# Stepwells as Living Heritage of India: Insights from Two Step-Wells in Ahmedabad

# Prachi Mistry<sup>1</sup> & Shweta Suhane<sup>2</sup>

<sup>12</sup>Institute of Architecture and Planning, Nirma University, India. mistryprachi9@gmail.com, shweta.suhane@nirmauni.ac.in

Received	Accepted	Published
31.09.2024	19.10.2024	30.11.2024

https://doi.org/10.61275/ISVSej-2024-11-11-10

#### **Abstract**

Culture and heritage remain important to Ahmedabad, which has an infinite sense of value for the two aspects. Ahmedabad has a set of interesting historical and cultural landmarks, which are known as stepwells. However, as time goes by, the idea of stepwells has seen its purist identity and purpose erode by the hands of contemporary society. Of the 45 stepwells in Ahmedabad, only 7 are protected by the ASI or the GAD and abandonments of the stepwells highlight the need for a fresh management strategy. The research intends to study how the concept of the Living Heritage Approach, which focus on the society's participation in the maintenance and development of heritage, could be implemented to restore the stepwells in Ahmedabad.

The study also entails methodology that is emphasized on, one as an initial study, Adalaj-ni-vav and the other as the primary study, Mata Bhavani Stepwell. It has been done in the form of recording current status of these stepwells along with evaluating the evidences of historical, social and cultural importance. In doing so, this research seeks to evaluate the tamgible and intangible value of heritage within these structures, in terms of the current condition of these structures and the society's interaction with them.

In the given results, it is seen that while inherence is an important part of stepwells, the lack of care and attention being paid currently makes it challenging to preserve them. Based on the finding of the Living Heritage Approach, it is possible to suggest the following methods for reactivation of these places, focusing on the participation of locals and the use of traditions. Apart from physical conservation of stepwells, this strategy also supports the cultural aspect of the stepwells and ensures their sustenance and development for future generations.

**Keywords**: Heritage Values, Living Heritage, Tangible, Intangible, Stepwells, Identity.

# Introduction

Heritage is mainly centered in the passing on of traditions or cultural values or any monument/object. According to the Oxford English Dictionary, the term "Heritage" refers to

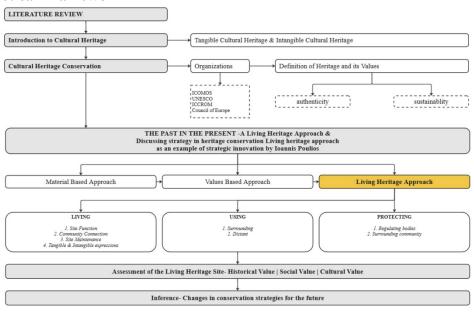
property or valuable historical items that are passed down from one generation to another, or something that holds historical or cultural significance worth preserving. Heritage manifests in diverse forms globally, spanning categories such as literature, physical artefacts, natural sites, traditions, cultures, and art. As the saying goes, "The origin of the present is traced in the richness of heritages." Throughout history, humankind has continually innovated, but once heritage is lost, its replacement becomes impossible. UNESCO, ICOMOS, and ICCROM among others, have established conventions, charters, and guidelines to facilitate the conservation and oversight of cultural heritage worldwide. The significance of heritage evolves and generation which is largely influenced by people's interactions with it. Heritage can take tangible or intangible forms, existing within busy cityscapes or open nature. Cultural heritage has been classified by UNESCO based on the community's expression towards various types of objects, places and rituals. "Tangible Heritage" refers to objects and places, whereas "Intangible Heritage" refers to rituals. "The book The Past in the Present", Ioannis Poulis authored a publication outlining an approach to Living Heritage. This approach emphasizes the community's involvement with the site, the traditional caretaking of the site by the community, and the continuous development of tangible and intangible heritage and space. In the case of Stepwell of Ahmedabad, several step-wells are currently present in an unused or abandoned condition due to negligence. Maintaining their condition is vital for the heritage preservation of the city. Giving a concept of a Living Heritage Approach to these step-wells might be a method to revive them.

In this context, this research aims to develop a comprehensive analysis of heritage value with a specific focus on the case of Adalaj-ni-vav and Mata Bhavani Stepwell using Living Heritage characteristics and values.

Its objectives are as follows:

- 1. To identify the connection between tangible and intangible features of a heritage stepwell.
- 2. To evaluate the characteristics and values of living heritage in the selected stepwell.
- 3. To examine the present association and significance of heritage stepwell within their context.

# **Theoretical Framework**



**Fig 1:** Framework Source: Derived from Primary Data

# **Cultural Heritage**

Cultural heritage encompasses important items for future generations, including country, tradition, and way of life. UNESCO has established guidelines that include traditions, arts, societal customs, ceremonial observances, celebrations, wisdom, and practices related to the universe. Cultural heritage is a combination of tangible and intangible assets inherited by a society from previous generations, a result of societal selection and human creation. (Testbook, 2023).

# **Tangible Cultural Heritage**

Tangible cultural heritage introduces to physical antiques, including artistic achievements, buildings, monuments, and other human ingenuity, that hold cultural significance in a community. It includes historical structures, archaeological sites, landscapes, and transportable cultural property. These assets contribute to a community's identity, providing valuable evidence for historical inquiry and information about past societies (Testbook, 2023).

# **Intangible Cultural Heritage**

Intangible cultural heritage includes performances, learning, and talents` including, objects, cultural spaces, artefacts, and instruments, recognized by societies and individuals. It preserves cultural diversity and is valuable for its societal relevance and knowledge passed down through generations.

It is a collection of inherited practices and modern traditions from various cultural groups, originating from neighbouring towns, cities, or new settlements. It shapes identity and coherence based on the environment, and is valued within communities. It is nurtured and shared among different groups, recognized and upheld by networks and individuals, ensuring no one can claim authority over a specific expression or tradition without their consent (Testbook, 2023).

# **Heritage in Indian Context**

The Indian concept of heritage, known as 'Dharohara', combines two words: 'Dhara', representing the essence of the earth, and 'ihara', signifying the enduring attempt to shape character over time. According to UNESCO's guidelines on intangible cultural heritage (ICH), the Indian understanding of ICH can be (a) Continuity of tradition, (b) Inclusiveness in making people's social identity, (c) Cultural representation, (d) The fellowship of the community (Singh, 2020).

The rich heritage of India is transitioning through the ages, becoming an integral part of everyday life. Living heritage and monuments are becoming increasingly significant in society. In India, a noticeable exchange occurs between architectural heritage and local communities. This relationship between built heritage and the community breathes life into our heritage, making it vibrant and dynamic. Just like we conserve cultural heritage, preserving the bond between built heritage and the local community is essential to ensure its continued vitality.

Living heritage refers to the ongoing relationship between a community and its heritage, reflecting the values of the community in its built heritage. India has a rich array of ancient structures and cultural treasures, but only around 25 have UNESCO World Heritage status and 3,650 are recognized as significant landmarks by the Archaeological Survey of India. Conserving heritage buildings involves combining ancient building knowledge with modern conservation practices. It's important to prioritize safety above all else. Unlike some other countries, India doesn't have formal systems recognizing heritage conservation as an interdisciplinary engineering effort with safety as a top priority. In a country with deep spiritual ties, preserving heritage buildings should consider the ancient architectural principles, spiritual significance, and the philosophy of impermanence of materials (Singh, 2020).

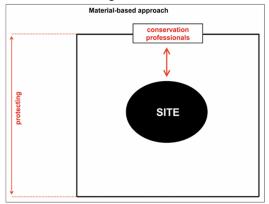
# **Heritage Conservation Management Approaches**

Authenticity in heritage conservation is a key concept developed internationally through the World Heritage and the Venice Charter Conservation agreements. It ensures values are expressed authentically through attributes. The Convention and Operational Guidelines emphasize the importance of sites that are nominated for inclusion on the World Heritage List, which necessitates genuine design, craftsmanship, and environment. The Nara Document on Authenticity (UNESCO 1994) adopted a more dynamic understanding of authenticity. The considerations encompassed various elements like form and design, materials and composition, use and purpose, traditions and methods, location and environment, and essence and emotion, in addition to other internal and external influences. This concept was later included in the Operational Guidelines by (UNESCO 2005) (Poulis, 2014). The discipline of heritage conservation aims to protect the physical and cultural remains of the past from being damaged or lost in the present. However, this approach can create a discontinuity between historical landmarks and the people and social processes of today and tomorrow. This discontinuity is the defining characteristic of heritage conservation and includes principles such as emphasizing the importance of the past and its physical artefacts, recognizing that heritage authenticity is irreplaceable, and it's important to think about the requirements of future generations. (Poulis, 2014) The main approaches for dealing with heritage protection are: The main approaches for dealing with heritage protection are: (a) Material-based approach, (b) Values-based approach and (c) Living heritage approach.

Although these methodologies were developed at different times, they are still relevant today. It should be emphasized that there is no definitive separation between these approaches as they address comparable concerns like substance, consistency, principles, and connections, and hold certain shared viewpoints. Additionally, the effective use of these methodologies depends on the specific circumstances of each location where they are implemented.

