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Mughal Welfare Architecture Reborn: The Account of Kharian Baoli's (Stepwell) Restoration

Tanzila Parveen[1], Muhammad Kashif Ali[2], Gulsion Nasim[3] & Adil Zaman[4]

[1]*PhD Scholar, Department of History & Pakistan Studies, University of Gujrat.*
[2]*Lecturer, Department of History & Pakistan Studies, University of Gujrat.*
[3]*PhD Scholar, Department of History & Pakistan Studies, University of Gujrat.*
[4]*Lecturer, Department of Political Science and International Relations, University of Gujrat, Gujrat.*

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Corresponding Author:
Muhammad Kashif Ali
Email:
m.kashif@uog.edu.pk

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ABSTRACT

The importance and conservation of this underground architectural heritage, Kharian Baoli, constructed in 1013 A.H. (over four centuries ago) under the rule of Mughal Emperor Jalal-ud-Din Muhammad Akbar, have been studied and analysed within this research paper. At the time of its construction, this water-body was built for the watering and domestic needs of the people, but later, in the late 20th century, it got ruined and was covered with trash, where native people reside. Following a long-drawn-out legal dispute in the Lahore High Court, the Punjab Government, yielding to pressure from the civil society of Kharian, restored it during 2019-2021 at a cost of 10 million rupees to its previous state. The research emphasizes the need for protecting such abandoned welfare infrastructure of the past and uses qualitative research techniques, i.e., primary and secondary data analysis, site visit, Gujrat district's historical chronicles, and comparative research on similar stepwells. It also analyses court proceedings, government documents, and news reports in order to track the legal and administrative actions leading to the revival of the baoli. By recording this case, the article highlights the intersection of heritage preservation, judicial intervention, and community activism in protecting Mughal-era public utilities.

Introduction

The word *Baoli* (also referred to as *Bawdi*, *Vav* or *Bavadi* in various parts of the world) comes from Persian and means a stepwell a distinct hydraulic building structure with staircases descending to the water level. These cleverly designed wells were not just utility reservoirs but also important social, religious, and architectural beacons throughout civilizations

Civilizations have created numerous water storage techniques for thousands of years to provide for their requirements, particularly in semi-arid areas with limited rainfall. To provide water supply during droughts, humans built deep furrows, rock-cut wells, and step-accessible reservoirs. These structures, also called step-wells, are known by various names throughout India, such as *baoli*, *bawdi*, *vavdi*, *vav*, *kalyani*, and *pushkarni* (Kumar & Singh, 2024). Though the term *Baoli* is in general use in Persian and Urdu-speaking areas, Western India utilizes words such as Vav (Gujarat) and *Bavadi* (Rajasthan), as a sign of linguistic variation corresponding to the same ancient idea. *Baolis* were historically necessary in dry and semi-dry areas, providing water security to humans and animals, be it during war or peace (Hashem & Showly, 2021). Collection and conservation of water have been an essential part of the Indian subcontinent society's right from the Harappan Civilization, meeting not just basic requirements but also performing social, cultural, and religious functions. *Baolis* or stepwells are divisible according to their architectural type as well as location and use. Architecturally, they differ in shape, such as *baolis* with a straight stepped corridor and one entrance, those with a straight stepped corridor and three entrances, L-shaped *baolis*, *baolis* with circumambulatory passages, and those with cross-shaped ground plans. Functionally, *baolis* near temples were used mainly for religious ceremonies, whereas those within villages were used as community meeting places (Bandil & Mishra, 2025).

The structures typically included multi-levelled cisterns and complex staircases, which helped people access the lowered water levels in cases of drought. Apart from their use as water conservation structures, step wells also held religious significance. When the wells were erected near mosques, temples, or churches, the sites served for ablution purposes, linking water conservation with religious practices. On the other hand, step wells erected along trade routes or in a dry region functioned as public welfare projects because they eased the lives of travellers, traders, and military forces dependent on horse, elephant, or pack-animal transportation, respectively. The aesthetic beauty of baoli was more than just their utility. They had intricate carvings, pavilions, as well as underground tunnels; hence they were places to be for hosting parties.

