

REINVIGORATION: NAVIGATING CHANGE THROUGH SPATIAL INTERVENTIONS

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ABSTRACT

Rajshahi is renowned for its simplicity and heritage legends, making it a city rich in history. Its people's emotions are undoubtedly calmed by its serenity, even though it does not clash with the waves of Padma. There is an intriguing mix of residential, commercial, and institutional zones along the "Sonadighi to Uposhohor" spine, which is primarily inhabited by young people or students. The spine requires room so that its inhabitants can take a moment to unwind while going about their hectic daily lives. We made those areas by bringing people closer to the ocean so they might contemplate life. To let them know how important it is to slow down a little. Our intervention zones will provide a welcoming "Community-Centric Space" for people of all ages. From Sonadighi to Uposhohor, the strong and quick spine will find roots and connections. There will be a "public realm" of vitality and belonging for both the youthful energy of students and the serenity of elders in residential neighborhoods. The exchanges will create a more compassionate society and lessen the widening generational divide. The approach incorporates elements of green urbanism, such as pocket urbanism, pop-up urbanism, and guerilla urbanism. The intention was to build municipal squares and a green civic canvas. Through public involvement and green connectivity, the projects incorporate heritage structures. The projected "Somobay complex" will arrange the disorganized "Sonadighi" commercial zone, providing space for the unlicensed sellers on the pedestrian area and enhancing mixed-use development. In the future, every city in the globe that struggles with a lack of breathing places on the highways might employ this design as a reproducible model. The layout might serve as an illustration of a green buffer model. It will serve as an excellent illustration of how various urbanism strategies may be modified to include people of all ages and foster harmony.

Keywords: *Community-Centric Space, Green urbanism, Mixed use.*

1. INTRODUCTION

Rajshahi, which was formerly a place with serene rhythms, is progressively changing into a bustling metropolis impacted by industrialization. The fast-paced lifestyle brought about by urbanization, globalization, and technological innovation is gradually replacing the peacefulness that formerly defined the cityscape. This shift has many advantages, but it also poses challenges that threaten the fundamentals of our culture and civilization. Because of this, it is more crucial than ever to develop neighborhood-focused neighborhoods and interesting public areas that guarantee that inhabitants' feeling of identification and belonging persists even as the city changes. (Alam et al., 2025) (Amin, 2018)

We have decided to carry out our inquiry along the dynamic spine that extends from Rajshahi's "Sonadighi" node to "Uposhohor." This particular portion presents a fascinating sequence of urban transformations that emphasize the city's complexity. Beginning with Sonadighi, the area is obviously mixed-use. The node, which includes commercial establishments including hotels, eateries, and retail stores, is a busy region that represents the city's growing economic activity. However, as we move along the spine toward Malopara and Mohila College, the urban fabric begins to drastically change. Here, the typology becomes an institutional zone and is inhabited by coaching centers, colleges, and educational facilities. The bulk of users in this group are young students, which reflects Rajshahi's dynamic and shifting youth demographic. (Sajid Bin, 2025)

As it gets near to Nogor Bhaban, the spine changes once more, returning to its commercial-civic metropolitan tone. The formal, businesslike cadence of the spine is restored by corporate offices, administrative structures, and the Nogor Bhaban itself. Ultimately, the spine relaxes into a residential pattern as we pass Dorikhorbona and approach Uposhohor. This area contrasts sharply with the previous zones, which were marked by private homes, community-based living, and quieter streets.

This trip demonstrates how Rajshahi's urban fabric is marked by sudden and rapid transitions between different land-use typologies, including as residential, institutional, and commercial. There is limited chance for social or spatial continuity because these changes are sudden rather than gradual. The residents, employees, and students that live in this corridor frequently don't communicate with one another because there aren't any common areas where they can do so. Without an inclusive public sphere, the city's capacity for social cohesiveness and community vibrancy is reduced.

Thus, our design objective was born out of a straightforward yet significant question: How can we re-establish the spirit of collaborative urban life and unite these divided zones? The project's objective is to create a network of interactive public nodes and pocket spaces that span these transitions: places where locals can engage with one another, students may unwind and gather, and bystanders can pause and make a connection. With these initiatives, we hope to provide a sense of continuity that will enable meaningful interactions between various user groups and changing age demographics.

