

Listing and Grading of Heritage Structures

Ahmedabad Urban Development Authority

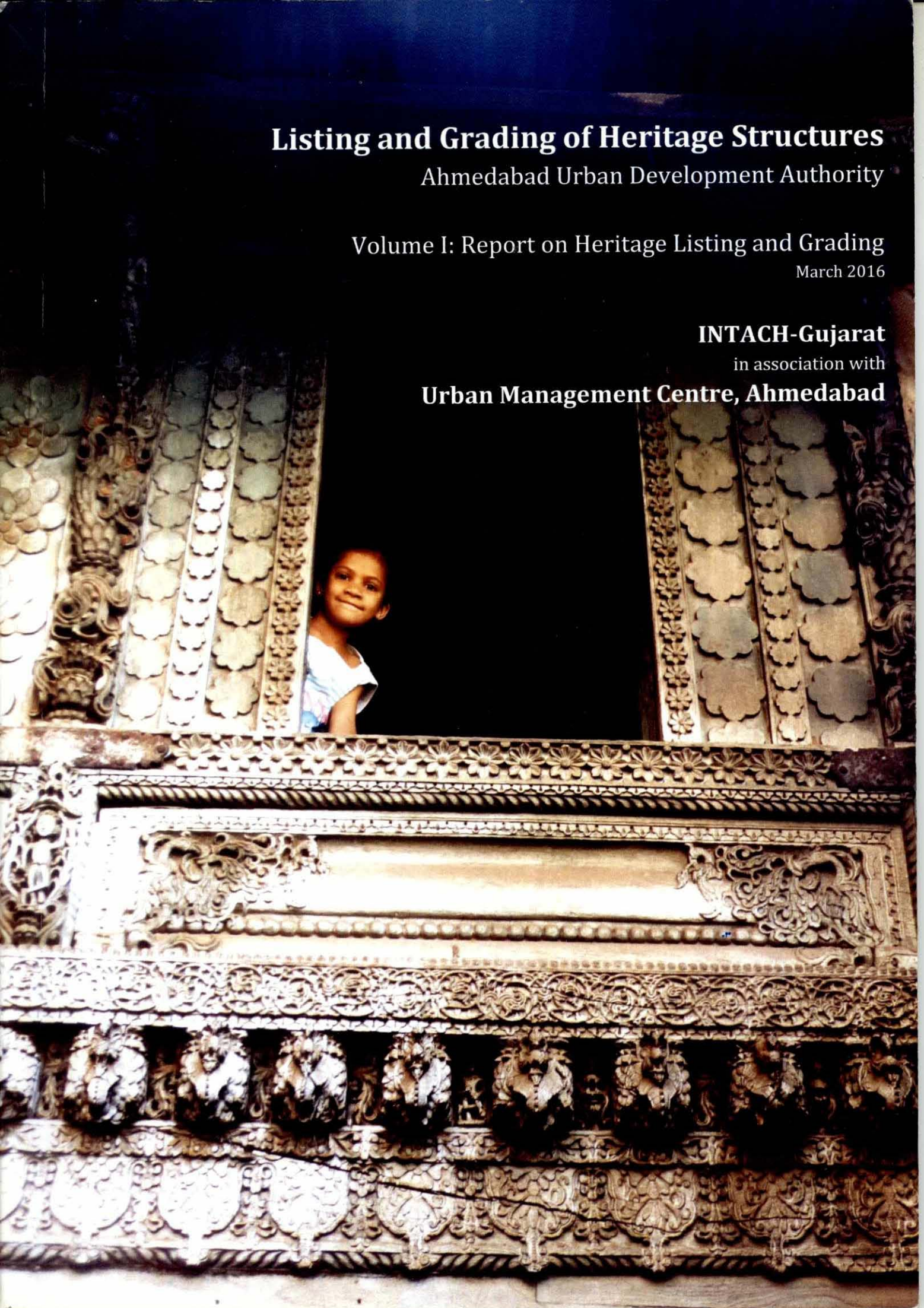
Volume I: Report on Heritage Listing and Grading

March 2016

INTACH-Gujarat

in association with

Urban Management Centre, Ahmedabad





Prepared by INTACH-Gujarat and Urban Management Centre

March 2016

All photographs are by the authors unless otherwise mentioned. Data from this document may be used and quoted with due acknowledgement to INTACH-Gujarat and Urban Management Centre.

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INTACH-Gujarat

Indian National Trust for Art and Cultural Heritage was set up in 1984 is India's largest non-profit membership organization dedicated to conservation and preservation of India's natural, cultural, living, tangible and intangible heritage. INTACH has many state chapters and city chapters to carry on with its agenda. It brings together heritage conservationist professionals, artists, art and culture enthusiast, governments on a single platform.



Urban Management Centre

INTACH-Gujarat chapter has partnered with Urban Management Centre (UMC) for execution of Listing and Grading of Heritage Structures in AUDA Area. UMC is a not-for-profit organization based in Ahmedabad, Gujarat, working towards professionalizing urban management in India and South Asia. UMC provides technical assistance and support to Indian state local government associations and implements programs that work towards improvement in cities by partnering with city governments.



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Front cover page
Back cover page
Credit

: Residence of Premilaben Ramanbhai Patel, Bhuvvaladi Village
: Fresco on Residence of Rutulbhai Patel, Kanbha Village
: INTACH-Gujarat and Urban Management Centre

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List of abbreviations

AMC	Ahmedabad Municipal Corporation
ASI	Archaeological Survey of India
AUDA	Ahmedabad Urban Development Authority
BCE	Before Christian Era
CE	Christian Era
cm	Centimetre
DP	Development Plan
GDCR	General Development Control Regulations
GIS	Geographical information system
GoG	Government of Gujarat
Gol	Government of India
GUDA	Gandhinagar Urban Development Authority
INTACH	Indian National Trust for Art and Cultural Heritage
km	Kilometre
MoU	Memorandum of Understanding
SDA	State Department of Archaeology
sqkm	Square kilometre
TDR	Tradable Development Rights
UMC	Urban Management Centre

Glossary

<i>Chabutra</i>	traditional bird feeder
<i>Gamtal</i>	Village
<i>Haveli</i>	a large traditional house
<i>Jharokha</i>	decorated window projecting out from an external wall
<i>Panch</i>	a group of elected/ nominated individuals by a community for administrative purposes
<i>panchayat</i>	administrative body comprising of <i>panch</i>
<i>Pol</i>	traditional neighbourhood with cul-de-sac
<i>Taluka</i>	sub-district administrative division
<i>Tanka</i>	traditional rain water harvesting tank
<i>Vav</i>	step well

Disclaimer

The scope of this report is to conduct listing and grading of heritage structures in the Ahmedabad Urban Development Authority's (AUDA) jurisdiction (excluding Ahmedabad Municipal Corporation) comprising of 167 villages and 5 municipal areas of Dehgam, Kalol, Sanand, Bareja and Mehmedabad. The list is based upon information drawn from data collected from various a) primary survey conducted by INTACH-Gujarat Chapter, b) government, non-government and private organisations; c) discussions with experts in the field of history, heritage and archaeology; d) research of the relevant region, and e) our own sector knowledge. No representation or warranty, express or implied, is given by INTACH-Gujarat or any of its respective partners, officers or employees of the accuracy of the information, data and maps or opinions provided by respondents or third parties.

In the course of the assignment, we were provided with both written and verbal information supplemented by hand drawn sketches, archive pictures, maps and drawings. Nothing has come to our attention to cause us to believe that the data provided by various sources are not true. We have neither carried out an audit or due diligence for ownership of structures surveyed, but have assumed the respondent's feedback to be true. No legal investigation of the title/ ownership of the tangible and intangible assets has been made.

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Acknowledgements

INTACH-Gujarat would like to acknowledge various individuals and organisations who have contributed towards this project directly or indirectly. Foremost, INTACH-Gujarat would like to thank INTACH head office based at New Delhi for their support.

We would like to specially thank Maj. Gen. (Retd.) L. K. Gupta - Chairman, Mr. C.T. Misra - Member secretary, Mr. Divay Gupta - Principal Director and Ms. A. Vijaya - Director Programmes of INTACH for their valuable support. INTACH-Gujarat would also like to thank AUDA for their support and facilitation during the study. We acknowledge contributions by Mr. Himanshu Thakkar, Deputy Town Planner and Mr. Suresh Bholowalia, Assistant Town Planner, AUDA for their time and guidance.

INTACH-Gujarat would like to specially acknowledge

- Ms. D. Thara, IAS, Chief Executive Authority, AUDA for her support and comments
- Mr. P. K. Ghosh, Retd. IAS, Chairman, Heritage Conservation Committee (HCC), AMC for insightful discussions
- Mr. P. K. V. Nair, DGM, Heritage Cell, Ahmedabad Municipal Corporation (AMC) for facilitating the study and discussions on relevant areas of heritage conservation
- Debashish Naik, Director, Centre for Heritage Management, Ahmedabad University
- All members of HCC, AMC for their guidance

INTACH-Gujarat would like to also thank Urban Management Centre (UMC), Ahmedabad for hosting INTACH-Gujarat office at their premises and for providing technical and administrative staff for this project. UMC has been a crucial associate of INTACH-Gujarat as they bring vast experience and regional knowledge in heritage.

Special thanks to all the owners and occupants of heritage structures and village heads (*Sarpanchs*) who extended their support to our survey team by sharing the history of their villages

Manvita Baradi
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and
Director, Urban Management Centre

1. Background

The built heritage of our country, which forms a part of our cultural heritage, is a priceless non-renewable resource that is seriously threatened. Government of India (GoI), through Archaeological Survey of India (ASI) and the state governments through their respective State Department of Archaeology (SDA) have been protecting monuments more than 100 years old declared to be of national or regional importance. However, considering India's vast cultural heritage, there are innumerable historic buildings and precincts of architectural, historical and aesthetic importance remain 'unprotected', largely neglected and threatened by natural decay, vandalism and urban pressures.

Ahmedabad region has rich historical past and it is reflected in the heritage structures spread in the towns and villages around the city. INTACH-Gujarat Chapter and Urban Management Centre (UMC) have in the past documented heritage structures in Ahmedabad Municipal Corporation (excluding walled city) and Gandhinagar Urban Development Authority's (GUDA), while AMC has recently revised the list of heritage structures in walled city prepared in 2001. Continuing the efforts towards documenting and creating policies to promote conservation of the built heritage, Ahmedabad Urban Development Authority (AUDA) requested INTACH-Gujarat and UMC to list heritage structures in AUDA area outside AMC's jurisdiction.

Cultural heritage refers to tangible and intangible manifestations of history and is of grave significance which could be aesthetic, architectural, associational or natural. This project has documented heritage structures – both inhabitable and uninhabitable that are a reflection of the region's historic and cultural past. The documented heritage structures have been evaluated based on three inter-related concepts including significance, integrity and context. Each concept is described below.

Significance

Significance is the importance of the property to the history, architecture, archaeology, engineering or culture of a community, region or nation. In selecting a building as a heritage structure, attention has been paid to its

- association with events, activities or important persons
- distinctive physical characteristics of architectural style, design, construction or form
- potential to yield important information such as illustrating social or economic history of the time it was built in
- technological innovations in construction or building typologies

Integrity

Historic integrity is the property's identity, evidenced by the survival of physical characteristics and significant elements that existed during the property's historic period. It enables the structure to illustrate significant aspects of its past having retained the original materials, features and aspects of construction dating from the period it was built.

Context

Historic context is information about historic trends and properties grouped by an important theme in the history of a community, region or nation during a particular period of time. Knowledge of the context helps us understand a historic building as the product of that time.

Heritage structures documented in this project include not only monuments but also artefacts, historical precincts, sacred groves, hills, water bodies, forests, gardens, cultural landscapes and traditional art & crafts. Following are the categories of structures which have been identified and listed:

Heritage Buildings & Sites

- Heritage buildings
- Historic sites & complex
- Religious centres
- Vernacular and local heritage structures
- Archaeological remains, ruins and remnants

Historic & Traditional settlements

- Heritage Villages
- Craft centres
- Streetscapes and Bazaars
- Historic trade routes
- Industrial, technological and transportation sites

Cultural Landscapes

- Scenic sites
- Water bodies

Types of heritage buildings which should be listed based on their significance are:

- Residential – palaces, *havelis*, bungalows, town houses, forts
- Commercial – factories, shops, *bazaars*, ports
- Community – schools/colleges, railway stations, post offices, police stations, libraries, courts
- Religious – temples, mosques, *dargahs*, *gurudwaras*, churches, shrines
- Memorials – *samadhis*, tombs, *chhatris*, head-stones, historic inscriptions

This listing is an inventory of heritage structures based on the primary survey conducted by INTACH-Gujarat and UMC during February to September 2015. The inventory captured basic information about the structure including its name, location, ownership, occupancy, time period of construction (based on administrative rule in the region), building use, heritage significance, presence of architectural elements, construction materials used and existing condition.

This inventory would be the basis for AUDA to notify the heritage structure and extend its tradeable development rights (TDR) to heritage properties. By doing so, it would provide incentive to heritage property owners to conserve it.

