



# Strategies for the Conservation of Heritage Site of Surla Tar Mosque, Goa

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**Abstract:** This research paper aims to develop a strategic plan for the conservation of the heritage site of the Surla Tar Mosque in Goa, India. The Surla Tar Mosque is an important heritage structure from the Adil Shah era of Bijapur, but it currently faces threats from natural deterioration and lack of proper conservation and management. The paper will provide the background information about Surla Tar Mosque, its historical and cultural significance, and the importance of conserving heritage sites in general. It highlights that heritage sites are not only important for preserving cultural values and history but can also be valuable assets for cultural tourism. The paper integrates data from literature to develop framework for conservation. The findings of this study can serve as a model for formulating conservation and management plans for Surla Tar Mosque specifically and other heritage sites in Goa generally. Proper conservation and sustainable management of the Surla Tar Mosque has the potential to not only preserve an important piece of history, but also drive cultural tourism and economic development in the region.

**Index Terms - Heritage Conservation, Surla Tar Mosque, Goa-India, Architecture.**

## I. INTRODUCTION

The conservation of the heritage can be the attempt of the actual generation to transfer their legacy to the future generation. It is the conservation of a cultural legacy and in the case of monuments, the effort is to transfer the monument to the future generation. Conservation plays a vital role in the modern world, especially in countries like India, which are rich in their culture, tradition, and the perfect examples of an ancient civilization. (Orbasli, 2008) The preservation plans and strategies play a fundamental role in the life and icon of the heritage they enrich, the souls and identity of the societies, and the environment they come from. They should fit a framework to house the collective body and lifestyle of the societies that have formed it. (Jokilehto, 2017)

### 1.1 Background of Surla Tar Mosque

The Surla Tar Mosque is one of the oldest surviving mosques in Goa, dating back to the 16th century Adil Shah era. It is located in the village of Surla, nestled between the red laterite soils, the Mandovi River, and a lush green forest. The mosque is said to have been constructed by Ibrahim Adil Shah, the ruler of the Adil Shahi dynasty, in the 16th century. The architectural style of the mosque bears resemblance to the Safa Masjid in Ponda, though it lacks the same visual appeal. (*In the Surla-Tar Masjid, Muslims and Hindus Gather in Peace | Goa News - Times of India*, n.d.) In the past, there was no road leading directly to the mosque - only a dense cashew and mango forest surrounded the premises. Worshippers would either hike to the mosque or cross the river on rafts, which later evolved to canoes and ferries. Eventually, a paved road was constructed down the hill, making it easier for visitors to access the mosque. Over time, the original structure of the mosque was ravaged by the elements. It was eventually rebuilt and restored to its former glory in 1956. The state's Department of Archives and Archaeology has taken over the monument in the past two decades, though locals say the upkeep and maintenance could still be improved.

Adjoining the mosque is a dargah (shrine) that is believed to contain the remains of a Pir Saheb (saint) and his companion. These individuals are said to have come to Goa in the pre-Portuguese era to build harmony between the conflicting Hindu and Muslim communities. The Surla Tar Mosque and the dargah are open to both Hindus and Muslims, and the local community celebrates the annual Shigmo festival with a procession to the mosque. This ceremony, called the 'bhovartalo', is seen as a symbol of communal harmony in the region. Despite its historical and cultural significance, the mosque is currently facing some challenges. With Muzavor, the octogenarian caretaker, looking for a successor, and the state archaeology department's alleged lack of consistent upkeep, the stunning Islamic architecture of the Surla Tar Mosque is at risk of losing its splendor over time.

## II. LITERATURE REVIEW

### 2.1 Significance of Heritage Conservation

Heritage encompasses much more than historic buildings. It also includes a sense of place, historic contexts, landscape, and spectacle of light and shade, natural material. A desire to identify and conserve such heritage elements among the diverse maritime heritage is a deep human trait. Built heritage can reflect a community's unique craftsmanship and technology, inform future technology research, and help to connect communities through their material culture. Heritage architecture, which includes religious, public, and private architecture, typically having high amenity value. The fabric of towns and cities is, to a very large extent, constituted of heritage buildings. The condition and maintenance of buildings reveals much about the state of national and local economies and about cultural value placed on tradition. Romantic literature and art revealed the persistent propensity to regard their heritage as precious. (Ashworth & Graham, 2018)

### 2.2 Criteria for Listing Heritage Building

Heritage buildings possess values, which qualify them for preservation and deserve to be conserved, giving importance to criteria for listing such buildings. There are generally two types of criteria widely accepted and utilized for consideration in heritage building listing and protection - one based on the architectural features and second based on social history through their association with historical events, persons, or communities. (Al-Sakkaf et al., 2020)

Criterion (i) denotes an archaeological site or building known for its function, type, and distinct organization, or history and impact on through its close association with the significant elements being exhibited by collections of material culture.