# **Material-Based Approach**

A material-based approach in heritage conservation is primarily focused on preserving the material or fabric of a particular object or site. Since the 19th century, this method has been used in the field. It has been further developed through the World Heritage concept and the adoption of the World Heritage List (UNESCO 1972). The Venice Charter (ICOMOS 1964), is the best example of a material-based approach in conservation. It aims to safeguard cultural heritage that is considered to belong to the past from harmful human activities of the present and passing down of these monuments to future generations creates a gap between the monuments and the people, as well as between the past and the present. The development of the surrounding area that depends on the exploitation of heritage is pursued entirely by the interests of the heritage authorities (Poulis, 2014).



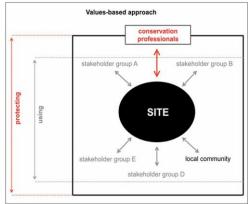
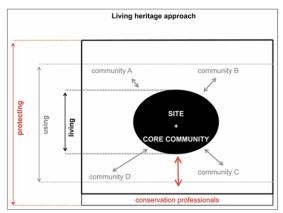


Fig 2: A material-based approach (No community involvement) | The Values-based Approach Source: Poulis, 2014)

### Values-based Approach

A values-based approach to heritage conservation is concerned with the positive qualities that society attributes to heritage. A stakeholder group refers to any group with a legitimate interest in heritage. This approach has been developed since the 1980s, within the developments of post-processual archaeology, and is considered the current most preferred approach to heritage conservation. An example of a values-based approach is the attempt of the World Heritage concept to evolve and open towards non-Western/indigenous communities and cultures (UNESCO 1994, 1996, 1999) (Poulis, 2014). The Burra Charter serves as the foundation for the values-based approach. In a values-based approach to conservation, the community is considered to be at the centre of the process. Unlike in a material-based approach, heritage does not hold intrinsic values. Heritage is not valued objectively, but rather by local community or stakeholder groups who assign subjective significance to it. As a result, heritage is considered a social and extrinsic process. Conservation efforts focus on safeguarding the values ascribed to heritage by stakeholder groups for the benefit of future generations, rather than preserving the heritage itself. (Poulis, 2014)

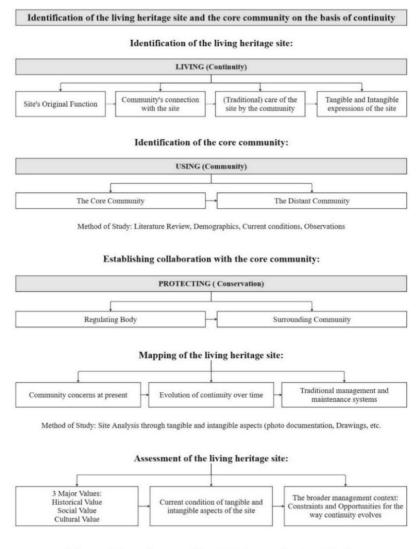


**Fig 3:** A living Heritage Approach Source: Poulis, 2014

# **Defining the Living Heritage Approach & Characteristics**

Living heritage, a concept coined by the 2005 UNESCO Convention, refers to the continuity of traditions and practices within communities. This concept encompasses living dimensions such as tradition, skills, and craftsmanship. Living heritage is characterized by continuity, including the original function of heritage sites and community relations. As conditions change within the core community, heritage sites adapt to new forms of expression. The core community is responsible for maintaining heritage, incorporating change into its living character. This approach acknowledges the core community's responsibility for the maintenance of heritage, rather than minimizing it (Poulis, 2014). The living heritage approach focuses on preserving the community's original connection with their heritage and safeguarding it within this connection. This approach differs from a material-based or values-based approach, as conservation does not mainly aim at preserving the (tangible) physical fabric of the heritage, but rather at maintaining continuity with the community's intangible connection to it. This means that in some cases, the physical fabric may be impacted. The focus is on the community's connection to the heritage rather than the tangible aspects of it. As continuity changes over time, conservation aims to hold these changes to guarantee the relevance of heritage to contemporary society. ICCROM has developed a living heritage approach at an international level (Poulis, 2014). The heritage site views the core community as an integral part of the site and distinguishes them from conservation professionals and the wider community. In a living heritage approach, the 'core community' is distinct from the 'local community' in a values-based approach and is considered one of the stakeholder groups. The core community is given the primary role in the conservation process, while conservation professionals provide an enabling framework of support, guidance and assistance to the core community. (Poulis, 2014).

# Framework for Assessment of Living Heritage Sites



Inference: Changes in conservation strategies serve the way continuity evolves at present and into the future

**Fig 4:** Assessment of Living Heritage (Framework) Source: (Poulis, 2014)

#### **Living Heritage Concept in India**

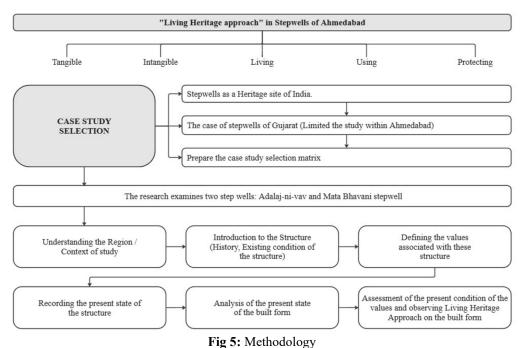
In the past at Visva-Bharati University, established by Rabindranath Tagore, teachers realized that students for whom learning combines the two streams of the conscious and subconscious mind. The conscious mind is a significant part of the time shaped by formal guidance and the latter is cultivated through experiential and reflexive learning. The various globalisations are always overwhelming the cultural diversity of this country. In exaggerating the cultural diversity and intangible heritage of individuals, cross-cultural competence is sensitive. Tagore, a prominent Indian thinker, emphasized the significance of both tangible and intangible heritage in his native environment philosophy. His ideas align with many Asian and African thinkers who worry about the impact of colonial improvements on heritage (Chakarbarty, 2024). In 2008, an ICOM workshop in Hyderabad and the Araku Valley of India focused on the protection of intangible heritage in the context of sustainable development. The workshop aimed to understand the total natural and cultural environment, planning for heritage development through functions such as economics, social or political change, well-being,

human and cultural rights, and sustainable physical environments. Whether it is tangible or intangible, there are numerous live elements to heritage sites (Galla, 2008).

# Research Methodology

This research utilized a case study method to analyze the "Living Heritage Approach" about the importance of tangible and intangible heritage within the stepwells of Ahmedabad, Gujarat. The case studies were selected mainly because they are considered essential heritage monuments of India. Therefore, a case study matrix was prepared to examine the stepwells concerning the parameters of the Living Heritage Approach, which led to examine the Adalajni-Vav and Mata Bhavani Stepwell. The method used thorough research of the region and context of the stepwells focusing on their historical significance and current state of the sites. Furthermore, values and factors are defined to the stepwells, with the help of physical survey of the area and primary data collection, (while taking care of their architectural elements and cultural meaning).

Analysis of the present condition of the site, mapping & data collection studied to understand the surroundings, culture, and infrastructures of the context which incorporates data collection on building use, cultural heritage, community mapping, site accessibility and public surveys. The study also looked into how the stepwells are used over time and how much the local communities protect and value them considering the "Living Heritage Approach". The analysis concluded by assessing the balance between use and preservation, aiming for sustainable management of both tangible and intangible heritage.



Source: Derived from literature

**Table 1:** Value Assessment of Living Heritage Source: Derived from Guidelines of heritage

Values	Parameters (Tangible Attributes)
Historical Values	Historical Significance, Structural Condition, Maintenance by surrounding community, Maintenance by ASI, Structural Modifications
Social Values	Precinct Usability, Public Accessibility
Cultural Values	Religious Idols, Religious Symbolic Elements
Values	Parameters (Intangible Attributes)
Historical Values	Original Function, Conservation Strategies. Heritage Awareness

Social Values	Communities Connections, Social Practices, New Generation Involvement
Cultural Values	Daily Usage, Festive Events, Customs and Traditions

# **Case Study**

# Heritage of India: Stepwells

The stepwells are subterranean constructions meant for drawing and conserving water, particularly in the arid zones of western India. In arid periods, they were used as sources of water and also as walls with shade for the people in the villages and wayfarers. Meandering structures like stepwells contributed to water conservation and distribution by storing rainwater and controlling the flow of ground water. In addition to being structures with a purpose, stepwells represented social and societal interrelatedness with nature, including structure, water, and weather (AG, 2022).

The constructions come in sizes and shapes influenced by the area's characteristics and the era when they were built well as the benefactor supporting their creation. There are often decorations and special architectural features in stepwells that have developed into structures over time. These spaces also serve cultural purposes are occasionally utilized for religious ceremonies and community gatherings that particularly cater to women. They are identified by a range of names such, as "bawdi," " vav," and "baoli," located in moist regions (Unni Sriparvathy, 2021).

