

# ELLORA- KHULDABAD-DAULATABAD

## Water and Sacred Spaces

*Yaaminey Mubayi*



The settlements of Ellora, Daulatabad and Khuldabad, laid out within a territorial radius of 10 kilometres, constitute a micro-region characterized by a convergence of geographical/geological, political and socio-economic factors that contributed to their pattern of historical evolution. This essay focuses on the waterscape in these settlements and its role in consolidating the region as a centre of religion and trade over millennia.<sup>1</sup>

### **Exploring the Landscape and the Role of Water**

Situated in the rain-shadow of the Western Ghats in the Marathwada region of the Deccan Plateau, the three historic sites along with associated settlements, including Verul, Kagazipura and Sulibhanjan villages and the pastoralist hamlets of Talawadi and Shardulwadi, occupy a micro-watershed of the Upper Godavari river basin. Numerous seasonal streams and gullies cut across the surface of the table-topped hills, and natural reservoirs are usually formed at the base of the slopes where runoff is collected. The location of the micro-region along the Dakshinapatha, an ancient north-south trade and pilgrimage route, further contributed to the evolution of human settlements in the area which began in the mid-1st millennium CE, if not earlier. The system of water conservation and management that supported historic settlements in the micro-region is evidenced by the presence of wells, tanks, reservoirs and channels, indicating the existence of technical knowledge to gain access to precious water in a resource-scarce environment. The caves themselves have cisterns attached to them, with channels etched into the rock for collecting rainwater run-off.

The temple of Shiva-Grishneshvar, located in Verul (Ellora) village, is designated as one of the 12 jyotirlingas, the most revered Shaivite places of pilgrimage. The tirtha, or sacred tank is believed to pre-date the temple structure, its water being ascribed medicinal and healing properties. Numerous myths and legends surround the tank, and the area is named Shivalaya Tirtha on account of this. The river Yelganga flows through the cave complex and runs adjacent to the temple and Verul village before joining the Shivna near Lakhni village in Khuldabad. The river is believed to be the embodiment of a water goddess, Ila, from whom the region, Elapura or Ellora, gets its name. Thus Ellora, Khuldabad and Daulatabad can be said to constitute a cultural landscape, a specific zone of settlement wherein the development pattern is characterized by the interaction between humans and the environment, as depicted in local religious cults, myths, rituals and cultural institutions.

Apart from the Shaiva tradition, the region attracts pilgrims of numerous other sects and religious communities. The temple of Parshvanatha on Charanadri Hill, above the Ellora Caves, is also an important Jaina place of pilgrimage. The Buddhist caves attract pilgrims from Southeast Asia, Japan and Sri Lanka. The ashram of Chakradhar Swami, a medieval Vaishnava saint who inhabited the Ellora Caves in the 14th century and is said to have performed miracles during his stay, is located within the cave complex and is still the spiritual headquarters of his followers, the Mahanubhavis. The twin dargahs of Pir Zainuddin Shirazi and Pir Burhanuddin Gharib, located in Khuldabad, about 4 kilometres away, attract a large number of pilgrims during the annual Urs festivals in January and April. Besides these, there are a number of Sufi shrines of local significance, such as the dargah of Baba Shah Dawal in Verul, which organize regular festivals, attended by large numbers from the local communities.

The significance of water is equally evident in the Daulatabad-Khuldabad area, and appears to run like a common thread through the historical narrative of the region. This is reflected in the structures and institutions like the dargahs and sites sacred to Sufi Islam, as also the secular public buildings of the Daulatabad Fort. For example, the dargah of Pir Jalaluddin Ganj-e-Rawan lies on the edge of a major

<sup>1</sup> Tirtha of Grishneshvar Temple, Verul (Ellora village).

reservoir, Pariyon ka Talab, that was historically maintained by the dargah establishment. There are underground water channels and hydraulic systems carrying water from the major reservoirs to the neighbouring towns and villages, and also providing water to the fields for irrigation. In the 16th century, Malik Ambar, well-known as the general of the Nizam of Ahmednagar but also a skilled hydrologist, built an intricate network of ceramic channels that gather the run-off from the hills and channelize it into the massive Nagar Talab, the public tank at Daulatabad. In more recent times, the Takaswami Ashram at the base of Charanadri Hill at Ellora maintained a historic cistern which provided water to the pilgrims visiting the hill-top temple of the goddess Girija at Mhaismal.

