

# Chapter-1

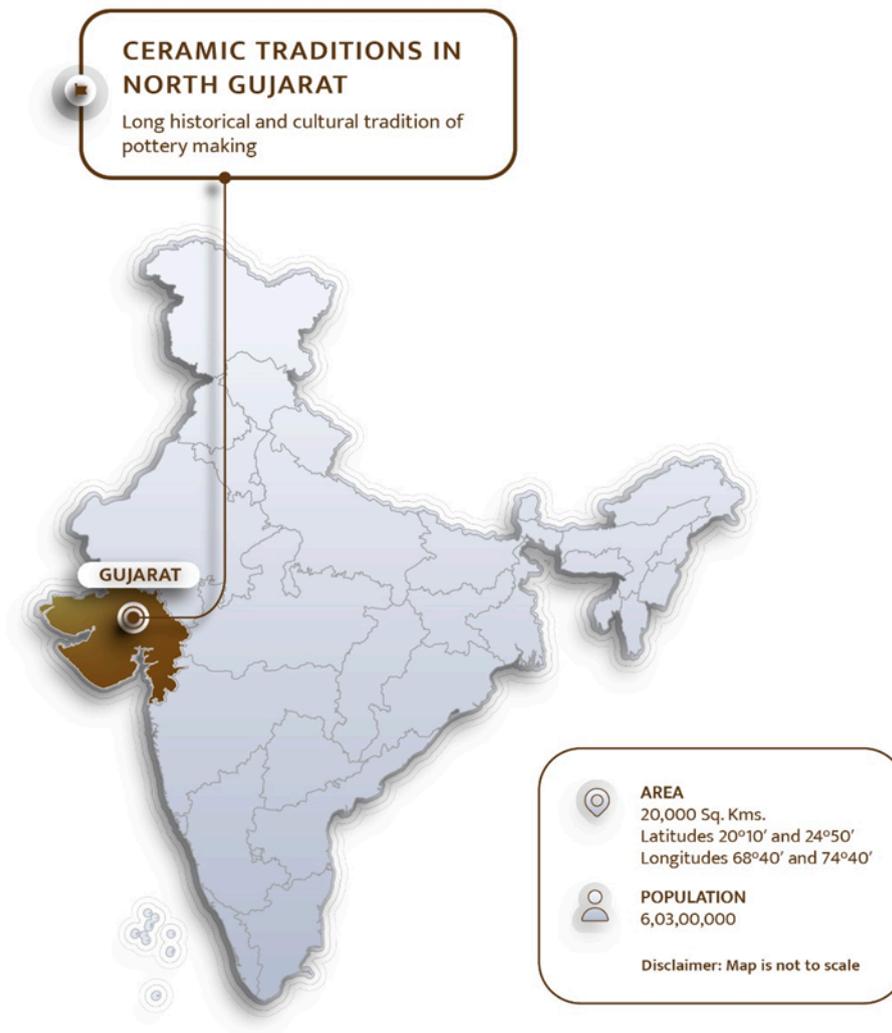
## INTRODUCTION

Clay must have triggered man's curiosity to use it for their purpose because of its easy availability and elasticity in nature. He learned the painfully slow process of trial and error, eventually building wisdom of the craftsmanship which reached its pinnacle. Accidents or persistent efforts could have brought new effects on the pottery. In most primitive industries, the process of producing an artefact involves a simple technique when the clay is fired it becomes a different substance. Something altogether new has been created, and thus the first potters can be called one of the first chemical engineers. (Shepard, 1956. Pp. 1-5).

Pottery serves as a vital window into understanding ancient cultures, offering glimpses into the daily lives of our ancestors through the durable remnants they left behind. Despite its fragility, pottery fragments endure centuries underground, making them invaluable to archaeologists during excavations. These potsherds provide crucial clues for establishing relative chronologies and reconstructing past societies. From the prehistoric era to modern times, pottery has remained a fundamental craft, evolving alongside human civilization.

