

Road Networks and *Baolis* along the GT Road in Northern Punjab



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I hereby declare that the material and information contained in this thesis is my original work. I have not previously presented any part of this work elsewhere for any other degree.

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ABSTRACT

The research was conducted under the title "Road Networks and Baolis along the GT Road in Northern Punjab". This study is exploratory and descriptive which describes in detail the current condition of baolis along Grand Trunk Road in Northern Punjab, Pakistan. This study has three main objectives which are to review the various studies done on road connections and baolis and to explore various sites in Northern Punjab, representing the current condition of baolis. The research also analyzes the similarities and differences in architectural styles of baolis with reference to road networks. Furthermore, it also focuses on the architectural styles and patterns of baolis including their shapes, measurements, and geographical location as well as their purpose. The Baolis (stepped wells) along Grand Trunk Road in Northern Punjab have been surveyed for archaeological documentation. The researcher has collected data from both primary and secondary sources. Field trips have been taken in order to collect the data. This study has been conducted on thirteen baolis in the areas of Gujrat, Jhelum, Rohtas Fort, Taxila, Rawalpindi, Attock, and Salt Range. Some of these baolis still exist while others have been damaged with the passage of time. Despite this, some baolis have vanished from the pages of history. The origin of Baolis and its connection with Grand Trunk Road has also been discussed in detail. Besides baolis, some of the remains of other historical monuments including sarais, Kos minars, dak chowkis, and army posts are still present along Grand Trunk Road. The origin of Grand Trunk Road from the time period of Chandra Gupta Maurya to Sher Shah Suri has also been discussed in detail. The main aim of the research is to explore the differences and similarities in baolis and their current condition. How these baolis have changed with the passage and their current condition is discussed in detail in this research.

Keywords: *Grand Trunk Road, baolis, sarais, dak chowkis, kos min*

CHAPTER 1

INTRODUCTION

1.1 General:

The Grand Trunk Road, sometimes referred to as "Shahrah-i-Azam" or simply "Grand Trunk Road," is a well-known and historic road that spans the Indian subcontinent, linking important cities and areas from Kabul in Afghanistan to Chittagong in Bangladesh. This route has been crucial in forming South Asia's social, economic, and cultural landscape for many years.

The Grand Trunk Road, also referred to as Grand Trunk Road, has a long history that dates back to the Indian subcontinent's Mauryan Empire era. The road's foundation has been in place for more than 2,000 years. It was initially built as a network of trade and communication channels linking important economic and political hubs inside the empire. The founder of the Mauryan empire, Emperor Chandragupta Maurya (c. 321-297 BCE), was instrumental in the early construction of what would later become Grand Trunk Road. He understood the importance of effective trade and communication channels for the management and rule of his huge empire, which included a significant portion of the Indian subcontinent. The city of Taxila, which is now in modern-day Pakistan, and the imperial capital of Pataliputra (present-day Patna, Bihar, India), were connected via one of the earliest predecessor routes of Grand Trunk Road. During that time, Taxila was an important hub for study, trade, and culture, and the road helped to enhance ties between the two areas. The Kushans, Guptas, and Mughals were among the several emperors and empires that later added to and enhanced the road system. As it started to link more villages, cities, and commercial hubs, it finally developed into the extensive and well-known Grand Trunk Road we are familiar with today. To provide accommodations for passengers, traders, and their animals, the Mughals built a number of caravanserais along the road.

The Grand Trunk Road was built and improved throughout the 16th century under the leadership of Sher Shah Suri, a member of the Suri family. Between 1540 and 1545, Sher Shah Suri, who ruled over a large portion of modern-day India, Pakistan, and Afghanistan, began a vast public works program that included building a number of roads, *sarais* (rest houses), and other infrastructure projects.

The restoration and development of the historic Grand Trunk Road, which had deteriorated over the years, is one of his most illustrious accomplishments. The road is claimed to have been reconstructed with stone and brick, with better drainage and alignment, by Sher Shah Suri. Along the way, he also constructed numerous *sarais* and houses to accommodate traders, tourists, and their animals.

Sher Shah Suri restored the splendor of Chandra Gupta Maurya's Royal Road while also excelling in supplying visitors with wayside amenities to the point where the Grand Trunk Road and Sher Shah Suri are now synonymous. He made sure that all major cities in his kingdom had safe and convenient road travel, especially between Sonargaon in Bengal and Attock Banares on the Indus River. He extended the Grand Trunk Road between Rohtas and Sonargaon, corrected its alignment, planted fruit-bearing and shade-giving trees along its sides, built *sarais* every two *Kos*, and added milestones (*Kos minars*), *dak* posts (*chowki*), and stepping wells (*baolis*) at more frequent intervals between two *sarais*. (Elliot, 1872). He also planted gardens alongside several other highways, such as the one from Benaras and the Gaur to Oudh route (Wakiyat e Mushtaqi). Over the course of his dominion, Sher Shah is said to have constructed 1,700 *sarais* altogether. The total number is increased to 2,500 in some history books. There may have been 1,500 *sarais* between Bengal and the Indus alone, according to (Nadvi, 1963). We have a good notion of the appearance and upkeep of these *sarais* thanks to various history books. In a nutshell, these were state-run businesses that served as both *dak*-posts and rest stops for travelers. Regardless of rank, creed, or religion, everyone was given free food and shelter in these *sarais*.

From A.D. 1545 to 1552, Islam Shah (Saleem Shah), who succeeded his father Sher Shah Suri, ruled. He put one more *Sarai* between each of the two that his father had constructed along the route to Bengal. He kept up the customs his father had started of giving travelers both prepared and raw meals. (Chaghatai, 1976). The so-called Akbari Sarai, which is located next to Jahangir's Mausoleum, and the Kachi Sarai at Gujranwala, which is completely razed save for its mosque, both date from the Suri era and were built by Islam Shah Suri. The system of having rest areas (*sarais*, *dak-chowkis*, and *baolis*) along major roadways was further developed and perfected under the reign of Akbar the Great (1558–1605).

The Grand Trunk Road was improved and extended throughout the British colonial era, connecting important cities and towns throughout the subcontinent. Additionally, the British built a number of bridges and culverts, greatly facilitating and enhancing the safety of road travel. During the colonial era, the British Army relied heavily on the road for transportation, and it was also essential for the transfer of troops and supplies during the two World Wars.

Although Sher Shah Suri made a substantial contribution to the Grand Trunk Road, it should be emphasized that the road existed long before his time and was built and enhanced throughout history by several kings and empires. Since there is no life without water, building *baolis* between two *sarais* was one of Sher Shah Suri's greatest gifts. A human cannot survive without water for more than twenty-one days, according to scientific studies. Human settlements in ancient times typically thrived near river banks due to the convenience of having a reliable source of water. Riverine civilizations include the civilizations of the Indus Valley, Babylonia, Egypt, and others. Water was collected either through wells or from *kunds* (tanks) where rainwater was kept in locations that were far from rivers. Water is necessary for the purification of the human body in addition to being used for drinking and a variety of other reasons. Water is therefore regarded as both cleansing and life-giving. These two characteristics of water are good. Baden Powell, who traveled from Calcutta to Peshawar in 1840, claimed that Meham, Hodal, and Kaithal in the current Haryana province (India) had stunning *baolis*.