These stepwells are located all over the country but most are in western region especially in Gujarat and Rajasthan. The construction of the earliest stepwell dates back to the 7th century AD and these structures were being added till the 19th century (AG, 2022; Emock Omayio, March 2021). Some of India's best-known stepwells can be seen below:

**Table 2:** List of Stepwells in India Source: Derived from Primary Data

State	Stepwell
Gujarat	Rani ki Vav, Adalaj Stepwell, Dada Harir Vav, Amritavarshini Vav, Surya Kund
Rajasthan	Chand Baori, Panna Meena ka Kund, Toorji ka Jhalra, Raniji ki Baori, Bhandarej Baori
Madhya P.	Udayagiri Stepwell, Rani Roopmati Baoli, Chanderi Stepwell
Delhi	Agrasen ki Baoli, Rajon ki Baoli, Gandhak ki Baoli
Haryana	Baoli Ghaus Ali Shah, Narnual Mukendpura Baoli
Maharashtra	Malvan Stepwell, Banganga Tank
Uttar Pradesh	Shahi Baoli
Karnataka	Pushkarani Stepwell, Lakkundi Stepwell, Trikuteshwara Temple Stepwell
Hyderabad	Bansilalpet Stepwell, Bapu Ghat Baoli Stepwell
Andhra P.	Ancient Horseshoe Stepwell, Mangalagiri Stepwell
Kerala	Peralaseery Sri Subramanya Temple

**Chand Baori, Abhaneri, Rajasthan:** This incredible stepwell is considered one of the most beautiful and deepest in India, probably from the 9th century, during the reign of King Chanda, of the Nikhumbh dynasty. It contains more than 3500 steps and has 13 stories making it a truly extraordinary, architectural edifice.

Rani ki Vav, Patan, Gujarat: A UNESCO World Heritage Site, this stepwell was built by Rani Rupmati in the 15th century as a commemoration of her husband, King Bhimdev I. It is considered one of India's most beautiful and complex stepwells and is even believed to have protective qualities. The stepwell features extremely intricate carvings and sculptures depicting scenes from Hindu mythology.

**Agrasen Ki Baoli, Delhi:** The stepwell situated at the center of Delhi is a popular place to visit. It is believed to have been constructed during the time of Tughlaq or Lodi dynasty. It contains three levels and descends a total of 108 steps to the water.







Fig 6: Chand Baori, Abhaneri, Rajasthan | Rani-ki-Vay, Gujarat | Agrasen Ki Baoli, Delhi Source: Wikipedia

#### **Current Scenario**

In the 19th century as water technologies advanced and leaders worried about profit, stepwells, an essential architectural feat, became increasingly unusual. During Britain's rule, many were emptied or destroyed as they were seen as unhygienic and possible sources of health diseases. However, the significance of preserving these underground structures as part of India's historical heritage has been acknowledged by the ASI, leading to the restoration of many neglected cave systems. The restoration aims to revitalize, restore, reuse, and integrate these structures into the urban fabric, preserving India's rich historical monuments (Lautman, 2019).

"Giving new life to heritage buildings is crucial for their survival. Transforming them for modern purposes creates a link between history and the present, ensuring their ongoing relevance for the future."



Fig 7: Stages of changes of heritage stepwells Source: Derived from literature

# Table 3: List of Stepwells in Gujarat Source: Joshi, 2017

# List of Stepwells in the Ahmedabad and Gandhinagar Region

Protected by ASI, State Archaeological Department, Unprotected and Lesser Known

- Stepwell at Uvarsad Village, Gandhinagar 1.
- Ancient Stepwell, Valad Village, Gandhinagar
- Khodiyar Mata ni Vav, Aslali Village, Ahmedabad Khodiyar Mata ni Vav, Badodara Village, Ahmedabad 4.
- Ancient Stepwell, Barejadi Village, Ahmedabad 5.
- Chara ni Vav, Chosar Village, Ahmedabad 6.
- Khodiyar Mata ni Vav 1, Devdi Village, Ahmedabad
- Khodiyar Mata ni Vav 2, Devdi Village, Ahmedabad Ancient Stepwell, Enasan Village, Ahmedabad
- 10. Ancient Stepwell, Jhaloda Village, Ta: Kadi
- 11. Guruji ni Vav, Kanij Village, Ta: Mehmedabad
- 12. Ancient Stepwell, Kanij Village, Ta: Mehmedabad
- 13. Prachin Vav, Kathwada Village, Ahmedabad
- 14. Khodiyar Mata ni Vay, Memadpur Village, Ahmedabad
- 15. Khodiyar Mata ni Vav, Bareja

Ahmedabad

- 16. Derani Jethani ni Vav, Ropada Village, Ahmedabad
- 17. Khodiyar Mata ni Vav, Ropada Village, Ahmedabad
- 18. Ancient Stepwell, Sankhej Village, Ta: Kheda
- 19. Dholi Vav, Chosar Village, Ahmedabad
- 20. Vav Wala Amba Mata nu Mandir, Ambawadi, Ahmedabad
- 21. Khodiyar Mata ni Vav, Bapunagar, Ahmedabad
- 22. Mahakali Mata ni Vay, Bapunagar, Ahmedabad
- 23. Syed Hazrat Jalaluddin ni Vav, Girdharnagar, Ahmedabad 24. Suteshwar Mahadev Mandir ni Vav. Gomtipur.
- Unprotected and Lesser Known Stepwells (38)
- Protected by State Archaeological Department (3)
- Protected by Archaeological Survey of India (ASI) (4)

- 25. Stepwell, Bhadaj Village, Gota Ward, Ahmedabad
- 26. Sindhvai Mata ni Vav, Indrapuri Ward, Ahmedabad
- 27. Ashapura Mata ni Vav, India Colony Ward, Ahmedabad
- 28. Khodiyar Mata ni Vav at Lambha Ward, Ahmedabad
- 29. Ancient Stepwell, Maninagar Ward, Ahmedabad
- 30. Gandharva Vav, Naroda Road Ward, Ahmedabad
- 31. Stepwell, Vadaj, S.P.Stadium Ward, Ahmedabad
- 32. Stepwell, Vasana, Vasana Ward, Ahmedabad 33. Khodiyar Mata ni Vav - 1, Vastral Ward, Ahmedabad
- 34. Khodiyar Mata ni Vay 2. Vastral Ward, Ahmedabad
- 35. Khodiyar Mata ni Vav, Khokhara Ward, Ahmedabad
- 36. Malekshaban ni Vav, Bapunagar, Ahmedabad
- 37. Dada Harir ni Vav, Asarva Ward, Ahmedabad
- 38. Rudabai ni Vav with inscription, Adalaj Village, Gandhinagar
- 39. Prachin Vav, Ambapur Village, Gandhinagar
- 40. Mata Bhavani ni Vav, Asarva Ward, Ahmedabad
- 41. Jethabhai ni Vav, Isanpur Ward, Ahmedabad 42. Khodiyar Mata ni Vav, Vatva, Ahmedabad
- 43. Vav, Mehmedabad, Kheda
- 44. Ancient Stepwell, Saiyedwadi, Vatva, Ahmedabad
- 45. Sasu-Vahu ni Vav, Vatva, Ahmedabad

Gujarat, a state in India, is home to numerous step wells, a unique architectural feature found in every village and town. The number of stepwells in Gujarat's southern and south-eastern regions is low, and there are no monuments with elaborate architectural frameworks or craftsmanship. However, Gujarat alone has around 570 stepwells built between the 2nd and 19th centuries using sandstones and bricks, across various reigns from the Mauryas, Guptas, Maitrakas, Gurjara Pratihara Empire, Chaulukya Kingdom, Delhi Sultanate, Gujarat Sultanate, Mughal Empire, and Maratha Empire (Joshi, December 2017). Some of the notable stepwells of Gujarat are Adalaj Stepwell, Bai Harir Vav, Jethabhai's Stepwell, Helical Stepwell, Amrutvarshini Vav, Navlakhi Stepwell, Borsad Stepwell, 43 Sevasi Vav, Ambe Mata ni Vav, Damavav step wells, Adi Kadi Vav, Khammavati Stepwell, Gopi Stepwell, Modhera Sun Temple, Ra Khengar Vav, Madha Vav, Navghan Kuvo, Vikia stepwell, Ambapur Ni Vaav or Ambapur Stepwell, Rani Ki Vav, Vidyadhar Vav, Uvarsad Step Well, Ancient Stepwell, Stepwell of Uparkot Fort, Gebanshah's Vav, Heritage of Ahmedabad, Surya kund of Sun temple of Modhera, Rudabai Vav, Dada Harir Vav, etc (Joshi, December 2017).

Ahmedabad, the largest city in Gujarat, has some of the most impressive stepwells: 7 stepwells have been protected by the state and central archaeological bodies. Adalaj ni Vav, Dada Harir ni Vav, Mata Bhavani ni Vav, Jethabhai ni Vav, are protected by the Archaeological Survey of India. Further, Mehmadabad ni Vav, Kathvada ni Vav, and Ambapur ni Vav have been protected by the Gujarat State Archaeological Department.

