

Adaptive Reuse Across Typologies: Civic, Educational, and Domestic Colonial Heritage in India

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ABSTRACT

India's architectural heritage extends beyond monuments to include civic institutions, educational structures, and domestic dwellings. Many of these buildings, products of colonial encounters and vernacular ingenuity, are threatened by neglect and rapid urbanization. Adaptive reuse offers a design-led strategy to conserve these structures while embedding them with contemporary value. This paper examines three case studies across different typologies: the Ahmedabad Municipal Corporation (AMC) Building as a civic landmark, Shaala No. 4 in Jamalpur as an educational building now undergoing conversion into a boutique hotel, and the Rodrigues Home Stay in Goa as a Goan-Portuguese villa reimaged as a domestic hospitality enterprise. By situating these examples within global and Indian adaptive reuse discourse, the paper highlights how typology influences reuse potential, structural strategies, and socio-economic outcomes. Comparative analysis demonstrates that civic heritage embodies collective memory, educational heritage adapts to tourism economies, and domestic heritage negotiates authenticity within hospitality. Together, these sites illustrate adaptive reuse as a culturally embedded, economically viable, and environmentally sustainable practice for Indian heritage..

Keywords: adaptive reuse, India, heritage architecture, civic buildings, educational heritage, Goan-Portuguese domestic, conservation.

1.0 INTRODUCTION

India's built heritage is layered, plural, and deeply tied to lived experience. While scholarship often privileges temples, forts, and palaces, the everyday architecture of governance, education, and domesticity equally shapes collective identity. Civic institutions recall democratic participation, schools echo social reform, and hybrid dwellings narrate cultural encounters. Yet many of these structures today face obsolescence, abandonment, or insensitive redevelopment.

Adaptive reuse provides an alternative to demolition or static preservation. By reprogramming buildings for contemporary needs, adaptive reuse retains embodied energy and cultural meaning while creating new economic value. In India, this practice is still emergent, yet urgent given the pressures of urban growth and heritage tourism.

This paper proposes a typology-based comparative approach. Three case studies are examined:

- **AMC Building (Ahmedabad, 1885):** A limestone civic structure with semi-circular and segmental arches, partly underutilized today.
- **Shaala No. 4 (Ahmedabad, 1861–1939):** A Grade II-A listed girls' school, now being adapted into a boutique hotel.
- **Rodrigues Home Stay (Goa, 1880s):** A Goan-Portuguese villa with a *balcão* and tiled hip roof, currently operating as a heritage homestay.

The sites are geographically situated in Ahmedabad and Goa (Fig. 1) and contextualized within adaptive reuse discourse milestones (Fig. 2). Each case is documented through photographs, architectural drawings, and reuse concepts, followed by a comparative framework.

By analyzing reuse across civic, educational, and domestic typologies, the paper demonstrates how adaptive reuse in India is not a singular strategy but a spectrum of cultural negotiations.

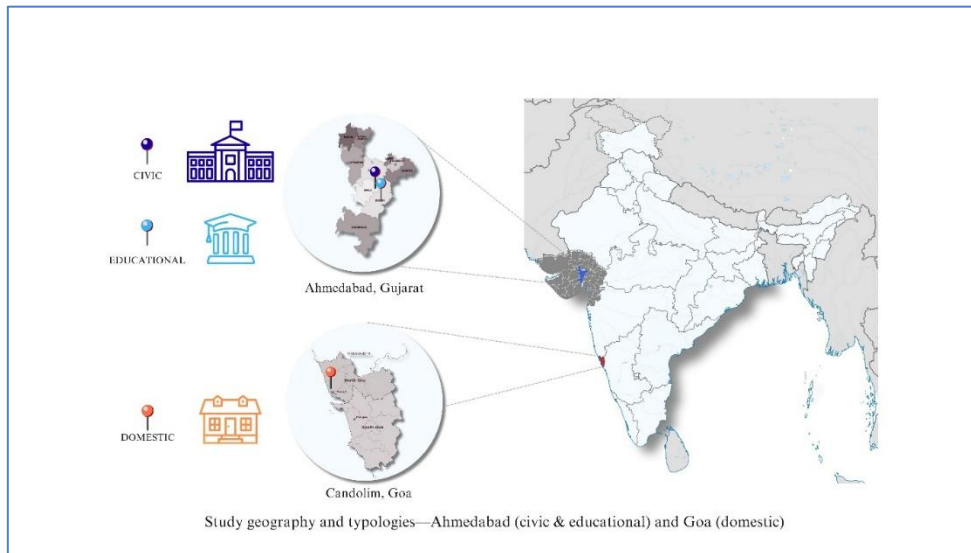


Fig. 1. India map highlighting Ahmedabad and Goa, situating the three case studies across civic, educational, and domestic typologies.