Baolis are primarily found in Pakistan along the Grand Trunk Road and a few other former caravan routes in the provinces of Punjab and Khyber Pakhtunkhwa. Both Balochistan and Sindh have not yet reported any *baoli*. It is an odd phenomenon that, whereas the neighboring region of Gujarat (India) is abundant in *baolis*, Sindh is conspicuously devoid of such water-works. (Shaikh, 2015) noticed there were a few wells at Makli Hill, Thatta, that had steps leading down to the water level. There are little rooms all around the shaft. These wells are referred to as *kupāgars* (well-houses). Balochistan currently gets its water from canals and tube-wells. But in some parts of Balochistan, the traditional method of artificial irrigation known as *karez*, which involves digging a well to an underground aquifer and forcing water out of the well itself remains popular (Gausha e Adab, 1986). The water needed for irrigation in protohistoric times, circa 4000 BCE, was obtained by a complex system of *gabarbands*. These stone embankments were built to collect rainwater and store it (Farooq, 1987). In various locations around Balochistan, *gabarband* remnants are still visible.

According to a survey of baolis in Northern Punjab, there are baolis in the Gujrat, Jehlum, Rohtas Fort, Taxila, Rawalpindi, Attock, and Salt Range districts.

The study's main objectives are to examine the existing state of baolis and compare and contrast them with the Northern Punjab road networks to identify similarities and differences.

1.2 Statement of the Problem:

The researcher wants to explore road networks and *baolis* along Grand Trunk Road in Northern Punjab. What was the main purpose of these *baolis*? Why were they built along Grand Trunk Road? What were the materials that were used in the construction of these *baolis*? What are the similarities and differences in architectural styles of baolis with reference to road networks? How these *baolis* have changed over time? Are these *baolis* still present over have been vanished with the passage of time?

1.3 Objectives:

The research carries three objectives as follows; -

1. To understand previous studies of road connections and *baolis*.
2. To explore various sites in Northern Punjab, representing the current condition of *baolis*.
3. To analyze the similarities and differences in architectural styles of *baolis* with reference to road networks.

1.4 Significance of the Study:

Throughout history, the Grand Trunk Road's road system in Northern Punjab was crucial in aiding trade and transportation. It provided a lifeline for commercial activity and connected numerous places. To supply both visitors and inhabitants with a dependable source of water, *baolis*, or stepwells, were built alongside the route. These *baolis* were not only useful but were brilliant examples of the period's architecture. They offer an intriguing window into the past and demonstrate how resourceful our ancestors were.

1.5 Methodology:

The *Baolis* (stepped wells) along Grand Trunk Road have been surveyed for archaeological documentation in the interest of research. The type of study being done is exploratory and descriptive in nature. The researcher has collected data from both primary and secondary sources. Field trips have been taken in order to collect the data. During my fieldwork, I obtained photographs of my research sites. During my fieldwork, I obtained photographs of my research sites. Photographs provide data that is insightful and may be missed during fieldwork. All images are inserted into my thesis. The locale of research is Northern Punjab including areas of Gujrat, Jehlum, Taxila, Rawalpindi, Attock, and Salt Range along Grand Trunk Road. I have mentioned almost thirteen *baolis* in my research out of which some are still present while others are in ruins or have been encroached on by residential colonies but still, some of their ruins are still present which I have documented in my research.

CHAPTER 2

LITERATURE REVIEW

Since a literature review is the mother of all studies, it serves as a background and a foundation for further studies. This literature section evaluates earlier bodies of my research that were completed by reputable academics. The current body of literature was extremely helpful in identifying gaps and subsequently filling them. In addition, this review has improved my research skills and background, which has helped me learn about important issues relevant to the field of study. I conducted a literature review on "*Road Networks and Baolis (stepwells) along Grand Trunk Road*" and as a result, I have cited the fundamental information regarding the present state of *baolis* along Grand Trunk Road in Northern Punjab, which forms the basis of the current study.

2.1 The Grand Trunk Road:

According to Wiles (1972), the renowned Grand Trunk Road, also known as Shahrah-i-Azim, which connects Peshawar (Pakistan) with Calcutta (India), has been in use for more than 2,500 years. The phrase "the muse of history" and "a broad scratch across the shoulders of India and Pakistan" have both been used to describe it.

Douie (1916) described it as the greatest road in the world; it has been likened to the Jada-i-Shah of the Achaemenians, the Pilgrim's Way in England, and the Appian Way in Rome. For more than 2,500 years, the strategic importance of this major thoroughfare and the accuracy of its alignment have been proven. Due in large part to the Grand Trunk Road's (GTR) meticulous planning and upkeep, the burgeoning British might was able to withstand the fierce battle of independence known as the "Mutiny of 1857."

Sarkar (1927) indicates that there used to be forts (*qila*), fortified cities (*qila band shehr*), army halting posts (*chhaoni*), caravanserais, *dak*-posts (*chowki*), milestones (*kos minars*), stepping wells (*baoli*), and of course, shaded trees for the benefit of drivers and

bystanders along this highway. The segment of the GTR that passes through Pakistan undoubtedly has the most complex and challenging geological and geographical landmass that a road builder, businessperson, or even combatant has ever encountered.

Chandra (1977) hints that no one is aware of the GTR's beginning. It probably developed as soon as traffic on the roads began to increase as a supplement to river communication. These significant thoroughfares were numerous and connected various regions of the sizable nation. Both an Uttarpatha (Northern Road) and a Dakshinapatha (Southern Road) are mentioned by the eminent grammarian Panini (500 BCE). Vannupatha, a road from Bannu to the Middle Country that cuts across a desert, was another option. Uttarpatha was most likely the same as Kautilya's Haimavatapatha, which connected Taxila to Vallika (Balkh or Bactria). Additionally, Kautilya provides thorough guidance on the many kinds of roadways that a monarch needs to construct. The roads connecting various national or provincial centers, the roads leading to military camps and forts, the roads for chariots, elephants, and other animals, as well as their appropriate widths and upkeep requirements, are among these.

Kangle (1960) explains that trade routes (both waterways and landways) are mentioned, and it was the emperor's responsibility to maintain them and keep them safe from interference from the king's favorites, robbers, and herds of cattle. Eight *dandas*, or forty-eight feet, was the standard for the width of a royal route, as well as those found in *droon-amuknas* and *sthaniyas*, or harbor towns. According to Magasthenes, the Mauryan Royal Road used to travel in eight stages from Purushupura (Peshawar) in the northeast to Pataluputra, the Mauryan capital, in the Far East at the beginning of the third century BCE

Sarkar (1927) has provided information on these eight steps, three of which—Purushupura to Takshasila, Takshasila to Jhelum, and Jhelum to Alexander's Altars on the Beas River—took place within the borders of present-day Pakistan. Stone pillars set every 10 stades or one *kos* along this Road served as markers for directions and distances to aid travelers. These correspond to the contemporary version of the medieval *kos minar*.

It's extremely plausible that Chandra Gupta borrowed the concept of a Royal Road from the Achaemenid ruler Darius the Great. This, along with other elements, had a key role in introducing the Persian influence that can be seen in Mauryan art. There were benevolent lodging facilities for ascetics, Brahmins, and heretics inside the cities, but there was no mention of comparable establishments by the highways.

Bhandarkar (2000) states that Chandra Gupta's grandson Asoka proudly asserts in one of his edicts that he enhanced this road system by planting trees, excavating wells every half *kos*, and constructing *nimisdhayas* all along the Royal Road. Although *nimisdhayas* has been given many different interpretations, it is typically described as a rest area. Asoka acknowledges that such comforts were also offered by earlier kings, proving that he was not the first to provide them on the roadways.

Agrawala (1956) claims that Central Asian people are responsible for the establishment of *baolis* (stepped wells) along high routes in Pakistan and India. Sakandhu and Karkandhu, two different types of wells, are thought to have been introduced here by the Sakas in their second wave in the second century BCE. The former was a stepped well and the latter was a Persian wheel.