Ellora with its rich heritage of rock-cut caves has been the subject of scholarly attention since colonial times. In the precolonial period, Indian writers including historians of the Mughal and Sultanate periods, and Arab and European travellers, wrote extensive accounts of the architectural wonders of the cave complex. The issue of water and its role in settlement evolution is a little more difficult to identify from the existing textual and inscriptional sources, and requires a more indirect inferential approach. For example, the Grishneshvar Temple and tirtha (sacred tank) are the topic of a large corpus of Puranic literature in terms of myths, legends and folktales that pertain to religious and ritual references to water and water deities.

The presence of water—either as flowing streams or natural and man-made structures for its storage, including reservoirs, tanks, wells and baolis or stepwells—undoubtedly played a significant role in the evolution of settlements in the arid landscape of Ellora, Khuldabad and Daulatabad. This chapter examines some of the waterbodies of the region with a view to understanding the socio-economic and cultural motivations underpinning their construction

and usage. The study is an attempt to analyse some of the writings that make reference to water management structures and to raise significant issues of historical and archaeological importance that have a bearing on the evolution of the political and cultural landscape in alignment with the ecological conditions in the region.

The presence of water conservation and management structures is characteristic of most of the interconnected Deccan cities, including Daulatabad, Bidar, Gulbarga, Beed, Burhanpur and Bijapur, with considerable resonance amongst them in terms of structure and architecture, technology and design. This indicates shared processes of inflows of technology and expertise from external regions like Central and West Asia, especially in the medieval period, and the role played by religious institutions like temples and dargahs in providing an interface between royal authority and society by administering the distribution of water.

### **The Geological/Geographical Context**

The Ellora-Khuldabad-Daulatabad region lies on the eastern margin of the Shivna sub-basin of the Godavari. It is characterized by the Mhaismal Plateau that slopes from north to south, which gives rise to the Yelganga and Girija rivers, as well as several seasonal streams (nalas) including the Gan, Khadki, Khori, Nagjhari, etc. The southern part of the Mhaismal Plateau is dissected by the basin of the river Purna; thus the area under study is part of the watershed of the two major tributaries of the Upper Godavari, the Shivna and Purna.<sup>2</sup>

The terrain is a combination of alluvial plains, undulating plains and extrusive surfaces like scarp faces, plateau surfaces, rugged slope zones, plateau plains, etc. This causes great sinuosity in the drainage profiles of streams, with sharp turns and meanders characterizing the sub-dendritic and trellis-like flow patterns.

The district of Aurangabad is covered by a rock formation consisting entirely of lava flows, called the Deccan Trap, owing to the terraced or step-like appearance of the rock outcrops. The

lava flows are indicative of great volcanic activity at the close of the Cretaceous period (145–60 million years ago), with layers of lava interspersed with volcanic ash and sedimentary materials called intertrappeans. The igneous rock of the Deccan Trap possesses the ability to hold and transport large quantities of groundwater owing to the presence of sub-surface air pockets or amygdaloidal vesicles.

The annual recharge to the groundwater is provided by infiltration of rainwater, which enters the vesicular zones, joints and fracture planes of the rock. The rills and gullies that carry water to streams and waterfalls are a manifestation of prehistoric tectonic activity. Therefore, the groundwater reserve is totally dependent upon the occurrence of these weathered zones, joints and fractures coupled with the intensity and distribution of rainfall which is directly related to percolation.<sup>3</sup>

The fabric out of which the Ellora Caves are carved consists of basaltic flows called the Upper Ratangarh Formation.<sup>4</sup> This enables the penetration and transmission of water within the rock surface, and explains the presence of rock-cut cisterns for collecting and storing water as part of the cave complex. It would also explain the presence of borewells and baolis as important man-made water storage and groundwater recharge mechanisms.<sup>5</sup>

### **Evolution of the Ellora Micro-Region**

The Ellora ensemble of caves may be historically located within the context of the cave-building tradition of the Deccan in general. Cave-dwellings were commonly associated with the monsoon retreats (*vasa*) of Buddhist and Jaina monks, who would settle in these secluded complexes during the rainy months in order to meditate as well as teach the younger acolytes and laypersons of the locality. The earliest monastic caves were excavated in the Nagarjuni and Barabar Hills in Bihar in the 3rd century BCE, and were associated with the Ajivika Jaina sect. Thereafter, cave-building activity shifted to the Deccan, with the Bhaja Caves being excavated in the 2nd century BCE. Out of a total

of 1,200 cave complexes in the country, about 1,000 are to be found in Maharashtra.<sup>6</sup>

The Ellora Caves complex may be dated between the 6th and the 13th centuries CE. By this time, there had been considerable stylistic and doctrinal evolution within the sphere of Buddhism. A 700-year-old tradition of rock-cut Buddhist viharas (monasteries) and chaityas (prayer halls) culminated in the Mahayana phase at Ajanta. After the decline of Ajanta, Ellora rose to prominence as a thriving nucleus of artistic, religious, political and economic life.<sup>7</sup> The Buddhist structures at Ellora, excavated between the early 7th and late 8th centuries, depict a high level of evolution of technique and philosophy, consisting of institutions of learning and viharas for habitation. The paucity of inscriptions indicates patronage by non-local entities like merchant guilds and commercial networks, on whose map Ellora was certainly located.<sup>8</sup>

