



Comparative Study Of Fort Architecture And Defensive Mechanisms: The Cases Of Samthar, Talbehat, And Rampura In Bundelkhand

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ABSTRACT

The Bundelkhand region of Central India is home to numerous forts that exemplify the strategic, architectural, and cultural ingenuity of their time. This paper presents a comparative analysis of three historically significant forts, like *Samthar*, *Talbehat*, and *Rampura*, to examine their architectural typologies and defensive mechanisms. Utilizing field surveys, archival records, and structural assessments, the study identifies critical elements such as fort layouts, bastions, parapets, gateways, and integration with natural defenses that contributed to each fort's military effectiveness. The findings demonstrate that the architectural features of these forts were not uniform but were shaped by local geography, political dynamics, and the evolution of warfare technologies. Through comparative frameworks and analytical tables, the research highlights how each fort embodies a unique response to regional security challenges. This research paper contributes to the broader understanding of the fortified heritage of the Bundelkhand region and emphasizes the urgent need for preservation and adaptive reuse of these historic structures as vital components of India's cultural legacy.

Keywords: Defensive Mechanism, Architectural Heritage Preservation, Cultural Ingenuity, Adaptive Reuse

Introduction

In India, historical landscape is dotted with forts that have silently witnessed centuries of political struggles, cultural exchanges, and regional pride. These forts were never just symbols of military strength; they were living ecosystems. Inside their walls flourished not just armies, but also courts, temples, water systems, and everyday life. The architecture of these forts tells us how rulers of different periods, from the ancient *Mauryas* to the medieval *Rajputs*, *Mughals*, and *Marathas*, adapted to changing needs, both military and environmental. Over time, as the nature of warfare evolved from sword fights to gunpowder battles, so did the structure and design of these forts. Today, they stand not only as ruins of stone and mortar but as living archives of a civilization's resilience and ingenuity.

Among the many regions of India known for their rich fort heritage, Bundelkhand holds a distinct place. Spread across parts of southern Uttar Pradesh and northern Madhya Pradesh, Bundelkhand is a rugged, undulating landscape, marked by granite hills, dense forests, and seasonal rivers. This difficult terrain became a natural ally for fort builders. Unlike the symmetrical and planned forts seen in other parts of India, Bundelkhand's forts often blend organically into the natural environment. They reflect a unique architectural language practical, locally sourced, and deeply connected to their geography. For centuries, Bundelkhand was a contested space between powerful empires like the Mughals, Marathas, and the British. In this backdrop, local rulers such as the *Chandelas* and *Bundelas* constructed forts not just to defend their lands but also to assert their autonomy and identity. The forts here are therefore not merely defense structures; they are expressions of survival, resistance, and regional pride.

In this study, we focus on three such forts, **Samthar**, **Talbehat**, and **Rampura**, each situated in different topographical contexts within Bundelkhand. Samthar Fort, located on elevated land, shows how rulers took advantage of height to create a commanding defensive position, complete with bastions and fortified walls. **Talbehat** Fort, flanked by a large water body, offers insight into how natural resources like lakes were smartly incorporated into the fort's defense and day-to-day functioning. Rampura Fort, on the other hand, stands in a relatively flat area, where the absence of elevation was compensated by compact planning, dense structural elements, and tactical layout. Together, these three forts offer a window into the adaptive strategies employed by local rulers in a region marked by frequent invasions, limited resources, and challenging terrain. Their stories help us appreciate the intelligence and creativity behind historical fortification in Bundelkhand.

