



“Riverside infrastructure development in India from a cultural perspective and advocacy planning perspective.”

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ABSTRACT

The river played an important role in every civilization whether it is transportation or economy but in due course of time, the urbanization around the city is hampering the ecology and ecosystem of the river. The development of riverfront infrastructure in India has gained significant momentum in recent years, with numerous projects underway across the country. In recent times, there has been a renewed focus on the development of riverfronts as a means to address these challenges like revenue generation in the context of the city development and what type of development is suited for the city according to the need of the city.

The study's findings suggest that riverfront infrastructure development in India is primarily driven by the need to enhance the city's aesthetic appeal and create new spaces for recreation and tourism. However, these projects also face significant challenges, including the displacement of informal settlements, the high cost of implementation, and the lack of community participation in project planning and design. And at last, it does not justify the cost of development. The research analyses the challenges, opportunities, and potential of riverfront development in Indian cities. It aims to identify best practices and policy recommendations for sustainable riverfront infrastructure development.

Overall, this study highlights the need for a more nuanced understanding of riverfront infrastructure development in the Indian context according to the city's needs, which considers the various social, economic, and environmental factors that influence these projects' success.

KEYWORDS

River-front development, River centric Urban planning, Cultural aspect, advocacy planning process, Sustainability, Creating identity.

1. INTRODUCTION

There are majorly 8 river systems in India. Which further divide into 400 plus tributaries on that riverside, there are more than 97 plus cities located.

Throughout the ages, the river has played an important role in the development of civilization in every aspect, whether irrigation or transportation, whether its culture or necessity. Before the industrial age, it was majorly used for navigation, and transport, down the line in the mid-18th century, Industrialization was the major phase when the role of the river was more than navigation purposes.

Along with innovations in large-scale manufacturing and production and construction. The location along the river was preferred for industrialization setup. After industries were set up which then led to urbanization and as a result. Another major shift was noticed in the late 20th century when industries moved away from the rivers and got there set up in less dense settlements like suburbs and rural areas which led to increased public access to the river and a change of approach in the river-side development. In today's context, riverfront development is an opportunity for revenue generation it is viewed as a source of economic generation and cultural growth. It is majorly commerce and revenue driven.

In the Indian context, rivers are named after God's Which shows immense stature in our culture and our view of looking wherever. Philadelphia centers temples are located along the river however due to exponential growth in organization and influx of population which has increased the pressure on the river immensely has negative impacts on the health of the river. And it is evident enough that the health of the river is neglected if compared globally and the irony is that urbanization happens around the river, more the deterioration of the river.

And in today's context when we hear about riverfront development. We think about a very wellfinished concrete promenade and some green patches in between. It will be hot in the sun and pleasing to walk at night which has become a basic and standardized language of a river from development but from an ecological and livelihood perspective. The riverfront development is facing a heavy task to cater to the needs of local vs global vs future needs somewhere or the other the development tries to cater to all three aspects but to achieve that, we neglect some basic aspects like ecological impact, social impact, economical and livelihood impact which leads to the deterioration of that very natural feature on which the development of civilization was dependent.

In this paper, we will decode the development. With the help of the key issues in these developments, we will further highlight two missing links in the current planning and implementation process and the cultural impact of the development (public involvement) and proper regulating bodies that need to be strengthened and created for sustainable results. It concludes by solving the problem and giving proposals to structure the process of implementation and to bring people to the river and revitalize it.

2. Problems the new riverfront pose on the cultural aspect of the cities

In the past, the primary focus of development authorities was to enhance the socio-cultural fabric and infrastructure along riverfronts. These developments held significant religious importance due to the association of water bodies with Hindu rituals. Additionally, some rivers, known for their perennial flow and navigable nature, served as ports, leading to the development of riverfronts as trading centers. Examples of such development efforts can be seen in Haridwar and Banaras, where the emphasis was on providing and improving facilities for bathing, prayer, and other amenities. The relationship between various temples and their corresponding ghats served as a guiding principle for the design. Similarly, in port cities like Patna and Kolkata, the focus was on navigation and establishing the city as a potential hub for trade. Initially, riverfront development was undertaken in a fragmented manner, with a limited perspective on specific aspects.

When we see new riverfronts in India have brought about a significant transformation in the urban landscape of several cities. However, it has also raised concerns about the impact of these changes on the cultural aspect of these cities.

One major issue is the displacement of local communities and the loss of traditional cultural practices. The construction of new riverfronts often involves the acquisition of land and the demolition of existing structures, leading to the displacement of local communities. In many cases, these communities are closely tied to the river and have traditional cultural practices and beliefs associated with it. The loss of their homes and communities can result in the loss of these cultural practices, leading to a loss of cultural heritage.