In the context of Gujarat, pottery reflects the region's rich cultural heritage, tracing back to its prehistoric roots. Gujarat's pottery was highly sought after and traded across various regions, showcasing its significance in ancient commerce. This state boasts a long and diverse history, from the Stone Age to the Protohistoric period, with notable landmarks like the Indus Valley Civilization at sites such as Lothal. Through different dynasties and kingdoms, Gujarat's cultural vibrancy endured, leaving behind tangible relics that connect us to its earliest times.

The artistic legacy of Gujarat encompasses a wide range of ceramics, displaying various forms, textures, colors, and decorations. From the Early Historic to the Medieval period, North Gujarat witnessed transformations in pottery styles, reflecting shifts in societal dynamics and cultural influences. This study is an attempt to understand the changes occurring in wares, shapes and sub shapes from the Early Historic to Medieval period of North Gujarat.



**Map 1.1: India Map showing Gujarat**

### **Previous studies on the Early Historic Ceramic of North Gujarat**

The research community in north Gujarat has conducted significant studies being descriptive, focusing on the political, geographical, literary, cultural, and architectural histories as well as understanding the ports and trading sites of the Harappan and Early Historic periods.

Ports and Pots of Gujarat by R.N. Kumaran (2009) emphasises ports and trading centres that date back to prehistoric times. In addition, the sites from the Harappan era to the present, with the opinions of various institutions and intellectuals from the time before independence to the present are documented according to their cultures and plotted in the maps for easy reference. It has also explored sites from the Prehistoric, Chalcolithic, Harappan, Early Historic, Medieval, and Late Medieval periods.

The Gazetteer of Indian Archaeological Sites and Monuments volume on Gujarat by Vasant Shinde, Shweta Sinha Deshpande and Sanjay Deshpande (2011) is an overview of Gujarat's history, from the Stone Age to British dominion, with important monuments and archaeological sites. In addition to compiling excavation/exploration material that has been published in journals, publications, and excavation reports, it also offers a reference index of archaeological sites.

Subsequently, a thorough history of Gujarat's archaeological excavations has also been produced, together with information on the material culture discovered there. Overall excavated sites that are not otherwise published are covered in the volume. (Rao and Kumaran 2015)

The beginning of the Early Historical period of ceramic studies at Vadnagar goes back to the date 1952 by Shri S. Ranganath Rao who identified the occurrence of 'Red Polished Ware' in the disturbed area of the present cemetery to the south of the town. While the eastern and northern banks of the Sarmistha tank indicating the other early historic areas of ancient Vadnagar were located by Shri. M. N. Deshpande and Shri R. N. Mehta.

The excavators aimed to understand the archaeology of the Pre-Solanki Period in North Gujarat as very few known accounts were available. In 1953 The Department of Archaeology of the M.S. University of Baroda carried out a small-scale excavation in the east of the town, outside the fortification. Apart from a few stray sculptures from this area, the presence of datable ceramic type 'Red Polished ware' found all over Gujarat and Saurashtra aided in determining the area's cultural succession. Further, knowledge of early historic cultures in Gujarat would also help discover new sites and establish links with the neighbouring areas.

The excavation uncovered a chain of three cultural periods

Period I was marked by the non-appearance of RPW and the prevalence of the coarse thick ware black inside and red or brown outside, found similar at Baroda and Amreli. The Punched Marked coin is linked with this period.

The next Period II fetched a huge number of RPW.

The last period III signifies the existence of the Medieval Painted Ware from the 7<sup>th</sup> century to 11<sup>th</sup> CE.

The cultural assemblage recovered from the excavations consists of chunk bangles, TC objects such as sealings, human toys, small pellets, discs with hubs, small vessels, animal figurines, beads, tablets, bone objects, and coins and sculptures. While the findings in ceramics include black and red ware of crude gritty quality, plain red ware, coarse grey ware, burnished grey ware, medieval painted ware and painted pottery with black designs in a red slipped ware with coarse fabric. The designs mostly consist of linear patterns, grids, and loops.