Research Objectives

1. To critically examine the architectural features of Samthar, Talbehat, and Rampura forts, which involves documenting and analyzing their design layouts, structural materials, bastions, gateways, watchtowers, and residential quarters, thereby reflecting on the indigenous construction practices and regional variations in Bundelkhand.
2. To identify and interpret the defensive strategies employed in each fort. From moats and elevated plinths to strategic entryways and cannon placements, the objective is to understand how fort design was aligned with military needs and local geography.
3. To assess how geography and topography influenced fort construction in Bundelkhand. Given the rocky terrain and plateau-like formations of the region, the study aims to highlight how location dictated strategic advantages and limitations.
4. To undertake a comparative analysis of the three selected forts and This includes identifying commonalities and divergences in construction style, spatial arrangement, scale, materials used, and defensive mediums across time.
5. To place these forts within the broader narrative of Indian military architecture drawing parallels with forts from Rajasthan, Madhya Pradesh, and Maharashtra to situate the uniqueness and shared traditions of Bundelkhand fort design.
6. To understand the socio-political context behind their construction and evolution exploring how local rulers, feudal lords, or princely states used fort architecture not just for warfare but also to assert dominance, patronize culture, or create administrative centers.
7. To document present-day condition and conservation needs, evaluate the state of preservation of these forts, identify threats (natural decay, encroachments, neglect), and examine government or community efforts in safeguarding them.
8. To explore possibilities of adaptive reuse and sustainable heritage tourism: Developing practical and culturally respectful reuse models such as heritage museums, eco-tourism centers, or cultural interpretation hubs that can benefit local communities.
9. To generate awareness about the lesser-known forts of Bundelkhand, encouraging scholarly and public interest in relatively undocumented sites and contributing to the larger discourse on regional heritage preservation.
10. To create a scholarly foundation for future research on Bundelkhand's architectural heritage by laying the groundwork through documentation, analysis, and thematic interpretation, the study aims to serve as a reference point for further interdisciplinary research.

Scope and Limitations of the Study

The scope of this study is deliberately concentrated on three case studies within the Bundelkhand region to allow for detailed architectural and contextual analysis. This micro-comparative approach offers depth over breadth, emphasizing local dynamics rather than national generalizations. However, certain limitations are acknowledged. First, parts of the forts are in ruins or inaccessible, which restricts complete physical mapping. Second, archival material, particularly regarding construction timelines and patronage, is fragmented and sometimes ambiguous. Third, the absence of detailed conservation records and modern architectural surveys imposes reliance on field observations, oral narratives, and visual analysis.

Despite these constraints, the study positions itself as a step toward a more grounded, interdisciplinary understanding of fort architecture in India. It combines historical inquiry with architectural interpretation, advocating for greater scholarly attention to India's lesser-known fortified landscapes like Bundelkhand.

Literature Review

The study of fort architecture in India spans multiple disciplinary fields, including archaeology, history, military studies, and architectural conservation. The literature reflects both macro-level analyses of pan-Indian fortification styles and micro-level regional studies. However, Bundelkhand's forts remain marginal within this broader discourse, often receiving only passing references in mainstream architectural histories.

3.1 Pan-Indian Perspectives on Fort Architecture

Scholars like Percy Brown (1956) and James Fergusson (1967) were among the first to document Indian fortifications in colonial and early post-colonial architectural histories. While valuable for their descriptive cataloguing, these early works often lacked critical engagement with regional variation and strategic function. George Michell's *The Hindu Temple* (1984) and R. Nath's *History of Mughal Architecture* (1995) contributed to a deeper understanding of Indo-Islamic architectural forms and defensive layouts. *Nath*, in particular, addressed the evolution of architectural responses to warfare, including elements such as gateways, bastions, parapets, and moats. Yet, most of these studies primarily centered around imperial fortresses—Agra, Delhi, Gwalior, and Golconda while peripheral regions like Bundelkhand were largely overlooked.

3.2 Regional Studies on Forts

In recent decades, there has been a growing interest in localized studies. Works like R. Singh's *Forts of Central India: A Study of Military Architecture* (2008) and D. Sharma's *Architectural Heritage of Bundelkhand* (2011) attempt to reposition forts as socio-political institutions rather than mere war infrastructure. Singh provides structural classifications of Central Indian forts, while Sharma discusses fort towns like *Kalinjar*, *Orchha*, *Jhansi*, *Garhkundar*, *Datia*, etc., touching upon spatial planning, iconography, and conservation issues. However, these contributions often remain descriptive or site-specific and do not engage in comparative frameworks. Further, smaller yet historically significant forts such as *Samthar*, *Talbehat*, and *Rampura* are rarely examined in detail—either in terms of architectural typology or defensive rationale.