Simultaneously, from the 6th century onwards, the increased political significance of local ruling dynasties and feudatory chiefdoms (*samantarajas*) as part of the process termed by Hermann Kulke, Burton Stein and others as “forming nuclear areas of sub-regional power”<sup>9</sup> led to a resurgence of Puranic Hinduism that absorbed local autochthonous cults and placed them in the Brahmanical pantheon. Berkson informs us that Cave 21, built around 550 CE, is the first structure symbolizing resurgent Hinduism in the complex. The regional rulers thus legitimized their authority by building monumental structures at key places of pilgrimage. Thus, while Ellora grew in significance between the 6th and 10th centuries CE, its development indicates multiple interconnected processes of interaction between the different faiths.

The patronage of these excavations is interesting in its multidimensionality. Ellora’s location along a primary trade route of the Deccan, the Dakshinapatha, made it an important region for merchants and traders, many

of whom belonged to the Buddhist community. Hence, it is no coincidence that such merchant guilds were important donors for the Buddhist caves. The scarcity of inscriptions in the caves also indicates the lack of patronage by local rulers and their feudatories, and indicates far-flung patterns of patronage such as by the Palas of Bengal, famous for their sponsorship of Buddhist sites. The appearance of donative inscriptions begins during the reign of the Rashtrakutas, especially with respect to the building of Kailasa Temple, and the mobilization of brahmins and other social groups to gain political legitimacy for the dynasty.

Thus Ellora as a site and a micro-region evolved as a result of three influential processes: merchant guilds providing support and patronage for the Buddhist structures, the consolidation of their authority by the Chalukyas and Rashtrakutas through patronage to local cults and pilgrimage places, and the geopolitical significance of the site along important trade routes.<sup>10</sup>

In 1296, Alauddin Khilji's Deccan campaign was aimed at procuring tribute and enabling political alliances with Deccan dynasties, i.e. the Yadava ruler of Daulatabad, Rai Ramchandra. Amir Khusro wrote extensive eulogies on the wealth acquired from the Deccan. Though Muhammad bin Tughluq (r. 1324–51) did not succeed in establishing his capital at Daulatabad, he did, however, facilitate the setting up of a Sufi centre in the town's environs that was said to rival that in Baghdad. Ellora also had strong associations with the family of Shivaji, the 17th-century Maratha leader. The Bhonsles migrated here from Pune, and through agricultural revenues, became wealthy enough to own horses and arms, which enabled them to enter the service of the Ahmednagar Nizam.

Shivaji's grandfather Maloji Bhonsle was the Patel of Verul village under the Nizam of Ahmednagar, and his father Shahji Bhonsle made the village the family's home base. The neighbouring fortified town of Khuldabad

(literally meaning "heavenly abode") was extensively developed by the Mughal emperor Aurangzeb in the 17th century. The plateau overlooking the Ellora Caves, including the settlements of Sulibhanjan and Kagazipura, was embellished by a number of temples and tanks like Surya Kund, Pariyon ka Talab, Pangra Talab as well as with edifices from the Chalukya, Rashtrakuta and Yadava periods. The area including Mhaismal Plateau, Khuldabad, Sulibhanjan and Ellora formed an integrated water catchment zone, with temples, tanks and buildings of pre-13th century date. Under Aurangzeb the town of Khuldabad became a major Sufi centre; he is buried there along with his family, within the tomb complex of his spiritual teacher, Pir Zainuddin Shirazi.

The Holkars of Indore controlled the region of Ellora including the caves till they were taken over by the Nizam of Hyderabad in the middle of the 19th century. During the rule of the Holkar queen Ahilyabai, various public works were carried out, including the restoration of Grishneshvar Temple. This placed Grishneshvar on a common platform along with other important temple sites including Varanasi and Bodh Gaya, and built up its significance as a site of national significance, simultaneously reinforcing the status of the Holkars as a pan-Indian power.