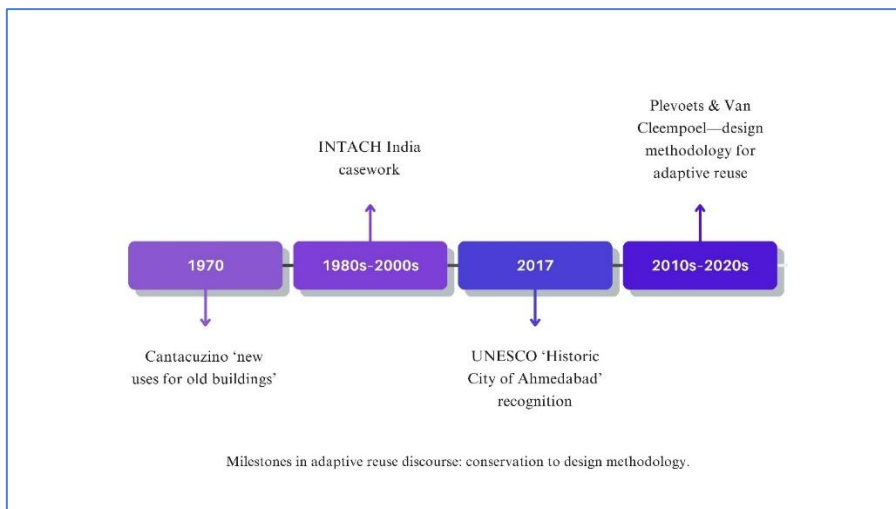


Fig. 2. Timeline of adaptive reuse discourse, from Cantacuzino (1975) to INTACH, UNESCO designation (2017), and contemporary scholarship.

2.0 LITERATURE REVIEW

2.1 Adaptive Reuse in Global Discourse

Adaptive reuse was first conceptualized as a conservation tool—Sherban Cantacuzino (1975) described it as giving “new life to old buildings” while retaining their symbolic and cultural value. Over time, scholarship expanded beyond conservation to include design methodology. Plevoets & Van Cleempoel (2019) reframed adaptive reuse as a discipline of design negotiation, where interventions balance authenticity with contemporary needs. More recently,

sustainability discourse has underscored reuse as a strategy for reducing embodied carbon and promoting ecological resilience, positioning it as both cultural and environmental practice.

2.2 Indian Contexts

In India, adaptive reuse intersects with the complexities of urban growth and living heritage. The Indian National Trust for Art and Cultural Heritage (INTACH) have documented reuse efforts across havelis, stepwells, and colonial precincts, linking conservation to local economies. Ahmedabad, inscribed as a UNESCO World Heritage City in 2017, epitomizes the tension between preservation and redevelopment in dense historic cores. Goa, shaped by Portuguese colonial hybridity, offers another lens where domestic heritage must negotiate tourism-driven pressures and questions of authenticity. Together, these contexts highlight how adaptive reuse in India is inseparable from socio-economic transitions and community needs.

2.3 Gaps in Typology-Based Analysis

Existing studies often remain siloed within single typologies:

- **Civic heritage** is primarily interpreted as political history rather than as spatial potential for contemporary civic engagement.
- **Educational heritage** is recognized for its role in social reform but rarely examined for its architectural and adaptive reuse value.
- **Domestic heritage** in Goa is often celebrated visually in tourism narratives but less critiqued in terms of sustainability and lived authenticity.

This paper responds to these gaps by comparing across three typologies—civic, educational, and domestic—to illustrate how adaptive reuse strategies differ in approach yet converge on shared values of cultural continuity, sustainability, and adaptive resilience.

3.0 CASE STUDIES

3.1 AMC Building, Ahmedabad

Constructed in 1885 as the Ripon Building (later renamed Sardar Patel Bhavan), the AMC headquarters represents colonial civic architecture in Gujarat. Built in limestone with semi-circular and segmental arches, its design emphasized both authority and accessibility. Double-height corridors and jack-arched ceilings gave scale and rhythm to its public interiors.

Although still partially occupied by the AMC Heritage Cell, the building today remains under-utilized, its civic role diminished. [Fig. 3a] presents the façade, demonstrating its monumental yet restrained composition, while [Fig. 3b] highlights the repetition of arch typologies that define its architectural language.

Proposals for reuse envision the AMC Building as a civic museum and cultural hub, reactivating its democratic legacy. [Fig. 4] depicts this adaptive vision, integrating museum galleries, a café, and public programs to sustain its civic identity.