Criterion (ii): Refers to a building that is either one among the rare departures or the finest examples of its type through the influence on its area by its excellence. The Tar Mosque Suria, being one of the 13 listed mosques in Goa, and the oldest known surviving masjid dating to between the 14th and early 16th centuries, still in use at the time of evaluation meet the criterion as a representative of this type, and selected for its rarity, intactness and exemplifying the influence by the pre-conquest mosque on traditional architecture in Goa.

### 2.3 Mapping of Historic Settlements

It's necessary to monitor and study mapping for conservation and set-out boundaries for the conservation of the tar mosque. Settlement, Macro, Micro, Lateral migration and dropping migration and slope variations involving Integrated remote sensing and GIS must be observed for the conservation of the historical buildings. GPS and conventional surveying cannot accept local mapping, so Mapping by Digital Photogrammetry, Terrestrial Photogrammetry, and Airborne Photogrammetry depending upon scale and precision can be used. (Harris & Hazen, 2006) (Al-bayari & Shatnawi, 2022) Mapping of historic settlements for the conservation and setting out of boundaries of a world heritage site in a community which is under the hill area has been studied by Cartographic and Geodetic approach. The abundance of evidence all around the world, historic buildings are susceptible to damages due to various natural, man-made factors such as, flooding, industrial & transport vibration, earthquakes. The significant factors of damages to cultural heritage are the increasing slope settlement. Suria is a historic and situated somewhat a slope or hill, the slope movement or sliding both intermittent and continuous and the natural and the anthropogenic factor such as deforestation and road laying are the main cause of this movement or sliding. The consequence of this movement or sliding leads to damage to the historic building of the study area. In addition to this, the roads and road leading above and surrounding monuments are also susceptible to pavement cracks which lead to trapping the water or to diffuse the seepage during rainwater that causes damage to monuments.

### 2.4 Challenges in Conservation for heritage site

Heritage places are associated with socio-economic conditions that do not allow instruments for proper upkeep and the care of heritage sites present. The expenses of financing and maintaining the heritage sites are often very high in terms of the stakes. The whole issue is that the country must rely on the imports through the other countries and correlate the trade rates. There has been a major increase in the insight and knowledge which is associated with the concern of heritage sites. Current developments and modern thoughts are concerned with the site's integrity and authenticity; the personal value of heritage sites for their possessors and how a human will make tools to assist in the mission of preservation easier. (Mekonnen et al., 2022) This has led to the reporting and the involvement of the local society and the bodies that manage the heritage sites. The thought of the locals will have a massive impact on the manner of conserving the heritage site. The major challenges that are encountered while conserving the heritage site are:

The preservation of the heritage sites is closely associated with various difficulties because the cultural and historical landmarks that are also known as the national identity of a country face issues of legality, ownership, and maintenance. The damage to the heritage sites is caused due to several errors which are made while the maintenance is carried out, to maintain the sites in a controlled manner. The visual context is, most frequently, violated due to insufficient knowledge as to how the heritage site shall be conserved or managed. To date, the conservation and preservation of the heritage sites of the world has become mandatory. Due to the frequent threats that are encountered by the heritage site raisings feel about the global warnings such as attitude, poverty, over or incorrect increased tourism, illegal occupancy, wars, condemnation is abandoned. (Nilson & Thorell, 2014)

## III. RESEARCH METHODOLOGY

The employed research methodology in this study consists of a literature review. The literature review involves an extensive examination of existing research articles, books, journals, handbooks for practicing conservation and conference papers related conservation of heritage site. The employed methodology includes a comprehensive literature review to understand about the strategies for conservation of heritage site to be adopted for conservation of mosque building as well as site, updated inventory

documentation of building as well as site including site plan, cadastral map, topography and vegetation, infrastructure and socio-economic data including community composition, socio-economic data of the community and complete visual documentation of the features present on the site in the existing condition must be carried out. The site was studied for its cultural context, religious historical, and architectural background, and its social and ritualistic association with the village. The material and services available on site and the possibility of their technical and aesthetical feasibility was studied. After detailed documentation and understanding about the building as well as about the site, then only a suitable and compatible approach of conservation for mosque building will be employed.