# AHMEDABAD STEPWELL TIMELINE

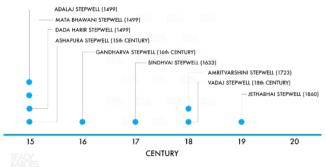


Fig 8: Timeline of Stepwell in Ahmedabad
Source: 9 must-visit stepwells including famous Adalaj Stepwell [with a route map]
(readyimages.com.au)

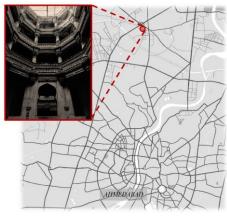
#### **Case Study Selection**

From many stepwells around Gujarat, the selected stepwell particularly which are located in Ahmedbad and Gandhinagar Region. The stepwells for case study selection are Rudabai Stepwell (Adalaj), Mata Bhayani Stepwell (Asarwa), Jethabhai Stepwell (Isanpur), Dada Harir Stepwell (Asarwa), Amritvarshi Stepwell (Khadia), Ambapur Stepwell (Adalaj). These stepwells been protected by ASI and GAD. The Archaeological Survey of India (ASI) and Gujarat Archaeological Department (GAD) are the primary government bodies responsible for heritage conservation in India and Gujarat. They are the core stakeholders for selected monuments. In Ahmedabad, there are 74 stepwells, with only 9 under heritage conservation, 4 under ASI and 5 under GAD (Joshi, December 2017). Stepwells under government bodies are conserved and in better condition than others, making them the focus for this case. Stepwells under ASI are well maintained and the heritage factor is intact for future conservation. Selecting from the conserved step-wells will help me understand the case from different perspectives of Communities, ASI officials, and other stakeholders. The method to select an appropriate case study that strongly aligns with the parameters of the living heritage (Tangible and Intangible Attributes). The following are the parameters: Historical Significance, Current Usage, Structural Condition, Community Connection, Social Practices, Daily Rituals, Festive Events, Religious Beliefs, Customs and Traditions. The research examines two stepwells: Adalaj-nivav and Mata Bhavani Stepwell.

Table 3: Case Study Selection Matrix (Source: Derived from Primary Data)

			Stepwells but	uit between the timeline of 15th to 19th Century in Ahmedabad	in Ahmedabad		
No.	Case Study Selection	Adalaj-ni-Vav	Mata Bhavani Stepwell		Dada Harir Stepwell	Amritvarshi Stepwell	Ambapur Stepwell
		800			1485	1723	Sth Century
- 61	Who built the structure	1470 Queen Rudabai	Dhai Harir	Jenathai	Dhai Harir	Raghunathdas	1 cm century
ω 4	in light of	Additional following Parcel Parcel	The state of the s	The should shall		Bu-Shara Davine a libradelada	And the second s
,	Location	variage,	ă	Seaple, Ammediatoric	Assiwa, Amiecaoad	Paticia Liva Darwaya, Ammedaded	Amosput, Generaling at
55	Historical Significance	Adala Sagorall or Radabai Sagoral was builtin 1498 in the memory of Raw Ver-Sagig (The Vighthe downty of Daniel) by list wide. Queen Radaderi, conte di net sutte of Gajarti, dara The sagoral is enserwed for its instinct occurge and independent and a The sagoral is enserwed for its instinct occurage a built and occurage a behalf of Think and a latimate matrix opin. Beyond an practical propose of growing versur, the Adala; Sagoral ir-flexes the rich cultural and historical exchange during that period.	Man Bhavan's segred was built in the 17th centary maning. Data and the 18th and the second training Constituted and altimo of Hands Goddon Bhawan in the restrict the theory gallery from which the stepwell derived in name.	This Stepmed was beath by Jefabithai acound 1860s.	The supowell was built in 1455 by Dani Hant. Dhan Hari built monogoe and a stude in which Malianud Begada, who was superintendent of the royal harms busined.	Amin'urathini var was completed in 1723. It was built by Sagfamanfans, deem to Balate Quil'Shan, who was the governor of The supered in believed to be built in the 15th centrary Sagfamanfans, deem to Balate Quil'Shan, who was the governor of The supered in believed to be built in the 15th centrary grapose.	The stepred is believed to be built in the 15th centrary through if doesn't laves any macrepton.
٧	Curent Unge	Currently, the stepwell acts as a community gathering space and routint attraction upon	Correctly the structure is used as a temple which knoses I the deliy goddens Man Bhewant Valents attracts by a locking at the structure.	The stepwell sets as a berings to Though compared to another stepwell it is not much winted unint an action.	The stepwell acts as a tousist attacton. Though compared to another stepwell it is not much 'visited.	The supred is createded and medy gets visitors.	Itis an active local attaction steprodi became a bemple is situated beside it.
7	Structural Condition	The stepool is in excellent structural consiston and well-maintained due to daily use by the surrounding community and $\lambda SL$	The step off has there stories and three pavilions, with the shorter commentation of the orderate, the state and and the step off is not very by well as materials of each of the step off is not very by well aminimed, as it affects from argifect and exceedances.	The stopwell is well maintained by the regulating being: It has a cordoned gremaion so the structure is in good condition.	The suprect is well maintained by the regulating body. It has a cochand premises so the structure is in a good confinen.	The supred is well maintained by the regulating body. It The supred is not well maintained. Even though it is beaued in the bar a cachang prantises so the another is no good the subsection of the attack of city of Americkan's not much attention is given to confident.	The suprect is well manufacted but it has tones of clearlinest and manufacture.
80	Community Connection	The local community dates interies about the siegwell with routine, feeling a introng connection to the size date to the daily interactions with visitors, which has minified a sense of pride in the area.	The stepwell is sinated in the middle of a lightly has community. There are no barriers between the stepwell precinct and the settlements around. The precinct acts as the access for the people living neatby.	The stepwell is cordoned; therefore, it does not has e any community connection. It also has a macque in the plot itself. It is accessable by people from both the religious.	The precinct of the stepwell is cordoned, therefore, it does not have any community connection. It also has a mosque in the campus streff. Thus the precinct access by people from both the religious.	The stepwell is situated in the old city of Ahmedabad. The area of the structure is gained, duss only visitor come.	The temple is located in the precinct of the stepwell. Thus, it is visited by the surrounding people.
6	Social Practices	The steproil is a busing this of total activity, darving in both locals and stouchs to the other states that the state of the states and the states of the states and the states of the	The stepred precurits used to occibize by the reighborhood community. If acts as a guiforing place comming how the stand other occasions.	Thy precinct of the supwell has a mosque. People codes for plob agraphy and letiture activities to the supwell.	The precinct of the stepwell has a mosque. People come for photography and lessure activities to the stepwell.	Presently so social practices are observed in the ategmed.	Supporell acts as a gathering place for people visiting the Auther Man temple located just at the entrance of the steprocil.
10	Daily Rimais	The Vighels and Redman priests perform a daily anoming must of lighting items; with a set then offered to the Godden Man Anhh, carved on the walk of the supred. The stepred is open to tourist from 8.00 an to 6.00 pm.	Brakinin taka can of ta stayrol. Posjetskov gestne to the sinne of Man Barena while passage by Moning and evaning pools is performed by the carealor doly.	Né daily ritush are solved in the stepwell.	No daily stands are noticed in the stepwell.	No delly situals are noticed in the stepmed.	No daily mands are noticed in the stepwell.
=	Festive Events	The local community colcitation fastirals like Hol. Navariti, and Dwals within the premises of the steprod.	It is wordshipped dining the nine days on Navantal Festival. On weekly bases, on every Sunday, sunadkast is offered to It the detty.	Ne feative events are observed in the stepmed.	No festive events are observed in the stepmell.	No festive events are observed in the suppreed.	The supposed is an active gathering space during the Nexterinal order festivals when the edge-cut Author Temple has theritons.
12	Religious Beliefs	There are stols of different gods tymboltang Hands and Jain dentes in the stepwell, with the main detry being Mats Amba.	A Men dety has been similed in the steprest for the varyouting communities. Small alarmes have been added a slong with minor alternation.	No religious behefs are associated with the supprest.	No religious beliefs are associated with the stepmell	No religious beliefs are associated with the stepmed.	No religious beliefs are associated with the step well.
ET .	Cuttoms and Traditions	Local visit the supred to prove the deay for their denies, vers, or weeding transh. Special commones are performed during festvals or special occasion.	Mora Baswanii si he Kodors of some communities. Propie visit the Timple during the featurals as well as on the other stanks of wedding:	The tradition of performing religious ritest <sup>1</sup> Dev. Devisit is a fall active in the supervol. It with object, the traditional been performing by the generatons of effatheni	No customs and traditions are associated with the stepwell.	No customs and traditions are associated with the stepwed.	No customs and traditions are associated with the stepwed.
	•			•			

# Case Study 1: Adalaj-ni-vav





**Fig 9:** Location of Adalaj-ni-Vav | Women Bringing water in the 1870s Source: Google map, Graphics made by author | Adalaj Stepwell - Wikipedia

The Adalaj Stepwell, also known as Rudabai Stepwell, can be found in Adalaj, a small town near Gandhinagar city in the Indian state of Gujarat. Queen Rudadevi constructed the stepwell in 1498 in remembrance of her husband, Rana Veer Singh, who belonged to the Vaghela dynasty of Dandai Des.