We suggest AUDA to prepare guidelines for redevelopment of heritage buildings/ precincts and heritage byelaws which could then be included in the development regulations (DR) of the Revised Development Plan of 2021 of Ahmedabad.

Methodology adopted

INTACH-Gujarat initiated meetings with officials of AUDA and collected all background information including prevailing General Development Control Regulations (GDCR) for Ahmedabad and Revised Development Plan 2021. The team organised the physical survey in all 168 villages and 5 municipalities within AUDA area outside AMC's limit.

INTACH-Gujarat and UMC adopted the following stage-wise methodology

1. Create a list of villages with their location based on database collected from AUDA
2. Conducted reconnaissance survey of villages to be documented
3. Conducted secondary research on history of villages and towns and their religious, economic and socio-cultural significance. The secondary research included description of built form and settlement pattern of villages and towns in AUDA
4. Prepared a preliminary list of heritage structures and other properties of importance was prepared based on the data collected from AUDA, reconnaissance survey and secondary research
5. A detailed survey route plan is prepared and on-foot street-by-street survey of each village in AUDA area is conducted
6. During the survey, buildings in the preliminary list are surveyed
7. In addition, new buildings are identified based on
 - a. visual assessment of trained survey team comprising of architects led by a senior archaeologist
 - b. discussions with local residents of the village
8. The identified potential heritage structures were documented using
 - a. survey forms
 - b. photographic documentation
 - c. mapping on-site consultation with local residents

INTACH-Gujarat with support from UMC initiated field survey including filling up of forms, undertaking photographic documentation, marking locations of the structures in a map and collecting information. To facilitate the survey, AUDA furnished a letter of introduction for the survey team members. AUDA also identified a coordinator for the listing process.

All heritage structures were documented using 'UMC CityCollect' - an android-based mobile app developed by UMC. The Form that helped capture detailed information about the heritage structures included the following:

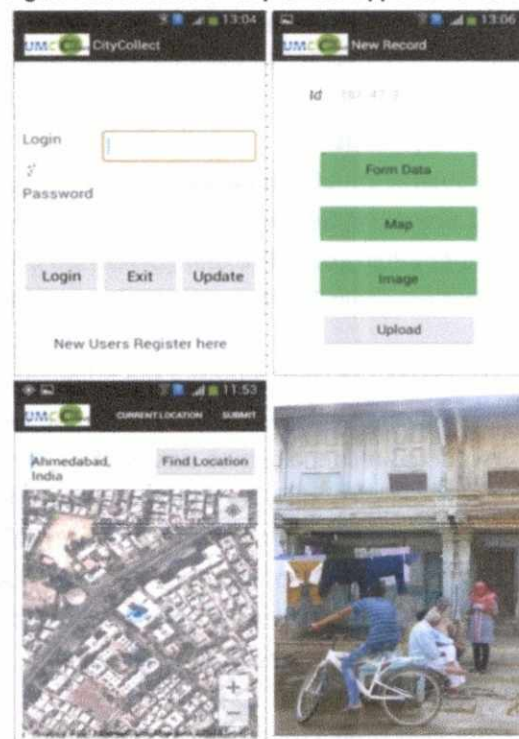
Figure 1 INTACH-Gujarat team during field survey



- Property category (building, garden/ park, spot, statue, fountain, well, etc.)
- Personal details and contact information of the occupier and owner (wherever available)
- Ownership as mentioned by the respondent
- Occupancy (single, tenancy, etc.)
- Building information including age, number of floors, material usage, modifications to original structure, significance for heritage, typology (for plan, plot layout, architectural style, etc.)
- Special architectural/ building elements
- Other anecdotal information

GIS database provided by AUDA was calibrated and cleaned for the purposes of field survey. The secondary research was done through a gamut of literature available on the history of Ahmedabad and its surrounding areas. A list of books referred during the review has been provided in the annexure.

Figure 2 Screenshot of 'City Collect' App used for survey



The team of enumerators comprised of architects, urban designers, archaeologists, engineers and urban planners for the listing and grading of heritage structures. Extensive training of all members of the survey team has been done to ensure uniformity and quality in the documentation. The full scale survey of the city was conducted using an android based application developed by Urban Management Centre (UMC). The app named 'City Collect' includes features such as

- Creation of a custom form/ questionnaire
- Geo-tagging survey forms (choosing the current location of the device or a manual entry of a different location) Integration with Google Maps for navigational purposes
- Clicking pictures using on-device camera

The figure shows the equipment and materials are used during the explorations of buildings and heritage/ancient sites in primary field survey. The equipment is used for cleaning, dressing and materials like kanku (kumkum) is used to identify the inscriptions written on the heritage structures/ temples/step wells etc. In continuation to that the figure 8 shows the use of this kit during the field survey for the exploration.

1. Clearance of buried structures, exposing of brick foundations and inscription.
2. Use of KANKU for reading and study of inscriptions
3. Use of cloth for cleaning and background for photography

Figure 3 Equipment and materials used for primary survey



Figure 5 Cleaning of Inscription, Ramji Mandir, Gatrada.

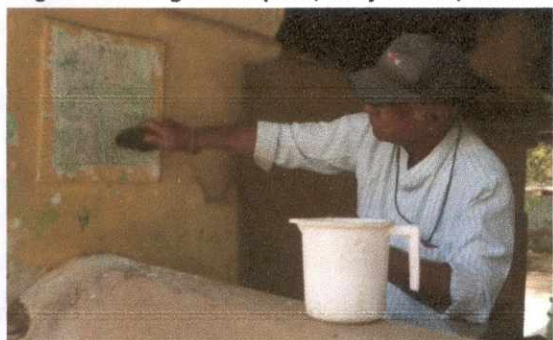


Figure 7 Loose Idols, Parts of Temple Architecture in Premises of Varahimata Temple, Hirapur.



Figure 4 Old Gatreshwari Mata Temple, Gatrada.



Figure 6 Pillar with Inscription, Isanpur Mota.



Figure 8 Arnath Jain Temple, Isanpur Mota.



4. Use of measure tape & scale

Figure 9 Ancient Lake on Jivanpura road, Sanathal



Figure 10 Stone Idols at Ramji Mandir, Gatrada.



2. Introduction

AUDA covers an area of 1866.90 sqkm including 466 sqkm of AMC's jurisdiction. AUDA consists of four districts; Ahmedabad, Gandhinagar, Mahesana and Kheda with 7 talukas; Daskroi, Gandhinagar, Kadi, Kalol, Kheda, Mehmedabad, Sanand. In addition to AMC, AUDA has the 166 villages and 6 urban local bodies Bareja, Bopal-Ghuma, Dehgam, Kalol, Mehmedabad and Sanand.

The Sabarmati River is the major surface water body flowing through AUDA with its tributaries of Khari and Meshwo. Thol Lake – an ecologically sensitive bird sanctuary is located around 20 km west of Ahmedabad in Kadi taluka.

The region was governed by several rulers during different time periods. Ahmedabad has been the major centre in the region and its history dominated developments in the region. A brief history of these areas has been provided below.

2.1. Ahmedabad City

Ahmedabad prior to 1411 CE

Archaeological evidence suggests that the area around Ahmedabad has been inhabited since the 8th century, when it was known as Ashaval (or Ashapalli) and ruled by Asha, chieftain of the local Bhil tribe (R. N Mehta, 2001)

Around 11th century, Karnadev I, the Solanki ruler of Anhilwara (modern Patan), waged a successful war against the Bhil king of Ashaval, and established Karnavati on the banks of the Sabarmati. Solanki rule lasted until the 13th century, after which Gujarat came under the control of the Vaghela dynasty of Dholka. The archaeological remains from that time suggest that the settlement of Karnavati was mainly confined to what is currently known as the walled city of Ahmedabad. No built structures from this time have been discovered outside the walled city (R. N Mehta, 2001).

Ahmedabad under the Islamic Rule (1411 – 1757 CE)

Gujarat came under the control of the Delhi Sultanate in the 14th century. During early 15th century, Zafar Khan Muzaffar, the local governor of the State established his independence from the Sultanate and crowned himself Sultan to form the Muzaffarid dynasty. Zafar Khan's grandson Sultan Ahmed Shah established Ahmedabad in 1411 CE (R. N Mehta, 2001). During his rule, he constructed the Bhadra Fort, the Royal Palace and several mosques including the Ahmed Shah Mosque and the Jami Masjid. In 1451 CE, Sultan Qutubuddin Ahmed Shah, the grandson of Ahmed Shah constructed the Hauz-e-Qutub, now known as Kankaria Lake and Bag-e-Nagina, a summer place outside the walled city. Later Mahmud Begada, the other grandson of Ahmed Shah fortified the city with an outer wall, 10 km in circumference, consisting of twelve gates and 189 bastions (Mukhtirajsinhji Chauhan & Kamalika Bose, 2007).

In 1535 CE, Mughal emperor Humayun briefly occupied Ahmedabad but the city was re-occupied by the Muzaffarid dynasty until 1573 CE when Gujarat was conquered by the Mughal emperor Akbar. During the Mughal reign, Ahmedabad became a thriving centre of trade and commerce. The

architecture of the city flourished during this time of relative political stability and prosperity. The forts and walls were renovated and revamped and several new palaces, gardens, mosques and mausoleums were constructed. The key buildings constructed during this time include the Azamkhan Palace, Shahi Baug and Moti Shahi Masjid (Muktirajsinhji Chauhan & Kamalika Bose, 2007).

While the palaces and parks constructed by Mughals became hallmarks of public architecture, the *pols* of walled city offered a unique typology in the organization of private residential space. A typical *pol* comprised a cluster of houses around a common courtyard and had only a few exit points for protection and security. The *pol* houses were beautifully constructed and reflected the traditional style of architecture with intricate woodcarvings. The *havelis* or houses of rich merchants and eminent persons often had a large forecourt and displayed exquisite artisanship. This traditional style of architecture is also evident outside the old in the *gamtal* areas. *Gamtals* were villages around Ahmedabad, which have now been engulfed by the city.

Ahmedabad under the Maratha rule (1757-1817 CE)

The Mughals surrendered to the Marathas in 1757 CE, but soon Ahmedabad became the centre of conflict between two Maratha clans; the Peshwas of Pune and the Gaekwads of Baroda. The Marathas ruled the city for 60 years. They largely converted old buildings to new uses and erected a few temples in the city. During this time, a variation of the courtyard house known as *Wada* came into being. The Gaekwad-ni-Haveli and Mavalankar Haveli are some examples of *wadas* which remain in the city (Muktirajsinhji Chauhan & Kamalika Bose, 2007).

Ahmedabad under British rule (1817-1947 CE)

In 1817 CE, the Maratha rulers in Ahmedabad were overthrown by the British. A military cantonment was established in 1824 CE and a municipal government in 1858 CE. In 1864 CE, a railway link between Ahmedabad and Mumbai (then Bombay) was established by the Bombay, Baroda, and Central India Railway (BB&CI), enabling traffic and trade between northern and southern India via the city (Muktirajsinhji Chauhan & Kamalika Bose, 2007). With better connectivity and transport, the city saw a growth of mechanized industries. The first textile mill was established in 1861 CE. In 1870 CE, the Ellis Bridge, city's first bridge over the Sabarmati River was constructed. The bridge was rebuilt in 1895 CE, which led to the expansion of Western Ahmedabad. Several institutions and residential colonies such as Gujarat College and Pritam Nagar (Brahma Kshatriya Society) were established on the west side.

During the 1900s, the Indian independence movement also began to deepen its roots in the city. Mahatma Gandhi established two ashrams which became centres of nationalist activities. The Gujarat Vidyapeeth was founded in 1920 CE. The city was at the forefront of organized protests and movements beginning with the Dandi March in 1930 CE, and followed by the Quit India movement in 1942 CE which led to India's independence in 1947 CE. Key buildings constructed under the British Rule include buildings in the Cantonment, Town Hall and MJ Library (The Vastu Shilpa Foundation, 2002).

Ahmedabad after Independence (1947 onwards)

After independence, industrialists and educationists in the city invited renowned architects of that time to construct residences, institutions and other public buildings. Ahmedabad became the hub of

modern architecture in the country with several buildings by architects such as Le Corbusier, Louis Kahn, Balkrishna Doshi, Achyut Kanvinde and Charles Correa.

2.2. Other municipalities in AUDA

2.2.1. Bareja

Bareja is located 19 km south of Ahmedabad on NH 8. The settlement of Bareja dates back to the 6th century CE. A copper plate of Maitrakaking Dharsen II refers to a place 'Bandarijidri' which according to Parikh et al, is believed to be the current day Bareja (Parikh & Shastri, 2011c, p. 536).

Bareja and Vyanch villages were given away by Muhammad Shah Badshah to the relatives of Kazi Nizamuddin – the second son of Maulana Shaikh Muhammad Nuruddin (one of Khalifa of Shah Alam) (Hassan, 2012, p. 83).

During the heritage survey, our team identified several heritage buildings in Bareja. One such example is Khodiyar Mata-ni-Vav, a stepwell near Bhim Talav which has been completely renovated over the time. The team surveyed private buildings in Mukhivalo Khancho, Charbhag and the entrance gate of Mukhini Khadki with rich elements of wood carving done during the colonial period (1817-1947 CE). Charbhag and Aathbhag, literally meaning four-divisions and eight-divisions are settlement design patterns found the settlements of Amin Patels of Aslali, Bareja and nearby villages.