Another problem is the commercialization of the riverfronts, which can lead to the commodification of culture. The development of new riverfronts often involves the construction of commercial spaces such as malls, hotels, and restaurants. While these developments may attract tourists and generate revenue, they can also lead to the commodification of local culture, reducing it to a marketable commodity rather than a living tradition.

Furthermore, the design of new riverfronts can sometimes clash with the existing cultural and historical identity of the city. In some cases, modern and Western-style designs are favored over traditional designs, which can erode the cultural identity of the city. (Bhargava, 2015) For example, the development of the Sabarmati riverfront in Ahmedabad has been criticized for its lack of connection to the city's cultural and historical heritage.

Lastly, the development of new riverfronts can also lead to environmental degradation, which can have a significant impact on the cultural practices associated with the river. (3) For example, the pollution of the Ganges River has resulted in a decline in the number of pilgrims visiting Varanasi, a significant cultural and religious center.

3. How can we boost public participation from a cultural perspective?

Public participation from a cultural perspective in contemporary riverfront development in India can be boosted through various means:

Involving local communities: The involvement of local communities in the planning and implementation of riverfront development projects is essential. Local communities possess valuable knowledge about the cultural heritage and traditions of the region, which can be used to preserve and promote the cultural aspect of the riverfront development. Moreover, it also ensures that the needs and aspirations of the local communities are taken into consideration.

Promoting cultural events: Cultural events such as music festivals, art exhibitions, and food festivals can be organized on the riverfront to attract people from different cultures and backgrounds. This not only promotes cultural exchange but also boosts the local economy.

Integrating cultural elements into design: Incorporating cultural elements such as traditional architecture, artworks, and sculptures into the design of the riverfront development can create a sense of cultural identity. For instance, the Sabarmati riverfront development in Ahmedabad, Gujarat, includes a statue of Mahatma Gandhi, who was born in the state

Educating people and Encouraging public art: Educating people about the cultural significance of the riverfront can increase their appreciation and participation. This can be done through guided tours, workshops, and seminars on the history and cultural heritage of the region. Encouraging local artists to create public art installations along the riverfront can be an effective way to promote cultural participation. This not only creates a sense of ownership but also makes the riverfront more visually appealing.

4. Urban planning approach

After discussing the framework of the execution, and strengthening the advocacy planning approach we concluded that the “development should reflect the needs of the people living around.”

After studying the whole frame of the social paradigm, we derive three Principles to achieve sustainable development.

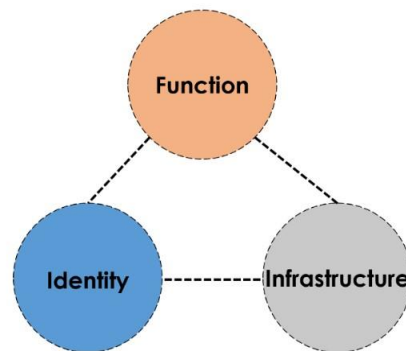


Fig 4.1 Principle for sustainable development

Taking three cases a riverside which, itself has a character. It can naturally occur or by man-made interventions.

So, take a case of a riverside that has a certain character settlement living around it.

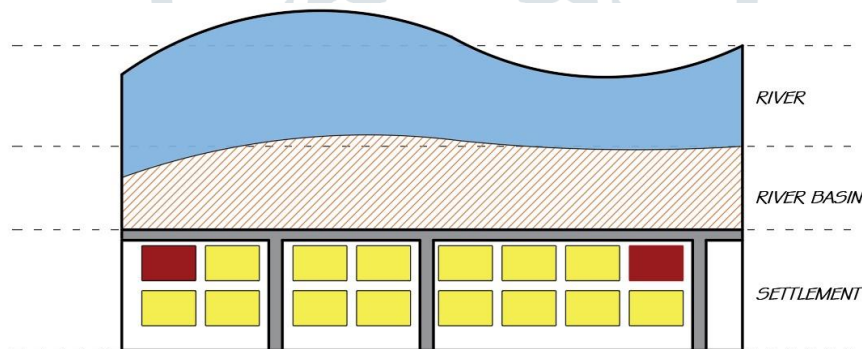


Fig 4.2 Schematic illustration showing the residential development

The first case is where we see majorly residential land use along the river basin. Which gives us the character for a residential-centric development on the riverside.

So, the suggested requirement for the development would be for the local crowd.

1) Playgrounds 2) Open-air gym 3) Yoga Area-Walking and cycling track 4) Open gathering place.