Farishta (1884) yet even under early Muslim reign in the subcontinent, we know very little about how the old roads functioned and what amenities were available at the side of the road for the convenience of visitors before the arrival of the Mughals. During the rule of Muhammad bin Tughlaq (A.D. 1324–1351), who contracted *sarais*, one at each stage, between Delhi and his new capital Daulatabad, the earliest particular mention of roadside inns or *sarais* can be found.

Afif (2009) we also learn from the Tarikh-i- Firoze Shahi source that Firoze Shah Tughlaq (A.D. 1351–1387), his successor, constructed a number of structures, including 120 hospices and inns, all in Delhi, for the convenience of tourists. Travelers were permitted to stay and eat for free for three days in these *sarais*. Mahmud Baiqara (A.D. 1458–1511) constructed a number of stunning *sarais* in Gujrat in a similar manner for the

comfort and convenience of passengers. Sikandar Lodhi (A.D. 1488–1517) of Delhi also constructed *sarais*, mosques, *madrassahs*, and *bazaars* at all of these locations where Hindus had their ritual bathing sites almost concurrently.

Misra (1977) explains how Sher Shah Suri restored the splendor of Chandra Gupta Maurya's Royal Road and excelled in offering roadside amenities to passengers to the point where the Grand Trunk Road and Sher Shah Suri are now synonymous. He made sure that all major cities in his kingdom had safe and convenient road travel, especially between Sonargaon in Bengal and Attock Banares on the Indus River. He enlarged the Grand Trunk Road between Rohtas and Sonargaon, realigned it, planted fruit-bearing and shade-giving trees along the sides, built *sarais* every two *kos*, and added *kos minars* and *baolis* more frequently between two *sarais*. Gaur to Oudh and one from Benaras are two additional highways that are nearby. In addition to *sarais* and fruit trees, he also planted gardens. It has been documented that Sher Shah constructed 1,700 *sarais* in total across his whole kingdom. The total is overstated to reach 2,500 in certain historical books.

Kham (1996) alone between Bengal and the Indus, according to estimates, there were 1,500 *sarais*. We can gather some information about the appearance and upkeep of these Suti *sarais* from various historical texts. In a nutshell, these were government-run facilities that served as *dak*-posts and lodging for passengers. No matter their rank, creed, or religion, everyone had access to free food and accommodation in these *sarais*.

Eliot (2017) explains Sher Shah Suri's son, Islam Shah (Saleem Shah), succeeded him and ruled from A.D. 1545 until 1552. Every two *sarais* his father had constructed along the route to Bengal, he added one more. He kept up the customs his father had set of providing both prepared and raw food to travelers. In Pakistan, the so-called Akbari Sarai, which is located next to Jahangir's Mausoleum, and the Kachi Sarai near Gujranwala, the latter built by Islam Shah Suri, both date to the Suri era. The system of having rest areas along major routes (*sarais*, *dak-chowkis*, and *baolis*) was further developed and improved under the reign of Akbar the Great (A.D. 1558–1605). In

addition to the emperor himself, his courtiers also constructed a number of additional *sarais* in various locations.

Khan (1869) claimed that Jahangir (A.D. 1605–1628), in particular, gave orders for all such people who passed away without issue to have their property used for building mosques and *sarais*, digging wells and tanks, and mending bridges. He simultaneously gave the landowners of all such remote locations—where the roads were dangerous—the order to build *sarais*, mosques, and wells so that people would be enticed to reside close to these locations. According to legend, Jahangiri *sarais* were eight *kos* away from one another. Jahangir commanded that these *sarais* (*pakka/pukhta sarais*) be constructed with stone and burnt brick as opposed to mud (*kacha sarais*). There were proper bathrooms, fresh water tanks, and regular attendants in each of his *sarais*. A number of halting points between Lahore and Agra have been planted with mulberry and other broad-leaved plants. Jahangiri *kos minars*, like those at Shahu Garhi in Lahore and Manhiala in Jallo, were between twenty and thirty feet tall. The courtiers of the emperor also created *rabats*. Jahangir built new bridges over all the rivers and nullahs that obstructed his routes in addition to rehabilitating the old ones. He constructed permanent homes along the Kashmir-bound roadway in stages so they wouldn't need to bring tents with them.

Khan (2021) states that the Shah Jahan Era (1628–1658) is known for its construction activity. In Agra, Delhi, and Lahore, the emperor occupied himself with building and adorning palaces. His courtiers did likewise. Many of his nobles, including Wazir Khan, are renowned for supporting construction projects. Although these never received the same attention Jahangir did, the building of roads and *sarais* did not lag behind. There is little doubt that Shah Jahan's reign is represented by the Shah Daula Bridge over Nullah Deg on the route from Lahore to Eminabad. Near his large public *hamam* within Delhi Gate was built Wazir Khan Sarai, which is now extinct. Lahore was also being built at this time.

Kham (1996) despite this increasing activity, there were never enough *sarais* at the necessary locations on the road between Lahore and Kabul, the most significant of all highways in ancient India. Travelers had numerous challenges as a result while in this section. This was realized by Aurangzeb Alamgir (1659–1707). He commanded that permanent (*pukhta*) and spacious *sarais* should be built at a public cost in every area lacking *sarais* and *rabats*. A bazaar, a mosque, a well, and a *hamam* were required in every new *sarai*. Older *sarais* received the same quality care and were quickly repaired when necessary. Some of his nobles, including Shaista Khan, also constructed new *sarais*. A hospice, a mosque, and a *sarai* were to be built in each city in memory of Khan-i-Khanan, a Wazir of Shah Alam Bahadur (1707–1712). Even money was sent there for that purpose. Muhammad Shah's (1719–1748) courtier Amirud Din Sambhli constructed a stunning *sarai* at Sambhal. During the same king's rule, Nawab Asif Jah constructed a caravanserai and a bridge in the Deccan. In his neighborhood, Hussain Ali Khan of Barha constructed a *sarai* and a bridge.

Afzal (2021) reports that the Punjab experienced a serious political setback following the passing of Muhammad Shah in the year 1748. In Lahore, regional *Subedars* fought nonstop against encroaching Durrannies and Marathas as well as the growing influence of the Sikhs as central power waned. Roads were no longer secure, and the *sarais* were neglected. The Punjab was totally ruled by Sikhs by the year 1799. In terms of architectural activities, their rule is a tale of inverse development. The highways turned into the damaged arteries of national life that drained the blood from the country's economic body during the eighteenth and nineteenth centuries when political instability predominated.

Sarkar (1927) When the British invaded the Punjab in 1849, they were well aware that it had historically served as the entrance to the entire subcontinent and that the Grand Trunk Road held special significance for both this region and the entire subcontinent. This highway needs to be kept in top shape and further developed if the threat from the northwest is to be reduced and local fighting man reserves are to be effectively utilized to bolster the British army. Therefore, the first twenty-seven years of their rule were

devoted to realigning this roadway, metalizing it, erecting bridges, causeways, and culverts where necessary, as well as creating their own *sarais*. The terrain that this roadway in Punjab travels through has reportedly been described as possibly the most challenging and diversified that a road-builder has ever encountered. The newly built road barely deviated from the Mughal Highway's original route. It mostly followed the previous alignment while at other times running parallel to it. Nearly all of the former GTR's stations, including *Sarai Kachi* (Gujranwala), *Gakharr Cheema*, *Wazirabad*, *Gujrat*, *Kharian*, *Sarai Alamgir*, *Rewat*, *Margalla*, *Sarai Kala*, *Sarai Hasanabdal*, *Begum-ki- Sarai*, and *Peshawar*, still hold important roles. There are a few others nearby, including *Sarai Sheikhan*, *Eminabad*, *Khawaspura*, *Rohtas*, *Sarai Sultan*, *Sir Jalal*, and *Sarai Pukka*.