2.2.2. Sanand

Sanand is one of the ancient towns of Gujarat located 24 km west of Ahmedabad city on the State Highway 8 and on the Viramgam - Bombay broad gauge section of the western railway. Sanand was once the headquarters of the ancient house of 'Koth' – a unit of administrative jurisdiction during the rule of princely states. Sanand has enjoyed urban status since 1872 CE and its municipality was formed in the year 1885.

According to a legend, Sanand was originally situated near the temple of Hazari Mata, at present on the western end of the town. As per another legend, Arjun – one of the five Pandavas, once used this place as a resting spot, after retrieving some cows belonging to King Virat of the ancient town of Viratnagar (now known as Dholka). Arjun used the location as a pleasurable resting place and hence, it derived its name Sanand meaning pleasure (Gujarat State Gazetteers - Ahmedabad District, 1984).

According to another legend, the word 'Sanand' is believed to have been derived from 'Sanadi' meaning alienated. The original 'Sanand' is believed to have been an alienated village under the Ahmed Shah Sultan (Government of Gujarat, 1984).

A hoard of 1395 coins were found from Sanand in which 9 coins belonged to Kshatrappa period; 283 of King Sharwa period ('Sarwa Bhattarka' may have ruled after Western Kshatrappa and before the brief rule of the Gupta Empire in Gujarat) and 1103 of the rule of Kumar Gupta I (Jamindar, 1975, p. 102).

Present day Virsinhji established Sanand in 1457 CE. Bhulabhai Patel constructed Nilkanth Mahadev Temple at Brahmpol in 1428 CE (Solanki, 2014a) in Sanand.

During Mughal rule (1573 to 1758 CE), the region including Haveli Pargana, Dholka, Kadi and Viramgam was under frequent robbery attacks by the 'Koli' community. In 1648-49, Shaista Khan was unable to control the disturbances of Kolis and sent petitions for his transfer from there. As a result, he was removed and Dara Shikoh was appointed in his place.

During his reign, Shaista Khan defeated a Koli leader Kahanji from Chumval who later surrendered to Shahjahan and returned to his land in 1654 CE (Parikh & Shastri, 2011f, pp. 59-60). It is said that Dhamal Karanji of Sardhar (origin) had conquered Kalol and Sanand Pargana. After conquering Ahmedabad, Sultan of Ahmedabad returned 500 villages to the two sons of Dhamal Karanji (250 villages along with Sanand was given to Virsinhji) (Parikh & Shastri, 2011g, p. 204).

In 1879 CE calico printing and dyeing was in practice in and around Sanand (Parikh & Shastri, 2011c, p. 525).

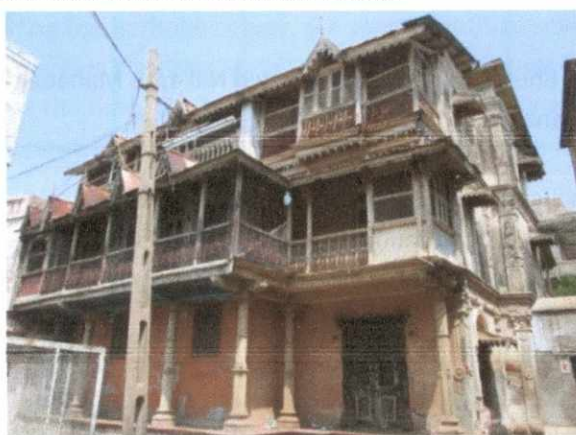
Bhavnath Mahadev Temple was constructed by Hiraba, Mother of Shri Jayvantsinhji, Thakor of Sanand and Koth state, in 1885 CE and renovated by Mahobatsinhji, State Administrator under the British Rule in 1924 CE (Vaghela P. , 2014b).

List of rulers of Sanand has been presented below (Vaghela M. , 2004)

Arjan Sinhji	1609	to	1638
Gopal Sinhji	1638	to	1643
Vajeraji	1643	to	1644
Rajshangji	1644	to	1683
Jagmalji	1683	to	1695
Karshanshangji	1695	to	1723
Bhagavatsinhji	1723	to	1743

Sabalashangji	1743	to	1753
Arjansinhji	1753	to	1786
Kayoji	1786	to	1803
Karsansangji	1803	to	1835
Bhagvatsinhji	1835	to	1869
Rammasinhji	1869	to	1904
Jasvantsinhji (Born in)	1904	onwards	

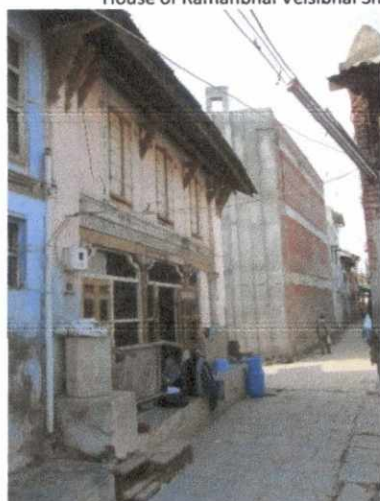
During the course of the primary survey conducted by our team, 72 structures of heritage value have been identified and documented and includes three lakes – Bhadreti Talav, Gadhiya Talav and Lakhamanu Talav. The team also identified historic *paliya* (hero stones). The heritage structures documented include residential and institutional and *chabutaras* (bird feeders). High concentration of structures was found in Jethavenanu Dahelu, Sabbavas, Kapadbazar, Jainvnas, Brahmpol, Juni Post Office nu Dahelu, Holi Chakla, Mochibazar, Danabazar and Viramgam Road. A few noteworthy structures have been shown below:



House of Ramanbhai Velsibhai Shah, Jainvas



Group of Chhatris, Sanand



House of Majulaben Rameshbhai Raval,
Janivas



House of Chinubhai Dhanjibhai Shah,
Budhalalnu Dahelu, Sabbavas



Chabutra, Sanand

A group of Chhatries is situated outside Siddhanath Mahadev Temple's entrance on main road. Two chhatries are historically important due to inscriptions on the lower part of *paliya* mentioning names of Rana Shri Arjan, Rana Shri Gopal and other members of their lineage. The inscription mentions the year 1594 CE).

2.2.3. Dehgam

Dehgam is a city and a municipality in Gandhinagar District and possesses a history of 800 years. It was a residential area of 'Rabari' caste and came to be known as Dehukagam after Dehu Rabari – one of the resident. It later retitled as Dehgam.

The town came under the Khilji rulers in 1257 CE and was conquered by Jafar Khan of the Tughlaq Dynasty in the year 1330. Thereafter, the city came under the Mughal rule including majority of other places in Gujarat. Dehgam gained political importance after it came under the Marathas in 1753 CE. The city became a municipality in 1987 CE in Ahmedabad District and after formation of Gandhinagar District, it became a part of it.

The three Talukas namely Kadi, Kapadvanj and Dehgam were in the custody of Kanajirai as per the elucidation between Malharrai and Kanajirai, in the Maratha time period, 1794 CE (Parikh & Shastri, 2011g, p. 114). In 1875 CE, during the Gaikwad regime, Dehgam taluka was formed and Dehgam erupted as the administrative center for the new taluka. To prevent the spread of the mutiny in 1857 CE in Gujarat and Maharashtra, disarmament was initiated by the British in Dehgam in 1858 CE (Parikh & Shastri, 2011h, p. 74). In the British time period, 'Mahi-Katha Agency' was formed for the states in between of Mahi and Sabarmati River including Dehgam Taluka of the then Vadodara State (Parikh & Shastri, 2011h, pp. 111-112)⁴. In 1897 CE, Ahmedabad-Prantij meter gauge railway line was constructed, which is also known as A-P-RLY. In 1949, the Dehgam taluka was included in the Viramgam subdivision.

During the survey, a total of 35 heritage structures were found located mainly from Aathamanon Darwaja to Ugamana Darwaja, Choksi Bazar, Juna Bazar and Dhuliyaotla.



Ugamanodarwajo, Opp Juma Masjid



Unidentified tomb near Cremation Ground



Old Civil Court, Near Choksi Bazar



House of Bhaveshbhai Shankerbhai Amin, Aminvado

2.2.4. Kalol

Karna Vaghela (Last King of Vaghela Dynasty of Anhilwad Patan) had two sons, namely Jetsinh and Varsinh. While Varsinh established his seat at Sanand, Jetsinh had established himself at Kalol (Parikh & Shastri, 2011g, pp. 145, 204). During the Mughal Period, Kalol was one of the Centre of Exise on Comodities (Hassan, 2012, p. 233). During the colonial Rule, the British government-detained the land of Marutisinh Thakor of Kalol in 1932 for his participation in 'no-tax' movement.

A branch of Majoor Mahajan Sangh – established by Mahatma Gandhi was established in Kalol in 1920 CE (Times News Network, 2009). A textile mill was established in Kalol between 1921 and 1941 CE which employed a large number of people and boosted the economy of the city.

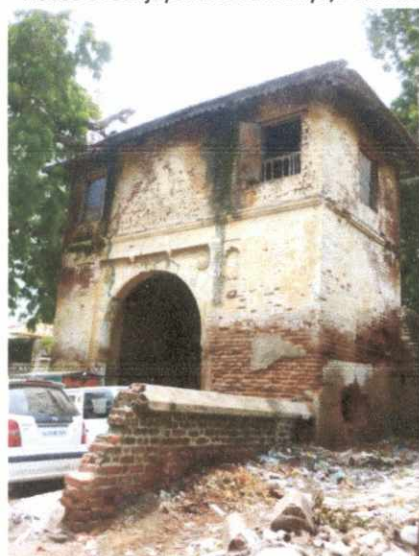
During the survey, a total of 42 structures have been identified inn Kalol. Residential buildings with wood carvings in columns, brackets, cornices, beams and lintels are mainly located in Tower Chowk, Panch Hatadi Bazar Road, Ambaji Chowk, Pandya Vas, Lawar Vas and Junachora Vas.



House of Sanjaybhai R Vakhariya, Panchhatdi Bazar Road



Shree Pushtimargiya Balkrishnalalji ni Haveli, Tower Chowk



Vahivatdar Kutchery (Old Mamalatdar Office), Near Sub-Treasurar's Office

During the survey, the team found archaeological remains and antiquities carved in sand stone in the compound of Kapileswar Mahadev Temple. These were unearthed during excavation work for

renovation of the temple. The remains appear to belong to the Solanki Period and have been examined by the Archaeology Department, Government of Gujarat and are protected by the Indian Treasure Trove Act, 1878 of the Government of India.



2.2.5. Mehmedabad

Mehmedabad was established in 1465 CE by Mehmoud Begada and flourished in the year 1497 CE according to an inscription on the inner wall of the main gate of Mamlatdar Office (Shastri, 1984, p. 66). During his period, Mehmoud Begada constructed four gates – Voral, Kacheri, Khatraj and Nadiad, Jumma Masjid, Sara (Pathikashram) and Fatah Talav. Later on orders of Mehmud Begada, Malek Mehmud Nizam constructed 'Pusta Mahal' and Jinalay Mahal on the banks of river Vatrak in 1546 CE and Chand-Suraj Mahal in 1546 CE (Mustak, 2005). Sultan Saiduddin Mehmud Shah III (1537-1554 CE.) successor of Mehmud Begada shifted his residence from Ahmedabad to Mehmedabad in 1549 CE (Parikh & Shastri, 2011e, pp. 111, 115). In 1546 CE, Mahmud Shah III developed 'Ahukhana' (Mrugopvan) in Mehmedabad on the basis of Ahukhana near Mandu in Malwa. Bhamarayakuva is one of the famous structures built in Ahukhana (Jote, 2013, p. 467). Mehmud Shah III was murdered by his servant Burhanuddin at Mehmedabad on the occasion of his birthday – February 15, 1554 CE (Parikh & Shastri, 2011e).

During the Mughal period, there Mehmedabad served as a police post between Ahmedabad to Bharuch (Hassan, 2012, p. 228). Mehmedabad also served as one of the missions of Christian Missionaries of Ahmedabad during British period (Parikh & Shastri, 2011h, p. 114). Laxmidas, a local writer who lived in Mehmedabad (1583- to 1616 CE) wrote three books titled 'Gajendramoska', 'Chandrahad Akhyan' and Dasamskandh (Parikh & Shastri, 2011f, p. 280).⁸

During the survey, the team identified 67 heritage structures in Mehmedabad Municipality's jurisdiction. These include residential and religious buildings, lakes, fort wall, town gates and institutional buildings. It is believed that Mehmedabad draws many of its town planning principles from Ahmedabad. For example, like Ahmedabad, Mehmud Begada established Mehmedabad on the Eastern bank of River Vatrak.



