence

4. Historical background & origin of the ancient city
4.1 Topography

The topography of the delta spreads out riverine geological orientation, which eventually rushes to the Bay of Bengal's bottom. As the fertile alluvial plains spread out into a wide ocean of beautiful green paddy fields, perhaps nowhere else in Asia has nature delivered her gifts or benefits. And the shallow, colorful hills that flank the majority of the Bay of Bengal's boundaries reach out indefinitely into the distance. This flat land is also adaptable. Wide, open valleys, mountainous streams, and enormous, deep gorges have all shaped the landscape of this flat country. It is also heavily forested, occupying the various colors that nature offers and the amazing sequences of the six seasons jam-packed with colorful and jovial natural cheer. It is where the humble people of our land tune up their anthems of

existence. The diversity of the season gives people cultural legitimacy. The river, the soil, the air, and the rest of the world are all in harmony with that close cultural proximity. Indeed, a vast scene where the earth's surface, river, and woodland are alive with an abundance of beautifully colored songbirds. The quantity of blessed and thriving crops in the region's rich and prosperous environment adds to its allure.
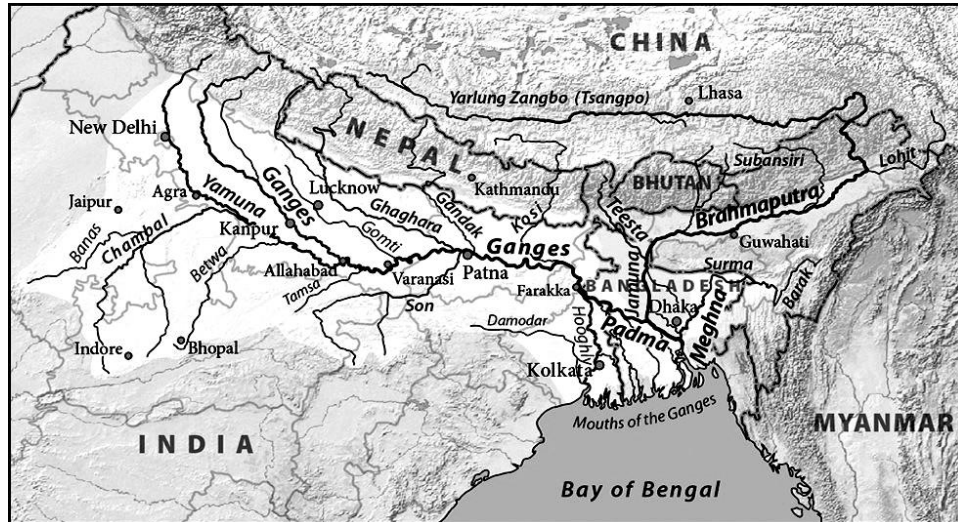

Figure 1. *Ganges and Brahmaputra River Basins on a map, in the figure above. The many river flows are connected as they move down from the Himalayan Mountains. At the delta, they all come together and direct their flows toward the outlet of the Bay of Bengal.*

Source: commons.wikimedia.org.

4.2 Natural Land Formation

The topography of flat terrain tends to cause rivers to diverge from their primary courses, stream in different directions, and form crisscross networks. This resultant natural land formation gives rise to a hierarchical flow for the navigation route. On both sides of the riverine path, several renowned towns and fortifications grew to enclose their lands and defend the region from outside forces. They became completely dependent on the city's, fortress's, and watercourses' banks for their aqua supply, which was a crucial and permanent component of their survival. The majority of Bengal's populace worked in agriculture.[2]

4.3 Historical Structure

In the meantime, trade, people, and monarchs all inhabited this delta region. Most of the major rivers' banks were bustling with people and the city's surroundings. Temples with stunning colors and sky-reaching spire towers were seen, and they were active due to numerous ceremonies. Numerous illustrious historical structures triumphantly line their fertile banks.[3]