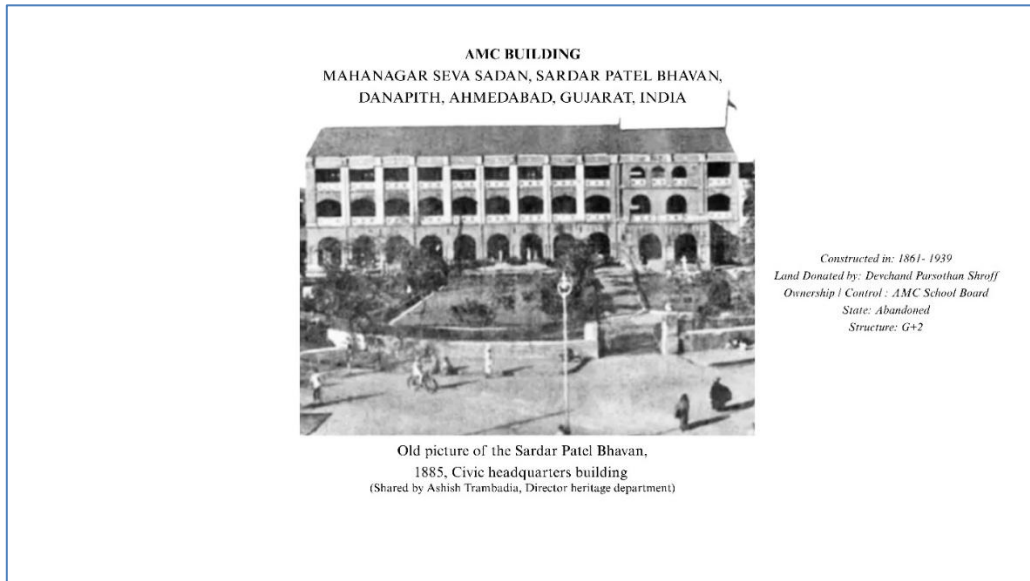


Fig. 3a. AMC Building facade (Sardar Patel Bhavan, 1885), colonial civic structure with semi-circular and segmental arches.

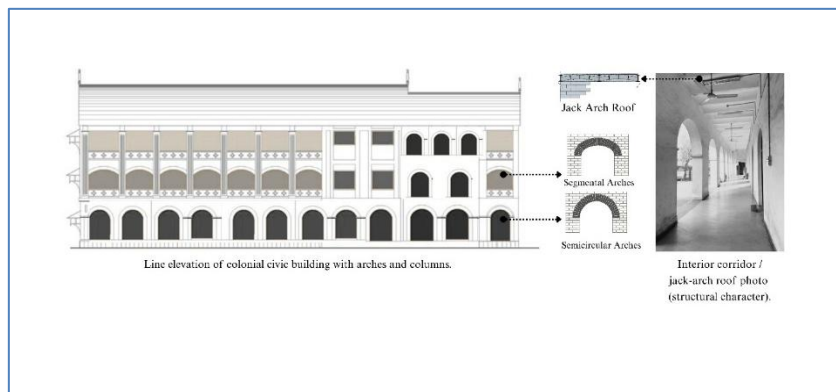


Fig. 3b. AMC elevation line drawing, showing repetition of arch typologies and jack-arched ceilings.

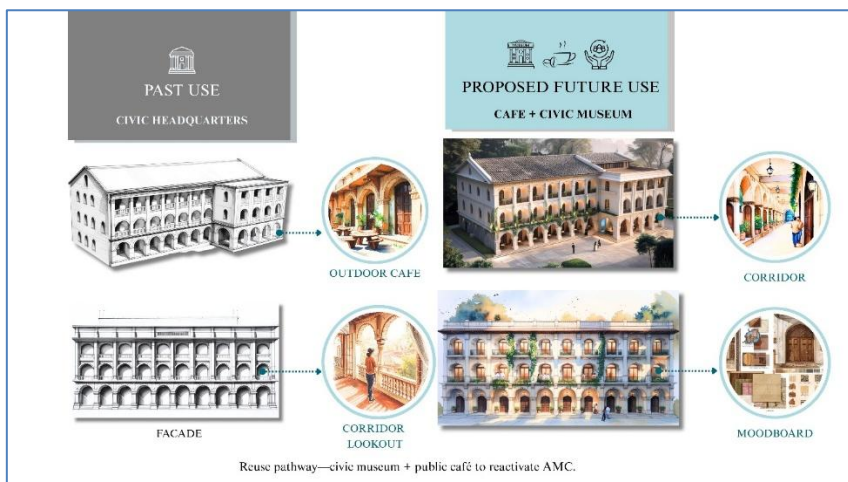


Fig. 4. Adaptive reuse collage visualizing the AMC Building’s proposed conversion into a civic museum and cultural hub.