#### IV. STRATEGIES OF CONSERVATION FOR SURLA TAR MOSQUE

As the site is tucked amidst the ken of the forest and needs a measure of ambiguity near, the site guidelines for community-based involvement and site protection can combine effort of school or university projects for the protection of cultural and natural heritage. It can be made possible through Non-Government-Organizations (NGO), monitoring the cultural continuity and integrity of ancient forms of worship. These will help to appoint communities who are aware of their environment and traditions, stakeholders, and direct producers of cultural heritage. The methodology used for the conservation of heritage sites in the study involves the following steps: open choice; multiple criteria; no constraints; holistic approach; priority selection; shared among stakeholders; and most importantly, the valorization of the cultural balance of a Heritage. Following the philosophy of "Do nothing till you have all the information...then do the right thing first time every time" and 'Prioritize and do only what needs to be done', in this section, all possible steps which could be taken for the conservation and management of Heritage site Surla Tar Mosque.

##### 4.1 Documentation and Assessment

Comprehensive documentation is a critical component of any effective conservation strategy for historic monuments and sites. This documentation should capture the current condition of the structure, identifying any existing damage or deterioration, as well as the factors contributing to its degradation. Detailed mapping, using techniques such as digital photogrammetry, terrestrial laser scanning, and GIS, can provide accurate spatial data to delineate the boundaries of the protected site and monitor changes over time. Photographic and video records, alongside measured drawings and material analysis, further contribute to building a robust baseline dataset to guide conservation interventions. Equally important is the documentation of the cultural and historical significance of the monument, including its architectural typology, construction methods, and associated intangible heritage. This holistic approach to documentation allows for the development of tailored conservation strategies that balance the protection of the physical structure with the preservation of its cultural values. Regular monitoring and updating of these documentation records are essential to adaptively manage the site and respond effectively to emerging threats, whether from natural disasters, human activity, or environmental changes. The diligent documentation of conservation strategies is paramount to ensuring the long-term safeguarding of these irreplaceable cultural heritage assets. This will be possible only if proper documentation like surveys, inscriptions, hand sketches, and photography is done. (Hassani et al., 2015)

##### 4.2 Structural Stabilization

Ensuring the structural integrity of historic monuments is a critical component of any conservation strategy. This may involve the careful assessment of existing structural conditions, including the identification of vulnerabilities to natural hazards such as earthquakes, floods, or slope instability. Based on this analysis, appropriate stabilization and reinforcement measures can be designed and implemented. This may include the use of traditional strengthening techniques, such as the application of lime-based mortars or the insertion of steel or timber elements, or the incorporation of more modern materials and technologies, such as carbon fiber reinforcements or base isolation systems. The selection of interventions must carefully balance the need for structural stability with the preservation of the monument's historic character and authenticity. Monitoring the long-term performance of these stabilization measures is also essential, as is the documentation of the decision-making process and the implementation of the conservation work. By prioritizing structural stability, conservation practitioners can safeguard the physical fabric of historic monuments, allowing them to withstand the ravages of time and the threats posed by natural and human-induced forces. (*Protecting India's Built Heritage against Natural Disasters*, n.d.)