This two-way function, as infrastructure related to the survival of life and as centers for culture, bears testimony to their erstwhile importance in the Indian subcontinent, particularly under the patronage of the Mughal emperors, like Emperor Akbar, who commissioned numerous baolis in the framework of their city development and welfare measures. Though the subcontinent, comprising modern-day Pakistan, India, and Bangladesh, has an abundance of such infrastructural landmarks, the stepwell is not an example of an exclusively South Asian monument. However, the baolis in the subcontinent remain unparalleled in the architectural glory and overall significance of these structures. The renowned Kharian Baoli at Baharwal, dating to 1604-05 CE (1013 A.H.) during the reign of Akbar, symbolizes such architectural glory. The renovations done in 2019-2021, even after such a long span of disuse and litigation over the structure, indicate the relevance of these structures in the modern age not merely as a relic of a former age but as a hallmark for sustainable water harvesting systems entirely in tune with the needs of common people. The present paper examines the historical, architectural, and socio-legal significance of Kharian Baoli in support of such renovations in recognition of its collective technological heritage in the form of architectural glories on the surface of the planet earth known as humankind.

Literature review and Research Methodology

Kharian Baoli research relies on a variety of historical literature, archives, and current research. Among the most important sources is Abdul Rehman and James L. Wescoat's *Pivot of the Punjab* (1993), which gives a foundational overview of the historical value of District Gujrat and its towns, villages and monuments, making special mention of Kharian's stepwells. Likewise, Captain

A. C. Elliott's *The Chronicles of Gujrat* mentions the area's historical sites, specifically the two *Baolis* in Gujrat and one of them was Kharian Baoli, with insightful information regarding their architectural as well as utilitarian functions.

Secondly, there emerge some crucial entries from *Tareekh-i-Gujra*t, which gives a comprehensive history of Gujrat in the form of maps, towns, and architecture, including the expenditure and construction of *Kharian Baoli* during the Mughal era. The most recent book by Liaqat Ali Sindhu, *Gujrat Gujranwala ki Khoj*, 2024, extends these findings by examining the towns, tribes, and Mughal architecture of the region's buildings, including Baolis. The importance of Kharian because of two Baolissweet water and sour is highlighted as the main subject matter by Ghulam Mufti Sarvar's *Tareekh-i-Mekhzan-i-Punjab*. Advocate Muhammad Zaman Khokhar's, *Gujrat Tareekh key Ainy Mein,* 1996, describes the history up to Emperor Humayun's visit and Emperor Akbar's orders for the construction.

Secondary sources other than the book include journal articles and government publications. Arif Sadeed's research study on Bihal Baoli of Khoi Ratta Kotli in Azad Jammu & Kashmir, the two government publications of 2022 on Baoli of Kotla Feroz Shah, and the research article "Into the Baolis: Step-wells of Bangladesh" published in 2021 by Mian Abul Hashim and Anna Zulfiqar add valuable comparisons from other regions on the architectural and restoration front. In addition, from the Archaeology & Cultural Sectoral Report in the Rawalpindi Regional Development Plan and the Lahore High Court Case, there is a background related to the restoration of Kharian Baoli.

From the methodology perspective, this study adopts a participatory research approach. The research combines primary data collection with case study data as well as field visits as a way to incorporate both the past and present aspects of the Baoli. This is done through the review of archived information to form the historical aspect of the study while carrying out field study visits to create the present dimension of the study.