Yes, this leniency could keep the ability to keep the settlement from being destroyed for the benefit of the populace. The river's flexible shoreline connects to several amenities that the region's monarch built and offers potential for all four seasons. The residents of the fortress city had an exceptionally joyful time at those banks. They were facing

mundane people's daily life patterns, the ritual activities along the river's edge, interaction, and the scenic beauty of the towns.[4]
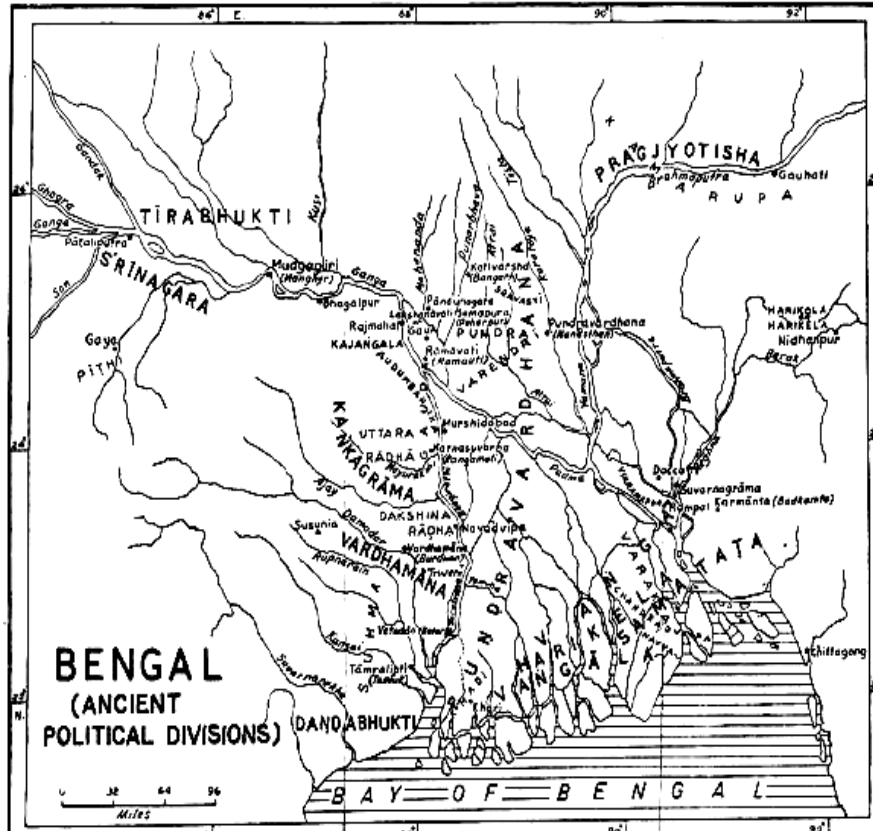

Figure 2. *River and political division that separates the region from one another*

Source: http://photos1.blogger.com/x/blogger/5167/3388/1600/487207/Map_of_ancient_Bengal.jpg

4.4 Natural Splits

There are numerous instances elsewhere throughout the world, notably in this subcontinent. Consequently, the river's paths occasionally brought happiness and suffering to the people and the country. The three primary natural splits of the delta correspond roughly to the principal ancient and modern political demarcations, which are known as the delta's earliest historical epoch.

4.5 Rivers

The present Rajshahi Division is located in the northern part of the territory, and the Padma and Brahmaputra rivers practically encircle the entire region. Numerous rivers, including the Padma, are also referred to as the Kirtinasa, or destroyer of monuments. As a result, experts are still looking for some of the forgotten cities that the mighty rivers took away. Essentially, a colony is developed and removed only when the river's

navigation path has to be changed. Starting with the Vedic, Buddhist, and Hindu settings, the delta region was oriented with various, vivid rites and a long legacy of spiritual cultural continuity, which undoubtedly influenced the city's development pattern.

4.6 Religious Perspective
The Indus Civilization and Pundranagar in our delta region used city morphology to come up with a unique strategy, possibly based on a clear zoning-based framework, because they thought that building a city could favor the religious boundary. The monarchs of the Pala and Hindu nations must abide by that. The ruins of the city eventually show the solution to satisfying those conditions. However, because of their geographical location and deep religious ties, Bengal's Buddhist and Hindu towns may develop spiritually similarly, unlike the Islamic city that the Sultans and Mughals constructed. The mention of the alleged vast form of settlement known as the "Gangaridhi," which was created especially for the potent river Ganges and its other connections, provides the strongest supporting evidence.

In the context of the delta, Bengal would therefore contain several city formulas that are still unknown to us. Therefore, research has the potential to deepen our understanding of the creation and arrangement of the ancient metropolis in the delta.