# Historical Value (Tangible & Intangible) Historical Significance

The Adalaj stepwell, also known as 'Vav' in Gujarati, is a five-story, intricately carved structure built since 1498. The well's origins can be traced to a Sanskrit inscription on a marble slab. Constructed by Rana Veer Singh of the Vaghela dynasty in 1499, the well was initially called Adalaj Ni Vav. Adalaj Ni Vav is a one-of-a-kind stepwell intricately carved and adorned whose ornamentation flows Islamic architectural motifs with deities symbolizing Hindu and Jain faiths. Floral designs are carved into Islamic fashion on the walls, scenes of daily life, and carved idol scenes of Hindu and Jain gods. It has been turned into a temple, and usually flowers are sold there. Adalaj Ni Vav is notable for its design, featuring three sets of entrance stairs that all lead to a large, open square platform. It was designed as a cool relief for sprightly residents and their visitors (contributors, 2024).







Fig 10: Adalaj Stepwell first floor | The stepwell is five stories deep | Intricate carving Source: Adalaj Stepwell - Wikipedia

# **Structure Condition**

Constructed in Solanki architectural style, the Adalaj well descends five stories into a formal octagon, with exquisitely carved pillars and a platform suspended at the top. Each floor of the well can be used by people and it was excavated deeply to reach groundwater, which was necessary because of seasonal variations. It has air and light openings on the rooftops and sizable openings at the landing points. Three stairs lead from the first floor to the water level, with the entrance on the south side and three stairways to a landing at the north end (contributors, 2024). The fourth floor has four tiny chambers with bay windows, adorned with engraved supports. The structure follows the traditional Indian structural system of trabeated

with lintels and horizontal beams. The floor is a tube-shaped tube carved from a circular well, with beams, walls, columns and arched openings spiralling upwards. A space in the upper part of the well is open to the sky. Stone beams set at a 45-degree angle reinforce the four corners of the square (contributors, 2024).

# Maintenance by surrounding community

There is a predominantly residential use of buildings. The use of buildings is often mixed in nature against the backdrop of a sub arterial, collector, or local road. In the southwest part of Adalaj Gamtal, a development area for Adalaj, businesses and mixed-use buildings are seen.

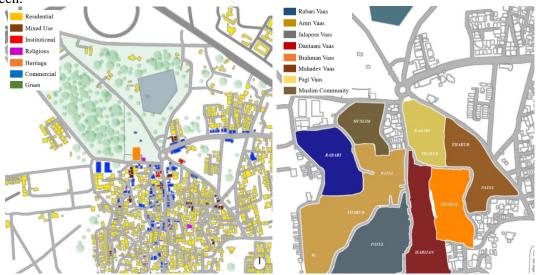
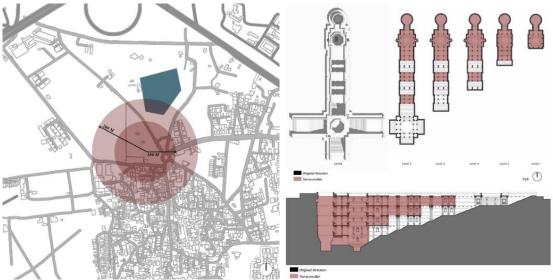


Fig 11: Building Use Plan | Community of Adalaj Gamtal Source: Google map, Graphics made by author

The maintenance of the Adalaj-ni-Vav is an active involvement of the community, along with the ASI. The monument's preservation will be guaranteed through this collaboration, with local guides and residents frequently overseeing the site, offering guidance to visitors, and safeguarding the stepwell's historical authenticity. Part of the management is maintaining the numbers of visitors, to avoid overcrowding and to provide a quality experience for all visitors to the site without damage.



**Fig 12:** Maintenance by ASI / Drawings of Adalaj ni Vav (The red-marked portion, in contrast, is not open to the public) Source: ASI employee, Graphics made by author

### Maintenance by ASI

The Archaeological Survey of India notification imposes significant regulations for the protection of monuments and their surroundings. In particular, the ASI does not allow any buildings within 100 m of ASI monuments, and buildings require permits to construct in a 200 m range surrounding ASI monuments.

Regardless of the 100m sovereign no-building rule, 48 buildings currently exist in the 100m no-construction zone, and 187 buildings exist in the 200-m range for monitored construction surrounding Adalaj-ni-Vav. It is the duty and responsibility of the Archaeological Survey of India to care for this monument and enforce the land use laws surrounding the ancient site.

# **Structural Modifications**

In order to ensure the historical and visual authenticity of the Adalaj-ni-Vav stepwell, local stakeholders have determined no structural changes, they are all working towards developing the stepwell while maintaining the integrity of the stepwell's original architecture. In addition, local stakeholders have enhanced the stepwell to increase visitation.

The enhancements intend to provide a better, accessible, and informative visitation experience, including enhancing visitation opportunities, and providing management for the caretaking of the site while respecting the heritage of the monument.

# **Original Function**

Initially constructed for the purpose of water supply to the surrounding region, the Adalaj-ni-Vav-baoli is now lying dry without water but is still serving the different requirements of the local community. So, this well had outlived its specified purpose but continues to fulfil the unspoken needs and appearament of the local community.

The architectural beauty and the historical significance further add to the attraction of the place. Times have changed, but the importance and significance of well has increased and accentuated its role play. Thus, Adalaj-ni-Vav has today, become a transformed hurdle for the society while for some, on the other hand, it is still the heartland of traditions and religious festivals.





**Fig 13:** Entrance of the Stepwell | Water Festival of Adalaj-ni-Vav Source: Author 21 April 2024 | Youtube Water Festival Adalaj 2020

# **Conservation Strategies**

The Archaeological Survey of India has instituted the buffer zone policies, the upkeep of structures, and the management of visitors for the protection of the Adalaj-ni-Vav Stepwell. In addition to these objectives, involvement by the locality itself is extremely important to safeguard the stepwell, to enhance its awareness and appreciation into daily life.

All of these meanings are intended to prolong the lifespan of the stepwell, protect it from injury and deterioration, and reduce harmful external agents while preparing it for disasters caused by organic or anthropic forces.

### **Heritage Awareness**

Assistance from local and distant communities has been critical in conducting awareness raising for the Site at Adalaj Stepwell. Trained local members of the community served as guides to development-led site interpretation for visitors. Important cultural events such as the Water Festival have been created to recognize the beauty and cultural significance of the site the Adalaj Stepwell, while also attempting to increase tourism and strengthen connection to the place.

# Social Values (Tangible & Intangible Attributes) Public Accessibility

Adalaj Gamtal is a 0.4 square kilometers area which includes Adalaj-ni-Vav and its surrounding areas. It has an easy reach to both Adalaj Chokdi Bus Station, 700 meters away, and Adalaj Gamtal Bus Station, 1 kilometer away. This area has two lakes, or Adalaj Lake and another lake very close to the Ganesh Temple. There are also some other sites such as Trimurti Mandir, Chehar Mata & Ambapur Stepwell Temple.

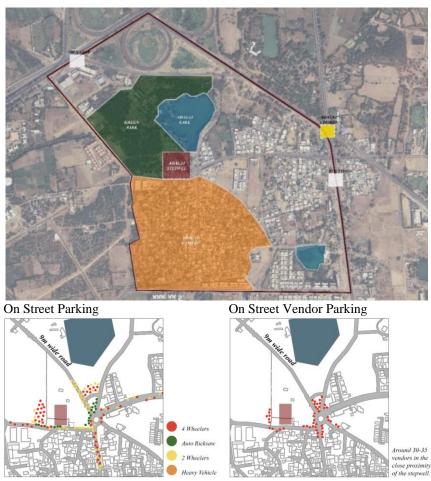
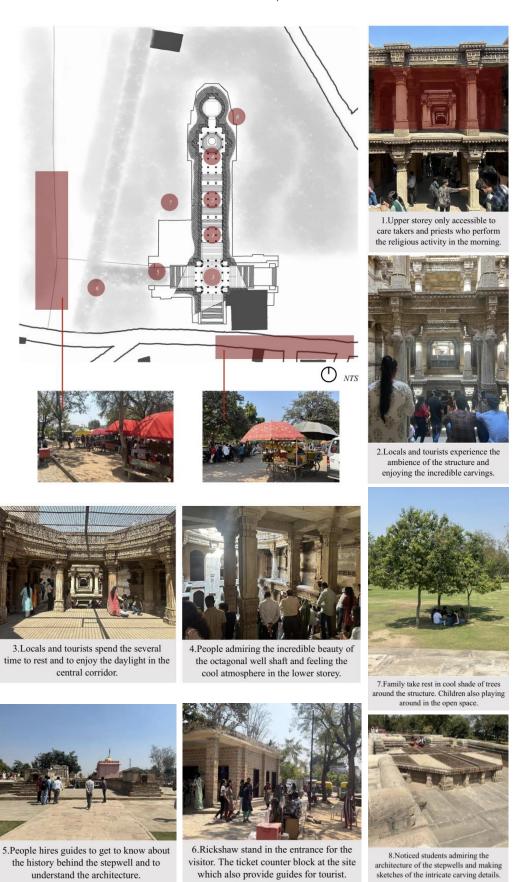


Fig 14: Map of Adalaj | Public Accessibility Source: Google map, Graphics made by author

### **Precinct Usability | Social Practices**

The stepwell precinct can be entered from the southern and western directions. The main entrance to the site from the internal road of the Adalaj is located to the south. This entrance is accessible for the local visitor and tourist. The secondary entrance from the west side to the site. This entrance is also one of the major entrances for the people of the community in the neighbourhood. It is observed that majority of the people use the main entrance access which passes through the precinct of the stepwell.



