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Riverfront Development and Community Engagement: A Case Study of the Urban River Spaces Project in Jhenaidah

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Abstract

Riverfront development has emerged as a crucial component of urban planning globally, owing to the potential it holds for enhancing the standard of living, fostering economic progress, and safeguarding cultural legacy. However, in Bangladesh, riverfront areas are facing several challenges, including water pollution, encroachment, floods, and limited public access. This research project aims to assess the impact of architectural intervention on community engagement in riverfront development, particularly the participation of local communities and stakeholders in the project. The research utilizes a combination of diverse methodologies, including surveys, interviews, and observation, to gather information on the design and execution of the project, as well as its influence on community involvement. A sample of 50 respondents was selected from the project site and its surrounding areas. The study's findings reveal that various architectural interventions, such as constructing multi-purpose infrastructure, using a participatory design approach, and adapting existing structures, can promote inclusive riverfront development and community engagement. These interventions can significantly enhance the quality of life of riverfront communities. This investigation helps to enhance comprehension regarding the influence of the architectural intervention on community involvement and riverfront development in Bangladesh. The outcomes of this research will help policymakers, architects, and urban planners in making knowledgeable judgments concerning riverfront development and fostering urban spaces that are both sustainable and inclusive.

Keywords: *Riverfront Development; Architectural Intervention; Community engagement; Participatory Design Approach.*

1 Introduction

Riverfront development is critical in urban planning around the world, providing significant opportunity to improve living standards, drive economic advancement, and protect cultural heritage. It acts as a critical link between the urban landscape and natural water bodies, resulting in dynamic settings that attract residents, tourists, and companies alike. Community engagement becomes critical in this environment because it promotes active participation, inclusivity, and a sense of ownership among local citizens. The Urban River Spaces Project in Jhenaidah, a city located along the banks of the Nava Ganga River in Bangladesh's Khulna division, is one such notable case study in riverside development and community interaction. Historically, Jhenaidah has evolved from a British-era police station to a thriving urban center that flourished along the banks of the Navganga River. The development of the area known as "Debdaru Avenue " has garnered attention and recognition, earning a prize the prestigious Aga Khan Award.

However, it is not merely the physical infrastructure that has been honored; rather, it is the exceptional process of establishment itself. The "City Wide People's Network", a collaborative effort involving architects, mayors, teachers, entrepreneurs, traders, and even tea shopkeepers, has been instrumental in the creation and ongoing expansion of the Urban River Spaces Project. This project aims to bring together individuals from diverse backgrounds and socioeconomic levels, forging a shared vision for the revitalization and sustainable development of the riverfront.

Our research aims to uncover the relationship between architectural interventions, community engagement, and the transformation of riverfront areas in Bangladesh through an examination of the Urban River Spaces Project in Jhenaidah, while also providing valuable insights into effective strategies for riverfront development and community engagement in urban contexts.

2 Aim

The aim of this research paper is to evaluate the impact of architectural interventions on community engagement in riverfront development in Bangladesh, with a focus on the Urban River Spaces Project in Jhenidah.

3 Objective

- 1 To understand how the Urban River Spaces Project in Jhenaidah engages the local community and stakeholders in riverfront development.
- 2 To examine the architectural changes made in the project, such as constructing multi-purpose infrastructure and involving community input.
- 3 To assess the impact of these architectural interventions on community involvement and the quality of life for riverfront communities.
- 4 To identify the main challenges and opportunities faced in riverfront development in Bangladesh.
- 5 To provide practical recommendations for policymakers, architects, and urban planners to promote sustainable and inclusive riverfront development based on the research findings

4 Literature Review

4.1 Introduction

The impact and surrounding factors of community-based riverfront development are thoroughly examined in this chapter. For clarity, it is broken into four parts. The first discusses the background and history of the place, the second describes the river and its environs, and the third describes riverside development and results. The fourth section examines community involvement, while the final section looks at how community architecture and waterways are related.