According to J.B. Seely, an early British traveller in the region, the Holkars maintained a large establishment at Ellora in the 19th century.<sup>11</sup> They used to rent the caves for religious purposes and raised funds by collecting an entrance fee. This practice seems to have continued till the beginning of the 20th century. In 1951 the Government of India declared the Ellora Caves to be monuments of "national importance"; two years later the site came under the control and supervision of the Archaeological Survey of India.<sup>12</sup>

### **Waterscapes of Ellora-Khuldabad-Daulatabad**

A subsection of the Ellora-Khuldabad-Daulatabad watershed is fed by the river Yelganga, a tributary

of the Shivna-Godavari that arises in a spring-fed reservoir at the top of the plateau at Mhaismal and flows down past the Jogeshwari and Ganesh Leni, creating a spectacular waterfall over Cave 29 before flowing down past the Grishneshvar Temple at Verul. Another river, the Girija, also rises from the same reservoir and flows in the opposite direction towards Phulambri in Khuldabad.

The landscape is dotted with tanks, reservoirs, check dams and wells, indicating systems of water management for irrigation and human usage within the historic settlements in the area. A case in point is Suryakund in Sulibhanjan village on the Khuldabad Plateau. The waterbody locally termed “kund” is in the middle of a natural depression, with walls built to hold in the water. A second kund is also said to have existed there, now buried in silt. There are steps leading down to the water. The tank is believed to be fed by a natural well or spring. According to local informants, the kunds mark the spot where Surya and Chandra (the Sun and Moon Gods) once did a penance. They left behind medicinal herbs in the water, which give it healing properties. Some people come here during Makar Sankranti to take a dip in the water of Suryakund, otherwise it is a fairly secluded spot. There is no mention in the literature of patronage by any historic dynasty. The area is believed to be a “tapovan”, a spot possessing three requisite criteria, i.e. having water; being a Shivalaya or abode of Shiva; and having the quality of “ekant” or seclusion,<sup>13</sup> essential characteristics of a place where wise men come to meditate.

In contrast, the Dharma Talab next to Bani Begum Bagh, the tomb of Aurangzeb’s daughter-in-law and a protected site under the management of the State Department of Archaeology, is a community meeting point, bustling with activity, used by the locals of Khuldabad for washing and bathing. It is also a rich source of fish.

A short distance away, Pariyon ka Talab or the “Lake of Fairies” is located adjacent to a prominent dargah of Khuldabad, that of Hazrat Shaikh Jalaluddin Ganj-e-Rawan Suhrawardi,

and is strongly associated with it. The shaikh is believed to have been the first Sufi saint to settle in Khuldabad. He came 800 years ago from Khirqan near Baghdad, where he had been a disciple of Shaikh Shahabuddin Suhrawardi.<sup>14</sup>

According to legend, the saint was given a stick (asa) and enjoined to travel eastward, stopping and settling in a place where the stick would sprout leaves (muqam). Following his travel through Iran and Delhi, he came south and finally the stick sprouted at this spot, a sacred space next to the reservoir. The original tree still grows in the courtyard and its fruit is believed to possess magical properties. The reservoir has a stone boundary wall believed to date to the Khilji/Tughluq period.

#### *Water Cisterns of Ellora Caves*

The caves at Ellora are provided with cisterns for water storage that are part of the original structures. These are partially underground and protected by overhanging rock, creating a substantial tank for collecting and storing water. The primary source of water for the cisterns would have been rainwater and runoff circulating through the vesicular rock. The quantity of water collected appears to indicate continuous usage and is a key factor in determining the numbers and types of inhabitants of the caves. There is no inscriptional evidence describing the sponsorship and usage of the cisterns, indicating perhaps that the cisterns were a normal and innocuous aspect of the cave structures, but nevertheless an essential one.

The Prakrit term for cistern is “podhi”, the term paniya podhi denoting a drinking-water cistern and snana podhi a cistern for bathing. There are references to podhis at other cave sites in Maharashtra, such as Bhaja, Bedsa, Kanheri, Shivneri, etc. They were believed to have been constructed by a variety of donors including monks, nuns, jewellers, traders and even housewives. However, there are no inscriptional references to the podhis of Ellora, where there

are channels etched in the rock for collecting rainwater and runoff, indicating a technical awareness of harvesting rain and groundwater. The water was potable, and could have been used for human and animal consumption. According to local informants, the water from the cistern at Cave 10 was stored in pots and used for drinking by ASI staff and visitors until 15 years ago.