5. Nature of ancient riverine cities and settlement pattern in the Delta land
**5.1 Land Formation**
Bengal's land formation and geographic location dictate how to adapt the habitation pattern and other phenomena in various morphologies. The "Ganges Valley Civilization Model" altered the structure of city patterns in several locations by using long, flowing rivers. From the Indus civilization (Indo-Pakistan) through Pundranagar (Pundrabardhan, Bengal), the form of urban orientation and notions exceeded important morphological ingredients due to contextual constituents. However, a distinctive ideology in the development of the urban context distinguished the majority of the ancient cities on the subcontinent.[5]

5.2 Trade
The important elements included the city's religious ties, the importance of trade, and fortifications to fend off invaders and natural disasters. In the meantime, rivers and waterways were crucial locations for the development of trade and commerce. Even though the city was entirely religious and had monastic and religious activities going on inside and outside of the fortified walls, these activities took up the majority of major establishments.

5.3 Morpho-structure
The concentrated area's focal point would be in the "morpho-structure." The Ganges Valley on the subcontinent was fortunate to have both a religious foundation and a bustling natural commerce center. Cities and settlements follow a dynamic systemic structure that adapts to the demands of mobility and time. The connection between natural and artificial interventions is always balanced.
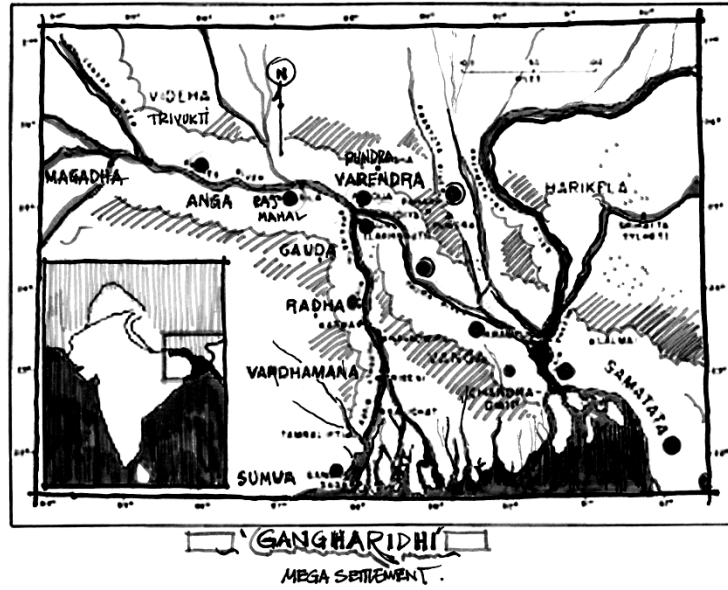
Gangaridai, meaning "Wealth of the Ganges" ; Sanskrit: Ganga Rashtra, meaning "Nation on the River Ganges"-was an ancient state found around 300 BC where the Bengal region lies today (present-day Bangladesh and the West Bengal state in India). It was described by the Greek traveller Megasthenes in his work Indica.

The Greek and Latin historians suggested that Alexander the Great withdrew from India, anticipating the valiant joint counterattack of the mighty Gangaridai and Prasii (Nanda) Empires, the latter located in central Bihar.

Figure 3. *The enormous settlement of Gangaridhi is located at the confluence of the powerfully flowing rivers Padma and Meghna. It continued to develop till SAMATATA (present day of Chittagong and Camilla)*

Source: Sajid-bin-DOZA

5.4 Riverine

The "Indo-Bengal land formation" was made up of layers of silt that flowed and fell into the Bay of Bengal. The old city of Mahashtan (Pundranagar, from the 3rd century BC to the 12th century AD) was built on the banks of the fiery river Korotoa. The river possessed an antiquated internal navigation system that has been documented and associated with numerous renowned ancient cities in recent history. As a result, Mahashtan evolved into an inland port city, implying its engagement with a distinct

geographical context, namely the elevation of the mainland and its interconnectedness with neighboring regions.