**Fig 15:** Precinct Usability Source: Author\_21 April 2024

- ➤ "I live in the village nearby. I have my stall here since the past 15 years. Currently my business is running well, but it would be affected if we are shifted" (Kalki ben 21/04/2024)
- ➤ "I am working on contract basis and I am involved in cleaning and maintenance from 8am to 6pm. I am appointed by ASI, for a period of 3 years" (Dinesh bhai\_21/04/2024)
- ➤ "We have come to visit the temple of our 'kuldevi'- Varudi mata' and to see the vav" (Group of tourists from Aravali\_8/04/2024)
- There is an increase in the number of visitors since the past 5 year" (Jagdish bhai (ASI employee) 12/04/2024 on a\_Conference call).

These spaces have a sense of time and place through their human activities and their built elements. They represent a cultural context and **community connection**.

# **New Generation Involvement**

# Local survey of users

Questionnaires were prepared for understanding the interaction between the site and visitors, as well as the demographic and social aspects of visitors.

The questions asked to the Users were as; Are you a local or a tourist? Did elders in your family visited this? Do your friends or children also like to visit this stepwell? Do you visit with your family?

Category of Visitors found were; local (15%), tourists (10%), senior citizens (25%), Adults/Friends/Students (15%), and Family Visitors (35%).

#### Reason for visit

The questions asked to know reason behind visit like; Do you come during Festivities, Sundays or Weekdays? On which occasion do you visit the stepwell? And the reason for visit found Sunday (40%), Weekdays (15%), Wedding Ritual (05%), Holi/ Navaratri/ Diwali (35%) and others (05%).

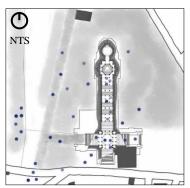
# Cultural Values (Tangible & Intangible Attributes) Religious Idols | Religious Symbolic Elements

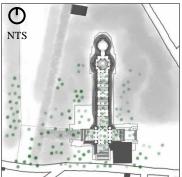
Adalaj Stepwell is home to various religious monuments, representing Hindu and Jain gods which reflect the diversity of their spiritual heritage in this region. Mata Amba, the central figure of the site's religious significance, is the main deity of the Stepwell. In addition to serving as a focal point for worship, these idols further enrich their cultural and historical value by highlighting the role of the Stepwell as a sacred space for followers of different faiths.

A carved sculpture from a solid stone block portrays the Ami Khumbor (representing the symbolic pot of the water of life) and the Kalp Vriksha (known as the tree of life). Additionally, there is a depiction of Navagraha, which represents the nine planets. It is said that during marriages and other ritual ceremonies, these images attract the villagers to worship. The symbols of Hindu and Jain gods carved at various levels in the well are beautifully complemented by images of flowers and architectural designs. Elephant sculptures in size of 3 inches 76 mm are dominant on the upper floors, each with its own design. Intricate carvings of women engaging in daily tasks like churning buttermilk and getting dressed adorn the walls. Additionally, there are carvings of dancers and musicians performing (contributors, 2024).

#### **Daily Usage**

The analysis was conducted to know the site's usage and activeness. How people are associated with the structure was observed. It also helped to know what duration and time of the day; the people like to spend time on the stepwell. In the afternoon and evening, the stepwell area is usually bustling with activity. Both local and distant communities gather in groups on the campus, using it as a social space. Food vendors, as well as the other shops, are busy from morning until evening for visitors and tourists. Secondly, there is an increase in activity late in the afternoon, and evening, such as photography, family picnics, and students' visits.





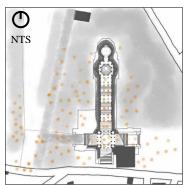


Fig 16: Morning Use of precinct | Afternoon Use of precinct | Evening use of the precinct Source: Cept archives, Graphics made by author

# **Festive Events**

The Adalaj Stepwell Water Festival is a celebration of the cultural significance, historical narratives, and architectural beauty of the Adalaj Stepwell—a monument to culture and a source of supporting historical significance to attract many people together in its winter months of January and February to promote awareness of water conservation and historical cultural properties' importance in Gujarat. The stepwell will be lit up outside with very bright colored lights and many events will occur on its guided grounds of cultural activities such as traditional dance and music while exhibiting some artistic modalities. People within the country and outside of the country will come to see the stepwell because of its beauty and join the cultural festival.

#### **Custom & Traditions**

Locals go to the Adalaj Stepwell to pray for their wishes, satisfy their vows, and carry out special ceremonies. It is regarded as a sacred place of worship where worshippers pray for blessings and have faith in the mysticism of their prayers, thus holding significant cultural and religious value. Worshippers congregate at the stepwell to experience festivities, and religion is used to receive divine blessings, such as Holi, Navratri, or Diwali, which can establish the stepwell as a point of interest.

# Case 2: Mata Bhavani Stepwell

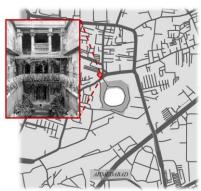




Fig 17: Location of Mata Bhavani Stepwell | Old photos of Mata Bhavani Stepwell Source: Google map, Graphics made by author | Mata Bhavani's Vav | Heritage of Ahmedabad

The Mata Bhavani stepwell is located in the Asarwa neighborhood of Ahmedabad. It is situated very close to the Dada Harir stepwell. It is named after the mother goddess Mata Bhavani, who has a small shrine built into the stepwell.

# Historical Values (Tangible & Intangible Attributes) Historical Significance

The prior of Ahmedabad is generally regarded as derived from the previous Karnavati, ostensibly established by a Chaulukya leader known as Karnadeva, during the 1070s. The exact location of this stepwell is unknown, but it appears to have been constructed during a period of political upheaval in the 11th century, indicating that the area that eventually became Ahmedabad became part of the Chaulukya dynasty's domain. It is a medium sized work with minimal sculptures or relief works. On the other hand, given its dual stair system, this architectural structure is fascinating. The square pool in front of the well, which is usually found in larger stepwells, is another notable feature. There is a stepwell of 46 m in length at the entrance to Mata Bhavanii, with a 5.10 m walking corridor on each side. There's a diameter of 4.80 meters in the well. On a tiered hallway that runs three stories, there are three pavilion towers (Precise, 2018).

# **Structure Condition**

The pavilion towers have no internal connections or spiral staircases, but flights of steps at the ground level connect to the top floors. Concentric rings of steps lead to the pool's surface, with four or five stair steps joining the tiers. The lower levels can only be reached through the stepped corridor. The ground plan for the Mata Bhavani stepwell shows a stepped corridor with a consistent width from the entrance to the final pavilion, but also a tapering plan as one moves from the first to the third pavilion tower, despite the absence of a tapering width from top to bottom. The well's diameter at ground level is 5.70 meters, including the parapet wall, and 5.40 meters without it. At the third story, it narrows to 4.80 meters, a design evident in the stepped corridor and a cross-section of the well.

A slender shrine, positioned on a platform, is built into the back wall of a well's story. The garbhagriha, a gathering place for worshippers, is in the pavilion-tower, possibly a temple. Three brackets below ground level likely supported a water-raising mechanism (Precise, 2018). The Mata Bhavani stepwell has modest sculptural and decorative ornamentation, with only sloped backrests, roof eaves, and parikrama featuring any sculptural or low-relief work. The structure is covered in white paint due to its sacred status.

The pediments have a stepped pyramidal form with a low relief jali design. The pavilions have flat roofs with protruding eaves and visible joints. Lion statues in a crouching position decorate the water outlets, although these are newer than the stepwell's structure (Precise, 2018).