Dudhiya Talav, Behind Bhamariyakuva



Eidgah, Eidgah Road



Ancient Roza, Opp. Bahuratna Society



Chand-Suraj no Mahel, Goli tekra

Potential heritage precincts and tourist spots in Mehmedabad

Sankari bazar - Sankari Bazar, literally meaning a narrow market is located at the heart of the core city. It is a stretch of road from the cross-hair of two major roads passing through the old core. Buildings along the main roads radiating out from this junction are ornamented with woodcarvings and main roads where the ground floor is used for commercial and upper floors used for residential purposes. Insensitive repair of old structures and uncontrolled new development around the area is affecting the visual quality of the precinct.

Dudhiya Talav - situated behind Bhamariyakuva, this manmade lake is adorned with an Aaramgah (a resting place) in the centre of the lake accessible via an approach bridge. The bridge is built on hollow arches and the lake edge is made of bricks and lime mortar. The lake may have been a part of the Aahukhana developed by Mahmoud Shah III. The lake is surrounded by greenery reflective of its serene environment.

Area around Meldimata Temple, Eidgah Road - situated on eastern bank of River Vatrak, several heritage structures are spread over in an area of approximately 2 sqkm. Most of the structures are made from bricks, sand stone and lime mortar and belong to the Gujarat Sultanate period.

Area along Chand-Surajno Mahal - situated in Goli tekra on the banks of River Vatrak, there are two huge structures known as Chand-Surajno Mahal. The structures are made of bricks, sand stone and

limemortar with a passage connecting the two structures. The architectural plan and the scale of the structure suggests that it was a royal complex.

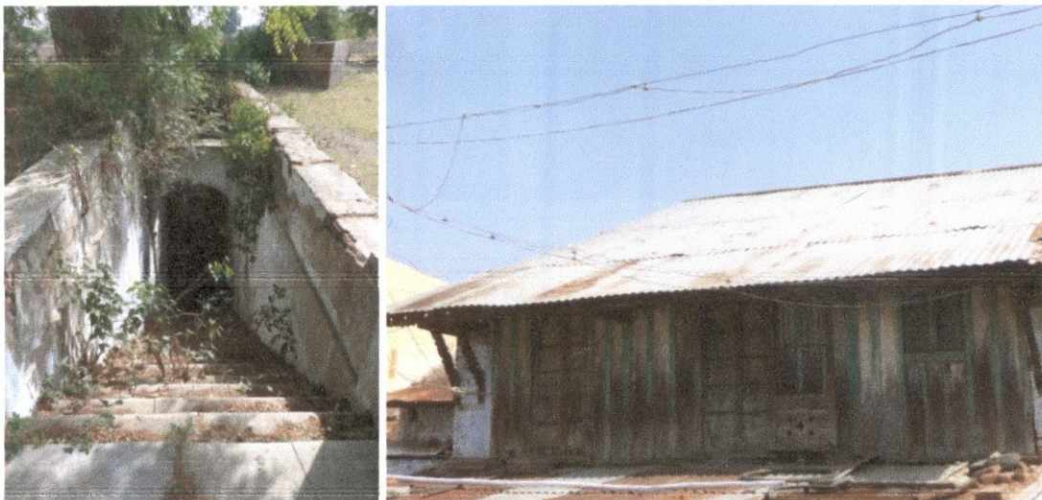
Heritage walk – several heritage structures are situated between the four main gates of the city. A major route where many structures of architectural significance are located starts from the Kutcheri Gate to Navapara through the Sankari bazar, Pandya Pol and Vadhiji Pol.

2.3. Villages in AUDA

2.3.1. Kanij, Mehmedabad Taluka

Kanij is a Village in Mehmedabad Taluka in Kheda District of Gujarat State. It is located 15 kms north of Kheda city. According to the local residents, the name of the village was derived from the Arabic word 'Kanij' which means a female slave. As per the local legend, Mamoud Begada married one of his female slave in 1459 CE and presented this village to her as the wedding gift. The wife's palace exist as ruins on a mound known as Ranivasno Tekro.

After conquering Pavagadh in 1535 CE, Humayun conquered Ahmedabad and left for Mandu after handing over his administration to Askara. During this time, a war between military of Askari and military force of Bahadurshah, the Sultan of Gujarat unfolded near Kanij (Jote, 2013, p. 424). Under the Mughal period Kajani (Kanij) also had a *thana* (police station) under Faujdar of Mahemdavad (Hassan, 2012, pp. 123,253).



2.3.2. North Kotpura, Sanand Taluka

North Kotpura is a settlement located behind Tata Motor's manufacturing plant on the Ahmedabad - Sanand Road. The settlement was originally a cattle farm established by Gujarat Cattle Preservation Association. This association was formed during the great famine of 1899-1900 CE under his Excellency Lord Northcote a Governor of Bombay and other philanthropic men. The association accomplished its object of preserving the famous Gujarat breed of cattle, which was threatened into extinction. In the year 1907, the association handed over the Northcote cattle farm of Chharodi to the Government of Bombay. For the maintenance and improvement of the breed, the Bombay Government enlisted principal subscribers to funds the association.

All the historical details along with list of subscribers are inscribed in marble plaques in Gujarati and English languages. A plaque on the sidewall of the memorial mentions Mr. Jamshedji Nasarwanji Tata as a subscriber.



2.3.3. Aslali, Daskroi Taluka

Aslali, historically known as *Asila Pallika Gram*, is in Daskroi Taluka of Ahmedabad district. It is situated on the Ahmedabad-Bombay National Highway located 12 kms from Ahmedabad. As per records of Maitraka King Dharsen II (598 CE), 'Asila Palika Gram' was situated in 'Bandarijidri Pathak' of 'Khetakahar' and was donated as a grant and the village 'Asilapalli' was named 'Aslali' (Parikh & Shastri, 2011a, p. 345).

A marble plaque mentions construction of the step well presently known as Khodiyar Mata ni Vav in 1680 CE. During the later 17th century, there was a police station at Aslali with a jurisdiction of five villages. (Hassan, 2012)

A marble plaque on the outer wall of Gram Panchayat Office indicates that during historic 'Dandi March', Mahatma Gandhi stayed in village for a fortnight on March 12, 1930 and addressed a mass gathering of the participants.



2.3.4. Unava, Gandhinagar Taluka

Unava is located 13 km north of the state capital Gandhinagar with the railway station on Kalol-Vijapur Railway line. It is believed to be established in 1411 CE and its name 'Unava' is said to be derived from the name of a resident - Una Rabari. Before the establishment of Unava, the same region was known as Brahmapuri, divided into two parts and controlled by the rulers of Pethapur and the Gaekwads of Baroda. There used to be a step-well known as Dama Vav, which restored by Damaji Rao Gaekwad. However, it does not exist anymore.

It is believed that Sahajanand Swami (popularly referred to as Swaminarayan), the central figure of the Swaminarayan sect of Hinduism visited this place many times, albeit with discrepancy about the number of visits made by him. During his visit to Unava in 1875 CE, places visited by him got rechristened as Prasadi no Otlo (a resting place for the saint), Prasadi no Vad (tree offered to the saint) and Prasadi no Kuvo (well offered to the saint). Villagers also said that he addressed the Gram Sabha at Shri Kast Hanuman temple.

According to the local legends, there was a ritual of sacrifice called 'Narmegh Yagna' which used to be performed in Chachar Chowk on the outskirts of the village in 18th century. The rituals included throwing a child into the Yagna Kund (fire altar). Later, Swaminarayan stopped this ritual but some castes perform the ritual on the last day Navratri festival but they step out of the fire altar safely. Many villagers recall their predecessors' encounters with Swaminarayan fondly and associate many places with the time he spent in Unava.

Gazetteers mentions that the Unava Vidhyarthi Ashram played an important role in India's freedom struggle (Rajyagor, 1980, p. 415). In the year 1920 CE, Vasan Railway Station was established and later renamed as Unava after independence of India. Shri Gogaji Mandir was established in 1946 CE by Shri Karshanbhai Desai (Gadhavi, 2006, p. 85).

During the survey, our team discovered loose sculptures and building parts carved in sand stone lying near an ancient well on the banks of the village lake. Based on its style, one sculpture of Lord Ganesh appears to be from circa 10th century CE.



2.3.5. Godhavi, Sanand Taluka

Godhavi village is located in Sanand Taluka, 30 km west of Ahmedabad city. Godhavi is a railway station on the Bombay-Viramgam broad gauge railway line (Government of Gujarat, 1984, p. 922). The village is believed to be associated with Mahabharat. According to the legend, Arjun fought Kauravas near this village and released cows from the Kanrav Army. As the war ensued, Arjun gathered all cows to feed their calves and this place was named as 'Gaudhavi' literally meaning fed by cows.

During the 15th century, the village was ruled by Jamakoli. Jamakoli was defeated by Mangal Simhaji of Manipur 1426 CE and he established his dominion in 1426 CE in Godhavi. Simhaji, who belonged to Sardhara Vaghela family, established the Shyam Mauleshwar Mahadev temple in 1427 CE (Vaghela M., 2004). He died in 1439 CE.

Within the village there are Paliyas also known as hero stones related to Vaghela rulers. Two such *paliya* called '*Khambhi*' belong to Shri Abhe Singhji & Shri Ade Singhji who died fighting for the protection of cows in 1760 A.D, as inscribed in a marble plaque near Gram Panchayat office. The village also has an ancient Jain temple and four other temples (Government of Gujarat, 1984, p. 922).



2.3.6. Jetalpur, Daskroi Taluka

Jetalpur is located 16 km away from Ahmedabad on National Highway 8 in the Daskroi Taluka of Ahmedabad District. The nearest railway station is at Barejadi on the Ahmedabad-Bombay broad gauge railway line (Government of Gujarat, 1984, p. 923). According to a legend, the village is named after a shepherdder called 'Jeta'.

During the rule of Jahangir (1605-27 CE), Shah Jahan attacked Gujarat. Muhammed Sahi khan, reliable and brave officer of Jahangir, had suppressed this attack. For this victory, Jahangir awarded him with the title of 'Nawab Saif Khan - Jahangir Shahi'. This battle took place near Jetalpur, and Saif Khan created 'Jeetbaug' in the memory of this victory over Shahjahan (Parikh & Shastri, 2011f, p.

53). During the Mughal period, Jetalpur housed Lugada-Gasadi Naku – a post for collection of excise duty and a police station with a jurisdiction of five villages (Hassan, 2012, pp. 223, 233).

Famous Gujarati poet Akha whi lived in mid-17th century CE was originally resident of Jetalpur (Parikh & Shastri, 2011f, p. 284).

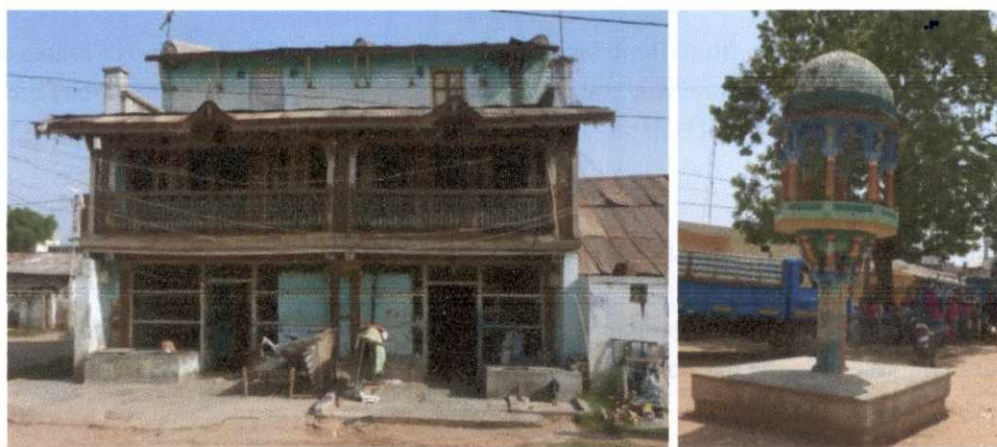


2.3.7. Khatraj, Mehmedabad Taluka

There are two villages by the name of Khatraj in Ahmedabad Urban Development Authority (AUDA) area – one in Kalol Taluka and the other in Mehmedabad Taluka. Khatraj, Mehmedabad was under the Gaekwad rule as a part of Ghodasar State (Chauhan, 2015).

According to the local residents, the village bears religious importance in the history of Swaminarayan sect since Shri Harililamrutam, a religious book of Swaminarayan sect mentioned that Swaminarayan visited Khatraj. There is a small 'Deri' (shrine) with symbolic ornamental footprints of Swaminarayan as it is believed that he used to address his devotees from this place. The Deri is located in Darbar Vas.

Khatraj is also the birthplace of Ghanshyam Maharaj (1884 – 1974 CE) (Acharya, 1982, p. 217). The current head of Swaminarayan sect was renunciated by Ghanshyam Maharaj who was born in Khatraj. The house in Patel Vas exists as of 2015 CE.



2.3.8. Sojali, Mehmedabad Taluka

Sojali is located 16 km from Kheda and 51 km from State capital Gandhinagar. This village is known for Roza of Mubarak Saiyed and Tomb of Saif-ud-din and Nizamud-din, both protected monuments under the Archeological Survey of India (ASI). Roza of Mubarak Saiyed, Vajir of Mehmud Begada was constructed in 1484 CE. The structure stands on 1.25 m high plinth, and covers 30 sqm of area (Parikh & Shastri, 2011e, p. 420). According to R.B. Jote, the Roza was constructed in 1558 CE after the death of Saiyed Mubarak and by his son Saiyed Meera, who died in 1572 CE (Jote, 2013, p. 468).