The significant features post excavation at Vadnagar revealed significant historical connections between Western India and the Mediterranean with the presence of Roman Samian ware alongside Indian pottery. The ceramic sequence at Vadnagar provides a vital starting point for exploring North Gujarat's history. The discovery of earlier microlithic cultures around Vadnagar prompts further research to bridge gaps in Gujarat's prehistoric and early historic periods. Common pottery types between South and North Gujarat suggest a distinct cultural zone. The absence of painted pottery in the South underscores regional differences. Continued excavation and study in Vadnagar and other North Gujarat sites were recommended to deepen understanding of the region's history. (Subbharao and Mehta: 1955).

Given the above findings, as per Rawat (2010), nothing concrete was identified about the ancient town's settlement planning, growth and significance. Further, the complete ceramic sequence of north Gujarat could not be entirely achieved as the ancient mounds lying outside the fortification possesses only limited cultural deposits. Therefore, since the year 2006 the Directorate of Archaeology, Gujarat State, undertook further excavations at the site to comprehend the history, its planning and growth during the successive phases of its history. Similarly, these excavations aim to study Buddhist remnants and ascertain Vadnagar's role in the ancient trade networks of Gujarat and western India.

Excavations were carried out at seven locations, three within and four outside the fortified town. The previous locations commenced in reconstructing a continuous cultural sequence ranging from the 4<sup>th</sup>-3<sup>rd</sup> century BCE to the present with a deposit of about 20.60m. While the latter locations outside the fortified area aided in understanding the expansion of the town during various phases of its history.

The excavation revealed that the formation of settlement began without a lasting fortification whereby the successors eventually constructed an earthen rampart around 3<sup>rd</sup> century BCE until the beginning of the 1st century CE when a massive alteration took place in town

planning. The succeeding period shows a change in the internal planning of the town having well-laid streets, lanes and abundant use of burnt bricks for houses as well as the fort wall. This indicates the development and growth in the town and its people which appears to have lasted for more than 1000 years, possibly till the 11<sup>th</sup>- 12<sup>th</sup> centuries CE, without any major change. However, the Solanki ruler Kumarpal (C. 1144-72 CE) in his stone inscription positioned at the Arjuna Bari (Gate) mentions undertaking major repairs of the fort wall in the 12<sup>th</sup> century CE.

It was observed that the overall lay-out plan of the town remained the same but the broad streets of earlier periods were cut down into narrow lanes to meet the demand of more space for residential purposes probably due to an increase in the town's population. Expansion of the town seemed to have spread on all sides from the wide-open road running along the fortification and in the internal broad streets. This planning of 12<sup>th</sup> century CE remained unchanged until the beginning of the 18<sup>th</sup> century CE when further expansion of the town took place within the fortified area. Around this time, new residential buildings were constructed near to the fort wall turning most of the streets running along the fort wall into a narrow gully. However, some new lanes were also built between the existing house blocks and these new houses bring a change in orientation of many lanes and streets. Eventually, the fortification wall lost its functionality. At present, the town is expanding further outside the fortified area in all directions, especially towards the west and northwest.

On the basis of the major events and uncovering of the remains evident in the excavation, the author has broadly divided the history of the site into five periods. Since the overall cultural assemblage does not reflect an abrupt change therefore the conventional way of periodisation based on the ruling dynasty at a particular period has not been followed. The major periods are as followings

- a. Formative stage of the settlement (pre-3<sup>rd</sup> century BCE)
- b. First fortified settlement (3<sup>rd</sup> century BCE to 1<sup>st</sup> century BCE)
- c. Re-planned town with burnt brick fortification (1<sup>st</sup> century CE to 11<sup>th</sup> century CE)
- d. Modification in internal planning (12<sup>th</sup> century CE to 17<sup>th</sup> century CE)
- e. Period of present town planning (18<sup>th</sup> century CE to date)

Further, the above-mentioned major periods are divisible into sub-periods based on coins, seals and sealing, inscriptions, brick construction, ceramic industry, and contemporary foreign objects or their influence on the local market.