This initiative aims to revitalize Rajshahi's social and cultural core in addition to its physical design. As we pursue modern achievement and technological growth, we often lose sight of our roots in the stories, laughter, and shared experiences that once defined community life. Our strategy aims to bring that comfort back to the evolving urban landscape of the city. By creating inclusive, human-scaled environments, we hope to remind individuals of our society's identity, how we got here, and the significance of preserving it despite modernization.

However, the layout of these locations is not the only challenge. As Rajshahi develops and adapts to accommodate new requirements, the treatments themselves must be flexible and adaptive. The goal is to develop a framework that can grow with the city, ensuring that the feeling of community and connectedness will persist as the urban perimeter expands and new construction takes place. In Rajshahi's evolving terrain, the project's ultimate purpose is to build a living social infrastructure rather than merely a collection of physical spaces that promotes relationships, respects culture, and finds a balance between progress and humanity.

2. METHODOLOGY

The project's urban methodology employs a methodical, systematic approach to develop successful solutions for Rajshahi's Sonadighi to Uposhohor spine. The first step is to choose the study region, after which important urban themes are found and described. In order to inform design strategies, the following step entails studying pertinent literature and precedents. The identification of issues and mapping of opportunities are guided by a thorough examination of the current context, which includes environmental, sociocultural, and physical elements. The technique ends with design development and implementation, whereas the visioning phase develops concepts to address difficulties that have been discovered. Land use mapping identifies built–unbuilt distribution, density patterns, and functional zoning along the primary development corridor.

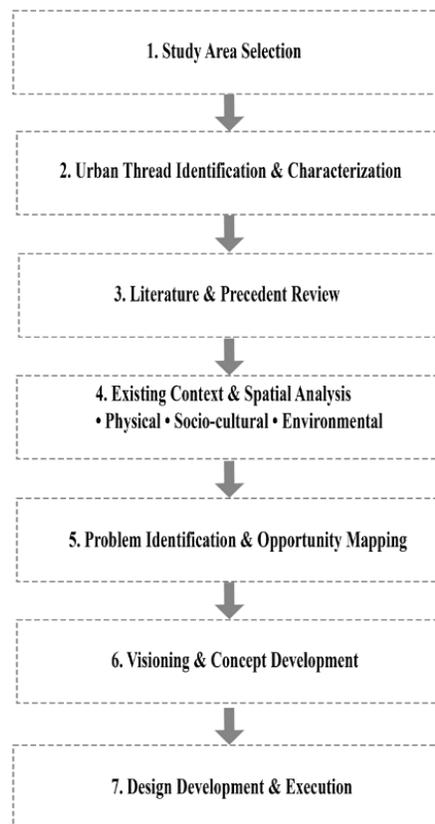


Figure 1: Methodology Diagram

3. SITE SELECTION

The proposed master plan for the urban realm that stretches from Sonadighi to Uposhohor presents a revolutionary approach to Rajshahi's urban expansion, based on the concepts of people-centric urbanism, transit-oriented development, and context-responsive placemaking. This corridor acts as a dynamic link between the old urban core and the developing residential fabric, making it an ideal location to explore the possibilities of connectivity, accessibility, and sustainable urban living. This site was selected because of its convenient urban location, the availability of underutilized land, and its adaptability to accommodate a variety of modes of mobility, including vehicles, pedestrians, and public transportation. By focusing on this area, the effort aims to revitalize abandoned urban margins and transform them into hospitable, vibrant, multipurpose public spaces that promote community engagement.

Through careful spatial planning and design intervention, the proposal seeks to strengthen social and environmental resilience, promote mixed-use development, and reorient the current urban pattern towards

public usage in order to ensure a balanced relationship between mobility, liveability, and identity within the developing city of Rajshahi.

