

MODHERA SUN TEMPLE: ELEGANT SCULPTURE TELLS THE CREATIVITY OF HERITAGE

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Article Received: 01 July 2026

Article Revised: 21 July 2026

Article Published: 01 August 2026



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Shri Sarvajani Pharmacy College, Arvind Baug, Gujarat Technological University, Mehsana-384001, Gujarat, India. DOI: <https://doi.org/10.5281/zenodo.21491646>



How to cite this Article: 1*Dr. Pruthviraj K. Chaudhary, 1Shloka V. Chaudhari, 2Dr. Dhruvo Jyoti Sen, 3Jaspal A. Chaudhary and 4Dr. Manoj P. Gadhvi, 5Dushyant P. Chaudhary, 6Dipal P. Chaudhary and 7Dr. Devanshi Chaudhary, 8Chetanaben D. Kalani. (2026) Modhera Sun Temple: Elegant Sculpture Tells The Creativity Of Heritage. World Journal of Advance Healthcare Research, 10(7), 386–390.

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ABSTRACT

The Sun Temple of Modhera is a Hindu temple dedicated to the solar deity Surya, located in the village of Modhera in Mehsana district, Gujarat, India. The temple is situated on the bank of the river Pushpavati, and was constructed in the 11th century during the reign of **Bhima I and Karna I** of the Chaulukya dynasty. The temple is no longer used for worship and is a protected monument maintained by the Archaeological Survey of India.

KEYWORDS: sun temple, modhera, gūḍhamandapa, sabhamandapa, kunḍa, dance festival.

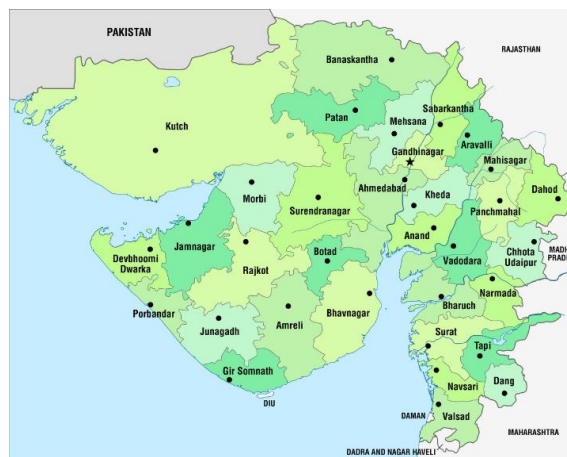


Figure-1: Modhera Sun Temple & Gujarat Map.

The temple complex has three components: **Gūḍhamandapa**, the shrine hall; **Sabhamandapa**, the

assembly hall and Kunḍa, the reservoir. The halls are noted for the intricately carved exteriors and decorated

pillars. The tiered steps of the reservoir lead to the bottom and numerous small shrines. The Sun Temple in Modhera, Gujarat, was built in 1026 CE by King Bhima I of the Solanki (Chaulukya) dynasty. Dedicated to the

Hindu sun god, Surya, it is celebrated for its intricate architecture, 52-pillar assembly hall, and astronomical alignment, which illuminates the inner sanctum during the equinox.



Figure 2: Shrine hall; Assembly hall and Reservoir.

The temple complex is divided into three main component

- **Suryakund (Reservoir):** A rectangular stepped tank featuring 108 smaller shrines.
- **Sabhamandapa (Assembly Hall):** An open hall with exquisitely carved pillars depicting stories from Hindu epics.
- **Gudhamandapa (Shrine Hall):** The main sanctum that housed the idol of the sun god.

Sunlight enters the Garbhagriha (the inner sanctum) of the Sun Temple in Modhera, Gujarat. The ancient stone architecture was meticulously designed so that the very first rays of the rising sun strike and illuminate the sacred idol of the Sun God exactly twice a year, during the spring and autumn equinoxes. The temple is an architectural and astronomical marvel, built in 1026 CE by King Bhima I of the Solanki dynasty. It features a grand, east-facing layout that is structurally aligned with the Tropic of Cancer, divided into three main components.