Further the excavation was undertaken by the Archaeological Survey of India for two seasons in 2014 under the directorship of Dr. Madhulika Samanta. The excavations were restricted to the outside area of the fortified town.

Subsequently, from 2016 onwards Dr. Abhijit S. Ambekar under his headship conducted excavations at eight localities within the limit of the fortified town during the three field seasons. The objectives of these excavations were to comprehend a complete cultural sequence Vadnagar and understand the defence arrangement prepared for the town. Likewise, to identify the structural and economic activities of the town. The excavations revealed an uninterrupted sequence of seven successive cultures spanning from Pre 2<sup>nd</sup> BCE till the present. The first settlers of Vadnagar were without any defence system. However, the foremost defence system was introduced in the form of the earthen rampart. Later on, the construction of a strong brick fortification wall on the hard bed earthen was observed with subsequent additions and restorations spanning five cultural periods.

The excavator has classified into seven cultural periods, spanning from Pre 2<sup>nd</sup> BCE till the present, based on the analysis of the excavated material culture, ceramic assemblage, and structural activity. Additionally, Gujarat regional stratigraphy, relative chronology (stratigraphy), and absolute dating (conventional radiocarbon, AMS, and OSL) were all taken into consideration.

Pd I: Pre-Rampart period (Pre 2<sup>nd</sup> century BCE)

Pd II: Rampart period (2<sup>nd</sup> century BCE – 1<sup>st</sup> century CE)

Pd III: Kshatrpa period (1<sup>st</sup> century CE – 4<sup>th</sup> century CE)

Pd IV: Post Kshatrpa period (5<sup>th</sup> century CE – 10<sup>th</sup> century CE)

Pd V: Solanki Period (11<sup>th</sup> century CE – 13<sup>th</sup> century CE)

Pd VI: Sultanate Mughal Period (13<sup>th</sup> century CE – 17<sup>th</sup> century CE)

Pd VII: Gaekwad Period (18<sup>th</sup>-19<sup>th</sup> century CE)

Majumdar (1960), highlights a comprehensive regional history of Gujarat in an easy form along with events and dates from the political, literary, and cultural history of Gujarat.

A geographical index or directory with a map contains information concerning the geographical makeup, social statistics and physical features of Meshana. Its content includes location, dimensions of peaks and waterways, population, and gross domestic product. A good deal of research has been done on a historical character, the Buddhist remains and the role of Vadnagar in the ancient trade mechanism. District Gazetteers- Mehsana- (1975)

The origin of the Vadnagar site was not known until J. Burgess explored and impressively described the aesthetic sense of the architectural features and making it well known in the Archaeological Map of Gujarat by its monumental Torana of the Solanki Period (Burgess and Cousen 1903).

Excavations reported by Mehta and Subbarao (1955). Subbarao, Mehta, and Chowdhary, (1966) successfully drew attention to several aspects of a distinct typological variety of ceramics. While Panjwani (1981) in her research speaks about a comparative study of the ceramics of Gujarat.

A detailed compilation of the results of the Vadnagar excavation has been summarized by Kumaran (2015).

Whilst the above researchers have shed light about few aspects of Early Historic ceramics of Gujarat but the aforementioned studies are characterized by certain lacunae. This region has been an area subjected to constant pressures during all the phases of its historical existence i.e., from the Mauryan to Gaekwad period and the aftermath of it was a rich cultural tradition, core zone for the spread of Buddhism, Jainism and Hinduism wherein it developed into a trading centre. The academic community has extensively worked on the political, socio-cultural, and other aspects from the Prehistoric to Harappan period, however, previous studies lack a proper investigation of the ceramics of the Early Historic period to the Medieval period. (a) Prior investigations have implemented several approaches to understand the Early Historic period only through particular wares or shapes, falling short of addressing the regular potteries found in abundance (b) There is a lacunae among the researchers to understand the pottery in a comprehensive way through a continuous cultural sequence. (c) In the decades of research discussion regarding ceramics, most of the work has been concentrated on the Harappan and chalcolithic while very less research on the Early Historic period potteries has been undertaken.