3.2 Shaala No. 4 (Jamalpur, Ahmedabad)

- Constructed between 1861–1939, Shaala No. 4 was among the earliest purpose-built schools for girls in Ahmedabad, reflecting the reformist ethos of the late 19th century. Classified as a Grade II-A heritage structure, it features a T-shaped G+2 plan with a sandstone plinth, brick arches with archivolt, jack-arched ceilings, and a king-post truss roof.
- Long abandoned, the building has recently been identified for adaptive reuse as a boutique heritage hotel, aligning with Ahmedabad’s growing heritage tourism. [Fig. 5a] shows the façade and porch in its current condition. [Fig. 5b] isolates key architectural elements—plinth, arches, ceilings, and trusses—that define its reuse potential. [Fig. 6] illustrates the proposed zoning strategy: reception and café on the ground floor, suites on the upper levels, and the porch as a semi-public threshold.
- This transformation demonstrates how educational heritage, once tied to civic reform, can be sustainably reprogrammed for contemporary economies of heritage tourism.

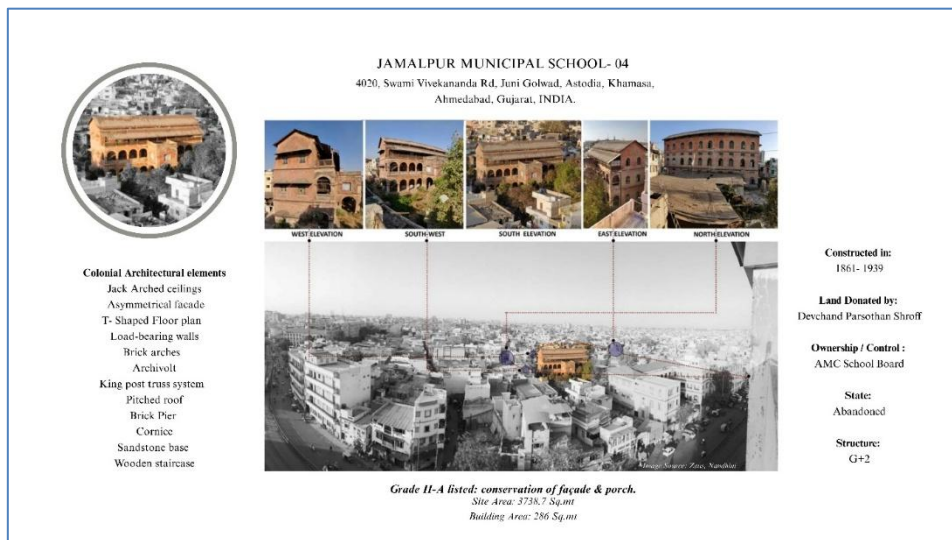


Fig. 5a. Shaala No. 4 façade and porch, reflecting Grade II-A colonial educational architecture.

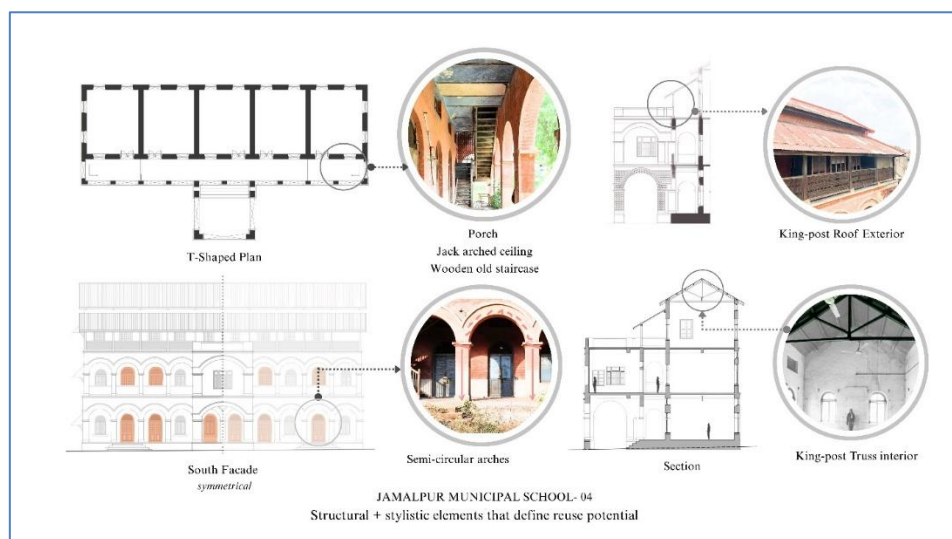


Fig. 5b. Architectural elements of Shaala No. 4: sandstone plinth, brick arches, jack-arched ceilings, and king-post truss.