2.3.9. Bhat, Gandhinagar Taluka

Bhat village of Gandhinagar Taluka is located on the western banks of river Sabarmati, across Indira Bridge on the way from Ahmedabad to Gandhinagar.

Ishwarbhai Matadar established the village. The village has been celebrating the festival of Garbo Mahotsav – a traditional dance during Navratri festival. Traditionally, to mark the beginning of the festival, a procession begins from the house of Ishwarbhai Matadar and ends at Mahakali Mata Temple. Newly married couples of the surrounding villages come to Bhat to perform a ritual named Chheda-Chhedi.

Mahakali Mata Temple is historically significant and has been renovated over the time. There is another significant temple of Surdhan Bapa near the Mahakali Mata temple. The temple has a hero stone with an inscription that dates it back to 929 CE.



2.3.10. Vasan, Gandhinagar Taluka

Vasan is located 12 km from Gandhinagar city on Gandhinagar-Mansa Road. Vaghela Chandaji Meraji of Poshina, Khedbrahma established Vasan in 1499 CE. It is believed that village derives its name from an ancient Vasania Mahadev Temple located on the outskirts of the village. The temple is believed to be 2000 years old. The temple has paintings inside the dome in Salati Shilawati style. An annual fair is held in the village during Janmashtami festival (Rajyagor, 1980, p. 417).

The village is also famous for natural heritage in the form of lakes including Chivaniju Talav named after the queen of Vadodara, Maharani Chimabai, and Khandrao Talav, named after Khandrao Gaekwad. A lot of construction took place in the village during the period of Pilajirao Gaekwad (1721 - 1732 CE) under the administrative rule of Kadi State.



2.3.11. Isanpur Mota, Gandhinagar Taluka

Isanpur Mota is located 14 km from the state capital. The village was established around 1100 year ago and is named after a resident known as Isha Rabari, who established it. During the Gujarat Sultanate rule, the then ruler of Ahmedabad married the daughter of the king who ruled the village.



2.3.12. Magodi, Gandhinagar Taluka

Magodi is located 14 km from Gandhinagar, on the bank of the river Kharli. The village is believed to have derived its name from the local king Modhan, who ruled the village. Magodi has archaeological significance as there is a mound spread over 50 m and 8 m high, known as 'Gadhiyo Timbo' located on the river bank. However, the mound at present is damaged by vegetation and appears to be have been vandalised. The exploration of the site during the survey conducted by INTACH-Gujarat Chapter and UMC identified the foundation-like structures and brick walls. The bricks measure 3 to 4 cm X 2 cm x 5.5 cm and belongs to 15th-16th century CE.



2.3.13. Usmanabad, Kalol Taluka

Usmanabad is located 19 km from Gandhinagar city. The village was historically known as Adisana, derived from the name of the local bird 'Aad'. The region was under administrative rule of Patels of Sabaspura. Later with the invasion of Muslims in the region, the Patels gave 90 *beegha*¹ or 2.22 sqkm land in exchange of security to a person named Usmanbhai. Thereafter the name of the village was known as Usmanabad.¹

¹ Beegha is a unit of area used locally in many parts of the Indian subcontinent. There is not standard size of a beegha but in Gujarat and Maharashtra, it is approximately 2468 sqm. Source: <https://sizes.com/units/bigha.htm>



2.3.14. Pardhol, Daskroi Taluka

Pardhol is located in Daskroi Taluka of Ahmedabad and lies 19 km in the west of the Ahmedabad city. The present village site is said to be the third habitation of Pardhol. First habitation of the village was established around the present Mahakali Mata Temple. Thereafter the village shifted to the site along the river. When the site was excavated, ancient items like a Hanuman idol, image of Nandi, loose *Jaladhari*, and other remains carved in sand stone and brick foundations were found at the site, which date back to 13th or 14th century CE.



2.3.15. Bhuvaladi, Daskroi Taluka

Bhuvaldi is a village in Daskroi Taluka of Ahmedabad district, 13 km to East of the Ahmedabad city. The village derived its name from Bhulabhai Bharvad, a local shepherd who first settled in the village. The village is famous for a historic temple of Annapurna Mata that belongs to the Maitrak period (6th- 8th century). The temple and the site around is scattered with archaeological remains, but currently lies defaced by later addition and renovations. The renovations have been carried out

in the historic temple in certain portions of spire, reflecting renovations in form of pyramidal style of *shikhar*, as seen during the Pre-Solanki temples of Gujarat.

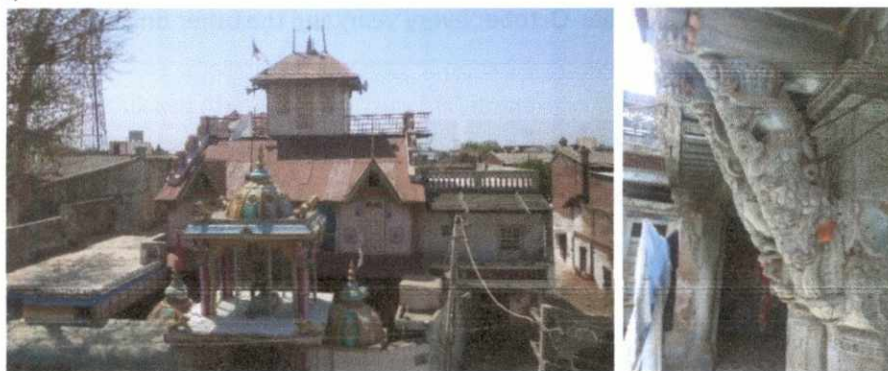
The village is also famous for Ramji Mandir temple, renovated during the British period in 1937 CE. The temple shows some important colonial architectural elements. The fortification walls of the temple belong to 12th-13th century. The village also had structures where indigo processing was undertaken before Independence.

The wooden residential buildings of village show the traditional architecture of the region. One such house of a Premilaben Ramanbhai Patel, in Manubhai ni Khadki, near Ramji Mandir is one of the best example of wooden houses that are beautifully ornamented with wooden carvings on beams, arches, columns and cornices.



2.3.16. Zundal, Gandhinagar Taluka

The village Zundal falls in Gandhinagar district, located 12km from the district headquarters Gandhinagar. The village is said to have been named after Zundo Rabari from Saurashtra (Rajyagor, 1980, p. 417).



shambles today. A major portion like well, wall and plinth of the step well is in a dilapidated condition. The step well is in a dire state and needs restoration.



2.3.21. Devadi, Daskroi Taluka

Devadi is a village in Daskroi taluka of Ahmedabad District situated close to Chosar village on the road from Vatva-Geratpur to Barejadi. The village derives its name from a saint in Hindu mythology – Dadhich Rishi and is believed to be his birthplace.

The village has a historic temple known as Dudheswar Mahadev. According to the caretaker at a temple, it estimated to be about 300 years old and has been renovated several times. Two step wells, both known as Khodiyar Mata ni Vav belong to Islamic period, found near the village along the main road.

Khodiyar Mata ni Vav I is situated on the main road, near the village entrance. The step well is a three storey structure that has been repaired and white washed. The Water Supply Department, GoG has done fencing around the step well.

Khodiyar Mata ni Vav II is located near Public Health Centre opposite to the entrance of Devadi village. The step well is made from brick mortar and sand stone. However, in it currently lies in a dilapidated condition with vegetation growth on the walls of the step well.



2.3.22. Barejadi, Daskroi Taluka

Barejadi village is located in Daskroi Taluka of Ahmedabad District. A copper plate of Maitraka King Dharsen II, dated 598 CE mentions that he donated a village named 'Ashilapallika Gram' situated in 'Bandarijiddri Pathaka' of 'Khetakahar'. This ancient village of Bandarijiddri is now believed to be the present day Barejadi. Sultan Muzaffar Shah I gave Barejadi and other scattered lands of Haveli Pragana to Shah Vajihuddin Alui Crezi, who came from Yaman who was the ancestors of Vali Gujarati (Parikh & Shastri, 2011c, pp. 94-96).³ Many wooden houses found in the region are constructed by Natwarlal Mistry, a local carpenter.

The village also has an ancient step well situated near village lake opposite to Navi Nagari Vas. The entrance porch is made of brick-mortar and is higher than the surrounding ground level. The structure is likely to have been constructed during the Mughal Period. The step well at present is in a dilapidated condition and only elements like 'Toda' on the sidewalls and half portions of well are exist today.



2.3.23. Nandej, Daskroi Taluka

Nandej is a village in Daskroi Taluka of Ahmedabad District. It is believed that the village had a police station during the Gujarat Sultanate period with officers, five "Savaar" and ten "Pedal" posted to look after law and order in the village (Hassan, 2012, p. 223).

The village has an ancient lake situated behind Neelkanth Mahadev Temple and Veraimata Temple near Nandej Gram Panchayat Office. Some houses in the village exhibit exquisite ornamentation with wooden carving in building elements. A few examples of these houses can be seen in parts of village like Patel ni Khadki and Vaniya Vas. Apart from wooden carvings, houses also have frescos depicting scenes from the life of Lord Shiv and his wife, Parvati and Nandi, scenes of hunting, scenes from Krishna Leela and Lord Ganesha. Houses of Ramaji Jivisinh Vaghela and Prabhatsinh exhibit Maratha and Victorian style of paintings.

The village also has a paper mill that was once famous across Gujarat. In current times, the paper mill lies in a dilapidated condition near the railway station.



2.3.24. Pahad, Mehmedabad Taluka

Pahad is a village in Mehmedabad Taluka in Kheda. It is located 11 km from district headquarters Kheda. The village has a high cultural and historic importance. In the cultural history of Gujarat, the village has contributed many artists who belonged to the Bhojak or Nayak communities for folk theatre art called Bhavai. They perform plays known as Bhavai Vesh related with the historical, religious and social aspects of life. The village also has the historically significant Indulal Yagnik Ashram, which was founded at the time of Maha-Gujarat movement. An ashram is located between the villages of Nenpur and Pahad and is run by Gram Vikas Sangh. The ashram worked primarily with tribal students, providing them facilities like primary school and hostels. The building has undergone renovation over a period of time. A plate mentioned that in the year 1973, then Chief Minister Shri Ghanshyambhai Oza had inaugurated the ashram.



2.3.25. Kachhai, Mehmedabad Taluka

Kachhai is located in Mehmedabad Taluka of Kheda District in Gujarat. The village has a *chabutra* (a birdhouse), located opposite the village's Gram Panchayat Office. The *chabutra* is remarkable due to its architectural form and ornamentation. It has eight sided walls with two square hollow niches that allow birds to make their nests within the birdhouse. The eight sides walls are decorated by an engraved *toran* with floral ornamentation. A projected slab with *madalikas*, the roof and the outer sides of Uchhalak Stambhika have small figures of dancers, players and musician. The central dome has Amalak and Kalash.

Another significant structure is an ancient well and an adjoining *hawada* (drinking water tank for cattle), situated behind water tank and a nearby house of Ravjibhai Sabarbhai Sodha. The well is constructed using brick-mortar and sandstone and is square shaped with an iron railing on all the four sides and squinches on upper side of well. The half-round dilapidated brick walls on one side suggest that it may have been used to supply water for farming through a canal. There is a *hawada* constructed during colonial period where as the well most likely belongs to the 18th century.



2.3.26. Gamdi, Daskroi Taluka

Gamdi is a village in Daskroi Taluka located 13 km from Ahmedabad. The team identified 28 structures of historic and cultural significance in the village.

The village has two Swaminarayan Temples in the village – one for men and women, each. The temple for men is located in the Patel Vas near the Ahmedabad District Co-Operative Bank. The compound wall of the temple has been under repair and modifications a number of times. The other elements like the wooden doors and flooring of the main temple belong to original time during which the temple was constructed. The temple is 'L' shape in plan with an open courtyard in the front. The temple stands on a one storey high plinth. The temple has ornamentation on elements like column, brackets, arches and beams these include carvings of figures of gods, goddesses, attendants, warriors, birds, floral patterns and geometric designs. The temple has a small *deri* with footprints of Shriji Maharaj. The structure constructed on an open *otla* (a platform in front of the house/ building) in 1812 CE. The inscription are is in Gujarati language written in Devnagari script.

The Swaminarayan Hari temple for women is located opposite to the Swaminarayan Temple for men and is comparatively simpler in its architectural form. The temple is one storey high and less ornamented. However, the temple has beautiful woodcarvings on columns, cornice and brackets. The temple is surrounded by a large number of heritage buildings such as Tekra Faliya, Mukhi Faliya, Bhagat ni Khadki, Chakala faliya, Mandir valu faliya, Manubhai ni Khadki, Patel Vas and Vachhe ni Khadki. The *khadkis* (streets or lanes) have a similar plan type of residential houses in rows with a common front courtyard. The residences have ornamented facades with woodcarving on the columns, beams, beam heads, brackets, cornices, decorative wooden bands in walls, *jaalis* on kitchen wall and highly decorative ceilings.