History of Baoli

Wells and *baolis* have been used as sources of water since ancient times, with such wells being constructed all over the world throughout history. Nevertheless, Abul Hashem Miah and Ananna Zulfiqar Showly observe that this specific type of stepwell is exclusive to the Indian subcontinent (Hashem & Showly, 2021). The first reference related to such *baolis* in the Indian subcontinent is traced back from the fifth century CE. This type of architect flourished during eight to eighteenth century very frequently (Hashem & Showly, 2021). There were more than 100 *baolis* in India in ancient times but only thirty survived which were restored and preserved (Indian Government Report, 2025). According to Mr. Phillip Earis, in Pakistan about two dozen *baolis* are existed while two thousand in the world. Field studies revealed records of two lesser-known *baolis*: (1) Bihal Baoli in Koi Rata Kotli, Azad Jammu & Kashmir, initially discovered in 2020, and (2) a stepwell in Khura, Soon Valley of Khushab District, initially documented in 2019.[1] During the fieldwork regarding the *baolis*, we discovered minimum detailed written accounts precisely regarding Bihar Wali Baoli Kharian, although a few historical sources point toward the presence of two *baolis* in Kharian. Mirza Azam Baig's *Twareeh-i-Gujrat* points out that in the period of Akbar, a *baoli* was built inside Gujrat city fort at a cost of 10,000 rupees. The author mentions this *Baoli zeena dar* (Urdu: stepwell) to be in good condition and in need of no renovation, although its marble plaque (*katba*) was said to have been dismantled during British occupation (Baig, 1867). Currently, no evidence of this *baoli* exists within Gujrat's fort. Recent reports confirm a number of endangered *baolis* throughout Pakistan. Imran William, a heritage enthusiast had identified a deteriorating

[1] Bihal Baoli (Koi Rata Kotli, Azad Jammu & Kashmir) was explored by Sadeed Arif, M.Ashraf Khan and Mehwish Muneer while a *baoli* in Khura (Soon Valley) District Khushab was explored by Tariq Amir.

baoli at Brahamanabad village outside Lahore in December 2023, in need of preservation with urgency. Another is Sher Shah Suri Baoli. Rohtas Fort is home to Pakistan's biggest stepwells - one close to Kabuli Gate (60-steps) and a central 148-step one, both from the time of Sher Shah Suri. During his limited region Sher Shah Suri introduced *Kos Minars* and *Baolis* between two *sarais* along the Grand Trunk Road, while the same legacy was adopted by the Jalal-ud-Din Muhammad Akbar during his era with *sarais, dak-chowkis and baolis* (Dar, 1994). The new GTR also occupy almost all old such stations such as Sarai Kachi (Gujranwala), Gakharr Cheema, Wazirabad, Gujrat, Kharian, Srai Alamgir, Rewat, Margalla, Sarai Kala, Sarai Hassan Abdal and Begum ki Sarai (Dar, 1994).

A Brief Historical Survey of Gujrat Baolis

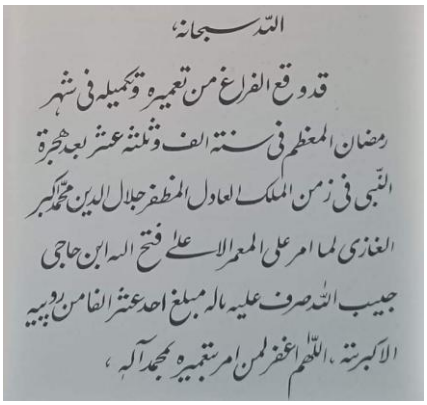

اللہ سبحانہ،
قد وقع الفراغ من تعمیرہ وتکمیلہ فی شہر
رمضان المعظم فی سنۃ الف وثلثۃ عشر بعد ھجرۃ
النبی فی زمن الملک العادل المظفر جلال الدین محمد اکبر
الغازی لما امر علی المعمر الاعلی فتح الہ ابن حاجی
حبیب اللہ صرف علیہ مالہ مبلغ احد عشر الف من روپیہ
الاکبرتہ، اللھم اغفر لمن امر بتعمیرہ بمحمد وآلہ،