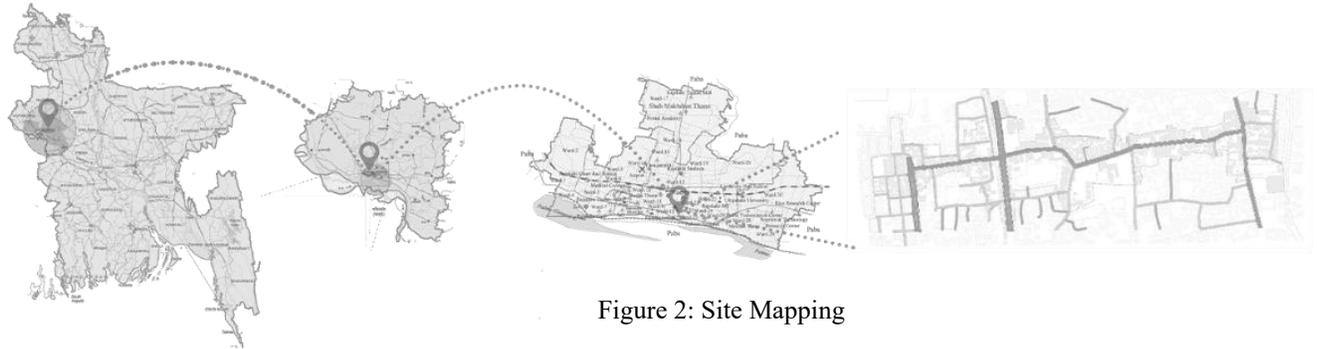


Figure 2: Site Mapping

4. EXISTING SITE ANALYSIS

4.1 Site Vision

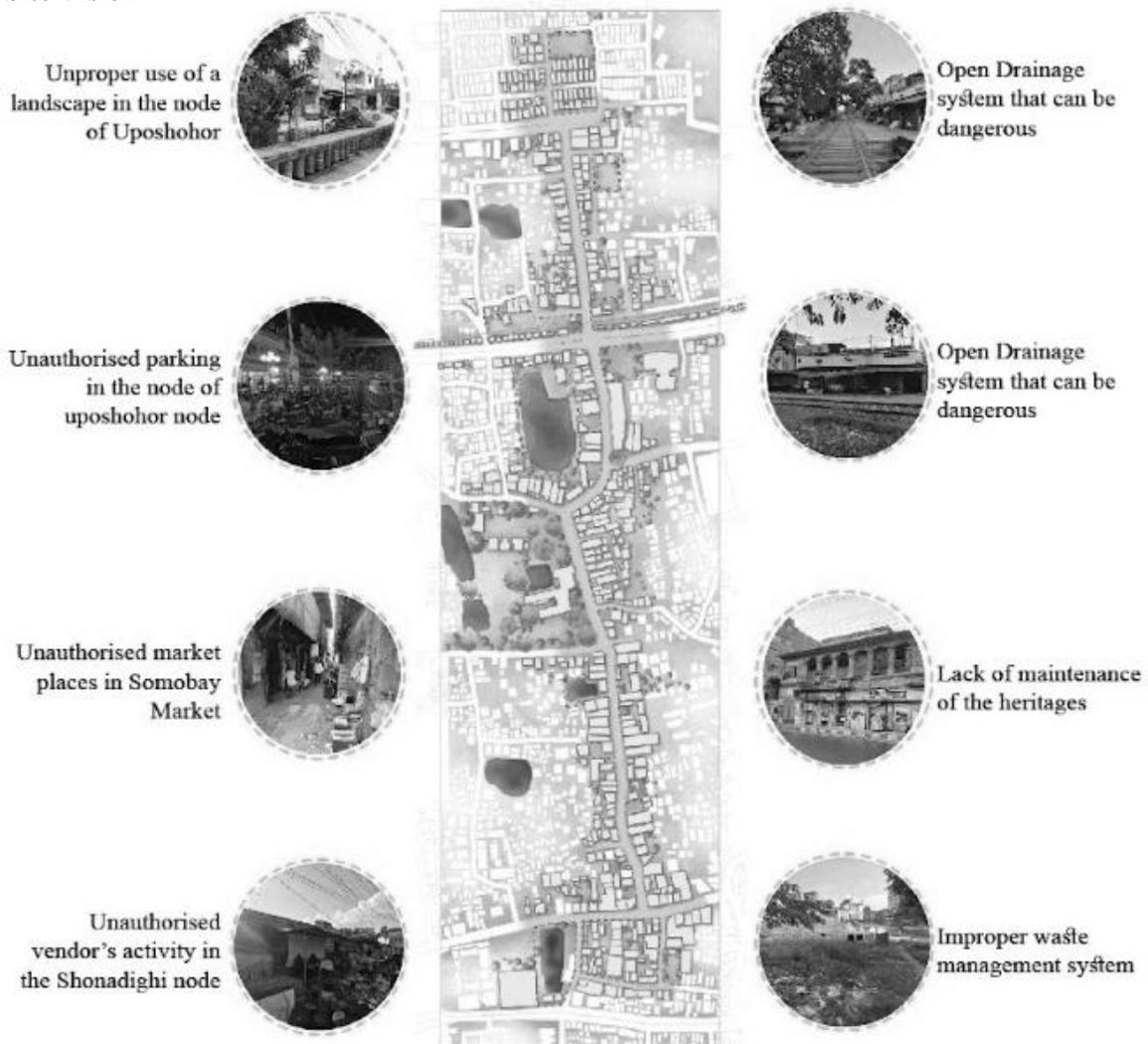


Figure 3: Existing Plan

4.2 Existing Context

A significant residential and institutional entryway to Uposhohor Mor, a historical and cultural hub close to the Rajshahi city center. The planned neighborhood of Uposhohor, which was created as a government residential zone in the 1960s, and the historic commercial fabric of Rajshahi city are connected by this corridor (Climate-Resilient-City-Action-Plan-Rajshahi-Report_compressed_compressed.Pdf, n.d.). The area between Sonadighi and Uposhohor Mor is a transitional urban segment that links the organized, grid-based residential zones of Uposhohor with the dense, naturally evolved old city fabric. In addition to serving as a vital route for transportation, this corridor serves as a socioeconomic interface where residential neighborhoods, educational institutions, and traditional marketplaces come together.

4.2.1 Land use pattern

The corridor's land use is diverse, transitioning from commercial and mixed-use operations close to Sonadighi to primarily residential and institutional uses as it approaches Uposhohor Mor.