Foster (1921) To understand how virtually unchanged the route from Kabul to Peshawar and from Peshawar to Lahore has remained from most ancient to modern times, one must read William Finch's account of the Mughal Highway and compare it to the British Highway as it was rebuilt from 1849 to 1886. Cities created during the Sultanate period, keeping in mind the path of old routes were crossed by the network of routes in medieval India, Pakistan, and the Mughal era, as well as today. If anything has changed, it is the *sarais* institutions. The need for caravans to travel in groups, the necessity of having night stopovers on the way, short halts for shade under fruit-bearing trees or beside stepped wells, and for taking direction and distances from large *kos minars* along the way were all eliminated by better roads, improved communication methods, better transportation facilities, lack of time available to individuals, and fast-moving life. Because it is no longer essential to go through the cool shade of the Himalayan foothills, the contemporary GTR has occasionally changed its path somewhat southward. This is the cause of the decay and rapid disappearance of all old *sarais*, *baolis*, *kos minars*, and even old bridges. It is time for the responsible department to act and conserve these important historical sites.

2.2 Baolis (Stepwells):

Butt (2006) narrates that the word "*baoli*" is a Persian one that refers to a well with stairs down to the bottom for water retrieval. These wells were constructed decades ago near the major thoroughfares traveled by army convoys and travelers riding horses, elephants, and other animals. When a way to pump water up to the ground level wasn't available, it was once a source of water consumption.

Le Strange (1930) man is a genius in the arts. As a result, adding staircases and subterranean shelters to wells allowed for some inventive ideas in the past regarding the age-old method of getting subsurface water through wells. The wells' unique design offered an additional benefit. The underground rooms not only offered water but also shade and shelter, which were important during the sweltering summer. Various names for this type of well include *baoli*, *vaoli*, *vao*, *van*, *ban*, and *vapi*. Although comparable structures are also found in Central Asia, where they are known as *sardoba* or a cool spot, the conceptual design of a *baoli* appears to have been invented locally, in addition to the Indo-Pakistani subcontinent.

Konishi (1996) during their excavations at Ain Umm-es-Sujur in Bahrain, Japanese researchers found step-wells that date to the third millennium BCE. Due to their vicinity to the temples, the wells have been referred to by the excavators as "holy wells" or "temple wells."

Jain (1981) every living thing depends on water, making it one of life's most essential elements. It gives life and cleans and purifies everything in its path. In the Muslim era, tremendous care was taken to ensure that people had access to water, and the installation of wells along busy roads was given particular priority. Building roads, bridges, and wells is seen as a religiously meritorious activity, and those who have contributed to the well-being of society by performing such services will be rewarded in the afterlife. Wells and *baolis* have a connection to the temple in pre-Islamic India. Due to their utilitarian nature, they are typically found in or around villages and towns. They

can be found along commerce and caravan routes at regular intervals or next to caravanserais. The construction of wells and *baoli* is an old pre-Islamic custom.

Nath (1976) explains that there are four different sorts of *baolis* and 10 different varieties of wells, depending on their size, that are listed in Hindu architectural canons. Gujrat has preserved the most representative specimens of wells, *baolis*, and well homes. The magnificent well houses served as both the main source of water supply and a cool retreat for the populace during the scorching summers.

Shukla (1960) narrates that there are four different varieties of *baolis*, referred to as *nanda*, *bhadra*, *jaya*, and *vijaya* in Hindu architectural canons. Additionally, it is very good according to Pauranic Dharma to place representations of gods or goddesses in *baolis*, wells, and tanks. Additionally, Arthasastra commands the royal housekeepers to build a square well with a three-story-high underground chamber. Hindus began to revere the *baolis* as a result.

Burges (1905) the *baolis'* architectural design has gone through several iterations. A step-well typically consists of two parts: a circular or octagonal well (called its shaft) from which water is drawn up by a *pur* (a leather bag used to draw water from a well) operated manually or by bullocks, or by a series of galleries or floors connected by flights of steps descending successively from the uppermost platform to a lower landing on which stand pillars supporting a roof of equal width above. The drop continues down another flight of stairs to a landing that is even lower and has two levels above it. In this manner, the drop continues in stages until it reaches the water's level. Every floor has platforms that round the reservoir's shaft, and the parapets' backs, which surround the shaft, serve as chairs for loungers. This design incorporates pillars, brackets, pilasters, and other architectural features to create a stunning structure. A pavilion that serves as the main entrance to the ground floor is also provided for the *baoli*.

Jain (1981) explains why there is little evidence available concerning such wells and *baolis* throughout the early Islamic period. Delhi has a few of the earliest step-wells

mentioned. The first, known as Gandak ki baoli near dargah Qutb Shah, dates to Sultan Shamsuddin Iltutmish's (1210–36) rule. The second illustration, called Ugrasan ki Baoli, is from the Tughlaq era. A *baoli*-like building known as Rajon ki Bain is thought to have been built in 1516 by Daulat Khan, a nobleman under Sultan Sikandar Lodhi. These step well-like structures were also built in the Agra Fort and outside of Fatehpur-Sikri's major building complex.

Brown (2013) explains that the Ahmed Shahi dynasty was in power in Gujrat when the *baoli* architecture reached its pinnacle. The two most notable *baolis* from this era are Bai Harir's Baoli in Asarwa and the *baoli* in Adalaj, which is located around 17 kilometers from Ahmedabad. The only part of the Bai Harir's Baoli, constructed in 1499, that is above ground is the Kiosks, one at either end of the complex. Compared to Bai Harir's step well, the Adalaj baoli is more ornate. It has numerous levels, platforms, a pillar chamber, and steps that are of the right size. It is a complex building.

Jain (1981) explains how *baoli* construction garnered significant attention in Gujrat during the pre-Mughal era and quickly rose to become the most well-known public structure with unrivaled creative craftsmanship. A stepped well typically had three components during the Mughal Empire, which inaugurated a new era in the history of construction on the subcontinent:

1. A vertical shaft with a bucket-hauling mechanism for water.
2. A set of stairs or a stepped hallway descends several steps to the water's surface from the ground level.
3. An open square pavilion or an archway-shaped entryway.

The open pavilion is often a straightforward square-shaped building built on a high platform with three sides of steps and a fourth side leading to the well. Several stairs provide access to the stepped corridor descending to the water level in circumstances when the square pavilion is absent. The entry to the tiered corridor may occasionally be

marked by a straightforward archway or by lateral gate towers that use the opening between them as the entrance.

Hurlimann (1965) the *baolis* built in various regions of northern India were built before those in Gujarat. However, the *baolis* constructed in Gujarat were more aesthetically ornamented than those constructed elsewhere. Near the Qutub Minar in Delhi, there was one of the first *baolis*. During the rule of the Rajput Tomar dynasty in the eleventh century, it was constructed. From the Delhi Sultans until the Mughal emperors, different Muslim sultans built *baolis*. A number of *baolis*, including the Gandhak-ki-Baoli close to the Qutub Minar, are credited to Sultan Iltutmish.

Khan (1966) the Hauz Khas Baoli, Rajon Ki Baoli, Ferozshah Kotla Baoli, and Khari Baoli are a few of the *baolis* that Alauddin Khilji (1296–1316), Sikandar Lodhi (1489–1517), Firoz Shah Tughlaq, and Sher Shah Suri built in Delhi and its surroundings. Emperor Babur, the creator of the Mughal dynasty (1526–1533), erected the first *baoli* at Agra. Details about it can be found in his memoirs. (Babur, 1922, Vol. II: 532).