Figure. 1: Memorial Plaque of Kharian Baoli

Gujrat, strategically located between the rivers Chenab and Jhelum on the Grand Trunk Road in northern Punjab, is an important place in history as a cultural and geographical centre of the region. The region's rich past dates back to pre-Alexandrian times when Hindu kings Bachan Pal and Suraj Bansi founded settlements in the Chenab's Belas area, which later evolved into the Buddhist city of Udanagar. After its downfall, Raja Risalu of Sialkot rebuilt the destroyed city, renaming it Gujarnagri, which over time became modern-day Gujrat. The area continues to be famous for its ancient landmarks, varied landscape, and lively cultural heritage (Elliot, 1992). The city of Gujrat was destroyed in 1011 CE in Sultan Mahmud Ghaznavi's sixth Indian campaign and was left in ruins until the reign of Emperor Akbar. In 1580 CE on his way from Kashmir to Kabul, Akbar came upon the ruined place and ordered Wazir Khan and Dianat Roy to build a new fort. The venture, sponsored by an 11-lakh rupee donation by Chaudhri Fateh Muhammad of Waraichanwala, saw Gujrat brought back to life after centuries of neglect (Elliot, 1992). Liaqat Ali Sandhu claimed taht the King Akbar was going to Kabul from Gujrat when he ordered to build the Gujrat fort (Sandhu, 2004). The historical accounts reveal that Akbar's building of Gujrat Fort had a *baoli* and a *hamam* (bath) in it. Mirza Azam Baig's *Twareekh-i-Gujrat* records that the *baoli* constructed at 10,000 rupees during Akbar's time stood on its own structurally with only the embellishing marble (*katba*) being dismantled during British times. While the *boali* was reportedly well-preserved and required no major repairs according to historical accounts, no trace of this structure remains in the present-day Gujrat Fort site (Baig, 1867). Khokhar's 1996 historical study *Gujrat Tareekh Kay Ainy Mein* documents the structural integrity of the *baoli* to be remaining intact with a single collapsed wall, implying the restoration process back then could well have helped protect the monument effectively (Khokhar, 1996). Today, there is no trace left of the *baoli* at Gujrat Fort. Its nearby town of Kharian did have two ancient stepwells dating back to the Akbar period, one of which stood with different characteristics. The brick-built *baoli*, carrying saline water that provided the place with its name, has vanished completely.[2] By comparison, the other *baoli* - constructed from characteristic black stone (perhaps obtained from Rohtas Fort site) and supplying sweet water - acted as a lifeline source of water for centuries and is amazingly well preserved now (Sarwar, 1996).

[2] According to Liaqat Ali Sandhu in his book "*Gujrat Gujranwala ki Khoj*" "the western baoli was renovated by the Sardar Lehna Singh" 154. Liaqat Ali Sandhu also confirms that the stone used in eastern baoli seems same as the stones used in the construction of "Rohtas Fort".

Geographical location of Kharian Baoli:

The ancient Kharian Baoli (Google Maps location: RV69+P85) is a focal point in Tehsil Kharian, District Gujrat, situated prominently along the historic Guliana Road close to Anarkali Bazar. It is an important Mughal-period monument that holds a strategic place in the urban landscape of the city, readily accessible along the eastern arm of the old Kharian-Guliana Road leading to the Grand Trunk Road. For those approaching from the Grand Trunk Road, the path to the *baoli* starts across from Malik Electronics, where the Punjab Archaeology Department has placed the signboard. The first trail takes visitors into the lively Anarkali Bazar, where after a few minutes' walk of about 50 meters, a well-marked turn leads visitors to the site of the *baoli* proper. The northern boundary of the *baoli* provides direct access to the busy marketplace, providing a fascinating contrast between the ancient water feature and modern commercial enterprise. These considerate placements of signage and the monument's placement in the centre demonstrate both the archaeological value of the *baoli* and the efforts of the authorities to make this heritage destination readily accessible to tourists and scholars alike. The ease of access of the site is also helped by its proximity to major thoroughfares yet deep within Kharian's historic urban planning.