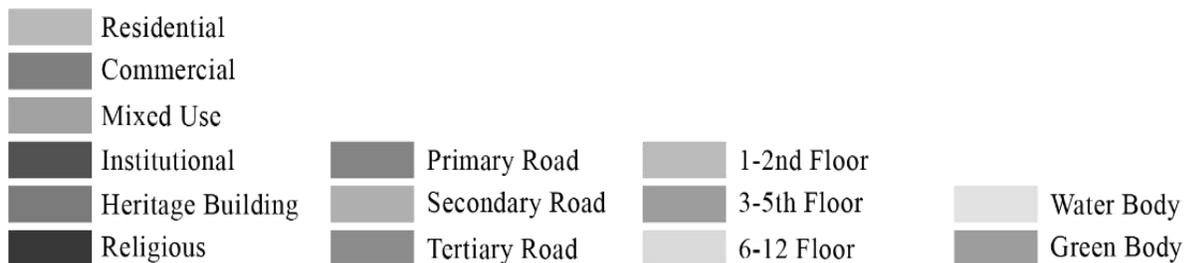
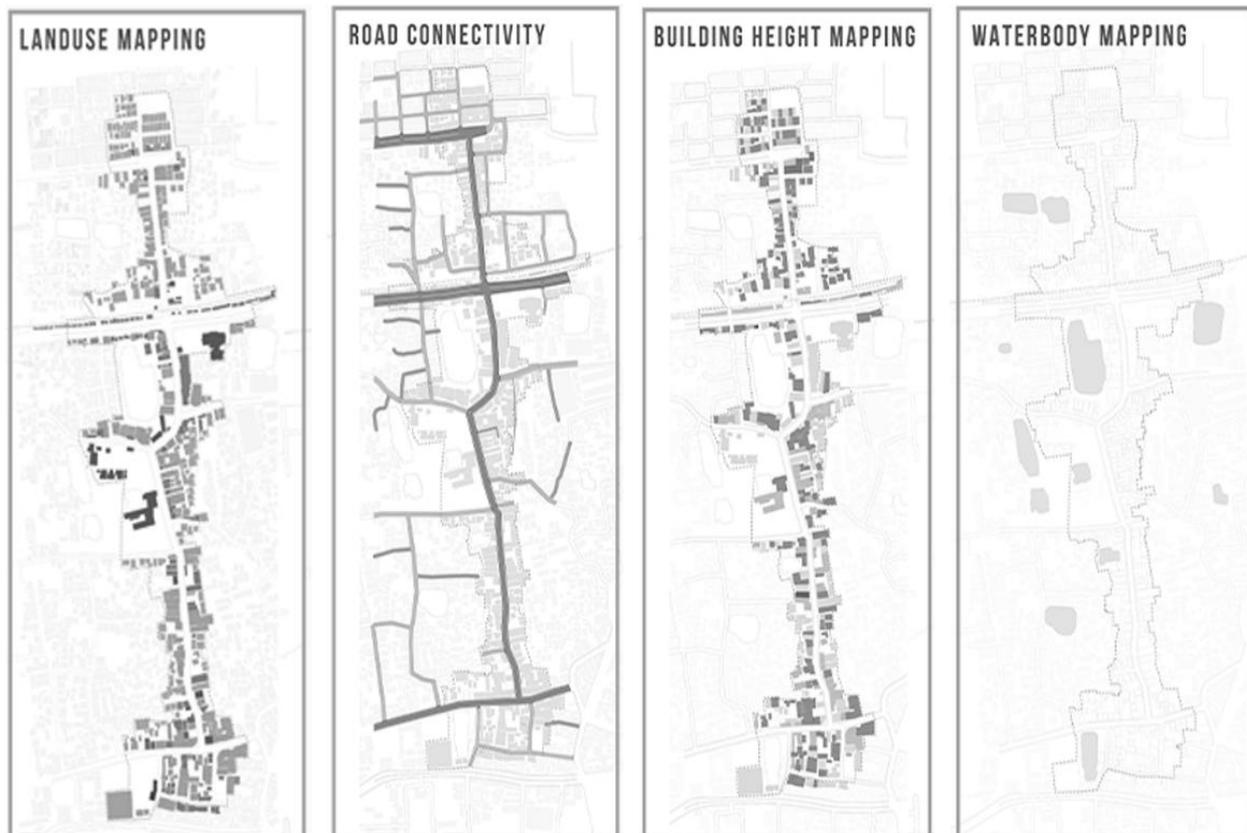


Figure 4: Land Use Diagrams

4.2.2 Spatial analysis

Building typologies change with time. In Sonadighi, mixed-use buildings with three to five stories occupy narrow plots. The plots get bigger and more regular as they approach Uposhohor, with well-planned buffers and green areas. Near Uposhohor, building heights drop to two or three floors, suggesting a suburban feel. The move from the dense historical core to a planned residential suburb is represented by this physical alteration. (Whitehandet al., 2009)

The site exhibits a mixed-use urban fabric, with commercial frontages dominating the main road sides and residential neighborhoods behind them. Uneven construction margins and sizes may arise from unplanned changes in land usage. Key activity centers that generate substantial pedestrian and vehicular intensity but lack coordinated spatial structure include markets, intersections, and institutional clusters.

The overall spatial layout is linear along important corridors, with unauthorized extensions into streets and public spaces. As a result, there are more traffic conflicts between vehicles, vendors, and pedestrians, as well as less clear zone hierarchy and visual coherence. Frontage activities need to be reorganized and zoning clarity needs to be improved in order to create a more readable and practical spatial structure.

4.3 Node-specific problems: Sonadighi to Uposhohor Mor corridor

4.3.1 Sonadighir Mor

Public realm quality and urban identity are clearly declining in Sonadighir Mor, especially along heritage borders like the Sonadighi pond. This historically significant node's character has been undermined by poor streetscape articulation, a lack of buffer areas, and unplanned commercial growth. Inadequate pedestrian infrastructure, a lack of authorized parking zones, and a poor road hierarchy all contribute to the area's circulation inefficiencies, which cause traffic jams and pedestrian-vehicle conflicts. Important indicators include neglected historical artifacts, subpar aesthetics, minimal ground floor participation and frequent obstructions in public areas. The primary objectives of this node are to improve public areas, preserve cultural heritage, incorporate buffers, and improve car and pedestrian organization through parking and hierarchy reorganization.