Nath (1976) tells the story of how Emperor Akbar later built a massive *baoli* at Fatehpur Sikri. Among others, *mahajans* (rich people), local chieftains, and philanthropists all contributed to the construction of *baolis*. Baden Powell, who traveled from Calcutta to Peshawar in 1840, claimed that Meham, Hodal, and Kaithal in the current Haryana province (India) had stunning *baolis*.

Shaikh (2015) *baolis* are largely located in Pakistan along the Grand Trunk Road and a few other former caravan routes in Punjab and Khyber Pakhtunkhwa. No *baolis* have been reported from Balochistan or Sindh, however. It is an odd phenomenon that, despite the surrounding region of Gujarat (India) being awash in *baolis*, Sindh is conspicuously devoid of these water systems. There are a few wells at Makli Hill, Thatta, that have steps that lead down to the water level. Small compartments can be found everywhere around the shaft. *Kupagars* (well-houses) are the name given to this sort of well.

Farooq (1987) indicates that in Balochistan, water is currently obtained by canals and tube wells. However, in some parts of Balochistan, the traditional method of artificial irrigation known as *karez*-which involves digging a well to a subterranean aquifer and forcing water out of the well itself, remains popular. Mr. R. D. Oldham of the pre-Independence Geological Survey of India explains how this irrigation system functions in Chapter 2 of the Quetta-Pishin Gazetteer (1986). Around 4000 BCE, in prehistoric times, an intricate network of *gabarbands* was used to collect the water needed for cultivation. These stone embankments were built to collect rainwater and store it. There are still *gabarband* remnants in numerous locations in Balochistan.

Baolis are located in the districts of Lahore, Jhelum, Gujrat, Rawalpindi, and Salt Range, according to a survey of *baolis* done in Punjab and Khyber Pakhtunkhwa. There is an old *baoli* at Zafarwal in the Narowal district and another close to Katas in the Chakwal district. These two *baolis* date back to the pre-Muslim era.

Shikoh (2005) Daulat Khan Lodhi constructed one of the earliest *baolis* in Lahore. Hazrat Mian Mir used to sit on top of this *baoli* to meditate. Near the Sonchri Masjid, there existed still another Lodhi-era *baoli*.

Latif (1892) Latif claims that Arjun, the fifth Sikh Guru, constructed the *baoli* known as Baoli Sahib during the rule of Emperor Jahangir.

Lal (1977) The Golianwali Serai, which was also constructed during Jahangir, featured a *baoli*. Near the modest structure with an underground cellar that Maharaja Ranjit Singh (1799–1839) built, on the first terrace of Shalimar Garden, there was a *baoli*.

Dar (1997) the story claims that several *baolis* have been found south of Lahore. Some 16 kilometers from the Lahore train station; these include Brahmanabad Baoli, Mahfoozpora Baoli, Lakhodher Baoli, Madrassa Baoli, and Bhadar Kal close to the settlement of Niaz Beg on Multan Road.

The government of Pakistan (1998) undertook a survey and found two *baolis*, one at Wan Radha Ram and the other known as Baoli Abdul Khaliq, in the neighboring district of Kasur. Numerous *baolis* may be seen en route from Sheikhpura to Gujranwala. In the Sheikhpura District, there is a *baoli* famed for its exquisite architecture near Jandiyala Sher Khan. At Gakhar Cheema and Dhaunkal, there were *baolis* located between Gujranwala and Wazirabad. Moving on to Gujrat, the Akbari Baoli was previously located in the ancient Fort. At Khariyan, there was a *baoli* as well. These *baolis* are no longer in existence. These have all been occupied. In Serai Alamgir, there was a *baoli* before crossing the Jhelum River. This has likewise disappeared. There are three *baolis* in Rohtas Fort, which is located 16 kilometers to the northwest of Jhelum.

Jairazbhoy (1972) *baolis* (stepwells) are extremely important in both history and culture. They were works of art in architecture that contained water and offered a steady supply of water in dry areas. These *baolis* served a purpose, but they also had cultural and social significance. They acted as hubs of activity for neighborhoods, promoting social contact and developing a sense of belonging. Intricate carvings and decorations were another common element of *baolis*, which demonstrated the period's talent in both art and architecture. The management of water, community involvement, and creative expression were all greatly aided by *baolis*.

Ramaswamy (1962) the *baolis* that line the Grand Trunk Road is of enormous historical and cultural importance. These *baolis* operated as water reservoirs and supplied people around with water as well as travelers. They were architectural wonders with elaborate carvings and decorations that were not only practical but also beautiful. In addition, they served as vital gathering places where individuals could unwind, mingle, and share tales. As a result, *baolis* along the Grand Trunk Road were essential for providing water and strengthening ties between neighbors

CHAPTER 3

A SURVEY OF BAOLIS IN NORTHERN PUNJAB

Baolis in Northern Punjab:

Some of the baolis can still be found in places along the Grand Trunk Road in the Northern Punjab.

3.1 District Gujrat:

3.1.1 Akbari Baoli at Gujrat:



Figure 1: General view of Akbari Baoli

Waqiat-e-Jahangiri (Jahangir, 1975) claims that Mughal Emperor Akbar constructed a fort on the other side of the river and forced the Gujjars, who had previously led a life of robbery, to live there while en route to Kashmir. As a result, the

area was given the name Gujrat and separated into its own pargana, which is a part of a *zillah*, or administrative district. In the fort, he also built a *baoli* and a *hammam* outside the Kabuli Gate. About Rs. 10,000 was spent on the *baoli's* construction (Beg, 1870). The *baoli* no longer exists because it was filled years ago. It was built on a foundation based on data gathered about 20 years ago when the *baoli* was in a decent amount of preservation. The staircase that descended to the water's surface was divided into three sections. Three central arches with platforms or landings spaced evenly between each component were present. The *baoli* was approximately 70 feet deep.

3.1.2 Baharwali Baoli at Khariyan:



Figure 2: General view (South-East) of Baoli at Khariyan, District Gujrat

According to reports, it was constructed under the rule of Emperor Aurangzeb. The *baoli* is made of substantial brickwork and is rather deep. It is separated into a succession of domed compartments that are stacked one on top of the other to the top when it emerges from the water. To get to the water, one must descend a lengthy staircase. Rows of little arches border the stair walls on either side. The *baoli* here has also been filled up, just like the one in Gujrat.

3.2 District Jhelum:

3.2.1 Baolis in Rohtas Fort:

About 20 kilometers to the northwest of Jhelum City is Rohtas Fort, which Sher Shah Suri constructed in 1541. It is a huge fort with twelve gates that is surrounded by a thick fortification wall. Three *baolis* as well as the Shahi Masjid and Haveli Raja Man Singh are situated there.



Figure 3: General view of Baoli near Tulla Mori Gate, Rohtas Fort.



Figure 4: Another view of Baoli near Tulla Mori Gate, Rohtas Fort

3.2.2 Baoli near Tulla Mori Gate:

The measurements of the *baoli* near Tulla Mori Gate are Length: 235 feet, Width: 27 feet, Depth: 140 feet.

The well's circumference is 94 feet, and its diameter is 25 feet. Although there are 160 stairs, only 148 can be seen. The remainder are swimming in the water. Each stair is one foot, three inches wide. The *baoli* is surrounded by a few tiny rooms. There is no roof over it.



Figure 5: Baoli near Tulla Mori Gate, view of the Steps

3.2.3 Baoli near Kabuli Gate:

Due to the presence of seven royal *hammams*, the *baoli* close to the Kabuli Gate is known as Sat Baoli. Deep inside the *baoli* are the *hammams*. There is a fifty-four-step staircase that gives them access. Almost all of the way is now blocked. 10 feet, 9 inches by 10 feet, 3 inches is the size of each *hammam*. The entrance measures 4 feet, 10 inches by 4 feet, 10 inches square. Domelets with arching shapes cover the passageway. To provide light into the internal complex, there are tiny openings in the roof.