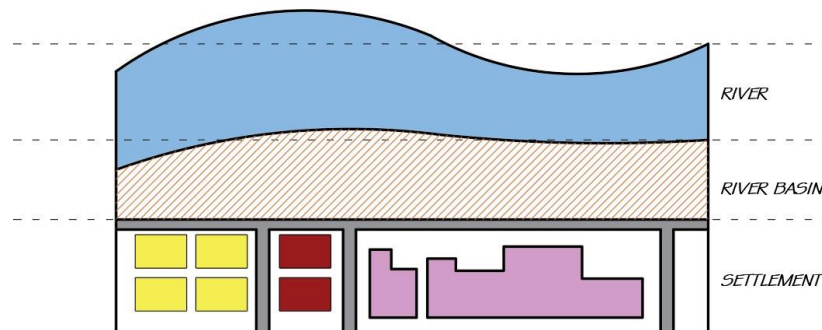


Fig 4.3 Schematic illustration showing the recreational development

Second Case, where there is a heritage site along the riverside. Which gives us the character for a history-centric development on the riverside.

So, the suggested requirement for the development would be by global standards i.e. developing as a tourist space

So, the suggested requirement for the development would be for the local crowd.

1) open exhibition spaces 2) Workshop areas for tourist involvement 3) Cultural convention ground

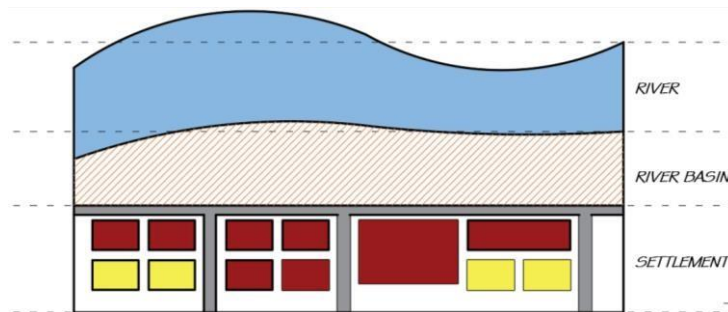


Fig 4.4 Schematic illustration showing the commercial development

Third Case, where we see majorly commercial development along the river basin. Which gives us the character for a commercial-centric development on the riverside.

So, the suggested requirement for the development would be to make it a commercial hub

So, the suggested requirement for the development would be for the local crowd.

1) eating spaces 2) vending spaces 3) a relaxing lush green environment which would also act as a counter to the heat by relaxing the microclimate of that area.

5. Contemporary planning procedure

Getting a grasp of how modern-day riverfront developments are planned out requires us to look back at India's top-down planning approach for development projects as a starting point. To finetune our understanding of this process we interviewed Central Development Authorities' government officials while studying national case studies too. Generally speaking, though this foundation model can be adjusted accordingly to accommodate different cases depending on their context or size.

At its core is a 'vision' which emerges from either political or economic motivations that set out parameters such as budget allocation which then determines its subsequent scale and scope before moving onto objectives setting along with developing strategies before finally preparing detailed reports about each aspect involved in executing the vision; such as data collection from private companies who're hired through tenders by CDAs.

This trend has emerged due to understaffing issues resulting from both quantity & quality shortcomings within city development bureaucracies. Major changes may have taken place when it comes to the tools and techniques employed in recent times, yet this has not led to skill improvement and therefore outsourcing continues to be an industry norm. A significant issue at hand is the disregard for important stakeholders like local populations and the River Basin Authority who have socio-cultural or ecological roots. This has created an imbalance where economic gains take precedence over other vital elements. The lack of direct communication loops between these stakeholders also results in losing valuable viewpoints.

6. problems implementation process in planning authorities

Lack of Public Participation: The lack of public participation in riverfront development projects is a significant problem in India. According to a study by the Indian Institute for Human Settlements (IIHS),

public participation is often limited or tokenistic, with the local community not adequately consulted during the planning process (11)

Inefficient Top-Down Approach: The top-down approach of planning authorities in India has been criticized for not considering the cultural and historical significance of the riverfront. According to a report by the World Bank, there is a need for more community engagement and participation in riverfront development projects (12).

Delay in Project Implementation: Delays in project implementation are common in riverfront development projects in India. According to a study by the Centre for Science and Environment (CSE), delays are often due to issues related to land acquisition, lack of funds, and clearance from various government agencies.

Limited Technical Expertise: Planning authorities in India often lack the technical expertise required for riverfront development projects. According to a National Institute of Urban Affairs (NIUA) report, this often leads to poor quality infrastructure and inadequate planning and design.