Figure 5: Visualization of Sonadighir Mor

4.3.2 Hetemkha Mor

Due to the high level of economic activity in Hetemkha Mor, traffic and pedestrian flow are severely strained. The cityscape is extremely crowded, with motorbike parking and unofficial vending encroaching on footpaths, reducing functional width (average 1.1 m) and impairing pedestrian movement. Frequent pedestrian-vehicle conflict spots and persistent congestion are caused by inadequate traffic control and a lack of allocated parking. With an average of 22 encroachments and 18 vendors per 100 meters, around 68% of pedestrian walkways are still blocked, greatly reducing accessibility and walkability. A breakdown in pedestrian harmony and overall node identity results from the public realm's unclear hierarchy and disorganized edge definition.



Figure 6: Visualization of Hetemkha Mor

4.3.3 Newmarket Mor

Due to poor edge delineation and uncontrolled vehicle movement, the corridor experiences traffic disorder. Road capacity is decreased by haphazard on-street parking, which results in low peak traffic speeds (10–18 km/h). The lack of pedestrian crossings (less than one per 500 meters) and the presence of unofficial stops (four to six per 500 meters) further impede traffic flow. Congestion is exacerbated by improper signalization. To restore circulation efficiency, the region needs better traffic control, parking management, and clear spatial arrangement.



Figure 7 : Visualization of Newmarket

4.3.4 Nagar Bhaban Mor

The Sonadighi to Uposhohor Mor portion of Rajshahi has serious urban problems with transit, zoning, and drainage. While unregulated vehicle movement, inactive traffic signals, and spatial invasion reduce transportation efficiency, inadequate drainage connections can occasionally cause sidewalk waterlogging that impacts pedestrians. Cities are now less livable generally due to zoning misuse, which has also decreased vegetation, shade, and rest areas. Initiatives to solve these issues include rerouting traffic, improving signal synchronization, putting anti-encroachment measures in place, updating drainage systems, and introducing additional greenery and public seating. Important variables influencing these issues include the amount and variety of traffic, the size of the roads and drains, the frequency of collisions and impediments, and the density of commercial activity in residential neighborhoods.



Figure 8 : Visualization of Nagar Bhaban

4.3.5 Uposhohor Mor

With little greenery, underutilized urban edges, and squandered corner areas, Uposhohor Mor demonstrates a blatant disregard for urban green potential. Only 8% of this area is covered by the current vegetation due to inadequate and inconsistent upkeep. Strategies to close these gaps include moving street vendors to make place for new pedestrian paths, planting vegetation in vacant locations, and establishing more green spaces. Converting abandoned urban corners and edges into useful green spaces is one of the goals, which will enhance the area's general environmental quality and public use. With only 8% green cover and wasted edges and corners, Uposhohor Mor in Rajshahi exhibits blatant disregard for green potential. Street merchants restrict pedestrian space and the planting of plants, and maintenance is sporadic. Relocating vendors, planting plants in underutilized spaces, and growing green spaces—all of which can improve public space and aid in addressing climate and waterlogging issues—are necessary to improve these situations.



Figure 9 : Visualization of Uposhohor Mor

5. PROPOSED SOLUTION

5.1 Solution according to zones

Sonadighi to Malopara solution of commercial zone

- Strengthens cultural identity and heritage value;
- Develops a modern, walkable, and community-friendly commercial hub;
- Increases local economy, tourism, and small business prospects;
- Links traditional commerce with modern retail needs

Malopara to Nagar Bhaban solution of educational zone

- Create a safe, student-friendly educational corridor
- Introduce dedicated pedestrian lanes and cycle lanes for smooth student movement
- Provide cycle parking, student resting spots and shaded seating areas along the route
- Add guardian waiting/resting zones near schools and coaching centers
- Install zebra crossings and improve traffic safety at key junctions
- Relocate informal vendors to reduce road blockage and maintain organized circulation
- Revive nearby water bodies and add green pockets for environmental improvement

Nagar Bhaban to Uposhohor Solution of Residential Zone

- Revive the Local Kacha Bazar to ensure fresh daily needs for residents within walking distance
- Create a night-use turf/mini sports ground so office-going people can play and relax after work
- Organize and redesign the existing Uposhohor mor landscape with seating, lighting, greenery, and child-friendly zones
- Establish a community node at Nagar Bhaban a transition to connect residential and commercial movement
- Improve street lighting, shaded walkways, and safe pedestrian paths for children and elderly people
- Add pocket parks, benches, and community sitting areas in open spaces to increase connectivity.