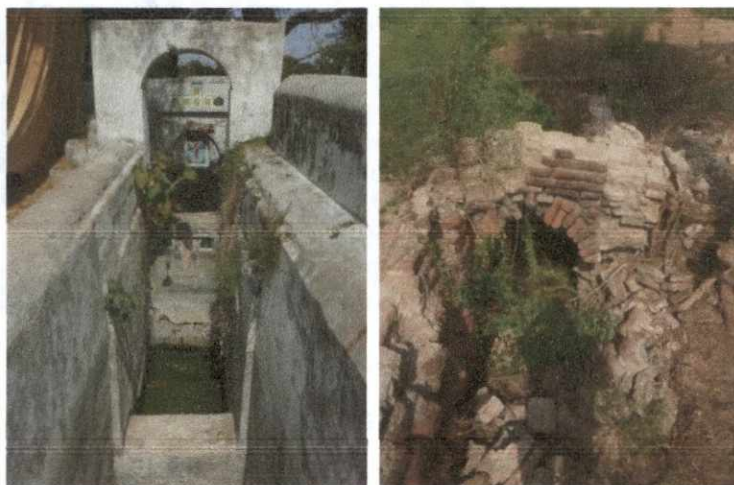


2.3.27. Chosar, Daskroi Taluka

Chosar is a village in Daskroi Taluka in Ahmedabad. It is located 14 km from district headquarters of Ahmedabad. The village has historic stepwells like Dholi Vav near Chosariya Hanuman Temple and Char ni Vav located 1.5 km away from the village.

Dholi Vav is a two-storey structure enclosed with a compound wall. The stepwell has undergone repairs and alterations over the years. The inscriptions on the walls of the stepwell state that the Bai Keshar, the widow of Sheth Maganlal Indaji constructed this step well in 1931 CE. The step well is still in use as it contains water. The area between the compound walls and the step well is used as a warehouse for storage of goods. However, Chora ni Vav, a stepwell built in 16-17th century that lies in state of dilapidation. The step well was constructed using the local materials like brick-mortar and lime. At present step well is full of vegetation and polluted water and needs conservation plan.

The village has a *chabutra* constructed of the colonial period, located in Darbar Vas. A large opla in sandstone has been constructed under the *chabutra* recently. A stone pillar supports the main portion of *chabutara* that has eight small *uchhalak* pillars with arches in between the two pillars. The octagonal sloping roof has *kangara* ornamented with floral patterns and a dome with *amalak* and *kalash* as a covering. The birdhouse is ornamented with figures of musicians on the upper portions.



2.3.28. Mahij, Kheda Taluka

Mahij is a village in Kheda Taluka of Kheda District in Gujarat. The village is lies 15 kms from district headquarters of Kheda. The village has notable heritage structures in form of step wells, lakes. A five-storey step well called Varai Mata ni Vav is located on the entrance of village. The step well is seen with pointed arch openings constructed in brick mortar. The stepwell represents Mughal architecture. The step well had been restored and renovated by Narmada Water Resources, Water Supply and Kalpsar, Gandhinagar under Nirmal Gram Yojana in 2011-12 CE.

The village also has a *chabutara*, a birdhouse, located opposite to Shwetambar Jain Derasar. The structure stands on huge plinth enclosed in a railing with an eight sided multi-layer base and walls on it. The feeding place is lowered with *uchhalaka* stambha, sloping roofs, and dome ornamented with arches and *kangura* belonging to colonial Period.

Another significant structure located in the village is Mahij Alliance Church located in Vankar Vas. The building highlights traditional architecture constructed in local materials of construction like brick-mortar. The plan of the building is an elongated room having gable pitched roof. The architecture of the entrance porch and pointed arches indicate that the church belongs to colonial period. The village also has natural heritage in form of kunds, lakes etc. Madar mata kund bears a high religious significance as the village is said to have derived its name from the deity, Madarmata. It is believed that the original village was established around this water structure. The temple of Madar Mata is a renovated structure over time. Narmada Water Resources Department renovated and restored the Kund in 2011-12 CE. The village also boosts residential heritage in form of Mahij Bhag in Patel Vas and Vacheno Vas having residences belonging to the colonial period.



2.3.29. Sankhej, Kheda Taluka

Sankhej is a village in Kheda Taluka located in Kheda District. The village is famous for Junagalki Talav, also known as 999 acre lakes. Narmada Water Resources Department renovated the lake under the Meshwo Naher Yojana. The village has a stepwell located between the Ambe Mata Temple and Galki Talav. The stepwell belongs to the Islamic period, which at present lies in the state of dilapidation covered with mud and debris.



2.3.30. Visalpur, Daskroi Taluka

Visalpur is a village in Daskroi Taluka of Ahmedabad. The village has heritage in form of houses with wooden carvings. The village has residences with wooden façades and ornamented columns, brackets, doorjamb and doors, ornate lintels, cornice, niches and ornate bands in walls.



2.3.31. Tajpur, Sanand Taluka

Tajpur is a village in Sanand Taluka of Ahmedabad District. The village is known for four *Paliya*, the hero stones that belong to the freedom fighters, who died during the Revolt of 1857 CE. The paliyas are located inside the complex known as Viranjali Van. The inscriptions on the walls of the *chattri* describe history of Tajpur in memory of the seven military men who made agitation against the British on 9th July 1857 of which two men were shot dead and other five surrendered themselves. One of them was Ratnaji Thakore of Tajpur.



2.3.32. Sanathal, Sanand Taluka

Sanathal is a village in Sanand Taluka located 20 km from Ahmedabad District on Sarkhej-Bavla Road. This village has a high archaeological importance due to an ancient lake located near Gram Panchayat Office. The lake was constructed using local material like bricks-mortar and lime. The centre of the lake has ruins of an ancient structure called the '*bakasthal*' a place for birds to nest in the centre of the lake. The sluice – a water channel is constructed in sandstone decorated that is ornamented with bands of geometrical design and Gagrak Patti. The inlet is covered with a structure with Square columns. The staircases inside the sidewalls of the structure currently lie in dilapidated condition but its mammoth size reflects its glory.

Ahmedabad Gazetteer mentions that Siddharaj Jaysinh constructed this lake in the 14th century. However, the bricks of the lake belong to the Islamic period. Thus, there is a need to carry out the detail research of its history and physical condition with maps and total station surveys. The site has significant potential to become important tourist destination at the regional as well as at state level because of its proximity to Nal Saovar. Therefore, there is a need to conserve the lake.

The village also has a famous Nimnath Mahadev Temple that is located near the primary school in the village. The temple was renovated in the year 2003 as mentioned on the plate on the slope of roof. Small traces of the ancient temple are seen in the temple till date like parts of plinth made from red sandstone, portions of Amalak used as udumbar present in Garbhgruh, the marble idols of standing Sun God, Yognarayan Kuber & Gurdars. The village also has a temple of Kuber that lies in ruins with fragments belonging to the Solanki – post Solanki Period.



2.3.33. Manipur, Sanand Taluka

Manipur is a village in Sanand Taluka located 22 km from Ahmedabad. The village is located on the Bopal-Ghuma-Godhavi road. Manipur has a number of heritage structures like Swami Narayan Temple and residences with wooden ornamentation.

A historic temple owned by Kalupur Gadi Sansthan, Ahmedabad has been under repairs and renovations over a number of times. The temple has ornamented structural elements made in wood like columns, brackets, cornice etc. The Entrance of the main temple has smaller temples of Lord Ganesh and Hanumanji on the two sides. The *simhasan*, seat of the saints, is carved in stone with mentions of Chhabi Pratima in the year of 1935 CE.

Swaminarayan na Pagala is a neglected structure situated near the entrance gate of the village, opposite to the Gram Panchayat office. The main structure is built on a plinth with four pillars that are joined with arches to the dome in the centre. The symbolic footprints of Swaminarayan are carved on a marble plate that is installed in the centre of the Chhatri. The inscriptions carved on the foot print mentions Ramdas Patel of Manipur installed footprints. The structure is surrounded with a compound wall with an entrance gate.



2.3.34. Ghuma, Sanand Taluka

Ghuma falls under the recently created municipality of Bopal-Ghuma. Ghuma is famous for its heritage structures. The entrance of *Gora no Madh* is an important heritage structure, noteworthy for its architectural form & features. The entrance has a wooden door of the historic period. The roof of the structure is made from galvanized sheets that is supported by brackets. The structure is a huge room with windows and niches in the wall. The inside of the gate, is an *otla* on both the sides with wooden staircase on the right. The structure belongs to the colonial period constructed for the protection of its residents.

A highly ornamented *chabutara* stands opposite the Bopal- Ghuma Municipality Office. The structure is made of sandstone and brick mortar and stands on a low-rise plinth that is ornamented with figures of musicians in brackets, elephants in front of main portion and *kangara* over sloping roof. The inscriptions on the chabutara mentions its period of construction in 1920 CE. The structure was constructed at the same place where Ram Charandasji performed 'Visnuyag' in 1917 CE.

The village also has an ancient well, canal, *kund* and a *havada* that is located across the main road from the village. The well is featured for its multiple use as it connects the *havada*, *kund*, water taps and canals. The lifted water flows into the canal that is connected with three water falls in the Kund, later falls in the Havada which has columns and ornamented beams.



2.3.35. Virochannagar, Sanand Taluka

Virochannagar is a village in Sanand Taluka located 47 km from Ahmedabad. The village is located near the Sanand-Viramgam highway. It is believed that the original name of this village was *Chor Vadodara*, meaning the village of thieves.

The village has a historic temple known as the Hapeshwar Mahadev temple. The centre of the temple is adorned with *Shiva* seated in *Ralitan* & served by *chowri* bearer on eight sides. The lower part of the idol, shows the God standing in *Tribhang* posture on the Niche, served by two attendants on both the side. The doorjamb of the temple is made of sand stone and is ornamented with floral designs of *Padma Patra*, lotus in scroll. The style of the temple doorjamb belongs to the Solanki period. The compound wall of temple has two loose sculptures made in sand stone.

The village also has the Belol Khan Gazi Masjid, constructed during 15-16th century CE is situated in Masjid Vas. The mosque is constructed in the local sandstone. The outer walls of the structure are ornamented with the belts of geometrical & floral designs while the west wall is projected with square *mehrab*s, a semi-circular niche in the wall of a mosque that indicates the *qibla*. The windows

of the mosque are ornamented with various perforated designs called *Jalis*. The main prayer hall is supported on the columns adorned in various designs. The ceilings and walls use elements from the older structures portions of which are seen in the renovated structure.

The Haveli of Mavsangbhai Hirabhai Makwana is another famous structure, situated in Mahadev Vas. The plan of the structure is similar to a *khadki*. There are three residences constructed in a row with common front courtyard and a common main entrance. The buildings have seen additions and alteration made in the later period, the original elements of wood carving are important for conservation.



2.3.36. Rancharda, Kalol Taluka

Rancharada is a village in Kalol Taluka of Gandhinagar District. It is located 33 km from Gandhinagar. The village has several heritage buildings built in the colonial period such as residential houses of Limdi vas and a *Chabutara*, birdhouse, situated in the centre of a *chowk* in the village, which has been renovated & painted in later period.



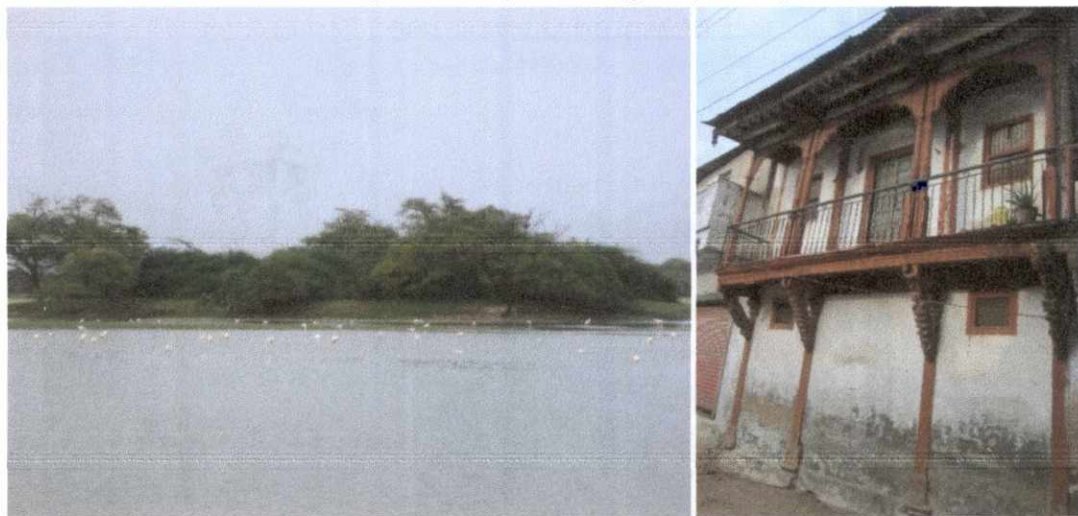
2.3.37. Santej, Kalol Taluka

Santej village is located in Kalol Taluka of Gandhinagar District at a distance of 26 km from Gandhinagar. Santej is a village of the colonial period. The heritage identified in the village includes a *Chabutra* opposite the Gram panchayat in centre of chowk. The *Chabutra* is highly ornamented with wooden carving and paintings. The Jain Upasraya beside Gram Panchayat office is another significant structure that was constructed during the colonial period.