Although very little attention has been given to the cave cisterns by colonial art historians in their extensive writings on Ellora, the topic finds mention in an account by Thevenot, a 17th-century European traveller in his description of the caves:

Leaving this place, I went into several other Temples of different structure, built also in the Rock, and full of Figures, Pilasters, and Pillars: I saw three Temples, one over another, which have but one Front all three; but it is divided into three Stories, supported with as many rows of Pillars, and in every Story, there is a great door for the Temple; the Staircases are cut out of the Rock. I saw but one Temple that was Arched, and therein I found a Room, whereof the chief Ornament is a square Well, cut in the Rock, and full of Springwater, that rises two or three foot of the brim of the Well.<sup>15</sup>

### *The Tirtha of Grishneshvar Temple*

The temple of Grishneshvar in Verul village, less than 500 metres from the Kailasa Temple (Cave 16), is an important pilgrimage site of the region. Being the site of one of the 12 jyotirlingas, it is part of an important network of Shaivite shrines and draws a number of pilgrims from across the country. It was possibly developed as a temple centre in the 8th century but probably had an existing cultic significance and prior associations with Shaivite theology that led to its increased importance under the influence of the Kalachuris, Chalukyas and finally the Rashtrakutas, all dynasties that had associations with Shaivism. As

a flourishing pilgrim centre, it drew patronage in subsequent periods, with Maloji Bhonsle as also Ahilyabai Holkar sponsoring major public works at the complex.

The tirtha or tank adjacent to the temple is the key to the sacred significance of the site and the cult, and is the primary attraction for visitors to the shrine (figure 1). Possibly pre-dating the temple complex, the tank has been mentioned in the Dashavatara Cave inscriptions of the Rashtrakuta king Dantidurga dating to 741–742 CE, wherein he claims to have taken a bath in the holy Guheshvara tirtha in Ellora, thereby legitimizing his control over the region.<sup>16</sup> The temple's association with water continued into the 16th and 17th centuries as evidenced by the construction of a baoli in the compound by Maloji Bhonsle during the reign of Malik Ambar and the Nizams of Ahmednagar. The baoli provides drinking water to pilgrims to this day.

The temple and tank were rebuilt by Ahilyabai Holkar in the early 18th century, indicating its importance as a pre-eminent Shaivite pilgrimage site of the region. An inscription embedded in the wall of the tirtha records the rebuilding.

The significance of the tirtha was recognized by James Burgess in the 19th century, who described it thus:

At the village Ahalyabai constructed a square *kund* or tank, surrounded by an outer wall about ten feet high in the inside—the level of the water being considerably below the ground. Inside this wall a broad platform goes quite round, from which the flight of steps the whole length of each side descend to the water, and on these steps are built four small shrines. This *kund* is the Sivalaya or the abode of Siva; and round it the ill—a large silver mask dressed in a Maratha turban—is carried in procession in a palankin at the Sivaratri festival, and bathing in its water is regarded as meritorious. To the east of the *kund*, in a square walled enclosure, is the temple, built by the same princess, and dedicated to Siva as Grishnesvara....<sup>17</sup>

*Takaswami Ashram, Ellora*

Outside the official boundary of the Ellora caves site lies a structure known locally as Takaswami Ashram (taka implying tank). The core of the complex is a cluster of three unfinished caves dating back to the period of the original ensemble, possessing the requisite cisterns. According to local informants, the ashram was the resting place of a “Swamiji”, a travelling sadhu from Agastyakona in Cuddapah (Kadapa) district of Andhra Pradesh, who settled down at this spot “a hundred years ago”. The Swamiji maintained one of the cisterns, and used to provide drinking water to pilgrims walking up the hill to the Girija Temple of Mhaismal. The cistern is protected by an iron gate and the water is still potable, used for animals and to water the gardens of the ashram (figure 2).

The usage of water at Takaswami Ashram throws light on the manner in which the cave cisterns of Ellora were intended to be utilized. The origin of the Swamiji in Agastyakona in Andhra Pradesh, another historic settlement characterized by the presence of a “Mahadev Mandir”, hills and forests, indicates an association of certain conditions believed to underpin a sacred landscape, as also historic pilgrim routes criss-crossing the Deccan interiors traversed by wandering ascetics. This throws some light on

the *raison d’être* of the cave complex at Ellora, and the references to the caves being used for ritual and meditation activities related by local informants and found in vernacular texts like the *Verul Mahatmya* and the *Mahanubhava Lilacharitra*<sup>18</sup> begin to make sense.

*Sufi Water Structures of the Tughluq Period*

The shift of the Delhi Sultanate capital from Delhi to Devagiri/Daulatabad in 1327 caused a significant demographic shift in the region. Despite Sultan Muhammad bin Tughluq’s decision to reverse his move and return to Delhi, many families chose to remain or move to other Deccan cities like Gulbarga. Amongst them were several Sufis who had accompanied the sultan’s entourage and had decided to put down their roots in the Deccan. The event facilitated the spread of north Indian culture, language and lifestyles into the south. It also enabled the greatest influx of Islam that the region had witnessed thus far, and established cultural and political connectivities between Western and Central Asia and the southern Indian states via the corridor of Delhi.<sup>19</sup>

Prominent amongst those who remained were Shaikh Burhanuddin Gharib and Zainuddin