5.3 Rethinking Somobay Market

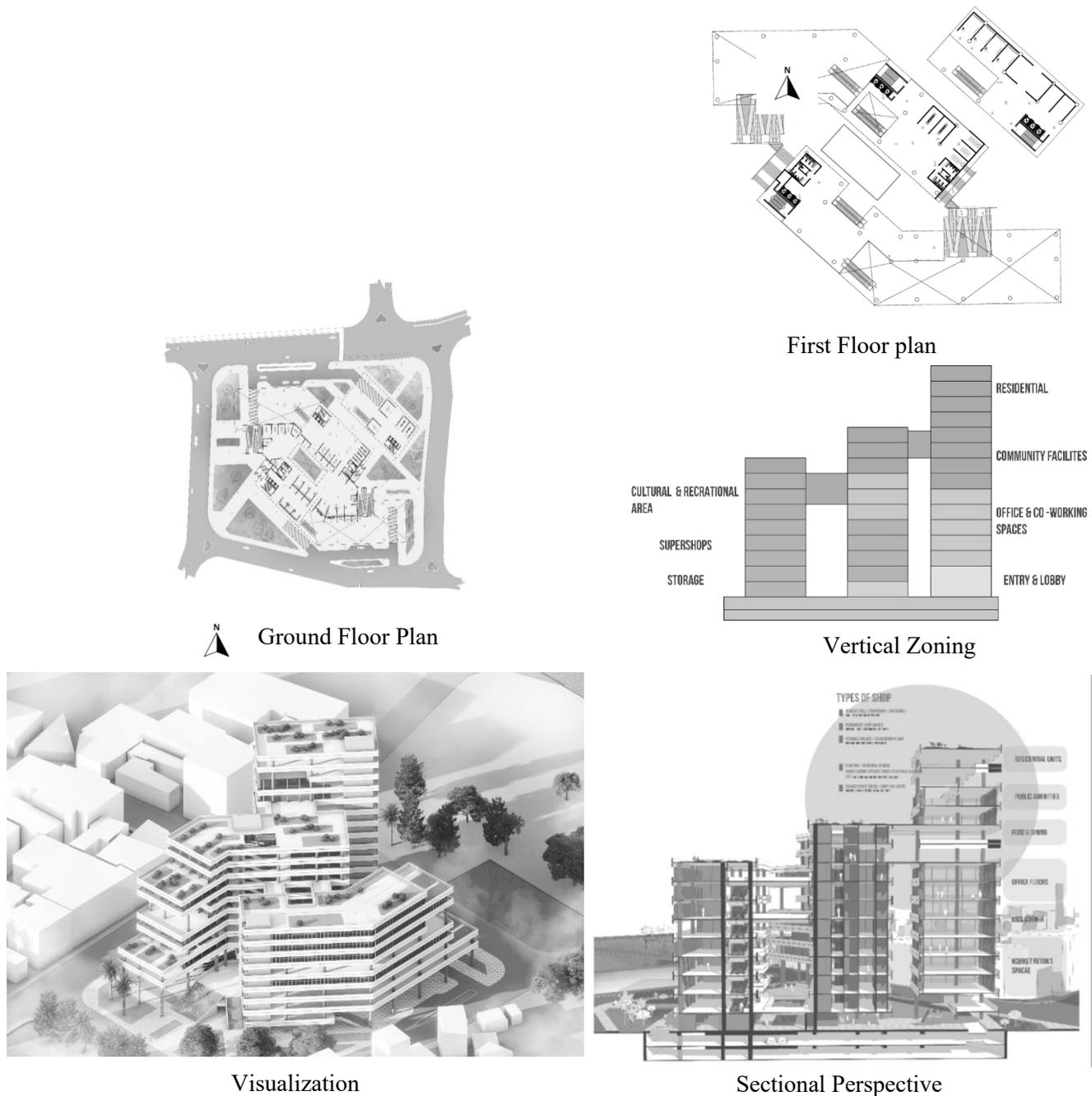


Figure 11: Rethinking Somobay Market

By constructing a dynamic, dynamic vertical landmark, it reverses the decline of the public sphere. In addition to providing essential rest areas and thermal comfort, lower-level Market/Retail and Public Amenities improve the streetscape. Most importantly, the mixed-use stacking creates a distinct circulation hierarchy by formalizing parking and centralizing activities. This guarantees zoning compliance and resolves informal development difficulties. The node becomes a safe, robust, and vibrant mixed-use ecosystem as a result of the enhanced spatial quality.

6.RESULT & DISCUSSION

6.1Result

The concept effectively creates an urban corridor that connects the residential, commercial, and educational zones into a unified, uninterrupted system.

As a result, riding and walking grew safer and more comfortable, especially for locals and students.

- The residential neighborhood acquired daily service access, recreational areas, and better public surroundings; commercial activities became organized and culturally alive, supporting small vendors, local companies, and heritage value.
- Community-focused areas like turfs, rest areas, vending pockets, and cultural nodes boosted social interaction and public participation; revitalized water bodies, shaded green areas, and public seating produced a climate-responsive and people-friendly ambiance.

All things considered, the idea creates a human-centered, walkable, and multipurpose urban setting where everyday activities like living, learning, commerce, and recreation coexist peacefully.

6.2 Discussion

The integration of the three zones demonstrates that social and functional linkages are just as vital as physical ones.

- In the Educational Zone, there was less conflict between students, vehicles, and roadside activities thanks to the installation of bike lanes, shaded walks, rest areas, and vendor relocation.
- In the Commercial Zone, the revitalization of Sonadighi and the organization of Somobay Market enhanced the local economy, heritage identity, and walkability.
- Upgrades including turf, landscaped nodes, and the revitalization of the Kacha Bazaar improved lifestyle, evening activities, and safety in the Residential Zone.

The fact that each zone helps the other is the greatest accomplishment:

- Workers have access to commercial services and recreational areas; students have safe access to homes and marketplaces.
- There is no traffic or lengthy commute for residents to access commercial and educational establishments.

7.CONCLUSION:

The development of Rajshahi's Sonadighi–Uposhohor spine provides a significant window into the evolving urban dynamics of Bangladesh's secondary cities. As urban areas continue to grow due to internal migration and globalization, the lack of transitional continuity between residential, institutional, and commercial zones poses significant challenges to social interaction, mobility, and the overall level of living. The absence of well-defined public areas throughout this corridor has led to a fragmented urban experience, where residents live close to one another but rarely establish deep connections.

Our design study and action sought to solve these disjunctions by introducing inclusive public domains and community-driven nodes. By including pedestrian-friendly zones, shaded rest places, and small-scale urban pockets, the plan seeks to close the gaps in contact between users of various ages and socioeconomic backgrounds. In addition to serving as practical utilities, these spatial insertions foster spontaneous connection within the communal fabric and strengthen social cohesiveness.

A conscious effort to achieve a balance between the human experience and urban efficiency is also demonstrated by the application of context-sensitive design principles, such as the formalization and relocation of street vendors, the reorganization of traffic patterns, and the emphasis on pedestrian comfort. This equilibrium is crucial in a city like Rajshahi, where sustained urban expansion depends on striking a careful balance between rapid modernization and social preservation.

The results of the study indicate that encouraging connectedness between different urban typologies, such as residential, institutional, and commercial zones, can significantly enhance a city's socio-spatial integrity.

Additionally, integrating cultural memory and community identity into modern urban frameworks ensures that Rajshahi's soul remains rooted in its local context even as it grows into an intelligent and interconnected metropolis.

In summary, the Sonadighi–Uposhohor spine concept is a social and cultural reconstruction of the urban landscape rather than just a spatial or physical reaction. It shows how deliberate, human-scaled design can close the gaps left by fast urbanization, revitalize community engagement, and help create a city that is more resilient, sustainable, and inclusive. Such interventions will continue to be crucial as Rajshahi continues to change over the ensuing decades to make sure that development does not destroy identity but rather strengthens it through design that honors both people and place.

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