Figure 6: General view of Baoli near Kabuli Gate, Rohtas Fort.

3.2.4 Langar Khan-e-Wali Baoli:

Langar Khan-e-Wali Baoli is the name of the third *baoli*. It had formerly been outside the fortress wall. It was difficult to get water for the *langar khana* (kitchen) in case of an enemy invasion. To ensure access to the *baoli*, the fortification wall was increased. To get to the water's surface, there are two flights of stairs, each seven feet long. Nineteen steps are present in each stairway.



Figure 7: General view of Langar Khan-e- Wali Baoli, Rohtas Fort.

3.2.5 Khojki Baoli, Dina Town, district Jhelum:

Five kilometers north of Rohtas Fort and eight kilometers east of Dina town are where you'll find Khojki Baoli. It is also known as Natain Baoli since it is in the middle of the two villages of Natain and Khojki. Either from Dina town or Rohtas Fort, one can travel there by road.

The *baoli* is arranged along an east-west axis. It is 120 feet by 24 feet in size. From the eastern side, a fifty-one-step staircase leads upward. There are three pointed arches built at equal intervals between the steps. The well has a diameter of 28 feet and a depth of 40 feet. Bricks were used in its construction. One of the *zamindars* in the area has built a tube-well in the *baoli* and uses the water for irrigation.



Figure 8: General view of Baoli at Khojhki, District Jhelum.

3.3 District Rawalpindi:

3.3.1 Losar Baoli:

Losar Baoli is situated in the Wah cantonment, about eight kilometers to the northwest of Taxila. The 100-foot-deep baoli is constructed of bricks. To get to the sea level, there is a staircase with landings at regular intervals that is framed by four centered arches with battlemented cresting. A small chamber on either side of the entry, with stairs leading to the roof, and an oblong brick platform behind it at ground level on each side are all that is required for access to the baoli. The baoli is entered by an arched and

domed gateway. To get water out of the well for agriculture, a Persian wheel was initially installed exactly on top of the well.



Figure 9: General view of Losar Baoli, Wah Cantt, District Rawalpindi.



Figure 10: Losar Baoli, view of steps leading to water level.



Figure 11: Losar Baoli, another view of steps leading to the water level.

3.3.2 Ghaznabad Baoli:

Kalar Sayedan is a nearby town to Gujjar Khan. Ghazanabad Baoli, which is currently in ruins, is located to the left of Gujjar Khan when approaching from Rawalpindi. The structure is 18 meters long and 3 meters wide. Twenty-seven steps total, nine of which are submerged in water. It is set up on a north-south axis.



Figure 12: General view of Ghaznabad Baoli, Kalar Sayedan, District Rawalpindi.



Figure 13: Ghaznabad Baoli, view of the well.

3.3.3 Shah Bagh Baoli:

On the left side of the road to Kallar Syedan, in the middle of the Ghazanabad village is where you'll find the Baoli of Shah Bagh which is 10 kilometers north of Rawat town. A circular well with a diameter of 4 meters and a staircase with 35 steps are included in the 18-meter structure, which is in good condition. Built from brick masonry set in lime mortar, it has a rectangular shape. It still has remnants of lime plaster. The building's well-being is set back to the west of the stepped approach path, with the structure's east-west orientation. In slabs of prepared schist stone, the stairs are constructed. With the exception of the fact that the Kenthla Baoli in Islamabad was built with limestone masonry, its structure is similar to that of the Kenthla Baoli at the Shah Allah Ditta Caves. It's in pristine condition. The travelers' animals as well as they used the *baoli* to quench their thirst. Along the historic roads built during the Sher Shah Suri and Mughal periods, such *baolis* are regularly encountered.

As a result, little is known about the history of this *baoli*. However, we might assume that it was built sometime during the Mughal era.

As I already indicated, the *baoli's* well is all that is left today. However, the steps are still hidden by the dirt and are readily cleared and repaired. Maybe it's still possible. Anyway, that is what occurs when historical monuments are neglected and when people do not understand the value of protecting cultural heritage.



Figure 14: The Shah Bagh Baoli, now just an ordinary-looking well.



Figure 15: No water, just garbage.

3.4 District Attock:

3.4.1 Saidan Baoli:

Its architectural layout resembles Chitti Baoli's in most respects. Residential properties have now nearly totally encroached on the *baoli*.



Figure 16: General view of Baoli at Saidan, District Attock



Figure 17: Baoli at Saidan, view of steps with arched compartments.

3.4.2 Chitti Baoli:

Between Hasan Abdal and Attock, on the left side of the Grand Trunk Road, is where you can find Chitti Baoli. It included a brick staircase that descended to the water's surface beneath four central arches, like other baolis. The landing platforms' structural remnants are still visible.



Figure 18: General view of Baoli at Chitti, district Attock

3.5 *Baolis* in the Salt Range:

3.5.1 Van Bachran, District Mianwali:

On the main route leading to Sargodha, Van Bachran is situated around twenty-four kilometers to the south-east of Mianwali. The *baoli* has fallen into disrepair. The passageway leading to the steps that descend to the water level is partially blocked while the well has dried up. Residents of the neighborhood use it as a waste dump. On either side of its entrance are *minars* that are still standing. The well is 19 feet in diameter and deep but is currently relatively dry.

According to Alexander Cunningham's description of the *baoli* in 1878–1879 when he visited it;



Figure 19: General view of *Baoli* at Van Bachran; District Mianwali, view of the well.

“The 179-foot staircase that descends to the water is 9 feet, 9 inches wide and has two tall *minars* at the head that are 15 feet apart on either side. These *minars* stand 25 feet tall, with the lower half being octagonal with 2 feet sides and the higher part being conical with a dome on top. A 30-foot-tall modest mosque sits nearby. The outside dimensions are 9 inches length by 20 feet wide. The *minars*' design is a perfect example of the Mughal era, of which there are still numerous examples between Agra and Lahore. The tiny thin bricks, which measure 612 by 4 by 1 inch, also retain signs of the same antiquity. (Cunningham, 1882)”.



Figure 20: Baoli at Van Bachran, view of the passage containing descending steps.

The *minars* undoubtedly resemble the *kos minars* constructed during the Mughal era, such as the one that is still standing in Shahu-Ki-Garhi, Lahore. Contrary to Cunningham's assertion that it is a structure from the reign of Akbar, it is known locally as Sher Shah's Baoli. The mosque, which is next to the *baoli*, has been completely rebuilt with no remnants of its previous design.