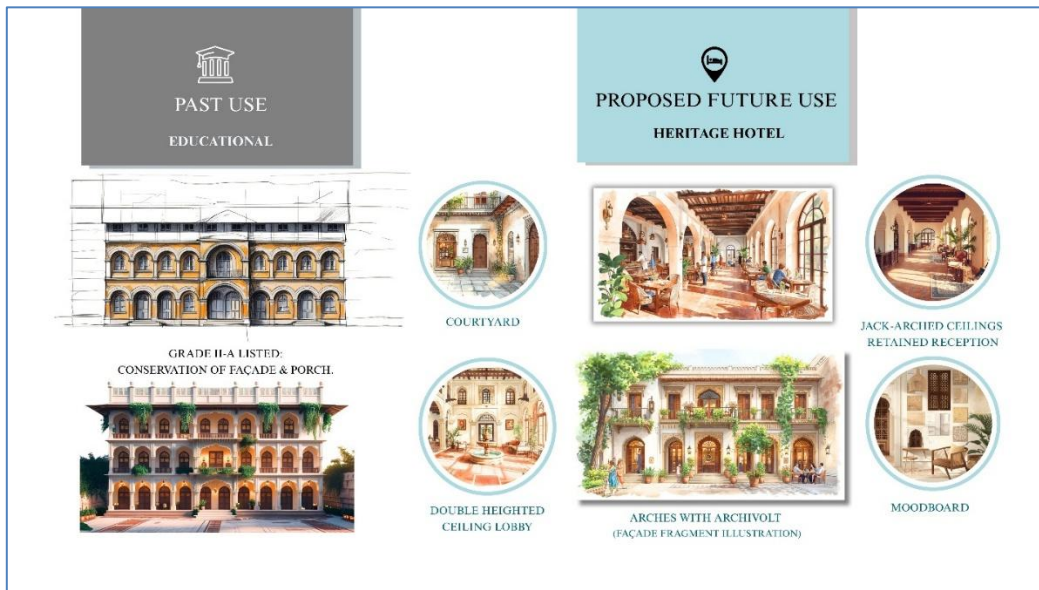


Fig. 6. Reuse zoning diagram illustrating Shaala No. 4’s adaptive conversion into boutique hotel suites and café.

3.3 Rodrigues Home Stay, Goa

The Rodrigues villa, dating from the 1880s, exemplifies Goan-Portuguese domestic architecture. Its design combines vernacular laterite stone walls with lime plaster, a tiled hip roof, ornamental stucco, and the characteristic *balcão*—a street-facing verandah for semi-public interaction. Wooden shutters and arched doors add to its hybrid aesthetic.

Originally built as a residence, the villa later served community purposes before being adapted into a family-run homestay, integrating heritage architecture with boutique hospitality. [Fig. 7a] presents the *façade*, while [Fig. 7b] combines architectural sketch details (*balcão*, roof, stucco ornament, wooden shutters) with a moodboard of reuse materials (laterite, stucco, tiles, teak) and boutique hospitality atmosphere.

Rodrigues Home Stay illustrates how domestic heritage is negotiated between authenticity and tourism, maintaining lived character while generating economic viability.

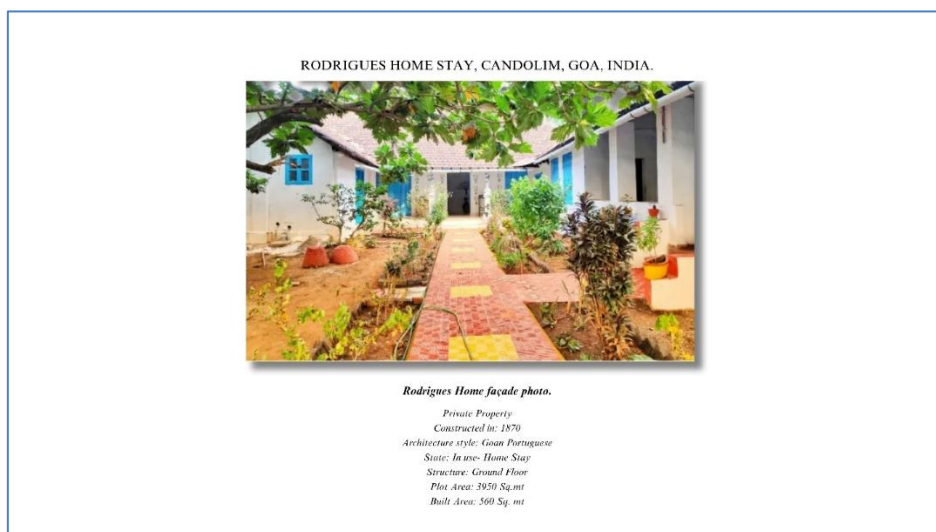


Fig. 7a. Rodrigues Home Stay façade, late 19th-century Goan-Portuguese villa with *balcão* verandah and tiled hip roof.