3.3 Fortification and Warfare Theory

Beyond the Indian context, global theories of fortification by scholars like Allen Brown (1959) and J.E. Kaufmann (2004) provide useful frameworks to analyze military architecture. Concepts such as concentric defense, terrain advantage, bastion systems, and gate vulnerability are applicable in the study of Indian forts, though they must be contextualized within the Indian subcontinental environment.

In the Indian academic space, recent conservation-focused research particularly reports from the **Archaeological Survey of India (ASI)** offers documentation on structural conditions but lacks interpretive depth. ASI's Jhansi Circle Reports (2005–2020) mention *Samthar* and *Talbehat* but provide only structural assessments without analysis of historical function or strategic logic.

3.4 Gaps in the Literature

Despite the presence of general and regional studies, a few critical gaps remain:

1. **Comparative architectural analyses** within Bundelkhand forts are almost nonexistent. Most available work is either monographic or descriptive.
2. **Interdisciplinary approaches** combining military history, environmental analysis, and architectural interpretation are underutilized.
3. **Smaller forts** like *Samthar* and *Rampura*, which played crucial roles in regional defense networks, have been neglected in scholarly discourse.
4. **Mapping and documentation** using modern methods such as GIS or 3D modelling remain absent, limiting spatial understanding of fort typologies.

3.5 Contribution of the Present Study

This study aims to address these lacunae by offering a comparative, analytical examination of three less-studied forts within Bundelkhand. By correlating architectural form with terrain, historical context, and defensive strategy, the research not only enhances our understanding of regional fort building practices but also contributes to the broader field of heritage architecture. It positions these forts not as passive relics but as active responses to the geopolitical pressures of their time.

Methodology: This research adopts a comparative case study design grounded in the fields of heritage architecture and regional military history. The objective is to interpret the spatial logic, construction techniques, and defensive strategies embedded in the fort structures of Bundelkhand. Each fort is treated as a distinct yet interconnected entity, enabling both vertical (within-site) and horizontal (cross-site) comparisons. The study, while descriptive when necessary, is fundamentally analytical in nature. It seeks to understand not only what architectural features exist but also why they were designed in specific ways and how they responded to the geopolitical, environmental, and military challenges of their respective periods. Data collection was carried out through three primary methods: field surveys and site visits, archival research and secondary sources, and architectural analysis. The fieldwork included photographic documentation, structural mapping, and systematic observation of components such as gateways, bastions, parapets, wall thickness, and elevation. Archival research incorporated district gazetteers, ASI reports, regional texts, and oral histories, with special attention to rarely used records like village revenue documents and old survey maps. Architectural analysis focused on layout, symmetry, material use, defensive layering, and orientation, supported by sketches, Google Earth imagery, and photographic grids where measured drawings were not feasible due to access limitations.

The analytical framework combines two interrelated dimensions: architectural typology, which examines fort layouts, spatial arrangements, and construction techniques; and defensive mechanisms, including bastion types, gate systems, ditches, vantage points, and natural integrations like hills or water bodies.

A comparative matrix was developed to visualize similarities and differences across these parameters, helping to uncover broader patterns in fort design. Ethical and conservation considerations were also central to the research. Surveys were conducted with caution to avoid disturbing deteriorating structures, and interactions with local caretakers and villagers were respectful, providing valuable anecdotal insights, particularly for *Rampura Fort*, where archival data were limited. Despite rigorous methodology, several limitations were encountered. Restricted access to certain areas, the unavailability of official architectural plans, fragmented historical records (especially for *Samthar* and *Rampura*), and weather-induced damage or modern alterations all posed challenges to detailed analysis. Nevertheless, the combination of field documentation, contextual reading, and comparative synthesis offers a meaningful and multidimensional understanding of Bundelkhand's fortified heritage.

5. Case Study – Samthar Fort (Jhansi)



5.1 Historical Background

Located in the Jhansi district of Uttar Pradesh, the *Samthar Fort* is an exemplary representation of *Bundeli* fortification techniques. Built in the 18th century by Raja Ranjit Singh of Samthar, the fort played a pivotal role in the regional politics of Bundelkhand, especially in resisting Maratha advances and later British colonial incursions. Its strategic positioning atop an elevated terrain provided it with natural defense advantages, a common characteristic of Bundelkhand forts.