5.5 Religious Connections

But at the same time, religious connections were important in ancient deltaic cities. For instance, we observed that Mahasthangarh's religious infrastructure was well-maintained, and historical records demonstrate that the city once featured stupas and temples with shiny tops that are now fading into the sky. Even so, the area around the city was fortified with strong and large-scale engineering.
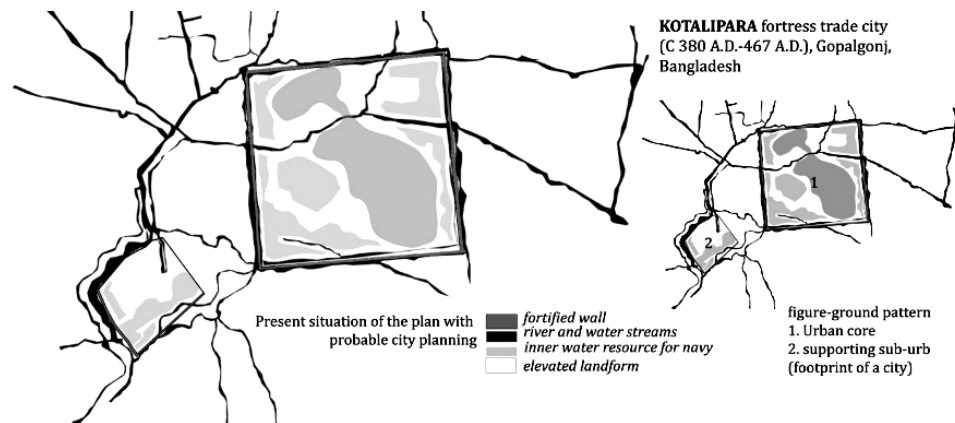

Figure 4. KOTALIPARA (380 A.D.-467 A.D.), fortress trade city Gopalgonj, Bangladesh.
Establishment of the City: 6th A.D.
Founder/kingdom of the city: during the reign of PALA dynasty
River nearby: GHAGAR.
Type of the city: riverine trading fort city Remakes of the city: Southern coastal marine fortification

5.6 Religious Building and Place

The extremely thick walls were built haphazardly along the contour of the rampart to control river courses, and eventually, the high track of the old Veranda landform became the location of the Mahasthan. The hierarchy-based pattern was discovered to be present in religious environments and infrastructure. For instance, within the fortified wall of Mahasthan, Buddhist temples were located or constructed in multiple strata; the primary stratum was entitled to mass activities and moved more quickly to the river landing terminal or terrace; from there, the mass gathering occupied the commercial and trading zone. There were public spaces and temples all around trading centers and crowded stores. Around the trading sector in the northeastern and north-western areas of the city, there are additional official buildings and infrastructure. When the little temple was finally discovered during excavations at the Mahasthan site, it was found to be in the first stratum of the second layer; hence, this region might be described as a religious-institutional and semi-residential area. Stupas, temples, and some housing for pilgrims make up the majority of the area. Not primarily because of the monastery, but perhaps because of the atmosphere.[6]
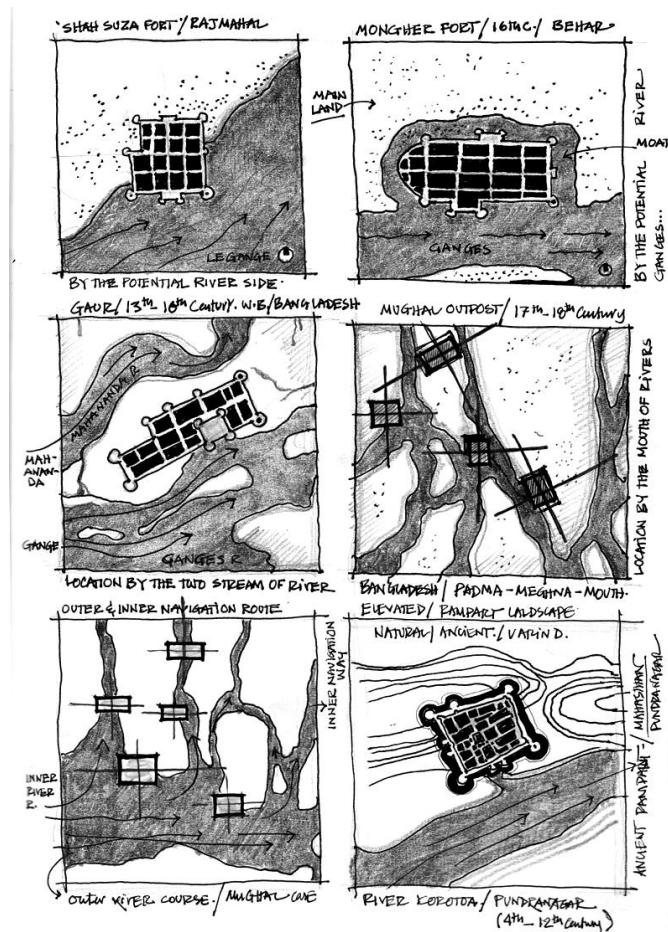
Figure 5. This "Figure Ground" pattern of various river fortifications illustrates potential methods, policies, locations, and river orientations that are focused on the crucial role of avoiding, maintaining, and creating the outpost for the sake of the country's security. These plates are all accurately cited using historical sources. Developed by Sajid Bin DOZA