### **Scope and Significance**

It is necessary to mention the direct beneficiaries of the study. Just like the scope and delimitation of the study, its significance shall be pointed out especially to the end-users to serve as a guide in identifying its value.

The former researchers have comprehensively explored various facets due to historical and geographical potentiality; however aforementioned work carries certain lacunae. This

research will offer an understanding of the ceramics of North Gujarat from the Early Historic to Medieval period. As the reference site Vadnagar site possesses an uninterrupted cultural occupation, the markers namely types of ware, shapes, types, and sub-types found in each period would be recognized. These changes in potteries would be identified based on morphological features, their probable function, and whether religious or economic influences had any impact on these alterations from the Early Historic to Medieval period. This research would additionally offer a ceramic chronology for north Gujarat wherefore along with the special potteries other regular specimens would also be analysed and documented. Establishing ceramic chronology would make it simpler to comprehend the type of wares, shapes, colours, and decorations adapted in each period which the previous studies have failed to investigate.

### **Objectives of the current research**

1. The study intends to understand and identify the various kinds of wares, shapes, types, and sub-types found in the cultural sequence and regional stratigraphy of North Gujarat.
2. To conduct a thorough typological quantitative analysis. Such an undertaking would facilitate typological quantitative results to determine the behavioural patterns over various cultural eras.
3. To examine and ascertain the popularity, markers, continuation, discontinuation and evolution of these types (shapes) through typological and quantitative analysis. This would lead to reconstructing the temporal distribution of these shapes and sub-shapes.
4. To examine the stylistic changes and decoration patterns. An examination of this facet of stylistic change and decoration pattern facilitates an understanding of popular fashion and the requirements of the people.
5. To present a tentative pottery chart integrating typological analysis data obtained in the cultural sequence with synchronization to the regional stratigraphy of North Gujarat.

### **METHODOLOGY**

Research methodology is the route through which researchers need to conduct their research to obtain the study's objective. This section discusses the research method adopted during the research process. The researcher layouts the research strategy, research design, research methodology, the study area, the data sources for instance primary and secondary sources, and methods of data analysis used as quantitative and qualitative data analysis. To justify the

objectives of the study, the qualitative and quantitative research method is comprehended in general. The study applied these mixed strategies to obtain all the aspects of the data.

### **Literary source**

A literature survey is a systematic method of understanding the existing information which is relevant to a particular topic by doing a thorough study of all sorts of published literature as well as other sources. Hence during this research, many publications such as excavated reports, journals, monographs, unpublished dissertations, and thesis were referred to in the libraries at The Maharaja Sayajirao University of Baroda, Vadodara, and ASI Ex Branch-V, Vadodara. This method not only facilitated the formulation of the research problem but also in knowing the extent to which the academic community has investigated and its shortcomings.