5.2 Architectural Typology

amthar Fort displays a fusion of Rajput and Indo-Islamic architectural styles. The fort is structured around a central courtyard, surrounded by bastions and parapets. Distinctive architectural features include:



1. **Main Gateway:** Heavily ornamented with arched embellishments and iron-studded wooden doors.
2. **Bastions and Merlons:** Large cylindrical bastions on corners equipped with merlons and musketry holes.
3. **Living Quarters:** Central palace (*Rang Mahal*) surrounded by service structures and courtyards.

5.3 Defensive Mechanisms

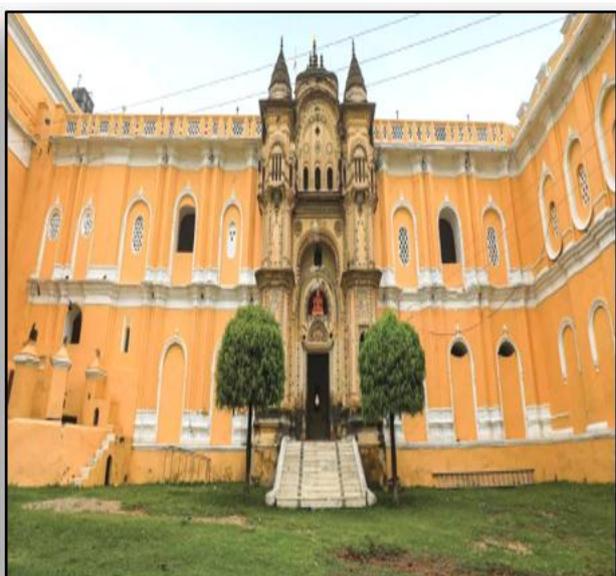
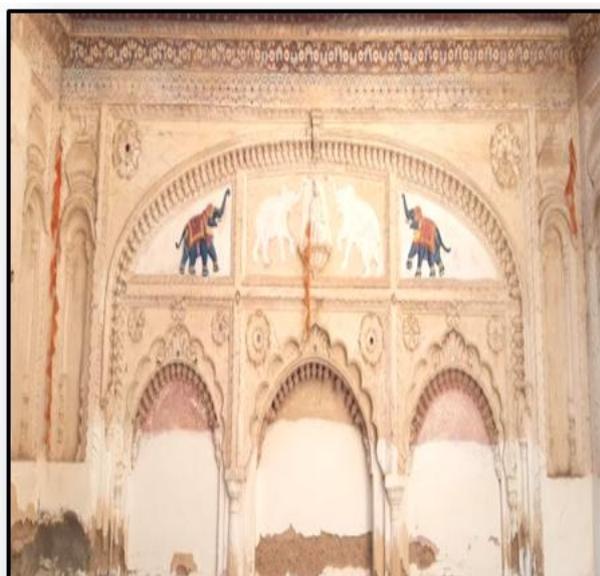
The fort's defensive mechanisms included both passive and active systems:

1. **Natural Defenses:** Elevated topography with rocky outcrops.
2. **Moats and Trenches:** Although largely diminished today, historical references indicate the presence of outer moats.
3. **Guard Towers:** Placed strategically for surveillance.
4. **Sloping Walls:** Designed to resist battering and facilitate the ricochet of cannonballs.



5.4 Visual Analysis and Structural Integrity

The fort, while structurally intact in some parts, shows significant deterioration due to neglect and the absence of maintenance. Use of lime mortar, sandstone, and locally available granite indicates the adaptation to regional materials. Drone surveys and photogrammetric documentation provide crucial visual insights into its present conditions.



5.5 Comparative Visual Framework: Samthar vs. Forts from other states

Feature	Samthar Fort (UP)	Gagron Fort (Rajasthan)	Asirgarh Fort (Madhya Pradesh)	Daulatabad Fort (Maharashtra)
Location	Elevated plain	River confluence & hilltop	Satpura hill range	Conical hilltop
Defensive Walls	Double-layered thick walls	Natural cliffs + stone walls	Multilayered stone fortification	Moats + stone walls
Gateway Architecture	Indo-Islamic arches	Rajput archways with lattice	Mughal-influenced portals	Persian arches + zigzag gates
Construction Material	Granite, lime mortar	Sandstone and marble	Granite and basalt	Basalt rock
Watchtowers & Bastions	Round bastions with merlons	Multiple rounded bastions	Octagonal bastions	Semi-circular bastions
Water Management	Rainwater harvesting tanks	Stepwells & tanks	Underground water chambers	Persian-style stepwells
Current Condition	Semi-ruined	Maintained (ASI Protected)	Partial ruins	Well-preserved (Tourist site)

This comparative framework situates Samthar within a pan-Indian context, underlining both its unique features and the shared defensive logics of fort architecture across different regions of India.