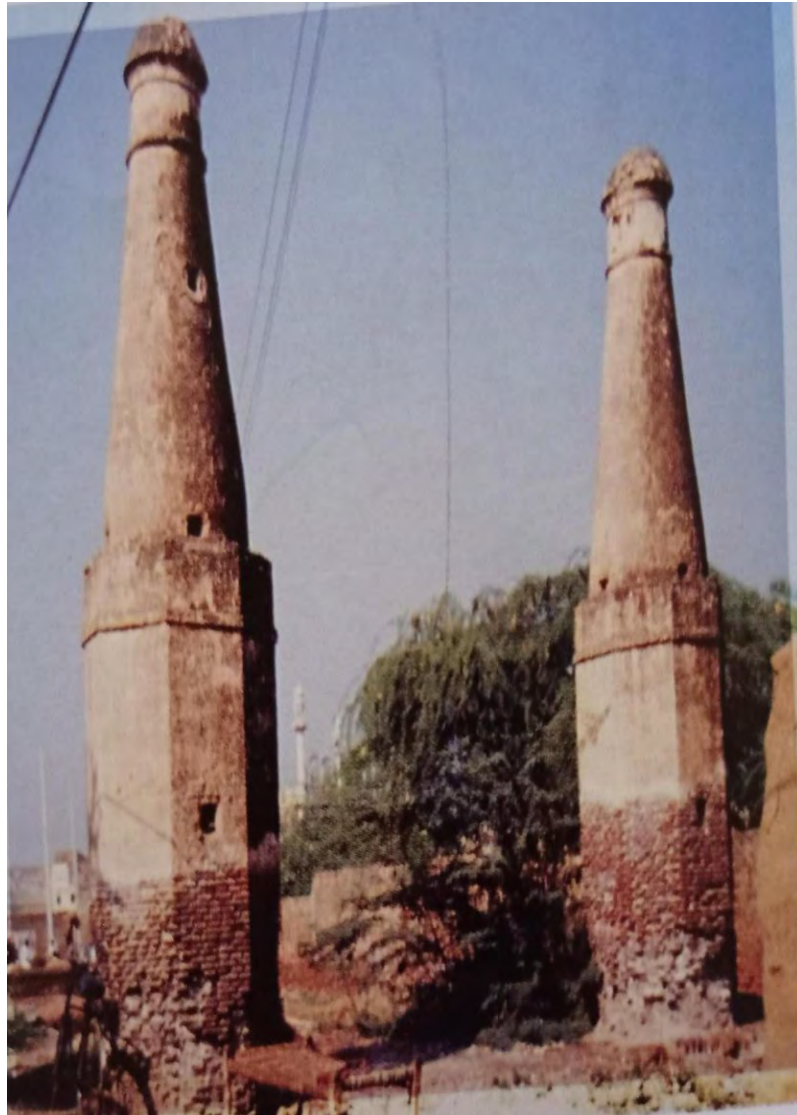


Figure 21: Baoli at Van Bachran, view of the Minars

3.5.2 Baoli at Gunjial & Hadali:

The Salt Range was home to a long-gone land passage that led to the Gomal and Tochi passes. The city of Khushab served as its starting point. Some of the *baolis* from the earlier path can still be seen today on the Khushab-Mianwali road in Van Bachran, Gunjial, and Hadali. Gunjial's baoli had long since completely filled. During my visit in 2006, two minarets that had once been a part of the *baoli's* entrance gate had been embedded in one of the home's walls, according to Sheikh (2015). The baoli in Hadali experienced the same outcome. The *baoli* was being filled up by the new owner of the property when I visited Hadali. Its front gate, which was surrounded on both sides by minarets, was still standing. The minarets resemble *Kos minars* in shape. According to local legend, Sher Shah Suri's rule is credited with building the baolis in Van Bachran, Gunjial, and Hadali.



Figure 22: Baoli at Gunjial, District Khushab, and view of Minars embedded into the well of a residential house



Figure 23: Baoli at Hadali, District Khushab, and view of the main entrance (now filled up)



Figure 24: Baoli at Hadali, view of the entrance and the well

CHAPTER 4

AN ANALYTICAL DISCUSSION

Grand Trunk Road (Grand Trunk Road)

4.1 A Historic Artery of South Asia:

For the last 2,500 years, there has existed a Grand Trunk Road, also known as Shahrah-I-Azim that connects Peshawar, Pakistan, and Calcutta, India. It has been compared to the Appian Way in Rome, the Pilgrim's Way in England, and the Jada-i- Shah of the Persian Achaemenid Empire as the greatest highway in the world.

The Grand Trunk route (G.T. Road), also known as Uttara path, Badshahi Sadak, Sadak-e-Sher Shah, and Jernaili Sarak, is notable for being much more than just a route today. It is the artery that connects one end of Pakistan to the other in terms of culture, politics, and commerce. Along the journey, the road travels through a number of significant cities and towns, including Naushehra, Attock, Taxila, Rawalpindi, Jhelum, Gujrat, and Gujranwala.

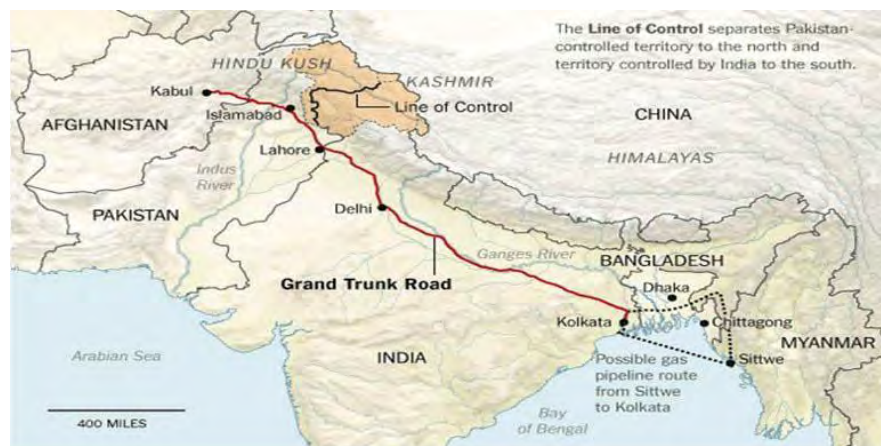


Figure 25: The extended Map of Grand Trunk Road

Nobody knows when the G.T. Road began, said Dar (2000). It most likely developed as a complement to river communication as soon as vehicular traffic began to grow. We do know that the route was used throughout the Mauryan Empire, which existed in the third century BCE.

A paved road from Peshawar to Cox Bazaar in Bangladesh was rebuilt on the exact same path in the 16th century by Sher Shah Suri, the medieval star of the Sur Empire. A rest space was constructed every two *Kos* (an ancient unit of measurement equal to 1.8 km), the width was widened, and fruit and shade trees were planted. For the comfort of the travelers, the surface of the road was marked, and gardens and step-wells known as "*baolis*" were constructed.

Following Suri, the road was extended all the way to Kabul, Afghanistan, by the Mughals and Afghan monarch Ahmad Shah Durrani. Suri's achievements allowed the G.T. Road to become a key component of modern economic and military administration systems, despite his brief 7-year reign as Mughal Emperor Babur's uncomfortable interlude between his and his son Humayun's leadership. He left a lasting impression on the Indian Subcontinent as a result of this, the first *Rupiya* (new currency), and the first official postal system. Even Humayun, his arch-enemy, could not resist calling him "Ustad-e-Badshahan, a teacher of kings."

4.2 Significance of Grand Trunk Road:

4.2.1 Historic Trace:

The Mauryan Empire is where Grand Trunk Road first appeared more than 2,000 years ago. One of the oldest road systems in the world, it has seen the rise and fall of numerous civilizations, such as the Mauryans, Kushans, Guptas, and Mughals, and has significantly influenced the history of the area.

4.2.2 Commerce and Trade:

The Grand Trunk Road has long been a vital commercial route linking various parts of South Asia with Central Asia, the Middle East, and Europe. The route made it easier for important commodities to be transported, including silk, spices, textiles, precious stones, and other items, which boosted the economies of the numerous civilizations it passed through.

4.2.3 Exchanging Cultures:

The interchange of ideas, languages, and religious convictions was made possible by Grand Trunk Road, which served as a crossroads for cultures. A dynamic blending of cultures resulted from the habits, traditions, and arts that were carried along the road by travelers, merchants, intellectuals, and conquerors. The architecture, fare, and customs encountered along the way still reflect this ethnic diversity.

4.2.4 Connectivity and Permanence:

Throughout several historical eras, the Grand Trunk Road was essential in establishing connections between far-flung areas and the centers of authority, fostering administrative cohesiveness, and fostering good governance. It served as a unifying thread that connected the Indian subcontinent and promoted a sense of solidarity among many communities.