4.2 Background and History

Riverfront development and community engagement are crucial elements in urban planning, with the potential to enhance the quality of life, drive economic progress, and preserve cultural heritage. A thorough understanding of the existing literature on these topics is essential to inform effective strategies for sustainable and inclusive riverfront development. There are 405 rivers in Bangladesh but only 230 are now alive. (Banglapedia, 2015) The Urban River Space project aims to bring back an urban river from the "backyard" to the "front yard". The slums in Jhenaidah's Chaklapara neighborhood have changed from temporary structures to brick structures. Urban-based community networks have brought together communities and enabled city dwellers to participate in significant decision-making processes, which has resulted in this shift.

"I started work in 2015. We want to arrange the city around the river. I have involved everyone from the city mayor to the hawker" Interview with Hasibul Kabir, retrieved from Daily Kaler Kantho, Ranjan, P. (2022, 4 June). A network called 'Jhenidah Citywide People's Network' has been formed to engage the people of the city with the slogan 'Nadi O Pukur Lakh Kari Mukh/Baraday Dei Jhinedar Sukh!'

(Let's face towards ponds and the river, to make Jhenidah happier and better! ") In the design, various structures including water gardens, community ghats, free platforms, footpaths have been placed with the idea of their slogan which if implemented will save the river and the city (Kaler Kantho, 2022).

4.3 Notion

There are some aspects regarding the river. It has some unique characteristics other than conventional rivers in Bangladesh. The activities around the river have different timings and features. The location of the river was pre-defined, as it was an active place for a long time. But it was a backyard. When the project was taken in hand it became the front yard. The features are described briefly in this part.

The river-centric city of Jhenaidah features a 4 km promenade along the riverbank, planned with water gardens, ghats, amphitheaters, and temporary markets. The connectivity between Ghatbaria Ghat and Chakla Para Bhasan is improved through this route. Among the designs is the "Devdaru Avenue" or "Urban River Space," thoughtfully integrated with century-old cedar trees. Key structures like a mosque, Shilpakala Academy, and the District Commissioner's office adorn this locale. The design has revitalized the area, replacing previous dumping grounds with a multifunctional space. The place now sees various activities throughout the day. Mornings host seniors and fitness enthusiasts, while afternoons attract a diverse crowd, enjoying food stalls and social club gatherings. Evenings bring families for serene walks amid the refreshing river breeze, aided by sufficient lighting. This

transformed space showcases communal engagement, diverse uses, and a safe environment, accentuating its significance in the city's fabric.

Due to the short 14-day summer survey, there is a gap in my research on Jhenaidah's Urban River Spaces Project. It didn't cover official holidays and noteworthy occasions that are essential to comprehending varied community engagement and riverfront use patterns. Insights into the project's true impact and its capacity to properly involve the community may be limited if these situations are excluded. A more complete knowledge of the project's influence in various circumstances would result from closing this gap.

4.4 Riverfront Development

Riverfront development refers to the planning, design, and transformation of areas along a river or waterfront to create vibrant, functional, and attractive spaces for public use. It involves utilizing the potential of the river or waterfront as a valuable asset for urban development, economic growth, recreation, and community engagement. Riverfront development typically includes elements such as pedestrian pathways, parks, public spaces, cultural amenities, commercial areas, and infrastructure improvements to enhance accessibility, aesthetics, and connectivity. The goal of riverfront development is to create a harmonious integration between urban areas and natural water bodies, revitalizing the riverfront as a focal point for social, cultural, and economic activities while preserving and enhancing the ecological value of the river.

4.5 Community Engagement

Community engagement refers to the active involvement and participation of local community members in the planning, decision-making, and implementation processes of riverfront development projects. It emphasizes the importance of collaborative efforts and empowering community members to have a voice in shaping their built environment. Community engagement in riverfront development aims to address the specific needs, aspirations, and concerns of the community, taking into account their cultural, social, and economic contexts. It recognizes that the success and sustainability of such projects depend on the active participation and ownership of the community.