A Note on the Architecture of the Baharwali Baoli:

The architectural account of this *baoli* in Dr. Rehman's work contains obvious textual similarities with the preceding Memorial Plaque accounts, pointing towards a verbatim borrowing of construction details. He reproduces the Persian text in English as:

Allah the Almighty

> "This baoli was built and completed in the month of Ramzan, 1013 A.H in the reign of just and victorious King Jalal-ud-Din Muhammad Akbar Ghazi. The Chief Engineer Fateh-ul-la son of Haji Habib-ul-la was ordered by the said king to build this baoli. On it were spent 11000 Akbari Rupees". (Rehman & Wescoat Jr, 1993)

The same quotation/inscription was recorded by Azam Baig during the British era in his book *Twarikh-i-Gujrat*, then Dr Rehman quoted in his work and the same is mentioned in *Gujrat Tareekh ke Ainy Mein*. The marble plaque was taken by the Tourism Development Corporation of Punjab (TDCP) for preservation and this information was passed by the locals of locality to the primary author. The *Baoli* displays unique Mughal architectural features, having a rectangular structure with a central circular water tank. Its design features several typical bulbous domes, arched rooms, and an elaborate stairway system. The most striking feature of the structure is its monumental vaulted gateway of entrance - the only point of entry to the stepwell - supported by domed pavilions on both sides and topped by a central dome above the gateway itself. Ornamental additions and a set of connected halls add further importance to the *Baoli's* architectural heritage, adhering to traditional Mughal design ideals in water architecture. Zaman Khokhar (1996) reported that once there was a wooden gate at entrance which has been perished. The *baoli's* architectural design has 103 well-carved black stone steps beside this portion, running down to water level. According to Zaman Khokhar there are three vaulted chambers, linked by these stairs, which leads to the water level, giving a direct entrance to the central well when he visited it was filled with water (Khokhar, 1996). However, Mufti Ghulam Sarwar counts the four chambers of this *baoli* with sweet water (Sarwar, 1996). It was noticed by the researcher that the baoli contains four compartments as it is empty with no water inside. In fact, it was also noticed that if a baoli is empty and made up of stone, then its

The architectural design of the Baoli comprises various sections having unique domes. These sections can be seen on the south side with large bulbous domes. The smaller decorated domes

symbolize both eastern and western walls. The first section comprises a major dome on the south side accompanied by twelve smaller domes on both side walls.

The second part of it has a particular room for visitors on the south side, planned exactly to provide relief during the long summer in Pakistan. A general window allows cool air to pass from the circular well and keep the area cool. Larger bulbous domes on both eastern and western sides probably provided resting quarters adjacent to this room; possibly for royal attendants or common visitors. This level features a substantial hexagonally-ventilated floor that regulates air and light flow to lower levels.

Descending further, the third section's stairway leads to the primary circular well, while the fourth and final level incorporates a protective domed canopy shielding the structure's upper elements. Throughout the descent, visitors experience a consistent cool draft - a testament to the *baoli's* ingenious natural cooling system. The frequently submerged lower stairs (evident from their worn, slippery surface) indicate historical water levels.



Figure 2: Eastern Wall of Baoli with Mehrab, (Photo: Tanzila Parveen November 2024

The centrepiece is the 110-foot-deep main well, which served multiple functions: providing potable water for humans and animals, supplying ablution water for the adjacent mosque (now disappeared), and functioning as a sophisticated climate control system. This multifunctional design reflects the Mughal era's advanced understanding of hydro-architecture and community planning.