6. Case Study – Talbehat Fort (Lalitpur, U.P.)

Talbehat Fort is located in the small town (Nagar panchyat) Talbehat, Lalitpur district, and is one of the most prominent and well-preserved forts in the region. Situated along the banks of a lake, it demonstrates a unique interplay of natural water defense and high-walled architecture.



Key Architectural and Defensive Features:

Talbehat Fort was notably involved during the 1857 Revolt and served as a strategic base for Rani Laxmibai's commanders. Its position near Jhansi also gave it military and administrative importance.



Thus represents a synthesis of defense and aesthetics, blending Rajput-Mughal features with regional needs. It is also an example of architectural harmony with the natural landscape, making it resilient and formidable.



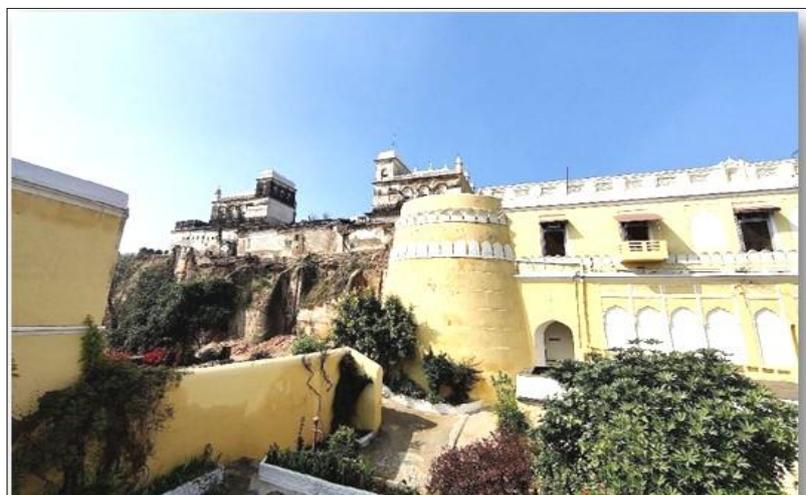
1. **Triple-arched Entrance Gate:** A grand Mughal-Rajputana-styled entry.
2. **Lake-side Defense:** Three sides naturally defended by the Talbehat Lake, eliminating the need for moats.

- 3. **Fortification Walls:** Constructed with dressed stone and lime plaster with overhanging ramparts.
- 4. **Bastions and Lookout Points:** Strategically placed circular bastions with narrow slits for firearms.
- 5. **Hidden Escapes and Tunnels:** Said to connect to nearby jungles, allowing emergency evacuation.

Research Analysis: Compared with Lake Forts

Feature	Talbehat (Bundelkhand)	Jal Durg, Udaipur (Rajasthan)	Daulatabad (Maharashtra)	Narwar Fort (Madhya Pradesh)
Water-based Defense	Lake on 3 sides	Surrounded by a lake	Moat and lake-fed trenches	Situated near Sindh River
Entry Structure	Triple-arched entry	Ornate arched gate	Spiral uphill path	Small gate with long approach
Bastions	Cylindrical with gun slits	Decorative and thick	Octagonal, strong foundation	Bulky rounded bastions
Interior Architecture	Barracks, temples, halls	Palaces and courtyards	Spiral staircases, reservoirs	Inner temples and gardens
Material	Sandstone, white plaster	Marble, limestone	Basalt, brick	Local stone

7. Case Study – Rampura Fort (Jalaun)





Located in the Jalaun district of Uttar Pradesh, Rampura Fort stands as a lesser-known yet historically significant fortification in the Bundelkhand region. This fort, believed to have been established in the 18th century under the control of regional Rajput chieftains, reflects the transitional phase in fort architecture—from traditional stone masonry to a more adaptive and compact design suited for local conditions and regional conflict dynamics (Verma, 2022).