4.6 Community Architecture

Community architecture is a practice that adds to societal awareness by including users in the design process and allowing them to distinguish between their requirements and goals. This technique empowers people to own the environment around them, as they play an important role in design. Community architecture seeks to fulfill the community's distinctive needs, goals, and objectives while taking into account its cultural, social, and economic surroundings. It seeks to create sustainable and inclusive built environments that reflect the community's values, identity, and sense of ownership. "This is for the community and its people. We are working as per their desire and as architects, we are getting involved in a process. Our first identity is the residents of this city, then we are architects," Farzana, S. (2022, October 31).

5 Methodology

The research uses different methods like reviewing the literature, conducting a case study, surveys, interviews, and observations to collect detailed information about the design, implementation, and effects of the Urban River Spaces Project on community engagement in Jhenaidah.

5.1 Literature Review

Literature review was based on available relevant journals, publications, books, articles, daily newspapers, and thesis reports. Literature review helps to find out the concept and background of riverfront development, how it can connect the community with its activities, and how community engagement helps to keep it alive. An extensive study was conducted to understand the connection between the local community and the river. Possible guidelines were taken into consideration for the development.

5.2 Field Survey:

A site visit facilitated a precise comprehension of the project's location and scope. This survey captured local engagement, daily activities, and practical insights, enriching contextual understanding.

5.3 Questionnaire survey

A total of 50 riverfront residents and passersby were questioned regarding the riverfront development and their involvement. This poll, which was conducted using open-ended questions, yielded a wealth of information on the river's dreams, grievances, opinions, and so on.

5.4 Case Study

Two ongoing projects were studied to understand how river development and community engagement work in local and international contexts. One is the Sabarmati River running through the city of Ahmedabad in the Indian state of Gujarat, and the other is the Han River Riverfront Development in South Korea.

5.5 Observation

Discuss the use of surveys as a data collection method. Explain the development of the survey questionnaire, including the inclusion of both closed-ended and open-ended questions to gather quantitative and qualitative data.

6 Case Study

Sabarmati Riverfront Development Project was designed with the intention of providing flood protection to the city. The project aimed to mitigate the risks of flooding by constructing embankments, retaining walls, and flood control infrastructure along the Sabarmati River. These measures were implemented to minimize the impact of floods and safeguard the surrounding areas from potential damage. The Sabarmati Riverfront Development has changed the face of the city of Ahmedabad in Gujarat. We can clearly see the changes in the before and after pictures of the same place.



As a result of the Sabarmati Riverfront Development, the local economy has received a new wind. Explore the economic benefits generated by the project, including increased tourism, job creation, and opportunities for local businesses, demonstrating the positive impact of riverfront development on the community.

The Han River is a major river in South Korea that flows through the capital city of Seoul. The Han Riverfront Development project aims to revitalize and transform the riverfront areas into vibrant public spaces that enhance the quality of life for residents and visitors. The project includes the creation of parks, promenades, cycling paths, recreational areas, and cultural spaces along the riverbanks. These developments have contributed to the improvement of urban landscapes, connectivity, and the overall livability of the city. The Han Riverfront has become a popular destination for leisure activities, picnics, sports, and cultural events.

Figure 4. (a) A view of the Han River Banpo River Park from the Apgujeong New Apartment in 1983: (b) the masterplan view of the Han River in 1986 rendering. (Source: Seoul Museum of History Archive)