Encroachment by the locals:

Local testimony and historical accounts from Mobeen-ur-Rehman - both a heritage specialist and existing custodian of the Baoli - record the original structure covering around 8 *kanals*[3] of land when built around 1591 CE during the reign of Emperor Akbar. The protected area, however, has reduced over time through encroachment by neighbouring communities to only 2 *kanals* and 14 *marlas*, representing a loss of close to 70% of its original extent (5 *kanals* 6 *marlas*). During our field work, we found that three houses—two contiguous and one independent—had been built on the walls of the Bahar Wali Baoli. On the eastern side, where one of these houses exists today, there used to be an old mosque constructed along with the *Baoli*. Though the mosque does not exist anymore, a surviving arch (*mehrab*) acts as proof validating local assertions of its existence.

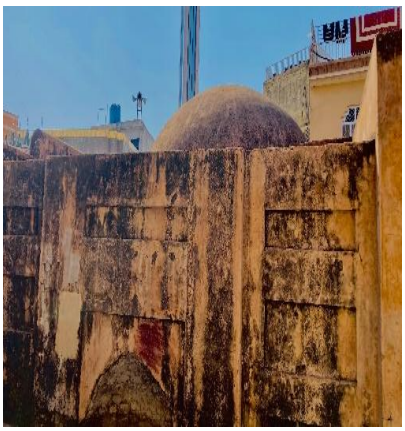


Figure 3: Old picture of Baoli before case proceeding, (Photo; Mubeen ur Rehman)

This *Baoli* continued to operate under British Raj; yet, with new wells being drilled and modern water supply systems becoming prevalent in Kharian, use of the *Baoli* eventually slowed. Eventually, it dried out, and people used it as a dumping ground. Vegetation such as small and large plants began to grow within the structure. By 1992, as seen in the photo, over half of the *Baoli* was engulfed vegetation, grown naturally. By 2018, when the Punjab Archaeology Department filed a

[3] *Marla* and *Kanal* are the local units to measure the land in the Indian subcontinent.

case in the Lahore High Court, the *Baoli* was nearly fully occupied by trash and natural materials, leaving only the front gate standing while the rest of the building was covered. On 7th March 2022, while visiting the *Baoli* after rehabilitation, the Gujranwala and still encroachments on the eastern wall of the *Baoli* by the community can be seen.

Gujrat Commissioners reaffirmed their resolve to safeguard the site from encroachment. However,

Legal Reclamation: How the Judiciary Saved Kharian's Mughal Stepwell:

The Archaeological Department of Punjab, in coordination with Gujrat Heritage Club and District Administration of Gujrat has mapped and documented 80 Mughal-era sites in Gujrat District to be preserved. With limited funding, they have shortlisted 35 sites to be conserved first, among which Bahar Wali Baoli of Kharian has been included as one of the important restoration projects (M. Ur Rehman, personal communication, April 25, 2025). The local people, having grown up in the vicinity of the *Baoli*, also made a conscious effort to retain this ancient landmark. In this process, they launched a court case with the help of The Kharian Trust, the Gujrat Archaeology Directorate, and The Punjab Tourism Department at the Lahore High Court. The matter, "Nasir Iqbal vs. Government of Punjab", was adjudicated on March 28, 2019, by Justice Masood Abid Naqvi (Iqbal vs Government of Punjab, 2019). It sought the rehabilitation of the *Baoli* through the removal of illegal encroachments that had been partly cleared by the Deputy Commissioner (D.C.O) of Gujrat and the remaining debris and destroyed buildings (Iqbal vs Government of Punjab, 2019). Supporters Sami Ullah Bhatti and Ibrar Haider Khokhar defended in court that the D.C.O. Gujrat had not yet taken required action to completely vacate the site. As a response, the court demanded the presence of the District Police Officer (D.P.O) of Gujrat and the Director General of Archaeology Department, Punjab. The court questioned whether any preliminary action had been taken to free the Baoli from encroachment and asked the authority to send a responsible officer from the Archaeology Department. The court also instructed that the *Baoli* be thoroughly cleared within two months, following which its true land area would be measured and the rehabilitation process started (Iqbal vs Government of Punjab, 2019). Mr. Masood Malik, then the Director of Archaeology Department (Punjab), was asked to go to Bahar Wali Baoli and furnish the Deputy Commissioner (D.C.O) Gujrat with a proper estimation of the area of land occupied by the Baoli. The D.C.O Gujrat was also instructed to arrange for the deployment of an official not below the Grade 17 level to the assistance of the Directorate of Archaeology to delimit the area, remove garbage, rubbish, and rubble from demolished buildings, and carry out its restoration and preservation. The Director of the Department of Archaeology was directed to visit the site again on April 5, 2019 and thereafter the whole process will be completed expeditiously. In case the restoration work was found to be unsatisfactory, the authority concerned (Director Archaeological Department, Deputy Commissioner Gujrat with Deputy Registrar Judicial High Court) was to file a compliance report within two months. (Iqbal vs Government of Punjab, 2019) On 4th July 2019, Mr. Masood Malik, told the Lahore High Court that excavation, removal of debris, and preservation work would begin with the help of the Deputy Commissioner of Gujrat (Iqbal vs Government of Punjab, 2019).