2.3.38. Thol, Kalol Taluka

Thol village lies in Kalol Taluka of Mehsana District and is located 40 km from Ahmedabad. The village belongs to the colonial period and in present is famous for Thol Lake – an artificial lake located around 3 km away from village. The lake was constructed in 1912 CE by the Gaekwads for irrigating the nearby fields, and later was declared as Thol Bird Sanctuary in 1988. The village is also has another lake located in the village owned by the local gram panchayat.



2.3.39. Jhalora, Kadi Taluka

Jhaloda village is located in Kadi Taluka of Mahesana District and it is located 58 km from district headquarters of Mahesana. Jhaloda has one of the significant stepwells situated near the village lake behind Aadya Shakti Mata Temple. The stepwell is five-storey deep with an entrance porch, open from all sides. The three sides are used as the entrance and the fourth side goes toward the well. The structure is made in the local materials with the use of brick and lime mortar. The structure at present lies in dilapidated condition.



2.3.40. Bhimasan, Kalol Taluka

This village is located in the Kalol Taluka of Gandhinagar. The village is known for the historic temple of Chamunda Mata. The temple has stone sculptures belonging to 13th century CE that lie in the premises of the temple. The loose stones include Nagdaman Chhatt carved in square stone slab based on popularly scenes of Krishna Leela – a mythological legend, was part of a historic temple ceiling. The broken image of Sessayi Vishnu is another sculpture carved in black stone which shows Lord Vishnu laying on Sheshnag. The other sculptures includes the statues of Laxmi- Narayan showcasing, four armed Lord Vishnu seating in Lalistan and Goddess Laxmi seated on left. All these images bear archaeological importance suggesting that there must be temple from an ancient period in the village. However, to establish or de-establish the claim, there is need for more exploration of the sculptures in the surrounding and conservation of the already existing sculptures.



2.3.41. Karoli, Kalol Taluka

Karoli is a village in Kalol Taluka of Gandhinagar district. Parts of an ancient temple can be seen scattered with broken bricks laying in the compound of Shiva Temple in the village. The archaeological remains of the temple belong to the Solanki period.



2.3.42. Vamaj, Kadi Taluka

Vamaj is a small village situated between Kadi and Kalol. The village is famous for Shri Vamaj tirth, a Jain temple. The idol of Dada Adishvar in the temple belongs to the times of King Samprati. The village has other heritage buildings that includes residences belonging in the colonial period located in Vaniya Vas, Mandirvalo Vas and Mavjibhai no Vas. The village also has two religious temples known as Nilkhanth Mahadev, situated in Nayak Vas near primary school and the other is Aadeshwar Jain Derasar, situated behind Nilkhanth Mahadev Temple. Both the temples have been renovated in later period. The paintings of Rasleela in the Nilkhanth Mahadev temple belong to colonial period.



2.3.43. Adraj (Merda Adaraj), Kadi Taluka

Adraj is a village in Kadi Taluka of Mehsana District. The survey team identified two building of heritage value, namely – Vasupujya Jain Derasar in Derasar Vas and Dudheshwar Mahadev Temple, near Chabutara, Ambaji Mata Chowk. Both these buildings have been renovated over a period of time. Dudheshwar Mahadev temple is a historic temple with frescos seen in *karotaka* or inner sanctum of the dome belonging to the colonial period. The building reflects the architecture and design of both the Mughal and the Victorian period.

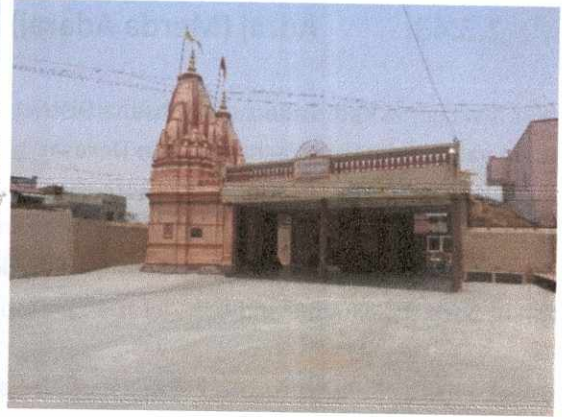
The village has a *chabutra* located in midst of Ambaji chowk, in the middle of high plinth made in stone and brick-mortar. The *chabutra* displays the construction of the colonial period.



2.3.44. Gatrad (Gayatrad), Daskroi Taluka

The present Gatrad village is located in Daskoi Taluka of Ahmedabad District. There is a mention of a village called *Gayatrad* in *Skandpuran's* part '*Kaumarika Khand*'. The village derives its name from Gayatri Devi. Present temple has been renovated over period with additions and alteration in the historic structure. There is a marble plaque fixed between the new temple and the adjoining Shri Purnakameshwar Mahadev Temple, which mentions the details of renovation of old temples. Inscription are carved in Gujarati language and Devnagari script, mentioning that the foundation were laid dated on 26th June, 1897 and idols were established inside the temple on 1st May 1900.

Archaeological remains of an ancient mound with debris of brick and other architectural parts, made from sand stone that is located in 'Raval Vas' in the middle of the village. The old temple known as Old Gatreshwari Mata Temple has bricks and architectural portions of sandstone sculptures, belonging to the Solanki period. The site needs a general clearance and exposition of structures in order to understand the historic significance of the structure.



3. Surveys and Preliminary Findings

A total of 789 structures including 670 buildings and 119 elements were documented by the survey team across 168 villages and 5 municipalities. The elements comprise of uninhabitable structures such as *chabutras*, gates, step wells, etc. while the buildings include structures suitable for human habitation. The survey was conducted between March and September 2015.

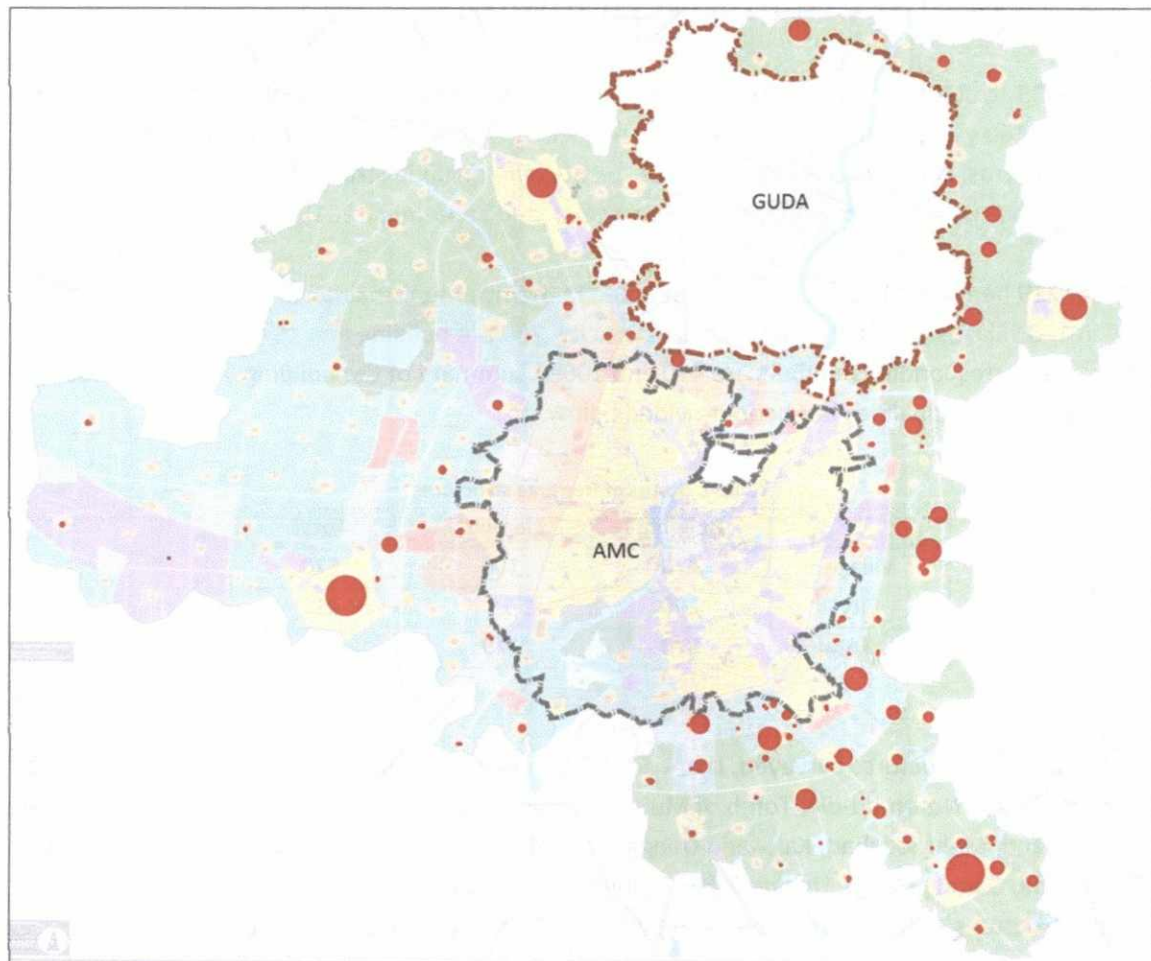
A total of 219 heritage structures have been found in the five municipalities while 570 structures found in 168 villages. Of the 219 structures in the city, 200 are building and 19 are elements. In villages, the corresponding numbers are 470 and 100. A summary of the buildings/ elements found in villages and municipalities has been provided below.

Table 1 Status of Heritage structures

	Building	Element	Total
Village	470	100	570
City	200	19	219
Total	670	119	789

In addition to the structures surveyed, there are ASI protected monument in Sojali Village i.e. Tomb of Saif-ud-din and Nizam-ud-din, Tomb of Mubarak Saiyyada and ancient stepwell in Kathwada village. Sanand, Mehmedabad, Kalol and Dehgam together have more than 30 heritage structures each. Kanbha, Gamdi, Vanch, Unava, Aslali, Mahij and Vadodara villages have more than 15-20 heritage structures each. A map showing the density of heritage structures has been provided below.

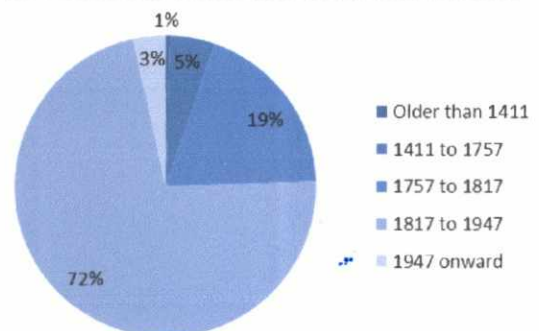
Figure 11 Density of surveyed heritage structures in AUDA



Source: Base Map – AUDA DP 2021; Overlay by UMC

The heritage buildings surveyed varies from 1411 CE to post independence period. Most of the heritage structures (around 72%) were built during the Colonial rule in India, followed by the period under the administrative rule of Maratha. Only 5% structures were built in Gujarat sultanate rule. Majority of the heritage structures in AUDA belong to the period from 1757 to 1947 CE.

Figure 12 Heritage structures by period of construction



Note: the periods given here are based on administrative rule. These are i) Solanki Rule (Older than 1411) ii) Gujarat Sultanate and other Islamic Rule (1411 to 1757) iii) Maratha Period (1757 to 1817), iv) Colonial rule (1817 to 1947), and v) Independent India (1947 onwards).

Amongst the surveyed buildings, more than 58 percent were residences followed by places of worship. Over the years, the use of the buildings has changed. A significant change has been that 18 percent of the buildings are vacant now. Some structures are being used as godowns and household industries at present. The figures below show the designed and current use of the heritage structures.

Figure 13 Designed use of the structures

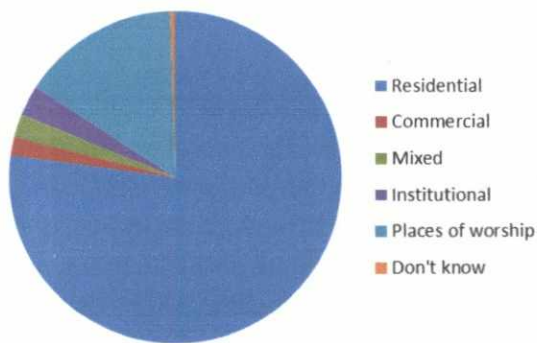
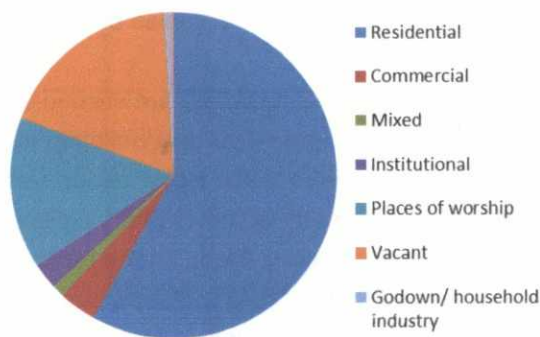


Figure 14 Current use of the structures



Majority of structures – around 3/4th, are built in traditional architectural style of the region. Around 15 percent of buildings have influence of European architecture and around 8 percent exhibit Maratha architectural style. Only 2 percent of the structures exhibit the Gujarat Sultanate style of architecture.