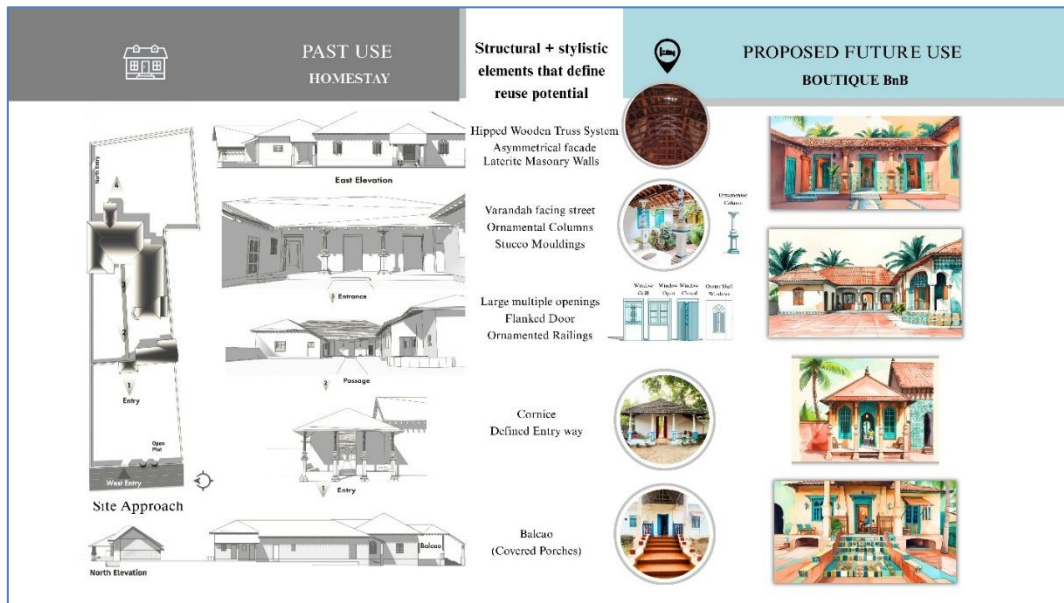


Fig. 7b. Combined architectural sketch and adaptive reuse moodboard — façade details (stucco ornament, arched doors, shutters) with material swatches (laterite, stucco, tiles, teak) integrated into boutique hospitality vision.

4.0 Comparative Analysis

Placing the three case studies together reveals how typology shapes both constraints and opportunities in adaptive reuse. Each building—civic, educational, and domestic—embodies distinct histories, architectural features, and reuse trajectories, yet they converge on shared values of sustainability and cultural continuity.

4.1 Typologies and Histories

- **AMC Building (Civic, 1885):** Symbol of colonial governance and civic identity.
- **Shaala No. 4 (Educational, 1861–1939):** Early girls’ school tied to reformist ideals.
- **Rodrigues Home Stay (Domestic, 1880s):** Hybrid Goan-Portuguese residence reflecting cultural fusion.

4.2 Architectural Features

- **AMC:** Limestone construction, semi-circular and segmental arches, jack-arched ceilings, double-height corridors.
- **Shaala No. 4:** T-shaped plan, sandstone plinth, brick arches with archivolt, jack-arched ceilings, king-post truss.
- **Rodrigues Home:** Laterite walls, lime stucco, tiled hip roof, ornate balcão, wooden shutters.

4.3 Current Conditions

- **AMC:** Partly occupied, largely under-utilized.

- **Shaala No. 4:** Long abandoned, now under redevelopment.
- **Rodrigues Home:** Active as a family-run heritage homestay.

4.4 Reuse Pathways

- **AMC:** Proposed civic museum and cultural hub.
- **Shaala No. 4:** Conversion into boutique heritage hotel.
- **Rodrigues Home:** Continued operation as heritage homestay.

4.5 Lessons Across Typologies

- Civic heritage safeguards democratic memory and enables cultural engagement.
- Educational heritage adapts to tourism economies while sustaining architectural fabric.
- Domestic heritage negotiates authenticity and hospitality, balancing lived tradition with economic viability.



Fig. 8. Comparative framework of AMC, Shaala No. 4, and Rodrigues Home, contrasting typology, condition, reuse strategies, and lessons.

5.0 DISCUSSION

The three case studies demonstrate that adaptive reuse is not simply a technical intervention but a cultural negotiation shaped by typology, economy, and sustainability. Together, they reveal how civic, educational, and domestic buildings embody different reuse potentials, yet converge on shared values.