Rehabilitation:

The restoration of Bahar Wali Baoli commenced after a legal struggle waged in the Lahore High Court by the Kharian civil society with the help of the Punjab Archaeological Department and Deputy Commissioner Gujrat. In appreciation of the monument's historical importance, the Provincial Government sanctioned a grant of 10 million rupees for the restoration of the monument in the fiscal year 2020–2021. Restoration began in 2020 with cautious excavation and cleaning to avoid damaging the structure. On April 7, 2022, The Dawn posted an article by Wasim Ashraf Butt that covered the restoration of Baoli. From what is reported in the article, the Commissioners of

Gujranwala Ehsan Bhutta and Gujrat Deputy Commissioner Dr. Khurram Shahzad inspected the work progress while Assistant Directorate Archaeology Department Imran Zahid briefed the project (Butt, Dawn News Report, 2022). The manual excavation was done slowly to maintain the original architecture. Since the well was cleared to 110 feet, it was then decided to stop further work in order to avoid the possible collapse of the structure and the well.

Current Situation and defects:

In October 2024, the main primary went to Bahar Wali Baoli twice. The initial visit was incomplete since the vaulted gate was closed, and its custodian was in Sarai Alamgir. The author jotted down the custodian's contact number, which was inscribed on the gate wall. The author called him before she went for the second visit and asked him to come to the *Baoli* so that he could let him in. Upon the visit, the researcher noted that the building needed additional maintenance. Herbs and plants had started growing again inside the *Baoli*, while water and algae covered the walls of the well and stone stairs. The location is currently vulnerable to biological colonization, with plants, moss, and microorganisms such as bacteria, cyanobacteria, algae, fungi, and lichen infesting the stone surfaces. Latest pictures depict that the Punjab Archaeological Department has put up an iron cage on the well's mouth so that it won't get clogged with waste. Yet, in spite of this step, individuals keep throwing garbage within the *Baoli*.



Figure 4: biological encroachment after renovation, (Photo: Tanzila Parveen November 2024)

Suggestions and Recommendations

The Bahar Wali Baoli in Kharian is the sole remaining historical stepwell in the district, but even it has fallen victim to encroachment and domestic waste disposal. Kharian city had two *Baolis* historically, both of which were built during the period of Mughal era. The Bahar Wali Baoli, on the eastern side, was constructed using black stone, whereas the second *Baoli*, to the west near the Alamgiri Mosque, was constructed using bricks. Sadly, the latter is now non-existent and remains only in local stories, books, allegations, and reports. To avert further encroachment and degradation, the local community and high authorities should sensitize the public on the *Baoli* and its importance. The monument is already threatened and in need of urgent cleaning and microorganism treatment to avoid biological colonization. The monument is not safe unless treated with appropriate biocide or fungicide since it is vulnerable to further degradation and possible collapse or total biological encroachment. In addition, the site can be opened for visitors and locals to bring revenue through adequate facilities like shops and guiding. At present, access is restricted because the vaulted gate tends to be closed often, curbing public access to the heritage site. Ongoing visits would not only help decrease the chance of biological encroachment but also prompt continued maintenance by the visitors and trustee authorities. Additionally, commodifying the space by charging entrance fees, and stores may give sustainable resources for conservation of the site. The public institutions like schools, colleges and universitas should be approached to visit the site for public awareness and for having sense of pride in their heritage.