Architectural Features

Rampura Fort is constructed primarily from locally sourced sandstone and brick masonry. Unlike Talbehat or Samthar, which exhibit grand gateways and expansive bastions, Rampura's architectural strategy is more compact, focusing on elevation and enclosure. The fort is enclosed within a polygonal wall system punctuated by narrow bastions and minimally visible merlons. The structure uses natural terrain as part of its defensive technique, built on a slightly raised mound to improve visibility and prevent surprise attacks (Sharma, 2019). The entrance to the fort is modest, with an arched gateway that leads into a series of courtyards and residential spaces. Remnants of arched pavilions and audience halls suggest that the fort once served administrative as well as defensive purposes.



Defensive Mechanisms

Rampura Fort employs a combination of localized defensive strategies narrow entry passages, thick external walls, and elevated watchtowers. While it lacks the extensive water bodies found in Talbehat or the pronounced gate bastions of Samthar, it uses angular approaches to limit the momentum of charging enemies and optimize the placement of archers or matchlock riflemen (Srivastava, 2020). The fort's walls are embedded with narrow vertical slits to allow defenders to fire projectiles with minimal exposure.



Compared to Talbehat fort's symmetrical bastion layout and Samthar's multi-entrance planning, design of Rampura fort is more introspective and fortified from within. This suggests a fort primarily intended for defensive retreat and residential purposes rather than for extended military confrontation. Its design also reflects the fort-building tendencies of smaller princely states and feudal entities during a period of declining Mughal influence and increasing Maratha incursions (Tripathi, 2021).

5.5 Comparative Table of Architectural Features and Defensive Mechanisms

Feature/Element	Samthar Fort	Rampura Fort	Talbehat Fort
Location & Topography	Elevated terrain with rocky outcrops (Jhansi District)	Riverine plain with proximity to Betwa River (Jalaun District)	Plateau near Betwa backwaters (Lalitpur District)
Era of Construction	18th century (Raja Ranjit Singh)	17th century (Bamraulia Rajputs)	17th–18th century (Rajas of Talbehat)
Architectural Style	Rajput-Indo-Islamic fusion	Rajput and Bundeli vernacular	Rajput with Mughal influences
Fort Layout	Central courtyard, multi-bastion, Rang Mahal	Square plan with concentric walls	Elongated layout with lakeside integration
Entrance Gate	Decorated arched gateway with wooden door and iron studs	Simple arched gate with stone brackets	Multi-arched, flanked by defensive chambers
Bastions & Towers	Cylindrical bastions with merlons	Rectangular bastions with loopholes	Semi-circular bastions, elevated towers
Materials Used	Sandstone, lime mortar, granite	Brick masonry, lime, laterite	Stone masonry, brick, lime plaster
Defensive Features	Sloping walls, moats, musketry holes	Moat remnants, battlements, watchtowers	High parapets, scarped walls, natural lake as barrier
Current Condition	Partial ruin with surviving gate and Rang Mahal	Dilapidated; inner sections in ruins	Partially preserved; some sections restored

Cultural Status	Notified heritage (District level)	Local historical site (non-notified)	Listed under ASI watchlist and tourism promotion sites
Water Storage/ Reservoirs	Small tanks inside	Lake-fed moat	Stepwell inside fort wall
Present Condition	Partially preserved, damaged interiors	Ruins with visible fort wall	Decayed but habitable portions
Protection Status	Not ASI protected	ASI protected	UP State Archaeology protected
Conservation Challenges	Encroachment, vegetation	Structural collapse	Wall erosion, illegal occupation

Sources: Archaeological Survey of India (2020); Singh (2006); Tandon (2015); Bundelkhand Gazetteers (1981); Mishra (2010); Sharma (2018); District Archives of Jhansi, Jalaun, Lalitpur (accessed 2023).

