

Report on

SITE VISIT AT COMMUNITY CENTER, SECTOR 15, FARIDABAD.

Date: Thursday, 03rd October 2024

Venue: Community Center , Sector 15, Faridabad.

Event Type: Site Visit

Mode of Activity: Offline

Target Group: 2nd year Students of B.Arch

Coordinators: Ar. Praveen Gupta , Associate Professor, SOAD.

Organized by: School of School of Architecture and Design

Number of Participants: 11

I. Introduction

Vernacular architecture, with its rich composition of local wisdom, serves as a bridge between the past and the present, where tradition meets contemporary innovation. As architects, our design approach for the community center in Faridabad seeks to honour this relationship by integrating vernacular elements with modern functionality. The site for this project, located in Faridabad, presents an opportunity to craft a space deeply rooted in the cultural and environmental context of the region. By utilizing indigenous materials, traditional construction techniques, and climate-responsive strategies, the design aims to create a meaningful dialogue between architecture and the community it serves.

The report presents a detailed exploration of the design process, informed by local vernacular practices observed during the site visit and subsequent study. The focus of this architectural investigation is the Faridabad community center, a space that balances the cultural heritage of the region with contemporary design sensibilities.

II. Objectives

The primary objectives of the community center design are as follows:

1. **Cultural Preservation and Integration:** To celebrate and preserve the local cultural identity of Faridabad through the integration of vernacular architectural elements, ensuring the center resonates with the community's heritage.

2. **Sustainability and Environmental Sensitivity:** To create an environmentally sensitive and energy-efficient community center by incorporating locally sourced materials and sustainable construction techniques.
3. **Local Materials and Construction Techniques:** To engage with the indigenous materials available in the region, promoting the use of sustainable, contextually relevant materials and traditional construction methods that align with the local climate and ecological conditions.

III. Description of Activities

1. **Site Visit and Observations:** The architectural site visit to Faridabad was a pivotal moment in the design process, offering direct insights into the materials, construction techniques, and spatial configurations that define the region's vernacular architecture. This immersive experience allowed for a deep understanding of the local building traditions, such as the use of local clay, brick, stone, and timber. Observations on the orientation of buildings and their relationship to the environment provided essential knowledge for crafting an energy-efficient and context-sensitive design.
2. **Literature Study:** To complement the site visit, a thorough literature study was undertaken, focusing on the vernacular architecture of Faridabad and surrounding regions. This research explored the history of local construction practices, material availability, and the evolution of regional architectural styles. The findings from this study helped inform design choices and ensured that the community center would honor the architectural legacy of Faridabad.
3. **Case Study:** The design of the community center was informed by a case study of local vernacular architecture in Faridabad. The case study focused on examining how traditional construction techniques—such as load-bearing brick walls, sloping roofs, and courtyards—respond to the region's hot and semi-arid climate. It also explored how these elements are integral to creating a sense of community and providing spaces that encourage social interaction.

IV. Methodology

The design methodology for the Faridabad community center was structured as follows:

1. **Group Case Study:** The team conducted a collaborative case study of a vernacular community center within the region, focusing on understanding key design elements such as

the use of local materials, building orientation, roof structures, and climatic responsiveness. This group study helped in understanding the spatial qualities that make such centers successful in their social and cultural functions.

2. **Individual Case Study:** Each team member independently analyzed different community centers in Faridabad, with a specific focus on the use of local materials, craftsmanship, roof forms, and their overall sustainability. This approach allowed for a more nuanced understanding of the region's vernacular architecture and how these elements could be adapted to the design of the new community center.

V. Design Process

The design of the community center was rooted in the principles of vernacular architecture, emphasizing the use of local materials and traditional construction techniques to create a building that is both sustainable and contextually relevant.



Figure 1: Community Center, Sector 15, Faridabad

1. **Site Description:** The project site covers 12,744 square meters, offering a generous space for the community center. The site is located in Faridabad, which has a hot and semi-arid climate. The design considers factors such as orientation, wind direction, and sun exposure to ensure that the building is energy-efficient and comfortable for its users.

2. **Program Requirements:** The community center program was carefully developed to meet the needs of the local population. It includes two meeting halls, a library, a principal's office, reception areas, sitting spaces, a kitchen/pantry, washrooms, parking, and outdoor spaces. Each programmatic element was designed to foster community engagement and provide essential services.
3. **Concept Development:** The design concept is grounded in the celebration of Faridabad's vernacular architecture. Key elements such as courtyards, sloped roofs, and the use of natural materials like brick and stone were explored to create a design that is not only functional but also resonates with the local cultural and architectural context. Traditional building forms were reinterpreted to meet contemporary needs while ensuring a strong connection to the region's architectural heritage.
4. **Schematic Designs:** Various schematic designs were developed to explore different spatial arrangements, forms, and material combinations. Each iteration considered the relationship between interior and exterior spaces, ensuring that the building facilitates community interaction. The design also focused on achieving a balance between private and public spaces, creating areas for both communal activities and quiet reflection.
5. **Regulatory Compliance:** The design adheres to local building permits and byelaws, ensuring compliance with safety, accessibility, and environmental standards. Special attention was given to the vernacular theme while ensuring that the design met regulatory requirements for structural integrity and functionality.

VI. Key Findings

The case study of Faridabad's vernacular architecture yielded several key insights that shaped the design of the community center:

1. **Community Center Planning:** Effective planning was essential to ensure that the community center would meet the diverse needs of Faridabad's residents. The center was designed to be a hub for social, educational, and cultural activities. The inclusion of large, flexible meeting spaces and a library addressed the community's need for gathering areas and educational resources.
2. **Climate-Responsive Design:** The orientation of the building was strategically planned to reduce heat gain from the sun. The use of sloped roofs, deep overhangs, and courtyards allows for natural ventilation, shading, and passive cooling. These elements,

derived from traditional building practices, help create a comfortable and energy-efficient environment.

3. **Material Integration and Craftsmanship:** Local materials such as brick, clay, and stone were integral to the design. The use of these materials not only ensures sustainability but also maintains the cultural identity of Faridabad. The involvement of local craftsmen in the construction process ensures the preservation of traditional skills and supports the

local economy.

Figure 2: Students at Community Center



Figure 3: Students at Community Center

4. **Sustainable Design Strategies:** The design incorporates both passive and active sustainability strategies. Passive strategies include natural ventilation, daylighting, and the use of thermal mass to regulate temperature. Active strategies, such as rainwater harvesting and solar panels, contribute to the building's energy efficiency and reduce its ecological footprint.

VII. Analysis and Interpretation

1. **Community Needs Assessment:** During the site visit and discussions with local residents, it became evident that there was a significant gap in communal spaces and educational facilities. The absence of a dedicated meeting hall and library highlighted the need for a space that could serve as a cultural and educational hub.

2. **Strengths of the Design:** The design addresses these gaps by incorporating multifunctional spaces that foster social interaction, learning, and cultural exchange. The

inclusion of meeting halls and a library ensures that the center serves as a resource for the entire community, providing both educational opportunities and spaces for social cohesion.

3. **Community Empowerment:** By providing a central space for gatherings, events, and educational activities, the community center empowers local residents and fosters a sense of belonging. The design is intended to serve as a catalyst for social and cultural development, offering a space that adapts to the evolving needs of the community.

4. **Sustainability and Vernacular Architecture:** The integration of vernacular architecture and sustainability principles ensures that the building is both environmentally and culturally responsive. The use of local materials and traditional construction