Conclusion

The Bahar Wali Baoli in Kharian is the sole well-maintained historic welfare building in the city. It was constructed during the rule of Akbar the Great at a price of 11,000 Akbari rupees, roughly

around the same time when a *Baoli* was erected in the Gujrat Fort for 10,000 rupees—alas, that *Baoli* does not exist anymore.

Though no longer in use, the Bahar Wali Baoli is preserved in its heritage without excessive structural compromise. It reflects typical Mughal architecture with domes, halls, staircases, and rooms. Yet, over time, its surrounding space was encroached upon, and the well was filled with trash. Following a lengthy court dispute within the Lahore High Court, the location was restored with a government grant of 10 million rupees, with two years of restoration work.

However, in a move that will ensure its preservation in the coming generations, the Baoli also requires regular maintenance. Public opening of this site will ensure that there is prevention of physical damage as well as biological decay. Increased flow of visitors would ensure there is a high level of vigilance regarding this monument.

The Bahar Wali Baoli has a lot of potential for a heritage tourism destination, owing to its well-preserved architecture from the Mughal era. It can be a great source for history enthusiasts, researchers, and tourists if proper conservation work is done. It is a precious addition to the Pakistan heritage tourism trail, owing to its unique attributes in architecture.

References

1. Baig, M. A. (1867). *Twareekh-e-Gujrat*. Victoria Press.
2. Bandil, M., & Mishra, R. (2018). Identifying the unidentified baolis (stepwells): An attempt to conserve the ancient water management system in Gwalior town. *Journal of Civil Engineering and Environmental Technology*, 5(6), 377–380. Accessed March 25, 2025. http://www.krishisanskriti.org/Publication.html.
3. Bery, Y. M. (2022, November). Structural changes in the baolis of Delhi as reflecting shifts in the political landscape of the Delhi Sultanate. *International Journal of Science and Research* (IJSR), 1449–1452.
4. Elliot, A. C. (1992). *The Chronicles of Gujrat*. Punjab Digital Library.
5. Government of India. (2014). Baoli at Kotla Feroz Shah.
6. Government of India. (2022). Rajaon ki Baoli, Mehrauli Archaeological Park.
7. Khokhar, M. Z. (1996). *Gujrat Tareekh kay Ainy Main*. Yasir Academy.
8. Lahore High Court, Lahore Judicial Department. (2019). Nasir Iqbal vs. Government of Punjab (Order sheet).
9. Miah, A. H., & Showly, A. Z. (2021). Into the Baolis: Step-wells of Bangladesh. *Journal of History, Art and Archaeology*, 1(2), 123–136.
10. Press Release, Kharian. (2022). Report.
11. Rehman, A., & Wescoat, J. L., Jr. (1993). *Pivot of the Punjab: The historical geography of medieval Gujrat*. Dost Associates.
12. Sandhu, L. A. (2004). *Gujrat Gujranwala ki Khoj*. Takmeel Printers.
13. Sarwar, M. G. (1996). *Tareekh-e-Makhzan Punjab*. Dost Associates.
14. Singh, S. K., & Singh, M. R. (2024). Characterization and compositional identification of stepwell (baoli) lime plasters from 16th-century Arabia. *Journal of Building Pathology and Rehabilitation*. https://doi.org/10.1007/s41024-024-00427-1 Preprint available at https://doi.org/10.21203/rs.3.rs-3151650/v1.
15. Urban Unit. (2022). Archaeology and cultural heritage sectoral report: Rawalpindi regional development plan.