Threefold preservation values emerge:

- **Cultural:** Identity, continuity, memory.
- **Economic:** Tourism, jobs, activation.
- **Environmental:** Embodied carbon retention, passive design reuse.

5.1 Cultural Value

Civic heritage such as the AMC Building preserves democratic memory through new cultural functions. Educational heritage like Shaala No. 4 translates social reform history into hospitality narratives, while domestic heritage such as Rodrigues Home sustains authenticity and lived identity within tourism. Across types, adaptive reuse ensures continuity of memory, preventing erasure by abandonment or insensitive redevelopment.

5.2 Economic Value

Adaptive reuse also embeds heritage into local economies. The AMC Building's conversion into a civic museum and café can attract tourism while reactivating urban civic space. Shaala No. 4's transformation into a boutique hotel directly connects heritage to heritage tourism markets, generating employment and revenue. Rodrigues Home Stay exemplifies small-scale, family-run economic sustainability through hospitality. In each case, reuse provides a viable alternative to demolition or vacancy.

5.3 Environmental Value

All three cases underscore the ecological dimension of reuse. By retaining limestone, sandstone, laterite, and timber construction, these projects conserve embodied energy. Traditional features—balcão verandahs, jack-arched ceilings, and truss systems—also demonstrate passive design principles such as ventilation and shading, reducing reliance on mechanical systems. Adaptive reuse thus supports sustainable futures while honoring historical techniques.

5.4 Converging Values

As shown in [Fig. 10], adaptive reuse values intersect:

- Cultural (identity, continuity, memory)
- Economic (tourism, activation, livelihood)
- Environmental (embodied carbon, passive design, resilience)

At their overlap lies the holistic potential of adaptive reuse as a sustainable heritage practice, relevant not only to India but to global contexts grappling with urban heritage and development pressures.

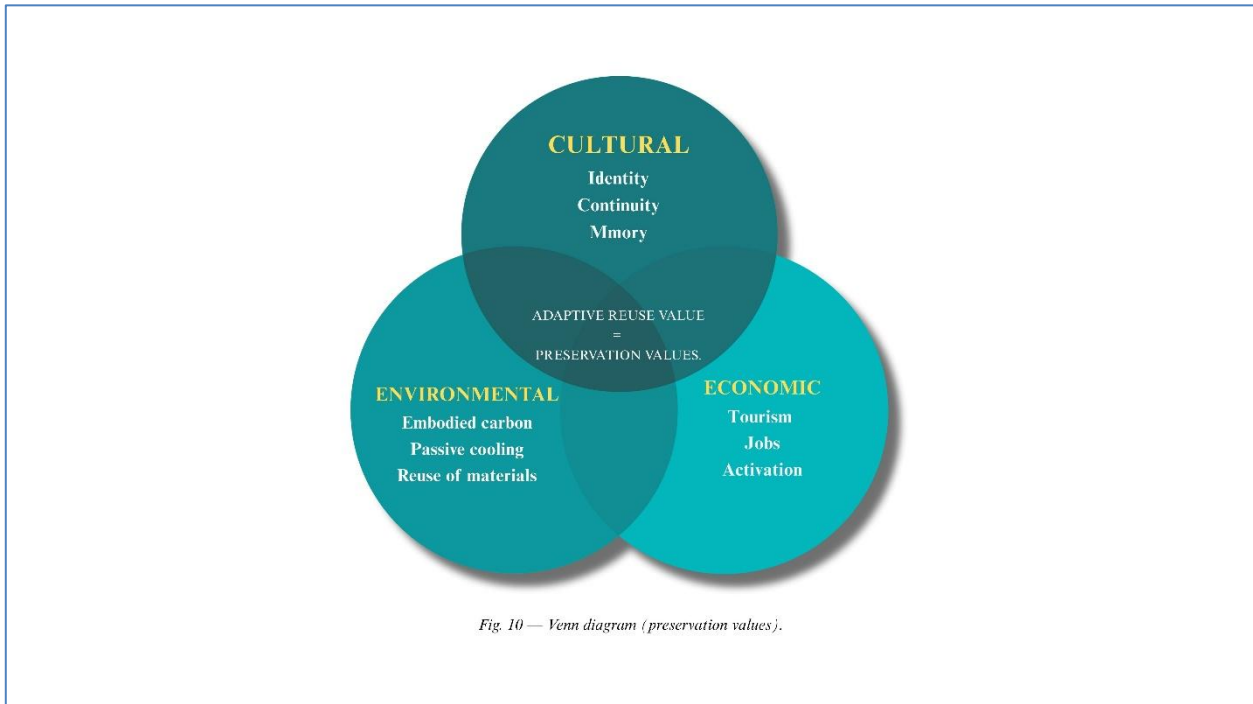


Fig. 10 — Venn diagram (preservation values).