2 Cave cistern at Takaswami Ashram, Ellora.



Shirazi, of the Chishti order, both buried in Khuldabad. Another famous dargah of Khuldabad is that mentioned above, of Shaikh Jalaluddin Ganj-e-Rawan on the edge of Pariyon ka Talab. The legends surrounding the many Sufi shrines (there are believed to have been 1,400 Sufi saints buried in the region, according to the oral traditions of the shrines) indicate their popularity amongst the communities of the region and beyond. Over time, the contentious relationship between the Sufi saint and the royal administration, symbolized by the former's defiance of the temporal authority of the latter, changed into one based on patronage whereby the dargah establishment was sustained by gifts and donations from the rulers, and in turn, legitimized royal authority across the countryside.

The historical layering in Ellora-Khuldabad-Daulatabad contains several Tughluq-period structures particularly with respect to water management. The Khaksar Reservoir in Khuldabad is encircled by a man-made bund wall to hold in the water that has a stone valve outlet for the flow to be channelled into the surrounding fields (figure 3).

The underground water channels have been largely destroyed owing to long-standing

agricultural activities in the region. However, stone masonry monitoring towers to observe the flow of water are still visible in places (figure 4). These may be compared with the Kundi Bhandara, the underground system of water channels or qanats built by the Mughals in Burhanpur, using Persian technology. The kundis, or openings along the underground channel, need to be mapped in order to identify the layout of the system and evaluate the distances over which the water was transported for agriculture and domestic usage.

Below, we examine a historic water system in detail and identify the ways in which the topography and the surrounding environment was used to promote the collection and transportation of water over long distances by medieval administrators. The ability to channelize and store large quantities of water enabled the political and military establishment at Daulatabad Fort to sustain relatively large populations, including horses and livestock, an important factor underpinning its significance as a key urban centre in the Deccan. An important aspect of the research is the role played by local informants from the contemporary agricultural community, whose deep understanding of the historic water system was instrumental in achieving an insight into its working. These are invaluable inputs as there is negligible inscriptional or textual material pertaining to the site.

**3** Hydraulic valve at Khaksar Reservoir, Khuldabad.

**4** Remains of the monitoring tower for the underground channel at Khuldabad.



5 Yadava-period steps at Mavsala Reservoir, Khuldabad.



*Mavsala Reservoir, Khuldabad Taluka*

Mavsala Reservoir (also called Rang Mahal Talab and Hauz-e-Qutu/Qutlugh Talab) is located in the village of Kagazipura in Khuldabad Taluka, about 2 kilometres from the state highway. It is currently managed by the Irrigation Department, and the water is used primarily for agriculture by the local village community. Submersible pumps are attached to draw out the water.

The tank is described in detail in the *Aurangabad Gazetteer* of 1884, wherein its construction is attributed to the Tughluq rulers, of which three, Ghiyasuddin, Muhammad and Firoz, are associated with it. According to the *Gazetteer*, the reservoir is strongly associated with the Kunbi community, who are known as “Tughluq Padshahs” or protectors of the cultivators, possibly appointed by the Tughluq rulers. The reservoir is located east of the “city of Mausala”, and was named Qutlugh Talab after the Sultan’s tutor, who was governor of Daulatabad Fort at the time of its construction. There is a flight of paved stone steps around the talab, and a three-storeyed “Summer Palace” (Rang Mahal) on

the banks facing Daulatabad Fort (figures 5 and 6).

According to a local informant, Shri B.D Shah, an agriculturist who is a resident of Kagazipura village, the tank was built by the Yadavas when they ruled in Devagiri (Daulatabad), and the steps or ghats date to that period. He stated that the first stage of fortification at Devagiri was by the Yadavas, for which purpose craftsmen were brought in from Iran. According to him, the talab was built to provide water to Devagiri Fort, and would have played an important role in sustaining the population during the siege by Alauddin Khilji in 1296.

Another informant at the site was Shri Murlidhar Balaji Sonavale, of the Bhil community, a neighbour and childhood friend of Shah. Sonavale stated that his ancestor was given the marfat (endowment for services rendered) for taking care of the tank and the orchard surrounding it by the Nizamshahi rulers of Ahmednagar. He stated that there was an orchard covering 32 acres (0.13 sq. km) extending from the Rang Mahal till the next talab, called



Abpashdara, now known as Hiranya Lake, downhill from Mavsala towards Daulatabad. One can still find remains of fruit trees, including mango, guava, ramphal, jamun and sitaphal, in the area.