5.7 Dwellings and Streets

Finally, a collection of dwellings and streets, or pavers, make up the stratum. The following paragraph would eventually go into greater detail. Different occupational masses lived in the historic neighborhood's residential area. For instance, the neighborhood was home to merchandisers, social workers, goldsmiths, blacksmiths, farmers, and porters; in most cases, the morphology is unchanged, as has been seen in other fortress cities. A dense population used to reside in the agriculturally based communities and territories that dot ancient Bengal from time immemorial, but ultimately the localities grew up alongside the river and the transportation channels. In the meantime, these powerful rivers periodically altered their courses, and unheard-of floods forced the community to relocate.

5.8 Location of the Cities

The Maharajas (Kings) of Bengal created significant cities close to and around the water streams to maintain the monarchy's control and stability. The Bengali Maharajas occasionally built cities while taking into account the possibilities of the location, such as in well-known holy locales or upcoming commercial and trading areas. The PALA period saw the development of socio-cultural structures centered on the home lifestyle's simple way of living, involvement in agriculture, handicrafts, and religious beliefs. The ancient deltaic fortified urban core may have grown out of two distinct settlements: the city itself and a strong agricultural hamlet that served as the urban core's constant source of food, other necessities of everyday living, and support for trade. The majority of the city's residents were typically members of the local aristocracy, those from the palace's forum, as well as creators, artists, sculptors, merchandisers, etc.

The ancient Hinterland of Pundranagar (MAHASTHAN) assumption `THE TOPOGRAPHY´during middle of the 8th to 9th Century AD. The PALA Kingdom.

Figure ground pattern of the settlement characteristics of the riverine ancient Bengal. Stating from the different realm and stratum.

Figure 6. *During the 8th-11th Century land character and natural aqua protection showing watery situation of MAHASTHANGARH*

The morphological patterns found in Patialiputra, Srabasti, Ayutthaya, Indraprastha, Purushpur, and Kapilavastu were also present in the riverine cities of Bengal. The gems of the prehistoric subcontinent were these magnificent ancient Indian cities. Eventually,

during those contemporary years, towns like Pundranagar, Kotibarsa, Tamralipiti, etc.[7] utilized all Indian historical city forms. Numerous pieces of documentation, literary works, and manuscript references that discuss the contemporary architecture of the cities have been uncovered. The aesthetic understanding of the city might once again be appreciated through this procedure. Through this procedure, we can discover hints. We first talked about the development of the old Deltaic fortress city. During the Muryan, Gupta, and Pala eras, respectively, Bengal's exceptional defensive urban environment first appeared and eventually became the nation's capital. The fortified city experienced significant development in its specialization, which led to a strong emphasis on the Buddhist religious mission, institutional expansion, and the networking activities of the inland port city.

Figure 6. An environment of the famous city as described by the poet and philosophers. Drawing by: Artist Roy G. Krenkel Portfolio 1979.

Source: https://www.pinterest.com/pin/158540849358915011/

5.9 Different Rule

During the different rule of the Pala, Chandra, and Sena Empires, the fort city of Kotiborsho rose to prominence. At the same time, Bikrampur (ruled by Buddhists from 770 to 1174 and still extant during the control of the Mughal Empire) rose to prominence for its Buddhist and Hindu religious pursuits as well as its cultural and educational aspirations. A commercial walled city was constructed in Bengal's southern-eastern region, namely Kotalipara (540 AD). Due to its isolated location in ancient Bengal, it was extremely challenging to establish a civilization during those times. This city was divided into two distinct sections: trading and residential. Three independent monarchs, Gopal Chandra (about 540 AD), Dharmadittya (around 570 AD), and Samacharadeva (the end of the 6th century AD), each attempted to construct the city.[8]

5.10 Art and Literature

In his epic poem "Ramacharita," Sandhakar Nandi described the ancient Ramavati, the residence of Rampal, with brightened elaboration. In his writing, he made this point. "Bright white palaces adorned with golden flowers surround the large, open streets, and the skyline is adorned with gold vase finials." The art and aesthetics of the city are often upheld by temples, stupas, Buddhist monasteries, lovely gardens with water features, sports facilities, and many other eye-catching scenes. To make city life and its residents bright and happy, precious jewels, clothing, lifestyle, the pure sound of instrumental music, and genuine classical music are used. The cultural identity was also elevated by these occurrences to a greater summit.