Built in 1026 CE by King Bhima I of the Solanki dynasty, the Modhera Sun Temple in Gujarat is a masterpiece of Māru-Gurjara (Solanki) architecture. Designed on a strict east-west axis, the complex is built to align with the sun and consists of three distinct,

interconnected components.

Surya Kund (The Sacred Tank): A magnificent stepped rectangular reservoir featuring geometric precision. It contains 108 miniature shrines dedicated to various Hindu deities embedded into its cascading steps.

Sabha Mandapa (The Assembly Hall): An open, pillared pavilion featuring 52 intricately carved pillars—symbolizing the 52 weeks of a solar year. Its archways, or toranas, and pillars are covered in detailed reliefs of epics, mythological figures, and dancers.

Guda Mandapa (The Main Shrine): The inner sanctum sits on an inverted lotus-shaped plinth and was once home to the gold idol of the Sun God. The structure is designed as a chariot and features exterior walls that narrate the solar cycle. **Astronomical Alignment:** The temple operates as an ancient observatory. The design ensures that during the vernal and autumnal equinoxes, the very first rays of the rising sun pass through the main entrance and strike a gem on the idol of the Sun God.

Intricate Exterior Carvings: The outer base and walls are ornately carved in multiple horizontal sections featuring Gajathara (elephants), Narathara (humans), and deities representing the eight cardinal directions.



Figure 3: Exterior Carvings.

Gudhamandapa (Shrine Hall): Contains the Garbhagriha where the sunlight enters to light up the main statue.

The Gudhamandapa is the main shrine hall and inner sanctum (garbhagriha) of the iconic Modhera Sun Temple in Gujarat, India. Constructed in 1026–1027 CE during the reign of King Bhima I of the Chaulukya (Solanki) dynasty, this enclosed hall is a masterpiece of Maru-gurjara temple architecture.

Architectural Marvel: Unlike the open assembly hall (Sabhamandapa), the Gudhamandapa is an enclosed, rectangular hall. It is designed with a stepped, diamond-shaped floor plan that leads into the dimly lit inner sanctum, where the idol of the Sun God, Surya, was originally placed.

Equinox Alignment: The hall and the main shrine were precisely engineered so that during the equinoxes, the first rays of the rising sun would travel through the hall, bypass the arched doorways, and strike a jewel placed on the idol's head, filling the shrine with a brilliant golden glow.

Intricate Carvings: Every exterior and interior surface of the hall is meticulously carved. The walls feature 12 niches representing the 12 Aditya (solar) manifestations, along with reliefs depicting celestial beings, dancers, and scenes from Hindu epics.

Structural Layout: The hall originally supported a magnificent, intricately carved ceiling and a grand shikhara (spire) that once crowned the shrine.

Sabhamandapa (Assembly Hall): An open hall supported by 52 intricately carved pillars representing the 52 weeks of a year. The sabhamandapa, or rangamandapa—the assembly hall or dancing hall—is parallelogram-shaped in plan, with rows of pillars and diagonal entrances on each side. Its extensively carved

exterior features a series of recessed corners, creating an impression of the star-shaped layout. There are 52 intricately carved pillars. Madhusudan Dhaky has suggested that the sabhamandapa may have been later addition based on style and construction.

Base moldings: The pitha is similar to the Gudhamandapa, but smaller in size, as two courses of fillets are omitted. The padma is richly carved with floral ornamentation.

Wall moldings: Above the Narathara, a band of figures depicting dancers and gods, known as rajasena, is present. The next tier is vedi that corresponds to the jangha of the mandovara and is decorated with large panels of gods, goddesses, and floral designs. This is followed by a cornice called asinot. Next is the kakshasana, which slopes outwards to form the backrests of the asana, a bench that runs around the hall. This section features erotic figures interspersed with rail patterns.