# Maintenance by surrounding community

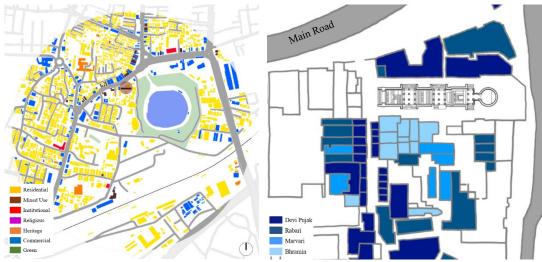


Fig 18: Building Use Plan | Community of Asarwa Source: Google map, Graphics made by author

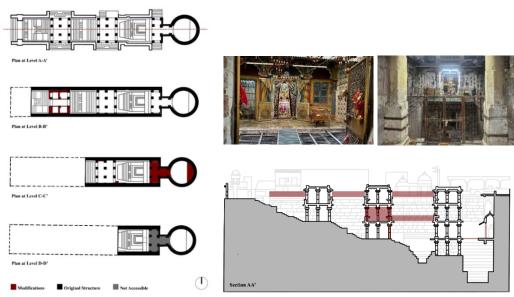
The use of buildings is mainly residential. Buildings facing sub-arterial, collector, or local roads often have mixed uses, even though the surrounding land is mainly residential. In the southern portion of the civil hospital area, where there is a creation of jobs and associated businesses, industrial and mixed building use can be observed. The Patni Devipujak Community, a scheduled tribe with a rich heritage of craftsmanship, lives in Asarwa settlements. They respect their Kul Devis and maintain connections with their ancestral villages. The caretaker of the temple, a Brahmin, has views on cultural and heritage factors. The community's lack of awareness on heritage aspects has led to the continuity of the site in the new era. The Devi Pujaks maintains connections with their ancestral villages and Kul Devis, despite their belief systems.

# Maintenance by ASI

The ASI is committed to preserving the physical integrity of Mata Bhavani Stepwell, focusing on its tangible attributes to maintain its originality. They safeguard against unauthorized alterations through careful observations and enforcement. Regular cleaning and inspections are undertaken by ASI officials and workers, with the community and stepwell caretaker legally notified. The ASI's preservation and protection of the historic structure are of great importance.

# **Structural Modifications**

Over time, the heritage structure of a stepwell has been modified due to diminishing water use and increasing water table depth due to mill and industrial developments. As a result, the stepwell became a place of worship, with many communities worshiping the goddess Mata Bhavani. The initial modification was to install metal posts on the edges of the stepwells, considering the safety of those living there.



**Fig 19:** Structural Modifications on Site Source: Cept archives, Graphics made by author

The temple, closely linked to the caretaker's family and community, has been neglected in its preservation efforts. Wall tiles were placed near the prayer area of Garbhgriha, and the stepwell structure was modified without considering its historical significance. External modifications, such as handrails for elderly and children, were made to accommodate increased footfall. The Mata Bhavani shrine making process has been very active in recent times. They're all built and carved in concrete. They're proud that their additions to the stepwell are all pukka, even though they can't buy or cut stone. The fact that Brahmins engage in physical activity reveals the old parameters of their nonlaboratory caste are being changed.

# Social Values (Tangible & Intangible Attributes) Public Accessibility

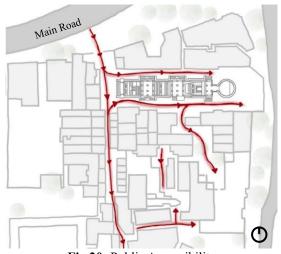
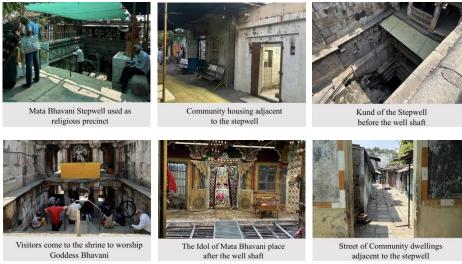


Fig 20: Public Accessibility
Source: Cept archives, Graphics made by author

From the northern and southern sides, there is a passageway into the stepwell precinct. The main entrance from the Asarwa Road is located north of this site. It is also one of the main entrances to the neighbourhood for the people of the community. The houses also have access from the southern end, which is a medium traffic road. Most people use the main entrance, which passes through the stepwell precinct, it is observed.

# **Precinct Usability | Social Practices**



**Fig 21:** Precinct Usability of Mata Bhavani Source: Author 30 April 2024

# New Generation Involvement Local survey of users

Questionnaires were prepared for understanding the interaction between the site and visitors, as well as the demographic and social aspects of visitors.

The questions asked to the visitors / users of Asarva were as; (a) Are you a local or a tourist? (b) Did elders in your family visited this? (c) Do your friends or children also like to visit this stepwell?, (d) Do you visit with your family? And the category of visitors found were locals (20%), tourists (10%), senior citizens (25%), Adults/ Friends (20%), and Family Visitors (25%).

#### **Reason for Visit**

The Questions asked to know reason behind visit like; Do you come during Festivities, Sundays or Weekdays? On which occasion do you visit the stepwell? And the reason for visit found festivals (15%), Sunday (40%), Weekdays (05%), Wedding Ritual (05%), Navaratri/Diwali (30%) and others (05%). Mostly the people are associated with the stepwell because of the Mata Bhavani Shrine. People from nearby villages come on Sundays to worship the goddess and receive the blessings of the Mata with the Prasad of the temple. Older individuals visit stepwells due to strong beliefs in the structure. Daily, the neighbours of the community make a gesture by passing by the temple. During Navratri, 90% of the people come to offer their prayers in front of the Mata and When they visit the temple, certain communities have additional rituals dedicated to this goddess.

# Religious Idols | Religious Symbolic Elements

The stepwell is currently being used for religious activities, as it contains a temple devoted to Mata Bhavani. At the same time, there are many items related to religion on display at the stepswell premises. These items are things like matka, which we use during the Navratri. They keep plastic chairs which are used on occasion.



**Fig 22:** Religious Idols on the precinct Source: Author\_12 April 2024

There are also other Pooja-related items in storage. Each of these two rooms is devoted to the storage area at the bottom of the stairs. One big storage area is beside the semi-open area behind the well shaft. It's got tables, knives, etc. that are used in cooking and preparing meals on occasion. This map shows the activity of the site throughout the year. The caretaker shall be responsible for the arrangement of the items and their management.

# **Daily Usage**

This analysis has been carried out to ascertain the usage and activity of this website. Observations have been made of the way in which people are connected to this structure. It also helped me to know what duration and the time of the day, the people visited the stepwell. This analysis has helped me see how the people of a neighborhood community, who are very close to that structure, use it. There's not a lot of activity in the afternoon. In the interest of security and in view of the religious significance of the structure, the stepwells' temple gates have been locked. The caretaker family, which stays in a house next door to the stepwell and takes care of

well-being and keeps an eye on no illegal activity going on inside this structure, looks after it. Throughout the morning and evening, the Stepwell building premises bustle with activity. Groups of people gather on the campus, making it a social hub for the surrounding community.

In the temple, some people come for prayer. There are daily worshippers in the other smaller shrines as well. During the morning, vegetable sellers and other shops are seen operating. There are women on the streets of a community who do their daily work. During the evening, there are few visitors to the temple. Some men are sitting and socializing in the campus area in the evening.

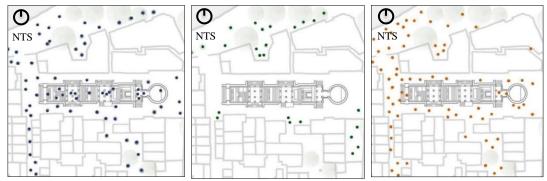


Fig 23: Morning Use of precinct | Afternoon Use of precinct | Evening use of the precinct Source: CEPT archives, Graphics made by author

#### **Festive Events**

Navratri is one of the main festivals celebrated in Mata Bhavana Stepwell. A large number of believers gather to pray for the goddess Mata Bhavani during this festival. Twice in a Hindu calendar year, the Navratri festival is observed at "Chaitra" month and again during 'Aaso.' The Mata Bhavani Stepwell sees a large influx of pilgrims on the 8th day of Navratri, known as 'Aatham'. The caretaker, along with other community members, organizes a Havan sacred fire ceremony on this auspicious day. The holy days are comprised of devotees receiving blessed food offerings, known as Prasad and Bhog. Navratri at Mata Bhavani Stepwell brings pilgrims from near and far, fostering a sense of community and belonging due to its significance as a cultural and religious tradition.

# **Customs & Traditions**

The local populace regards the Mata Bhavani Stepwell as one of its prominent places of worship, where community members come to pray and engage with a goddess. Individuals pray at the shrine and seek the goddess' blessing that their requests will be fulfilled. In addition to its religious significance, the Stepwell is also a space for celebrations and other activities, such as wedding ceremonies. These traditions and events in combination highlight the Stepwell's role in both spiritual devotion and social engagement, emphasizing its significance in people's cultural and social experiences.

# **Discussions**

# Case Study 01: Adalaj-ni-Vav

#### **Historical Value**

The Adalaj-ni-vav is well-known for its intricate carvings and breathtaking architecture that reflects a mixture of Hindu and Islamic artistic styles which, in and of itself, exhibits deep cultural and historical implications. Although it has ceased to operate in its primary stepwell function, it remains a place of community gathering and popular tourist destination, thus maintaining its relevance. Moreover, it is overall in excellent structural condition, thanks to the considerable commitment from the local community and, to all appearances, also the Archaeological Survey of India (ASI). ASI continues to engage in the application of: Buffer Zone Regulations, Structural Maintenance, and Visitor Management Conservation Methods.

The local community has also demonstrated its role in maintaining the steps of a stepwell and also engages in an invaluable role in keeping intact and alive the intangible

qualities of traditional festivals and rituals associated with the specific stepwell. The core emphasis of ASI is the physical conservation and protection of Adalaj-ni-vav from unauthorized modifications, with ASI employees conducting frequent inspections and scheduled cleaning. The community significantly contributes to maintaining the stepwell's beauty and cultural significance through educational programs, guided tours, and cultural events.