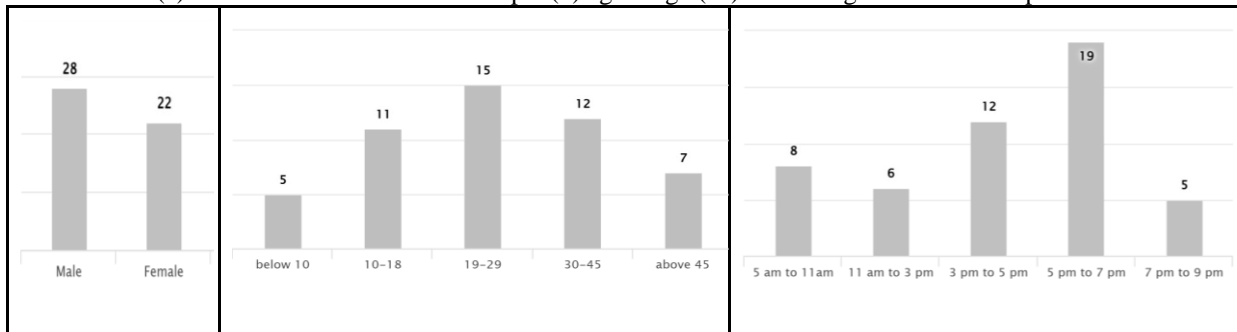


The Han Riverfront project promotes environmental sustainability, offering recreational and cultural amenities, while the Sabarmati Riverfront focuses on flood protection. Both projects have notably transformed their cities. In Seoul, the Han Riverfront enhances aesthetics and leisure options. Similarly, the Urban River Spaces Project in Jhenaidah uplifts residents' lives, encouraging interactions and economic activities along the riverfront.

7 Analysis and Observation

Through surveys and interviews, the study engaged a diverse demographic, including children, school-age boys, college students, and local stakeholders. Findings spotlight the historical richness of the river, revealing the endangerment of older fish species like Chala and Ukal.

Table- (a) Male and Female ratio of sample (b) age range (c) Time range of the the sample collection



The site's popularity among the youth, particularly those aged 16 to 29, is evident, with peak activity during afternoons and evenings. Concerns emerge regarding the absence of waste disposal facilities and the demand for play equipment, particularly by parents. Interviews indicate the potential for economic growth by offering snacks and light meals along the urban river space, benefiting both local commerce and visitors.

Field observations depict a dynamic scene like mornings are marked by elderly individuals strolling. The elderly appreciates the senior-friendly design of ramps. Families frequent the area from afternoon to evening. The serene river, unscathed by erosion, enables a pollution-free environment ideal for recreation. Its steady flow and absence of fish maintain water quality, unaffected by natural disasters. Overall, the study captures a vibrant community space with inherent potential for further development and enriching the lives of local residents.

7.1 Questionnaire Survey

In a survey of 50 riverside residents and visitors to the Urban River Space, I asked a series of questions based on which responses were charted. The sample question was-

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Is community engagement making this project possible?					
2	Are you in need of a space that is more comfortable?					
3	Do you like how things are right now?					
4	Will you have a participating role if it is extended?					
5	Is this initiative beneficial to everyone?					
6	Do community events now outnumber those in the past?					
7	Is the city's river-centric thinking growing since it was built?					

7.2 Analysis

As an answer to the given question, it is evident from this chart, which is organized according to the question serial, that this project is functioning properly. It's been a good endeavor, providing a public space in the city for people to relax, walk, and hang out. After this occurs, everyone becomes motivated that good work can be done by everyone in society. They aspire to be included in the process of orienting the city to face the river.

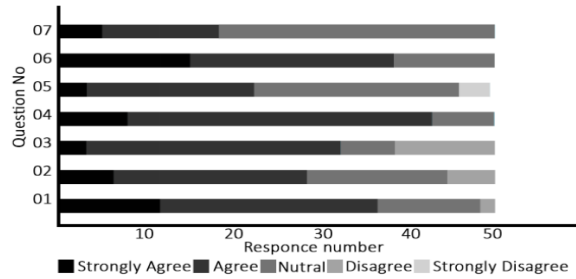


Figure 1 -A Comparative picture of opinion

8 Conclusion

The study demonstrates that riverfront development can improve a city's appearance and foster community cohesion from our nation's perspective. When every urban person can contribute to rural development from his point of view, things are lovely and available to everyone. I came here to work, and this place is where human knowledge is being given emotionally. People who live in cities are becoming more conscious of it. When the city's remaining portions are finished, they will serve as a model for the rest of the nation. If we can achieve this in our city and set an example, people from other regions of the country would say, "If Jhenaidah can do it, why can't we?" Kabir, H. (October 31, 2022). Finally, it can be said that in riverfront development, if you follow the process of this project without following it, it is fruitful.

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