Fig. 9. Venn diagram of adaptive reuse values—cultural, economic, and environmental—converging on sustainable heritage.

6.0 CONCLUSION

The three case studies demonstrate that adaptive reuse in India is typology-sensitive yet value-driven. Civic, educational, and domestic heritage follow different historical trajectories but converge on shared outcomes of cultural preservation, economic viability, and environmental sustainability.

- The **AMC Building (1885)** represents civic heritage whose proposed reuse as a museum and cultural hub would safeguard democratic memory while reactivating public space.
- **Shaala No. 4 (1861–1939)**, once a girls’ school embodying reformist ideals, illustrates how educational heritage can be reprogrammed for tourism economies through its transformation into a boutique hotel.
- The **Rodrigues Home Stay (1880s)** shows how domestic heritage, rooted in Goan-Portuguese hybridity, sustains authenticity while adapting to hospitality demands.

As shown in [Fig. 11], each site follows a common trajectory: construction → social peak → decline/abandonment → adaptive reuse. This temporal arc underscores that reuse is not only about architectural survival but about re-inscribing relevance across time.

Ultimately, adaptive reuse in India must be understood as a living practice that bridges past and present. It allows civic institutions to speak to democratic identity, schools to evolve into hospitality-driven futures, and homes to sustain lived cultural hybridity. When framed as a cultural, economic, and environmental negotiation, adaptive reuse emerges as a critical strategy for ensuring the resilience of India’s heritage in the 21st century.

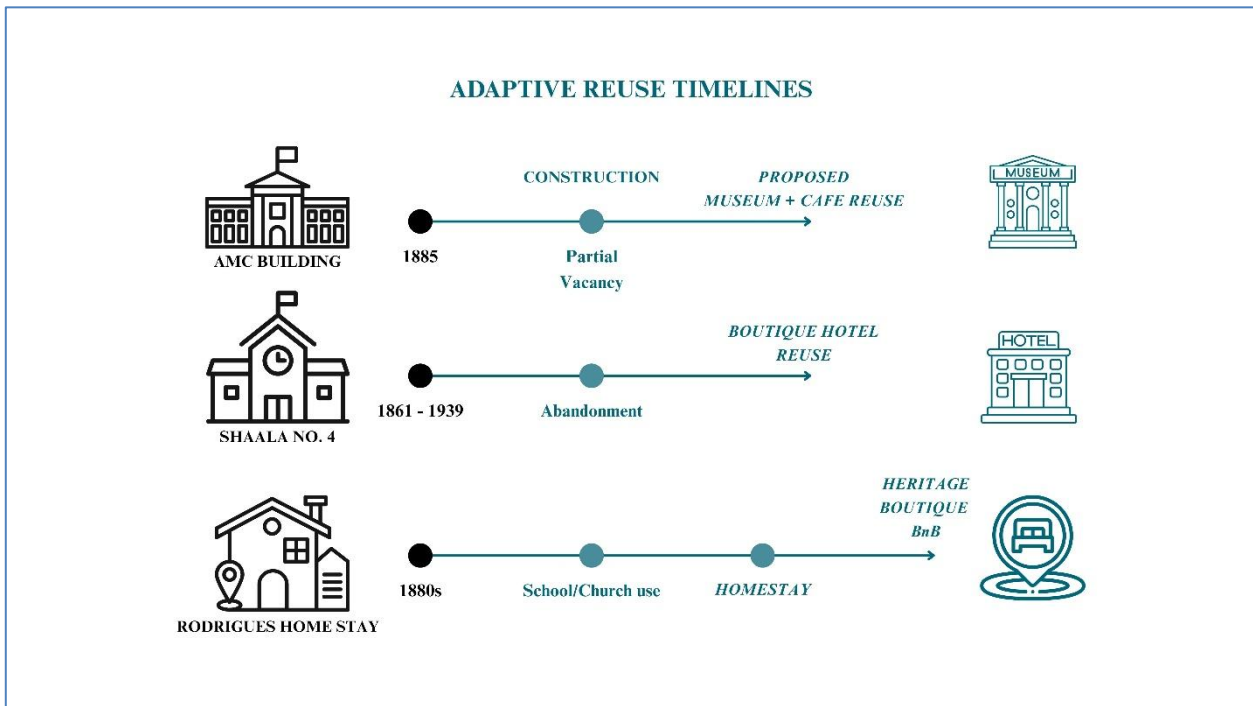


Fig. 10. Timelines of AMC (1885), Shaala No. 4 (1861–1939), and Rodrigues Home Stay (1880s), showing trajectories of construction, decline, and adaptive reuse

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