#### **Social Value**

The Adalaj-ni-vav is vital communal gathering location for its respective user groups that function as repositories of many kinds of social value. Adalaj-ni-vav is attractive to both locals and visitors—especially on weekends—and at festive times of year like Holi, Navratri, and Diwali. This stepwell is relatively close and easy to access, Adalaj-ni-vav located in Adalaj and accessible from the SG Highway. The stepwell holds substantial importance for residents of the area, who relish both the everyday activities and the stories surrounding them. Daily events and festivals draw people living nearby and visitors traveling from afar to witness the 'vav' in Adalaj ni-vav, or attract substantial crowds altogether.

Lively attraction continues at Adalaj-ni-vav while tourists and locals engage with the beauty of the carvings and the coolness of the atmosphere. Small businesses are run in booths near the vav selling snacks, drinks, and trinkets. Tour guides share in-depth histories and architectural histories with tourists and locals alike. Children play in the wide-open spaces and families gather around the adjacency of the vav. Equally significant was the role of new generations. Children and youth learned about the cultural heritage and aesthetic quality of the Adalaj-ni vav by engaging in educational field trips or family visits. Visitors would experience the site's aesthetic merit through personal photography and videography.

#### **Cultural Value**

The Adalaj-ni-vav is a site of considerable cultural significance featuring idols of multiple god's representative of both Hindu and Jain gods, with Mata Amba representing the primary deity among these. The stepwell is intertwined with deep-rooted religious representations. Adalaj-ni vav not only showcases female artistry in household tasks, preening ritual acts, and dance with an upper level adorned with elephants but also features a pot of the "water of life," Ami Khumbor on the terrace, and a navagraha indicating the nine planets.

In broader context, the rights of the local inhabitants to use the stepwell are indicated alongside the cultural practices of navigation and how those are intertwined with the community, including religious flags (or, Chundadis), pots (or matkas), garbas and temporary idols - practices that are closely related to the belief systems of the community. Adalaj-ni-vav has Vaghela Brahman priests who conduct daily rituals by providing lit lamps for the Goddess Mata Amba, which is viewed as a service to the community in general. The stepwell is open to tourists from 8am-6pm, which attracts visitors who take pleasure in its beauty. Adalaj-ni-vav also hosts the annual "Water Festival," Holi, Navratri, and Diwali.

# Case Study 02: Mata Bhavani Stepwell Historical Value

The Mata Bhavani Stepwell, one of India's earliest stepwells, is of great cultural significance given its continuing manifestations and architectural attributes. The stepwell is no longer in use to fulfill its original purpose, but the temple shrine of Mata Bhavani continues its use. It is relatively structurally intact due to the care of the local communities. However, the ASI has not implemented additional conservation measures to preserve the site. This has led to the neglect of its heritage significance in the conservation of the stepwell. The community has played a significant role in retaining the stepwell and temple, with the caretaker living relatively close, and the assistance of individuals from the surrounding communities. The community has changed the site slightly over time, which has impacted the original fabric of the stepwell. The preservation culture in the community surrounding Mata Bhavani Stepwell is much weaker, with little effort-driven primarily from the caretaker and ASI. Even if ASI is involved in the

preservation process, its focus is mostly on the physical structure of the stepwell with limited attention to protecting the building's intangible heritage.

# **Social Value**

The Mata Bhavani Stepwell also acts as a crucial place for communal gathering locations and functions as an organizer for many kinds of social value. Mata Bhavani Stepwell is visited daily, weekly, and yearly for communal gatherings for religious purposes. It is relatively close and easy to access, Mata Bhavani Stepwell located in Asarwa and more conveniently accessed from the main road for locals. People associated with the vav have an inter-generational bond with the Mata Bhavani Stepwell that's intimately connected to their belief in Goddess Mata Bhavani. The main draw of the Mata Bhavani Stepwell is the temple shrine where wedding rituals and other ceremonies take place, as Mata Bhavani is revered as the 'Kuldevi' for numerous communities. The involvement of new generations is equally important, although most visitors to Mata Bhavani Stepwell are older than 30 years. The younger generation does participate, to some extent, in perpetuating their family traditions, customs, and practices.

### **Cultural Value**

The Mata Bhavani Stepwell also represents cultural significance that encompasses both tangible aspects and other immaterial elements, connected to religious and community practices. The Mata Bhavani Stepwell has idols of a wide variety of gods and has a central shrine featuring Mata Bhavani, along with additional deities like Vishnu, Ganesha, and Krishna. The stepwell connects with deep-rooted religious meanings. The caretaker for the Mata Bhavani Stepwell, a Brahmin, conducted Pooja two times per day, and sees participation from community members nearby. Devotees congregate at Mata Bhavani Stepwell during Navratri, an important festival, in accordance with the Hindu Calendar, which has two Navratris in Chaitra and Aaso. The mopping-a-dressing day ('atham') is one of the most important events marked with cohesiveness, Havan, Prasad, and Bhog. Both stepwells serve as strongholds of customs and traditions, with locals praying there and making vows and other special observances. The unique feature of events at Mata Bhavani Stepwell is that it is a place of celebration and wedding ceremonies for many devotees and they fulfill their begging desires.

#### **Conclusions**

The connection of the community to the stepwell is one of the most prominent factors observed in understanding the dynamics of living heritage site. Here at both Adalaj-ni-vav and Mata Bhavani Stepwell, one can see the attachment of the community to the structure to a great extent. The surrounding as well as the distant community are highly involved in the management of the site. This participation brings out the significance of Living Heritage Approach which entirely dependent on the tangible and intangible heritage of the site.

The physical aspects of the site primarily demonstrate the historical importance of the stepwell, whereas the non-material aspects are the customs, ceremonies, and principles relevant to the community's connection to the stepwell. The heritage value remains unharmed due to the constant efforts of the regulating bodies to protect and preserve tangible heritage.

However, the regulating bodies have not been prioritized the intangible aspects, which are related to the community's connection to the site. In the case of Adalaj-ni-vav, tangible aspects are appropriately maintained by the ASI safeguarding the architectural and historical identity of the structure. However, in the case of Mata Bhavani, some gradual modifications are affecting the tangible elements of the structure while the intangible aspects are prominently being taken care by the surrounding and distant community. According to the research, to ensure the smooth continuation of the site more coordinated management system must be developed for finding a balance among the local community and regulatory bodies which could promote the safeguarding of tangible and intangible heritage. This will facilitate the involvement of stakeholders with minimal conflicts and preserving the living heritage for future generations.

# References

- AG, H. R. (2022). Stepwells of India (Jal Mandir). Press Information Bureau, Research Unit, 1-8.
- Arkarapotiwong, P. (2015). The Investigation of LIving Heritage Attributes in Living Heritage Sites.
- Chakarbarty, S. &. (2024). Visa-Bharti-Santiniketan, A Unesco WHS: A role model of deeply-rooted education and re-coonecting culture. EdA-IJAE, Rome, 52-67.
- contributors, W. (2024, August 2). Adalaj Stepwell. Retrieved from Wikipedia The Free Encyclopedia: https://en.wikipedia.org/wiki/Adalaj Stepwell
- Emock Omayio, I. S. (March 2021). Introduction to Heritages and Heritages Management. Delhi.
- Galla, A. (2008). The 'First Voice' in Heritage Conservation. International Journal of Intangible Heritage, 14.
- Joshi, M. (December 2017). Lesser-Known Stepwells. Ahmedabad: Urban Management Centre (UMC).
- Lautman, V. (2019, December 4). Stepwell architecture. Retrieved from Encyclopedia Britannica: https://www.britannica.com/technology/stepwell
- Poulis, I. (2014). Discussing strategy in heritage conservation: Living Heritage approach as an example of strategic innovation. Journal of Cultural Heritage Management and Sustainable Development, 20.
- Poulis, I. (2014). The Past In the Present: A Living Heritage Approach. Meteora, Greece: https://www.jstor.org/publisher/ubiquitypress.
- Precise, P. a. (2018, March 17). Mata Bhavani's Vav. Retrieved from Heritage of Ahmedabad: https://heritageofahmedabad.com/mata-bhavanis-vav/
- Santosh Kumar, S. M. (2024). Criteria for Selection of World Heritage Sites. Press Information Bureau, Research Unit, 4-5.
- Shaojie Wang, Q. G. (2023). Research on the Conservation Methods of Qu's Street's Living Heritage from the Perspective of Life Continuity. mdpi.
- Singh, R. a. (2020). Intangible dimensions of urban heritage: Learning from holy cities of India. inbook, 275-291.
- Testbook. (2023, December 21). Cultural Heritage Overview | Tangible and Intangible Cultural Heritage in India. Retrieved from testbook: https://testbook.com/ias-preparation/cultural-heritage
- Unni Sriparvathy, T. S. (2021). Adalaj Stepwell: A magical Resonance of Architectural Ingenuity. Athens Journal of Architecture, 280-281.