Shah then pointed out “Malik Ambar’s pipeline”,<sup>20</sup> the complex hydraulic system set up by the Bahmani general to transport water to Daulatabad Fort. He said that the level of water at Mavsala was at exactly the same height as that in the “khandakh” (defensive moat) at Daulatabad Fort. He indicated a flight of newer stone steps into the talab (possibly dating to Malik Ambar’s period). The lowest four or five steps have holes that lead into tunnels that carry water from the talab through the steps, under the embankment into a “pressure chamber” on the other side (figures 7 and 8). Figure 7 is the one with holes in steps. Figure 8 is an underground water channel. Stone poles were used as sluices to control the outflow of water from the reservoir.

Shah explained that the “pressure chamber” had a larger inflow pipe and a smaller one for outflow, thus pushing the water out with considerable pressure and enabling it to travel uphill, not unlike a pump. From there, a smaller ceramic channel carried the water over the hillside to Daulatabad (figure 9). The outflow channel, in the form of a tunnel under the bund wall (see figure 8 above) is very similar in structure to the Persian qanat found in the Kundi Bhandara in Burhanpur. The openings at ground level are similar to the kundis used for monitoring the water flow.

The pipeline was broken and scattered beyond the embankment owing to excavation of clay by brick-kiln owners, therefore it was approached from the opposite end, at the prominent reservoir Abpashdara, part of a major dyke that may have once been a water channel. Walking along the bank of the reservoir, enclosed on two sides by the steep stone walls of the dyke, and criss-crossed by dry feeder channels, we entered a jungle that had once been part of the original fruit orchard of the Nizamshahi rulers.

Following the pipeline deep into the forest, we approached an aqueduct, another pressure chamber and finally a waterfall and a pleasure pavilion with double-storeyed, crenellated arches, built by Malik Ambar, completely hidden by trees (figures 10 and 11). According to Shah, the pavilion served a double purpose: it was a place for the royal ladies to enjoy the cool spray of the waterfall, and it also serviced a major water supply system. A small stream carrying overflow from the waterfall ran along the opposite wall of the dyke, which had narrowed considerably. A bridge/aqueduct had been constructed over the stream.

The area is deserted today, except by Bhils and pastoralists whose cattle graze in the abandoned orchard. There is a gigantic banyan tree that is known as “Jalali Baba’s Dargah”, Jalali Baba being probably one of the legendary 1,400 Sufi Pirs that migrated into the region. According to our informants, only Bhils worship at the “dargah”, and the shadow (*saya*) of the Baba is believed to protect the area. The Bhils also report a fragrance indicating the Baba’s presence.

The water system shows an integrated arrangement coordinating groundwater resources, rainwater harvesting, topography, types of trees and vegetation in an organized and sustainable manner, to conserve and transport water from its place of origin and storage to its point of usage. While the fruit orchard was established to preserve a suitable environment for the working of the pipeline, the ancillary component of the pleasure pavilion was appropriately mobilized for preserving the water supply. Associations with venerated forms like “Jalali Baba’s Dargah” further reinforce the sacred significance accorded to the water system and its environs amongst the local community, thus helping to preserve it.

## Conclusion

The region of Ellora-Khuldabad-Daulatabad depicts an evolution of different stages of water-

6 Rang Mahal, Mavsala Reservoir, Khuldabad.

7 and 8 Sluice holes and outlet pipeline at Mavsala Reservoir.

9 Stone-encased ceramic pipeline that transported water to Daulatabad.

management technology, from the earliest phase of checking and storing runoff in reservoirs at the base of slopes, to harvesting rainwater and runoff through the rock in the cave cisterns, to transporting collected water from reservoirs into fields, to the imperial waterworks designed by Malik Ambar. A common theme running through the various stages is an understanding of water as a part of an ecological system involving hill slopes, forests, the nature of the rock and soil and their ability to hold and transport water. Social and ritual elements like the association of the water structures with temples and dargahs reinforced the control over essential resources by institutions of authority, political or cultural. They also protected and preserved the water systems through a network of rituals, myths, legends and pilgrimage practices that reinforced their sacred significance and thereby prevented them from being damaged or destroyed. The myths and rituals pertaining to water resources also generated a greater consciousness of the presence and significance of water in the lives

of the communities, and the belief in its sacred nature enabled its conservation over centuries.

#### Figure Acknowledgements

All illustrations courtesy the author.