### **Field survey**

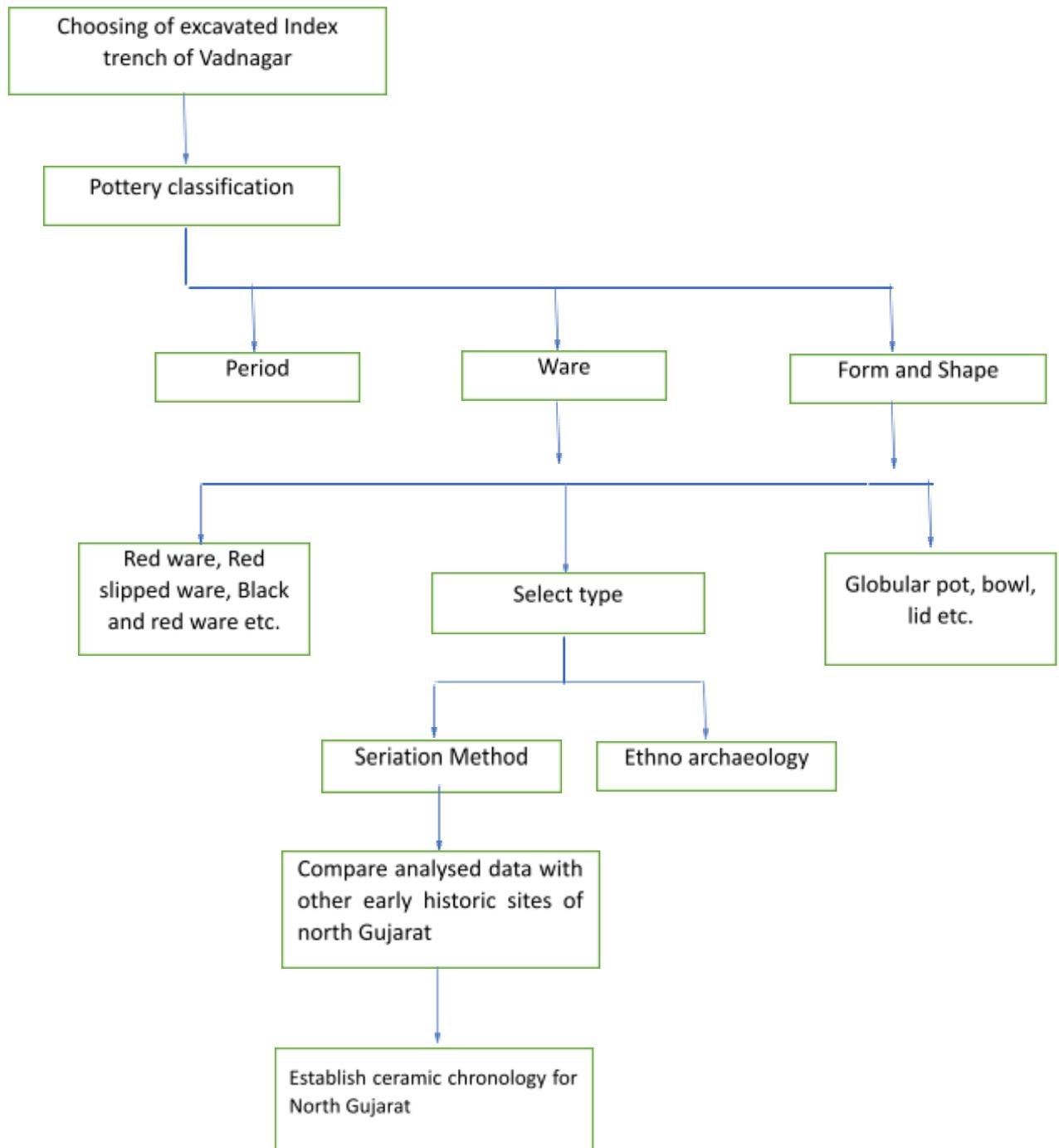
This methodology involves data collection that focuses on observing, interacting and understanding people, things, or a subject while they are in their original environment.

The excavation by the Archaeological Survey of India from 2016 onwards under the directorship of Dr. Abhijit S. Ambekar was conducted at eight localities within the limit of the fortified town during the three field seasons. The results from all the locations have shed light on a promising finding. The researcher has participated in the excavation at Vadnagar and has further assisted the Head of the Office in the report writing of the excavation in ASI Excavation Branch-V Vadodara.

The pottery analysis for the report was done by comparing four index trenches of two seasons (2016-17 and 2017-18) in different localities namely Locality C, Locality B, Amba Ghat, Valmiya No Mahad. However, based on the pottery analysis conducted for the report, the researcher has selected locality C (2016-17) and Amba Ghat (2017-18) as the index sites for the study of ceramic traditions and behavioural patterns in the various cultural periods of Vadnagar. These two sites have helped in establishing a complete cultural sequence of the site.