Environmental Concerns: Environmental concerns are a significant issue in riverfront development projects in India. According to a report by the Centre for Science and Environment (CSE), riverfront development projects often significantly impact the environment, including water quality, erosion, and biodiversity. However, planning authorities in India often fail to address these concerns adequately.

Lack of Coordination: Lack of coordination between different government agencies involved in riverfront development projects is another significant challenge. According to a study by the Indian Institute for Human Settlements (IIHS), there is a need for greater coordination between agencies to ensure efficient and effective project implementation.

7. Proposed procedure for development.

We traced three major points after getting a gist of the conventional planning procedure. That is a Lack of proper study and analysis of the context, inefficient supervision of the Apple authority, and public involvement. With a vision that would resonate with the needs of the beneficiaries and add cultural value to the city.

The planning procedure should be very sustainable and could sustain in any context. After setting up a vision for the riverside development. And for better efficiency, It will be divided into three phases. To maintain the flexibility of the process, it will be open for intervention according to the context.

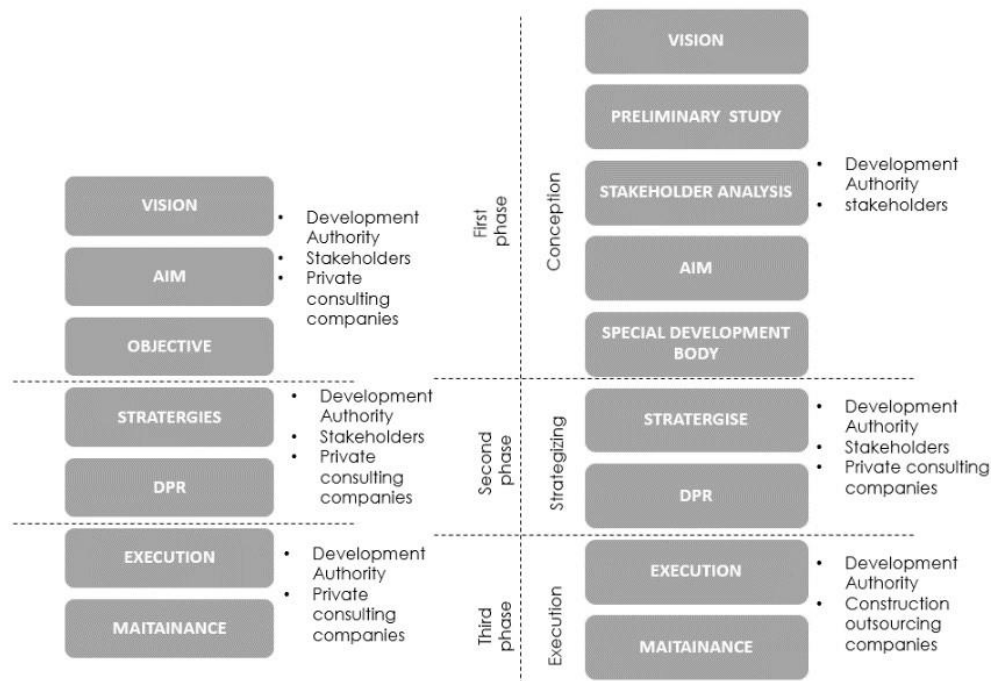


Fig 1.5 Schematic illustration comparing the conventional and proposed procedures.

The first phase (Conception)

The authority would conduct a proper survey and site analysis. The scope of the survey would have a social impact assessment, environmental impact assessment, and a proper site survey which would help us know the scale of the project needed. After that, the authority would mark the beneficiary and the stakeholders. The stakeholder should have the expertise to handle economic, social, and ecological. Then the authority would draw the line and mark the aim of the development. And to reach that aim there would be a formation of a regulatory body that would have at least 30% of the local representation, which will help to make the framework and the strategies good as ideal and practical as reality in the form of a proposal.

The second phase (Strategizing)

After the authority has made the framework then the proposal will be out for public review. The public review will be conducted by the development authority and would be chaired by any one of the Mayors, Magistrate /SDM/ADM, MLA, or the chief of the development authority. And it would be done a minimum of three times first for the proposal, second for the changes, and third one would finalize the development parallel with the DPR of the project. For public involvement, any family member above the age of 25 should participate in the review meeting.

The third phase (Execution and maintenance)

This phase of the development will start which is the implementation stage. The project would be out for tender by the regulatory body under the supervision of the development authority. Then at last that regulatory boy will also act as the matinee body for the development.

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