4.2.5 Settlement and Migration:

Because of the road's accessibility and connectedness, people moved there and built towns along its path. Urban centers and commerce hubs were created as a result of the growth of villages and cities along significant intersections.

4.2.6 The Mughal Legacy:

The road was further maintained and upgraded throughout the Mughal Empire, and caravanserais and rest stops were set up at regular intervals to serve both travelers and traders. Innumerable ancient buildings still bear the Mughals' architectural and cultural influence on Grand Trunk Road.

4.2.7 Strategic Significance:

The strategic location of Grand Trunk Road makes it an important military route throughout history. Armies were able to quickly mobilize and communicate on the road, which allowed them to impose control over huge areas.

4.2.8 Heritage Marker:

Grand Trunk Road is a representation of the shared history and interrelated heritage of South Asians. In the current era, the importance of its preservation and acknowledgment as a history corridor has grown, promoting a sense of pride and cultural identity among the locals.

4.3 Contribution of Sher Shah Suri in Grand Trunk Road:

A talented builder, Sher Shah Suri. He is thought to have constructed many forts, mosques, *baolis*, *sarais* (inns), and tombs. The Great Trunk (GT) Road, however, deserves the highest praise. He also built *sarais* and *baolis* (stepped wells) for his soldiers and travelers on the Grand Trunk Road.

4.3.1 Baoli:

A *baoli* (stepwell) is a reservoir that can hold water. It provides groundwater as well. The governing clans commissioned a large number of tanks and *baolis*, where water was stored during the rainy season and used all year long by the locals. The step-well (*baoli*) features a set of stairs that descend to the ground level where the water is kept, as the name implies. The steps made it possible to access the water throughout the summer when the water level dropped. *Baolis* are typically found in Pakistan along the Grand Trunk Road.

Some *baolis* were created solely for the purpose of storing water, while others served as a place for travelers and caravans to stay. These *baolis* were built with rooms on the upper floors and a *dalan* (column-supported veranda). These stepwells also served as gathering places where people could talk to one another.

The three primary components of a *baoli's* architectural shape are:

1. The well where the water is collected.
2. The staircase with multiple storeys leads to the groundwater.
3. Pavilions in the middle.

The history of *baolis* dates back many centuries. Since it also had a tank that was fed by a well and was accessible by steps, the Great Bath at Mohenjo-Daro, which was constructed more than 4,000 years ago, is regarded as a type of *baoli*. *Baolis* evolved over time to serve as both the primary water source and a cool haven for various relaxation and recreation activities like prayer, meditation, bathing, and other such activities. With the rise of Islam, this system of collecting water underwent significant modifications to its architectural and artistic components. The British began using pipelines instead of *baolis* because they thought they were filthy water sources in the nineteenth century, which led to a rapid drop in the use of *baolis*.

CONCLUSION

Living proof of South Asia's rich history and culture may be seen along the Grand Trunk Road. You cannot exaggerate how important it is as a commerce route, a mode of transit, and a cultural landmark. It serves as a reminder of the lasting effects left by the former great civilizations and empires that previously ruled this area, as well as homage to the individuals who have incorporated this road into their culture and tradition. Although the Grand Trunk Road has undergone numerous renovations over the years, it nevertheless retains its vintage appeal and historical significance. The shifting landscapes, cultures, and traditions of the subcontinent may be seen as one drive along this road, making the voyage a time travel adventure. The route, which South Asians have traveled for generations while overcoming obstacles and adjusting to changing conditions, is also a testament to their tenacity and determination. Due to the Grand Trunk road's capacity to foster trade, intercultural dialogue, and administrative cohesiveness throughout the Indian subcontinent, it has significant historical value. Grand Trunk Road continued to play a significant role in promoting trade and communication between regions as successive rulers and dynasties came and went. This helped to foster the development and fusion of various cultures and civilizations.

The Grand Trunk Road's beginnings can be found in antiquity, with the Mauryan Empire's dominion over the Indian subcontinent. More than 2,000 years ago, the road's foundation was laid. It was primarily built as a network of trade and communication channels connecting the important political and commercial hubs of the empire. Emperor Chandragupta Maurya, who established the Mauryan Empire (c. 321-297 BCE), was instrumental in the early development of what subsequently became Grand Trunk Road. Sher Shah Suri revived the glory of the Royal Road of Chandra Gupta Maurya and excelled in providing roadside facilities like caravanserais, *kos minars*, *dak chowkis*, and *baolis* to the travelers to such an extent that today the Grand Trunk Road and Sher Shah Suri have become synonymous. Later, a number of rulers of the Mughal Empire played their part in

the extension and improvement of Grand Trunk road, but Sher Shah Suri. Considering that "Baolis along Grand Trunk Road in Northern Punjab" is the primary emphasis of my research topic. Everyone is aware that water is one of the most essential elements for life and that without it, nothing would exist. In addition to bringing life, it also cleans and purifies objects. Without water, there is no life. Wells and *baolis*, which serve as water reservoirs, were constructed in antiquity to store water. In order to provide passengers with rest stops and water for both themselves and their horses, Sher Shah Suri ordered the construction of *baolis* all along the Grand Trunk route close to the *sarais*. Some of these *baolis* are still visible along the Grand Trunk route but aren't in great shape, while others have perished over time and only a few fragments are remaining.

The Grand Trunk Road is a monument to its lasting historical relevance because it has seen the rise and fall of empires and the ebb and flow of civilizations. Its significance as a commerce route, a cultural link, and a representation of regional togetherness has had a lasting impact on the history of the area. As a symbol of the common legacy and intertwined fates of the various peoples of South Asia, Grand Trunk Road continues to pique the interest of historians, archaeologists, and enthusiasts today. To ensure that this historic thoroughfare's historical significance endures for future generations, it is still crucial to protect and treasure it as we move forward. The historical legacy of Grand Trunk Road endures, and some of the antiquated route is still in use and preserved as a reminder of the area's rich past and cultural heritage, even if contemporary infrastructure and transit systems have supplanted the ancient route's original function.

GLOSSARY

B

<i>Bazar</i>	market
<i>Baolis</i>	step wells
<i>Baoli, vaoli, vao, van, ban, and vapi</i>	ancient names used for wells

D

<i>Dak Chowkis</i>	posts
<i>Dandas</i>	feet
<i>Dalan</i>	column-supported veranda
<i>Droon-amuknas</i>	harbor towns

G

<i>Gabarbands</i>	stone embankments were built to collect Rain water and to store it.
<i>Grand Trunk Road</i>	Grand Trunk Road

H

<i>Hammam</i>	a Turkish bath
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K

<i>Kacha sarais</i>	mud inns
<i>Kunds</i>	wells
<i>Karez</i>	traditional method of artificial irrigation
<i>Kos Minars</i>	milestones
<i>Kos</i>	ancient unit of measurement equals 1.8 km

L

<i>Langar khana</i>	kitchen
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M

<i>Madrassahs</i>	school
<i>Minars</i>	pillars

N

Nanda, bhadra, jaya, and vijaya

ancient names used for step wells

Nimisdhayas

typically described as rest area

P

Pakka/pukhta sarais

made with stone and burnt bricks

Pur

leather bag used to draw water from a well

Q

Qila

fort

Qila Band Shehar

fortified city

R

Rupiya

currency

Rabats

rest houses that are built inside the city

S

Shahrah-I-Azam

ancient name Grand Trunk Road

Sarais

inns

Subedars

a mid-level junior commissioned officer

Sardoba

a cool spot

Z

Zillah

district

Zamindar

landlord

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