Ceiling and torana: The roof, which was shaped like a stepped pyramid, no longer exists but the outline of the steps is visible in its profile. Inside, the ceiling rises in tiers, forming a walnut-like shape, and features numerous floral garlands. The ceiling is 23 feet high. It is supported by pillars arranged in an octagonal plan. These pillars have stilts that support the lintels. Torana, or the decorated cusped arches, spring from the lower brackets of the pillars and meet the lintels at their midpoint. There are two types of arches: semicircular and triangular. The semicircular arches feature cusped arches with tips, while triangular arches have a round apex and wavy sides. Both types include a broad band decorated with figures and ornamental tips, many of which are now defaced and damaged. The lower brackets feature makara which gives the structure its name Makara-Torana while the decorative elements give it name of chitra-torana.



Figure-4: Assembly Hall.

Surya Kund (Reservoir): A massive stepped tank featuring 108 miniature shrines. Built in 1026 CE by

King Bhima I of the Solanki dynasty, the Modhera Sun Temple in Gujarat is dedicated to Surya, the Sun God.

Built Around Light Architecture with Purpose. Surya Kund is a magnificent, geometrically stepped reservoir at the 11th-century Modhera Sun Temple in Gujarat. Built in 1026 CE by King Bhima I of the Solanki dynasty, it features 108 miniature shrines and served as a sacred bathing pool before entering the main temple.

Architecture: The tank features a striking inverted pyramidal design with four terraces. Devotees used the intricately carved steps and geometric patterns to access the water.



108 Shrines: The reservoir is adorned with 108 small, detailed shrines dedicated to various Hindu deities (including Ganesha, Shiva, and Vishnu) strategically embedded into its walls.

Historical Significance: The tank and temple are located on the banks of the Pushpavati River. Although no longer an active place of worship, the site is revered for its medieval Maru-Gurjara architecture and solar alignment.



Figure 5: Reservoir.

The temple is aligned so that the first rays of the equinox sun once illuminated the sanctum. During the solar equinoxes (March 21 and September 22), the 11th-century Modhera Sun Temple in Gujarat, India, perfectly aligns with the rising sun. The first direct rays of light travel precisely through the temple's entrance arches, illuminating the inner sanctum where the idol of the sun god, Surya, once stood.

Perfect Alignment: The complex is built on a strict east-west axis.

The Path of Light: Sunrise rays pass through the Sabha Mandap (assembly hall) directly into the darkened Garbhagriha (sanctum sanctorum). **The Goal:** A

millennium ago, this beam would fall directly on the gem-studded, pure-gold statue of Surya. During an equinox, the sun is positioned directly above the Earth's equator. As a result, the angle of sunlight at noon is (90°) directly overhead at the equator, and it drops by 1° for every 1° . The Modhera Dance Festival, or Uttarardh Mahotsav, is an annual classical dance and music festival held at the 11th-century Sun Temple in Modhera, Gujarat. Organized by the Tourism.

Festival: Corporation of Gujarat, it usually takes place over two to three days during the third weekend of January, right after the conclusion of the Uttarayan (kite-flying) festival.





Figure 6: Modhera Dance Festival.

Performances: The festival features a wide array of Indian classical dance forms, including Bharatanatyam, Kathak, Odissi, Kuchipudi, Manipuri, and Kathakali, alongside regional folk dances.

Venue: The historic Sun Temple—a masterpiece of the Solanki era—acts as the magnificent, naturally lit backdrop for the artists.

Atmosphere: The temple is illuminated with colorful lights, bringing to life the intricate sandstone figurines carved on its edifice.

CONCLUSION

The Modhera Sun Temple, located on the banks of the Pushpavati River in Gujarat, India, is a breathtaking masterpiece of 11th-century architecture and ancient astronomical engineering. Constructed in 1026 CE by King Bhima I of the Solanki (Chaulukya) dynasty, the temple is dedicated to Surya, the Hindu sun god. It stands as a pinnacle of the Maru-Gurjara style, celebrated for its exquisite stone carvings, complex geometry, and brilliant cosmic alignment. The most elegant aspect of Modhera is its integration with solar mechanics. The temple is built so that during the equinoxes, the first rays of the rising sun pass perfectly through the arched gateway of the Sabha Mandap and illuminate the idol in the inner sanctum. The temple is a protected monument maintained by the Archaeological Survey of India.

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