#### Notes

- 1 I would like to acknowledge the Ellora Caves Site Management Plan commissioned by the Archaeological Survey of India (ASI), during the preparation of which my interest in the region was awakened. I would also like to express my deep appreciation of the historical research carried out by Dr Ranjeeta Datta which greatly enriched my understanding of the region and its issues. I am indebted to Professor R.S. Morwanchikar for his deep understanding of and seminal research into the historic water-management structures of Ellora-Khuldabad-Daulatabad, and his generosity in guiding my research. The Senior Academic Fellowship awarded by the Indian Council of Historical Research (ICHR) enabled large sections of this research. Finally, my heartfelt thanks to Shri Kachru Jadhav, Shri Yusuf Shaikh and the community of Verul village and Khuldabad for



**10 and 11** Waterfall and pavilion in “Malik Ambar’s pipeline”.

- sharing their valuable insights and understanding.
- 2 *Aurangabad District Gazetteer*, 1884 (reprint 1977).
  - 3 “Geo-scientific Studies for the Conservation of Ellora Caves”, Geological Survey of India, Central Region, January 2001.
  - 4 Consisting of Compound Pahoehoe (combination of a top vesicular zone, middle massive part and bottom vesicular layer with well-developed basal pipes).
  - 5 “Geo-scientific Studies for the Conservation of Ellora Caves”, January 2001.
  - 6 M.K. Dhavalikar, *Ellora*, New Delhi: Oxford University Press, 2003. See also James Fergusson and James Burgess, *The Cave Temples of India* (1880), reprint Delhi: Kessinger Publishing, 2009.
  - 7 Carmel Berkson, *Ellora: Concept and Style*, New Delhi: Abhinav Publications, 1992.
  - 8 There is a reference to Ellora merchants in a donative inscription at Sanchi. See Geri Malandra, *Unfolding a Mandala: Buddhist Cave Temples of Ellora*, Albany, NY: SUNY Press, 1993.
  - 9 A. Eschmann, H. Kulke and G.C. Tripathi, *The Cult of Jagannath and the Regional Tradition of Orissa*, New Delhi: Manohar, 1981.
  - 10 Berkson, *Ellora*, pp. 31–32. See also Richard M. Eaton, *A Social History of the Deccan (1300–1761)*, New Delhi: Cambridge University Press, 2005.
  - 11 J.B. Seely, *The Wonders of Ellora or the Narrative of a Journey to the Temples or Dwellings Excavated out of a Mountain of Granite at Ellora in the East Indies*, London: G. & W.B. Whitaker, 1924.
  - 12 T.V. Pathy, *Elura: Art and Culture*, New Delhi: Sterling Publishers, 1980, p. 5.
  - 13 Conversation with the priest at the Datta Mandir at Sulibhanjan, a short distance away from Suryakund.
  - 14 Information provided by a functionary of the dargah.
  - 15 “Indian Travels of Thevenot (being the third part of the travels of M. De Thevenot Containing the Relation of *Indostan*, the *New Moguls*, and of Other People and Countries of the *Indies*)”, in *Indian Travels of Thevenot and Carreri*, ed. Surendranath Sen, New Delhi: National Archives of India, 1949, pp. 104–07.
  - 16 Pathy, *Elura*, pp. 10–13.
  - 17 James Burgess, “Report on the Antiquities in the Bidar and Aurangabad Districts” *Archaeological Survey of Western India Reports*, Vol. III, 1878, pp. 82–83.
  - 18 The Mahanubhava sect, founded by followers of Chakradhar Swami in the 13th century, has an ashram adjacent to the Ellora Caves. It is believed that Chakradhar Swami meditated in the Ellora Caves for ten months in 1268 CE, and his experiences are recorded in detail in the Marathi text, *Lilacharitra*. The ashram is still functional in situ.
  - 19 Carl W. Ernst, *Eternal Garden: Mysticism, History and Politics at a South Asian Sufi Centre*, New Delhi: Oxford University Press, 2004, pp. 114–18.
  - 20 “There are many magnificent remains of former aqueducts...especially about the neighbourhood of Sultanpur, which are assigned to sultan Ghias-uddin Tughlik. In Malik Ambar’s time, the mountain streams were dammed up near their source so as to form reservoirs, and the water was drawn off through sluices. Works of this description were most abundant in the Ambad taluk, where the ruins of several tanks are still to be seen. Handsome wells were occasionally built along the sides of the roads by benevolent individuals. They were of an irregular star-shaped pattern, with steps leading to the water; and were entirely restricted to the use of wayfarers. Excluding the Sarf-i-Khas and jagir lands, there are in all 16 tanks and 15,373 wells in the Aurangabad district. Of the former, 7 are still in good order, and are chiefly used for domestic purposes. Of the latter 4,610 are out of repair. At the present day wells are usually sunk by private individuals at their own cost, but the government hold out certain privileges as an inducement to the prosecution of this useful work.” *Aurangabad District Gazetteer*, 1884.

#### Additional Reference

S. K. Dikshit, “Ellora Plates of Dantidurga”, *Epigraphia Indica*, Vol. XXV, 1940, pp. 25–31.