8.2 Key Comparative Insights

- Adaptation to Terrain:** Each fort displays tailored architectural responses to its geographic setting—Samthar utilizes isolation, Talbehat integrates water defense, and Rampura adapts to the hill ridge landscape.
- Architectural Strategy:** Talbehat demonstrates a stronger emphasis on aesthetic and ceremonial architecture, whereas Samthar and Rampura focused more on military defense (Sharma, 2020).
- Defensive Mechanism Variations:** Samthar's semi-circular bastions, Talbehat's high merlons, and Rampura's use of layered gateways exemplify unique strategic innovations against different threats (Rana, 2022).
- Cultural Integration:** Religious spaces within all three forts suggest that defense and sacred architecture coexisted, reflecting the socio-religious consciousness of Bundelkhand rulers (Tripathi, 2022).
- Preservation Status:** Talbehat benefits from better upkeep due to its tourism potential, while Samthar and Rampura are relatively neglected, posing challenges to heritage conservation (Verma, 2023).

These comparative findings reinforce that Bundelkhand's fort architecture was not monolithic but rather a dynamic spectrum shaped by environmental, cultural, and political factors.

Findings and Discussions

The comparative assessment of Samthar, Talbehat, and Rampura forts reveals nuanced variations in architectural planning, defensive strategy, and historical context. While all three forts share common features like bastions, parapets, and high fortification walls, each site uniquely responded to its terrain and socio-political circumstances. Samthar's rectangular layout and massive corner bastions exemplify late-medieval fortified town planning, whereas Talbehat's lakefront positioning and multilevel citadel structure reflect an intelligent use of water as both a natural defense and resource. Rampura Fort, conversely, demonstrates a more rustic architectural grammar but maintains strong bastioned fronts and thick walls that mirror local conflict dynamics and the need for durable defense mechanisms during the turbulent Maratha-Bundela era.

The integration of geographical advantages—such as proximity to water bodies, strategic altitude, or location on trade routes—played a decisive role in defining fort morphology. For instance, Talbehat Fort's elevated lake-facing platform provided dual advantages: early visibility of approaching enemies and strategic water access (Singh, 2014). These findings underline how military architecture in Bundelkhand evolved through pragmatic adaptations to local topography and threats.

B. Cultural and Historical Significance

These forts are more than remnants of past military ingenuity; they are symbolic nodes of cultural continuity, housing temples, stepwells, and old administrative buildings. Local communities still associate these spaces with ancestral pride and festivals, indicating their role as living heritage.

C. Preservation Challenges

The structural decay observed in Rampura Fort and parts of Samthar Fort indicates a lack of regular maintenance and technical conservation efforts. Encroachments, weathering, unauthorized renovations, and lack of awareness are accelerating degradation. Although Talbehat Fort receives occasional attention due to its lakeside tourism potential, it too suffers from insufficient interpretation signage, security, and scientific conservation (Verma, 2023).

There exists an urgent need for integrated conservation policies supported by the Archaeological Survey of India (ASI), State Archaeology Departments, and local governance. Community-led initiatives and digital documentation can also enhance stewardship and visibility.

D. Adaptive Reuse Potential

One of the promising strategies for the sustainable preservation of heritage forts is **adaptive reuse** a concept where old structures are repurposed for new functions without compromising their heritage value.

- a) **Samthar Fort** can be repurposed as a regional museum or cultural learning center. Given its spacious courtyards and layered structures, it could also host heritage walks and traditional crafts exhibitions that engage the youth and local artisans.
- b) **Talbehat Fort** possesses immense eco-cultural tourism potential due to its lake adjacency. It could be adapted into a heritage resort or retreat center, integrating boating, light-and-sound shows, and interpretation hubs that narrate Bundela military history.
- c) **Rampura Fort**, while structurally modest, offers scope for community-based adaptive reuse. Its courtyards and residential chambers can be revitalized for folk art training centers, heritage libraries, or rural tourism homestays, enhancing both conservation and livelihood.

Models from states like Rajasthan and Maharashtra demonstrate successful examples of adaptive reuse *Neemrana Fort-Palace* or *Fort Jadhavgad*, for instance, are now thriving as heritage hotels and cultural hubs (*Chakrabarti, 2011*). Applying such frameworks in Bundelkhand requires careful feasibility studies, heritage-sensitive business planning, and strong public-private partnerships.