Figure 15 Architectural style of heritage structures

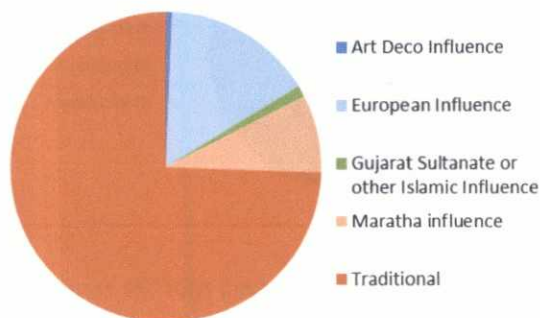
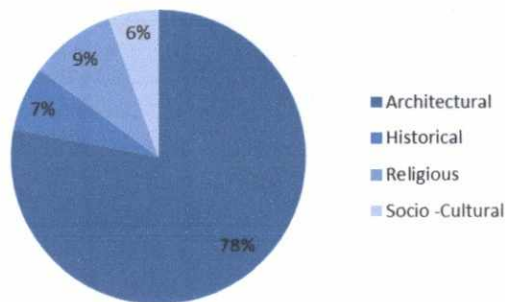


Figure 16 Significance of heritage structures



Most of the heritage structures were surveyed due to its architectural significance. The remaining structures had a mix of religious, cultural and historical significance. Other than residential and commercial structures, most of the other structures have more than one significance, especially places of worship.

Figure 17 Ownership of heritage structures

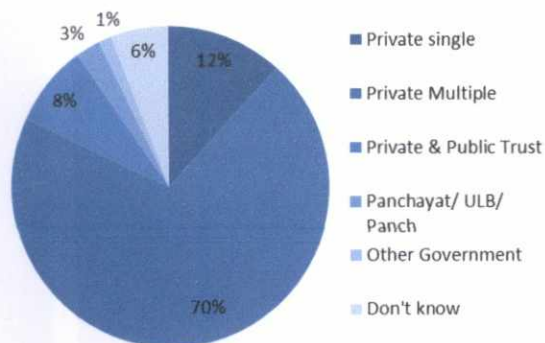
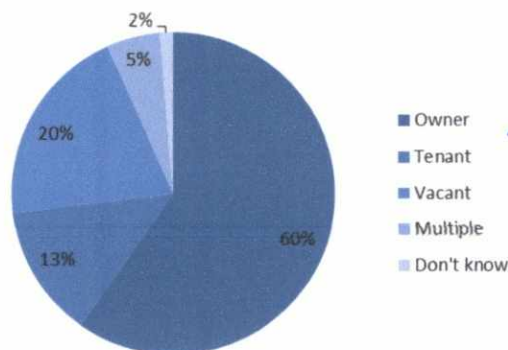


Figure 18 Occupancy of heritage structures



Around 66 percent of the buildings are owned by private single owners and only 5 percent of the buildings have multiple private owners, albeit from the same family. Around 8 percent of the structures are owned by private trusts and 2 percent by public trust. From the above chart it can be noted that 60 percent of the buildings are occupied by the owners. Around 60 percent of the

buildings are occupied by their owners while a large 20 percent were unoccupied. Around 13 percent buildings have been occupied by tenants.

A mere 18 percent of all buildings are in good condition while around 28 percent of all buildings are in fair condition. Around 40 percent buildings have started showing signs of deterioration. Around 15 percent structures were found either under 'serious deterioration' or in the 'danger of disappearance'. The survey shows that 'negligence' is the biggest threat to heritage structures followed by natural decay. Based on the feedback from some owners, they are unable to preserve the architectural style of their buildings due to unavailability of the skilled labour and high cost of renovation in the style. Around 21 percent structures are under threat due to urbanisation pressure. Many structures face vandalism, especially the public structures which are vacant. Many structures face more than one threat.

Figure 19 Condition of heritage structures

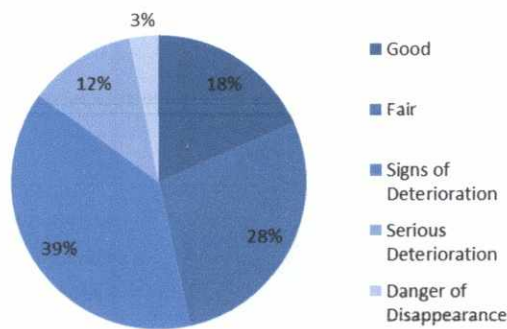
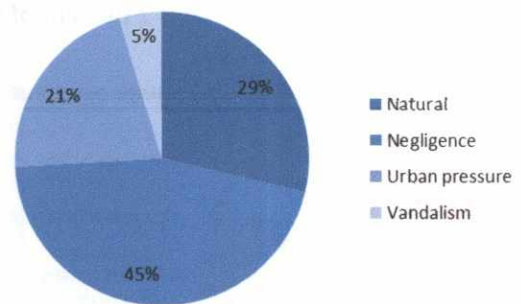


Figure 20 Threats faced by the heritage structures



As urbanization is a significant threat to heritage structures, it has been observed that the structures in villages along the Sardar Patel Ring Road are under severe pressure. In addition, almost all heritage structures in municipalities face pressure of urbanization. There are 93 structures in villages which are within a range of 3 km from the SPRR and 219 structures in the five municipalities. This constitutes 38.5 percent of the total heritage structures identified in the AUDA area outside AMC's limit.

4. Way Forward

INTACH-Gujarat and UMC is currently grading heritage structures. Based on the grading, INTACH-Gujarat and UMC recommends that AUDA undertake the following steps:

1. Prepare guidelines for restoration and repairs of heritage buildings and structures
2. Prepare heritage byelaws for monuments and incorporate them in the in development control regulations of the development plan.
3. Identification of and delineation of precincts to prepare a detailed project report and notify as special heritage precincts
4. Notify the list of heritage structures as per the standard procedures adopted by Government.
5. Prepare basic toolkits for owners of heritage structure owners providing "dos and don'ts" of restoration and conservation of heritage structures.

End of document

Bibliography

- Acharya, V. (1982). *Sri Harilamrutam, Part 2*. Vadtal Managing Trustee Board.
- Chauhan, N. (2015, May 04). Discussion with Mr. Chauhan, Talati, Gram Panchayat Office, Khatraj, Mehmedabad Taluka. (INTACH-Gujarat Chapter, & Urban Management Center, Interviewers)
- Chughtai, M. (1942). *Muslim Monuments of India through their inscriptions* (Vol. III). Pune: Reprinted from the Bulletin of The Deccan College Research Institute, Poona.
- Gadhavi, P. (2006). ચાલો ગાંધીનગર ને પ્રવાસે (Let's take a trip to Gandhinagar). Gandhinagar, Gujarat: Education Office.
- Gandhinagar Urban Development Authority. (2000). *General Development Control Regulations - Draft Development Plan Gandhinagar, 2011*. Gandhinagar Urban Development Authority. Gandhinagar: Gandhinagar Urban Development Authority.
- Gandhinagar Urban Development Authority. (n.d.). *Projects*. Retrieved February 03, 2014, from Gandhinagar Urban Development Authority: <http://www.guda.gujarat.gov.in/projects.htm>
- Government of Gujarat. (1984). Gujarat State Gazetteers - Ahmedabad District. *Gazetteer of India: Gujarat State Gazetteers - Ahmedabad District*. Ahmedabad, Gujarat, India.
- Gupta, D. (2007). *Identifications and documentation of built heritage in India: Process for identification and documenatation of cultural heritage*. New Delhi: INTACH (UK) Trust.
- Hassan, M. M. (2012). તારીખે અવલીયા એ ગુજરાત: મિરાતે અહમદી (પૂરવણી), ભાગ 3 (*Chronological History of Gujarat: Reign of Ahmed (Supplement), Part 3*) (Third Edition (Translated) ed.). (S. Kalimi, Ed., & K. Farooqi, Trans.) Ahmedabad: N B S Book Depot, Morakwad, Mirzapura, Ahmedabad - 380001, Gujarat.
- Jamindar, R. (1975). *ક્ષત્રપકાલનું ગુજરાત (Gujarat during the rule of Western Kshatrapas: History and Culture of Gujarat of the first 4 centuries A.D.)*. Ahmedabad, Gujarat, India: Gujarat Vidyapith.
- Jote, R. B. (2013). *ગુજરાતનો સાંસ્કૃતિક ઇતિહાસ (The Cultural History of Gujarat)* (Second Edition ed.). Ahmedabad: N B S Book Depot, Besides Torrent Power, Morkaswad, Mirzapur, Ahmedabad.
- Muktirajsinhji Chauhan & Kamalika Bose. (2007). *A History of Interior Design in India* (Vol. Volume1: Ahmedabad). Ahmedabad: SID, Research Cell, School of Interior Design, CEPT University.
- Mustak, M. (2005). *મહેમદાવાદ એક અધ્યયન (A Research on Mehmedabad)* (First Edition ed.). Ahmedabad: Malek Mohammad.

- Parikh, R. C., & Shastri, H. G. (Eds.). (2011a). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 1: ઇતિહાસની પૂર્વભૂમિકા (પ્રાગ-ઇતિહાસ અને આદ્ય ઇતિહાસ સહીત) (Gujarat's Political and Cultural History, Volume 1: Pre-history and early history)* (Vol. 1). Ahmedabad, Gujarat, India: B J Institute of Learning and Research, Ahmedabad.
- Parikh, R. C., & Shastri, H. G. (2011c). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 3: મૈત્રક કાલ અને અનુ-મૈત્રક કાલ (Gujarat's Political and Cultural History, Volume 3: Maitrak and Post-Maitrak Period)* (Second Edition ed., Vol. III). (B. Shelat, Ed.) Ahmedabad, Gujarat, India: B J Institute of Learning and Research, Ahmedabad.
- Parikh, R. C., & Shastri, H. G. (Eds.). (2011e). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 5: સલ્તનતકાલ (Gujarat's Political and Cultural History, Volume 5: Sultanate Period)*. Ahmedabad, Gujarat, India: B J Institute of Learning and Research, Ahmedabad.
- Parikh, R. C., & Shastri, H. G. (2011f). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 6: મુઘલકાલ (Gujarat's Political and Cultural History, Volume 6: Mughal Period)*. Ahmedabad: B J Institute of Learning and Research, Ahmedabad.
- Parikh, R. C., & Shastri, H. G. (2011g). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 7: મરાઠાકાલ (Gujarat's Political and Cultural History, Volume 7: Maratha Period)*. Ahmedabad: B J Institute of Learning and Research, Ahmedabad.
- Parikh, R. C., & Shastri, H. G. (2011h). *ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઇતિહાસ, ગ્રંથ 8: બ્રિટીશકાલ (Gujarat's Political and Cultural History, Volume 8: British Period)*. Ahmedabad, Gujarat, India: B J Institute of Learning and Research, Ahmedabad.
- R. N Mehta, D. R. (2001). *Amdavad ni Puravastu*. Ahmedabad: Gujarat Vidyapeeth.
- Rajyagor, D. (1980). *Gujarat State Gzaetteers, Gandhinagar District. Gujarat State Gzaetteers, Gandhinagar District*. Gujarat, India: Government of Gujarat.
- Shastri, H. G. (1984). *ઇતિહાસના સાધન તરીકે ગુજરાતના અભિલેખ (State Archives as a Tool for History)*. Ahmedabad, Gujarat, India: Gujarat Vidyapith.
- Solanki, P. (2014a, March 10). સોહામણું શહેર સાણંદ: સાણંદમાં વાઘેલા રાજવી નું ધર્મરાજ્ય સ્થાપના (Pleasant City Sanand: Establishment of Dharmarajya in Vaghela's Royal Sanand). (M. Thakkar, Ed.) *Manohar Times*(Issue 29), p. 4.
- The Vastu Shilpa Foundation. (2002). *The Ahmedabad Chronicle: Imprints of a millenium*. Ahmedabad: The Vastu Shilpa Foundation.
- Times News Network. (2009, December 04). Majoor Mahajan Sangh tuns 93. *The Times of India* [Online]. Retrieved February 20, 2016, from

<http://timesofindia.indiatimes.com/city/ahmedabad/Majoor-Mahajan-Sangh-tuns-93/articleshow/5297746.cms>

Vaghela, M. (2004). *ગોધાવી ગામનો ગૌરવવંતો ઇતિહાસ (Glorious History of Godhavi Village)* (First ed.). Godhavi: Rajput Community of Godhavi.

Vaghela, P. (2014b, September 29). સોહામણું શહેર સાણંદ: ધર્મ સ્થાનક શક્તિ પીઠ (Pleasant City Sanand: Religious Seat of Shakti Peeth). (M. Thakkar, Ed.) *Manohar Times*(Issue 6), p. 4.