In view of the aforementioned, Vadnagar was selected as the main reference area of north Gujarat for research due to its potential of unearthing rich continuous ceramics from Pre 2<sup>nd</sup> century BCE to 18<sup>th</sup>-19<sup>th</sup> century CE.

## Outline plan of work



The pottery analysis presented has been done by first selection and comparison of two seasons (2016-2017 and 2017-2018) deepest index trenches in different localities. Each site was taken as a separate entity for pottery classification. The collection of potteries found in the stratigraphic context were separated into diagnostic and nondiagnostic shards based on

the period, wares, determined by colour, decoration, surface treatment, shape, and morphological features.

At this stage, small diagnostic sherds also allows to understand a complete or partial reconstruction. This analysis of rims, necks, shoulders, bases and body parts with partial diagnostic features were the common attributes in this research. Moreover, rim being the greatest source of information on the overall vessel form was examined in detail. Subsequently, surface treatment which gives a visual aspect to the vessel has either a functional or stylistic (decorative) purpose. (Dales and Kenoyer 1986:42).

This allowed an understanding of the characteristic features of the ceramics with the corresponding cultural phase. Based on the categorisation of pottery appearing in each stratigraphic context the broadly recorded data was further examined into representative types, or in other words potteries having common characteristics for each period, ware and shape.

The sherds were then matched and measured with the established types and sub-types based on the presence or absence found in each layer. This recording of data led to identifying the counts of sub-types found in each layer. As the layers and sub-types are in large numbers the recorded layer data were then combined and converted into cultural periods for easy understanding.

To comprehend the broad distribution of the types and subtypes found in each cultural period, the database was prepared in an Excel sheet to generate bar graphs. The graph makes it easy to comprehend at a glance and illustrates subtypes starting slowly, growing to a peak and then dying away as another subtype becomes popular. It not only indicates the lifespan of a subtype but also shows different designs overlapping at a glance.

Descriptive analysis, drawings, and photographic documentation of the selected potteries were conducted. The examined data of Vadnagar was further then compared with the other early historic excavated sites of north Gujarat namely Devnimori and Shamlaji to comprehend regional variations. Thus, to obtain a ceramic chronology chart from the early historic to the medieval period, the above steps were taken into action.

Further, an ethnographic study was also carried out which basically involves looking into the tangible and intangible aspects of modern societies and comparing them with the ancient society.

Nearby community potters, local residents of Vadnagar and other various places were interviewed. The subject experts in the field of ceramics were also consulted and interviewed. Further, the Vechaar Museum in Ahmedabad having a collection of over 4500 utensils was visited. Through this examination, it was possible to compare the modern and ancient techniques to trace their similarities in them.

### **Limitations of the study**

As previously indicated, the sherds unearthed during excavations were in lakhs, so there is room for human error in the collection of samples from the site and in the examination conducted. Further, it was noted that the area of excavation did not remain the same throughout because of the structural remains and other human activities. Further, the excavation in the deep cuttings being confined to a limited area and water logging resulted in uncovering inadequate sherds.

Therefore, the findings reported in the typological and quantitative form are the general observation that was drawn during the study, keeping in mind the practical excavation challenges. The research only aims at giving a tentative ceramic chart found in the cultural sequence and regional stratigraphy of North Gujarat. However, further research or contribution by tertiary educators and researchers on these observations are open and could determine deeper knowledge.

This research focuses on the ceramics of North Gujarat from the Early Historic to Medieval periods. Through detailed excavation and analysis, it aims to uncover the cultural evolution, typological changes, and regional variations in pottery, offering valuable insights into the region's history and material culture. Despite facing challenges in excavation and data gathering, this study gives a foundational understanding of North Gujarat's ceramic heritage and invites further exploration in this field.