To dominate and gain more authority over the subcontinent, the Pala monarchy built numerous fortified cities. Citadels, apartment complexes, multiple multifunctional structures, cantonments, market squares, temples, roadways, pedestrians, and parks may all be found in these fortress cities.

The old royal copperplate texts from the sixth to the thirteenth centuries AD provide descriptions of these fortress cities. This time frame appropriately indicates the height of Buddhism in ancient Bengal. Many ancient cities were built during the Pala dynasty, and all of them were located by the Ganges River valley or by the side of the powerful Goddess River Ganges, according to an old Buddhist copperplate. To fend off attackers and defend the mainland, it was crucial to establish outposts over the Ganges valley (the mainstream of the river course), beginning in Rajmahal and continuing into Bengal.

At the confluence of the Ganges and Mahananda rivers, some 25 miles from Ramavati, King Lakshman Sena built a sizable urban area known as Lakshmanavati during the later Sena period. This metropolis used to cover a total area of land that was between 10 and 15 miles across. There was a sizable, fortified fortress in this city.

6. Conclusion

This scholarly discourse partially reveals the essence and configuration of the fortified deltaic settlements situated within and near the Ganges Valley. In our endeavor to discern the historical urban fabric, it is imperative to grasp the inherent essence of the urban environment, commonly referred to as the "nature of the city." The comprehension of ancient urban settlements and rural communities on the subcontinent poses inherent challenges from a physical standpoint. The vast majority of ancient urban settlements boast remarkable antiquity spanning millennia. Furthermore, it is noteworthy to mention that during the eras of Vedic and Buddhist influence, comparable urban centers were erected, albeit regrettably succumbing to the passage of time and fading into obscurity.

We come across references to very old copper plate writing, old drawings, and different kinds of literature; in the case of Bengal, the old historic traveler's "diary-writing" helped to refer to the city's position more satisfactorily. The descriptions of various cities are detailed in those old writings. Sometimes with fantastical descriptions, and other times preverbal with local socio-cultural elements. Particularly in the case of ancient Bengal, the majority of the ancient cities only had a physical boundary; nevertheless, those natural landscapes either became mounds or, via some other means, fell into disrepair, and no one had any knowledge of the places.[9]

Researchers and academics have been working under these limitations for a few decades to explore the city and settlements in the Bengal Delta. Many ancient historical occurrences have come to light, but some remain hidden from research and are only known through exploration. One such site is Mahasthan, where the area was so vast and unheard of that excavating the ground was not only a challenging task but also required the expenditure of time, money, and energy. A researcher needs documents or other supporting evidence to uncover the specific geographic elements of the city and avoid hitting a research black hole. As we debated the ancient towns alongside the Ganges, the ancient cities in the subcontinents were occupied with the vivid nature of their planning. Significant references to rebuilding and restoring the lost historic circumstances were discovered through literary evaluations and ancient inscriptions. The nature of the old city and associated phenomena may be clarified through this procedure; however, archaeological data is now crucial in securing such references and hints. The ancient cities that are mentioned here have all been discovered through archaeological research, and they have all been documented with hints and basic orientations. In the meantime, some major writing was responsible for those ancient towns' physical existence.

As a result, getting information from various locations requires a thorough search for information as well as a comprehensive awareness of the scenario that is closest to the investigation's endpoint. The diversity in the parts of the old towns by the river with massive walls may be the result of gathering all those queries and questions, allowing us to travel on the ideal route map.

Last but not least, the ancient city of the Ganges Valley joined with the pre-river market center; the legendary buildings in the first ring were monasteries and stupas. Street bazaars, their significance in religious and congregational activities, and the maintenance of the hierarchy all contributed to the way of life and the economy of the urban center. Additionally, the city's defense began to be a crucial consideration for the Pala kingdom's rulers. Finally, it was revealed that, interestingly enough, it was just around this time that Mahayana Buddhism, supported by the Palos, rose to prominence internationally and had a significant impact on the development of the old river fortress cities.

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Notes and References

[1] The Ganges civilization (the Vedic period) for several hundred years after the decline of the Indus civilization life in Indian was structured around small villages. A second period of urbanization, known as the Ganges civilization, (1500BC)
    Source: https://www.physocean.icm.csic.es/science+society/lectures/illustrations/lecture14/ganges.html

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