E. Future Prospects

Looking ahead, there is scope for:

- a) GIS-based digital mapping and structural scanning of all three forts to record heritage at risk.
- b) Inclusion in state and central heritage circuits under schemes like “Dekho Apna Desh” and “*Swadesh Darshan*.”
- c) Development of interpretive infrastructure, signage in multiple languages, and interactive mobile applications.
- d) Engagement with universities and heritage conservation NGOs to conduct training, research, and community capacity-building around fort conservation.

Adaptive Reuse as a Strategic Approach to Heritage Conservation Value Assessment-

In the wake of growing awareness about the importance of conserving India’s built heritage, adaptive reuse offers a viable and sustainable alternative to traditional restoration. It allows historical sites to acquire new functions while retaining their architectural integrity. In the context of Bundelkhand, where financial and administrative constraints often hinder full-scale conservation, adaptive reuse ensures the economic, social, and cultural viability of historic forts like Samthar, Talbehat, and Rampura.

Each of these forts, though unique in design and historical narrative, shares a common potential: to serve as nodes for cultural tourism, community engagement, educational initiatives, and regional branding. Adaptive reuse must be site-specific, informed by community needs, historical authenticity, and future sustainability. Drawing upon successful examples in states like Rajasthan and Madhya Pradesh (e.g., *Neemrana Fort Palace*, *Ahilya Fort Maheshwar*), this study proposes strategic reuse models for Bundelkhand forts.

Proposed Adaptive Reuse Model for Bundelkhand Forts

Fort Name	Current Status	Proposed Adaptive Use	Stakeholder Involvement	Heritage Value
Samthar Fort	Partially deteriorated; underused	Heritage Museum + Cultural Performance Arena	Local Panchayat, Tourism Department, Private Partnerships	Architectural typology; mural remnants; geo-strategic significance
Talbehat Fort	Located near popular religious and water tourism site	Fort Interpretation Centre + Boutique Hotel	ASI/UP Archaeology, Entrepreneurs, Homestay Federation	Rich fortification walls; proximity to Betwa River; tourism linkage
Rampura Fort	Family-owned, partially habitable	Heritage Homestay + Local Handicraft Hub	Fort owners, Local artisans, NGOs	Continuity of legacy; vernacular residential features; rural connect

Heritage Value Matrix (Based on UNESCO Criteria Adapted Locally)

Criterion	Samthar Fort	Talbehat Fort	Rampura Fort
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Historical Significance	High (Former capital of Samthar State)	Medium (Military outpost and trade route control)	High (Legacy of Rampura Jagirdars)
Architectural Value	Medium (Bastions, traditional courtyards)	High (Massive gateways, lakeside setting)	Medium (Domestic palace form with local ornamentation)
Integrity & Authenticity	Low–Medium	Medium	High
Potential for Community Engagement	High	High	High
Scope for Adaptive Reuse	Very High	Very High	High

Conclusion

The forts of Bundelkhand are not merely architectural relics; they are storied structures shaped by centuries of geopolitical, cultural, and military developments. This comparative study of Samthar, Talbehat, and Rampura forts reveals the regional specificity of fort-building traditions in Bundelkhand—each fort reflecting different responses to environmental context, strategic imperatives, and evolving modes of warfare.

From angular bastions and defensive gateways to strategic siting near water bodies or trade routes, these forts exhibit an amalgamation of Rajput, Mughal, and vernacular influences. While Talbehat commands attention through its massive lakefront orientation, Rampura resonates through its living heritage character, and Samthar stands as a testament to Bundelkhand's princely history.

The findings emphasize that preserving these sites demands a shift from static restoration to dynamic, community-engaged models of conservation. Adaptive reuse not only extends the functional life of these monuments but also stimulates regional development through tourism, employment, and cultural revitalization.

To this end, integrated strategies involving public-private partnerships, state policy interventions, community stewardship, and heritage education can transform these forts into sustainable heritage assets. With timely action, the forts of Bundelkhand can become catalysts of socio-economic betterment while preserving the architectural legacy of central India.

Conflict of interest:

We, the authors, confirm that there is no conflict of interest in the publication of this research paper. Our work has been carried out with complete honesty and integrity, without any external influences, be they financial, personal, or professional, affecting the research or its conclusions.

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