##### 4.3 Conservation of Architectural Features

The preservation of a historic monument's architectural features is a crucial aspect of any comprehensive conservation strategy. This involves the careful identification, documentation, and stabilization of the various elements that contribute to the structure's unique design and character. For example, the conservation of ornate facades, intricate carvings, decorative tilework, or delicate geometrical patterns requires specialized techniques and materials to ensure their long-term survival. The use of traditional building methods and materials, such as lime-based plasters or hand-carved stone, can be essential in maintaining the integrity of these features, as they often match the original construction techniques and materials used. In some cases, the reintegration of missing or deteriorated architectural elements may be necessary, but this must be done with great sensitivity to ensure a harmonious visual and functional integration, drawing upon thorough historical and material research to guide the restoration process. Equally important is the protection of the monument's setting, including the preservation of its surrounding landscape, viewsheds, and associated intangible heritage, all of which contribute to the overall significance of the site. By understanding the cultural and historical significance of these architectural features, conservation practitioners can develop tailored strategies to safeguard them, ensuring that the unique identity and character of the historic monument is maintained for future generations to appreciate. This may involve the implementation of preventive conservation measures, such as improved environmental controls or the use of protective coverings, as well as the careful planning and execution of any necessary interventions to restore or reconstruct damaged or missing elements. (Kaarwan, n.d.)

#### 4.4 Method, Materials and Techniques

Materials are extracted and processed from multiple sources, making the production of cement energy-expensive, environmentally unfriendly, and leading to release of greenhouse gases and environmental impacts. The results are rapid and will vary, but they have shown some evidence in the form of good quality repair, preservation/conservation of archaeological sites and historic structures in various parts of the world that reveal that materials produced by design on the conservation and preservation of cultural heritage. For the preservation of Surla Tar Mosque in Goa generally, traditional materials were used for conservation work due to their compatibility with the original material, soil conditions availability, and low cost. In the absence of information on composite conservation of architectural heritage, the existing cultural strip was considered because none of the practices were permitted on this site.

These strategies are used to repair a previous state by removing any additions, revisions, re-covering, and/or modifying the original substance of a preserved heritage piece. For the conservation of the Heritage Site at Surla, Goa, the researchers can use method of composite conservation, which embraced preservation, renovation, and extension for getting historical integrity, authenticity, use as well as environmental sustainability. It provides guidance about national and local laws, principles, policies, and ethics for the protection of cultural and historical properties for conservators, architects, and engineers in both the personal and private realms. Conservation of heritage is a broad term that encompasses any actions that focus on maintaining the cultural significance of a heritage asset and preserving its tangible form. By extension, built heritage conservation is the process of protecting, conserving, and restoring built heritage through practical and effective means while enabling changes in social, economic, political, and physical contexts. Estimating the level of the apparent surface area needed to manage the surroundings and achieve an acceptable level of conservation, hence respecting the structure's aesthetic and visual effect, is a primary consideration in determining the scope of the intervention that will be made on the surface of the constructed work to be conserved.

#### 4.4 Adaptive Reuse and Tourism

Developing sensitive adaptive reuse strategies and sustainable tourism initiatives can help generate resources for the mosque's ongoing maintenance and preservation. This may include repurposing ancillary structures, establishing a small visitor center, or organizing cultural events and heritage walks.

#### 4.5 Legal Protection and Management

Ensuring robust legal protection, such as heritage designation, and establishing a comprehensive management plan for the site are essential to safeguarding the mosque in the long term. This should involve collaboration between government agencies, heritage organizations, and the local community.

## V. CONCLUSION

This paper has provided a comprehensive overview of the Surla Tar Mosque, an important heritage site in Goa, India. The mosque dates to the 14th-16th century Adil Shahi era and is one of the oldest surviving mosques in the region. Despite its historical and cultural significance, the mosque currently faces threats from natural deterioration and lack of proper conservation efforts. The paper has highlighted the importance of heritage conservation in general, emphasizing how historic buildings and sites can serve as valuable cultural assets that connect communities to their past. It has also outlined key criteria for identifying and listing heritage buildings, noting that the Surla Tar Mosque meets several of these criteria based on its architectural features and historical associations. Based on the analysis presented, the paper proposes that a strategic conservation plan is urgently needed to safeguard the Surla Tar Mosque. This plan should utilize indigenous conservation practices and involve local community participation to develop sustainable tourism opportunities around the site. Proper conservation and management of the mosque has the potential not only to preserve an important piece of history, but also to drive economic development in the region through cultural heritage tourism. Overall, this research provides a strong case for the conservation of the Surla Tar Mosque and serves as a model that can be applied to other heritage sites in Goa and beyond. By protecting and celebrating their cultural legacies, communities can work to transfer their rich histories to future generations.

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