

# **Contextualizing the Archaeological Landscape of Kamakhya Temple in the Light of Material Evidences**

A Thesis Submitted  
in Partial Fulfillment of the Requirements  
for the Degree of

**Doctor of Philosophy**

by

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## STATEMENT

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The work contained in this thesis entitled “*Contextualizing the Archaeological Landscape of Kamakhya Temple in the Light of Material Evidences*” has been carried out by me under the supervision of Dr. Sukanya Sharma, Professor, Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, India. This work has not been submitted elsewhere for the award of any degree.

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December 2019

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## CERTIFICATE

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This is to certify that the work contained in the thesis entitled “*Contextualizing the Archaeological Landscape of Kamakhya Temple in the Light of Material Evidences*” by Ms. Priyanka Tamta (Roll No. 126141018), a student in the Department of Humanities & Social Sciences, Indian Institute of Technology Guwahati, for the award of the degree of Doctor of Philosophy was carried out under my supervision. The results embodied in the thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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*Dedicated*

*To*

*My little brother Nitin*

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I still remember the day when I first stepped into the campus after having enrolled for the PhD, as I write this acknowledgement, I cannot help but think of the time and how it passed by. I was young and naive and driven towards achieving what I set out to, it has been a rollercoaster ride, and at the end of it, I believe this is not just the fruit of my actions and dedication, I owe it to everyone who played their roles in helping me achieve this.

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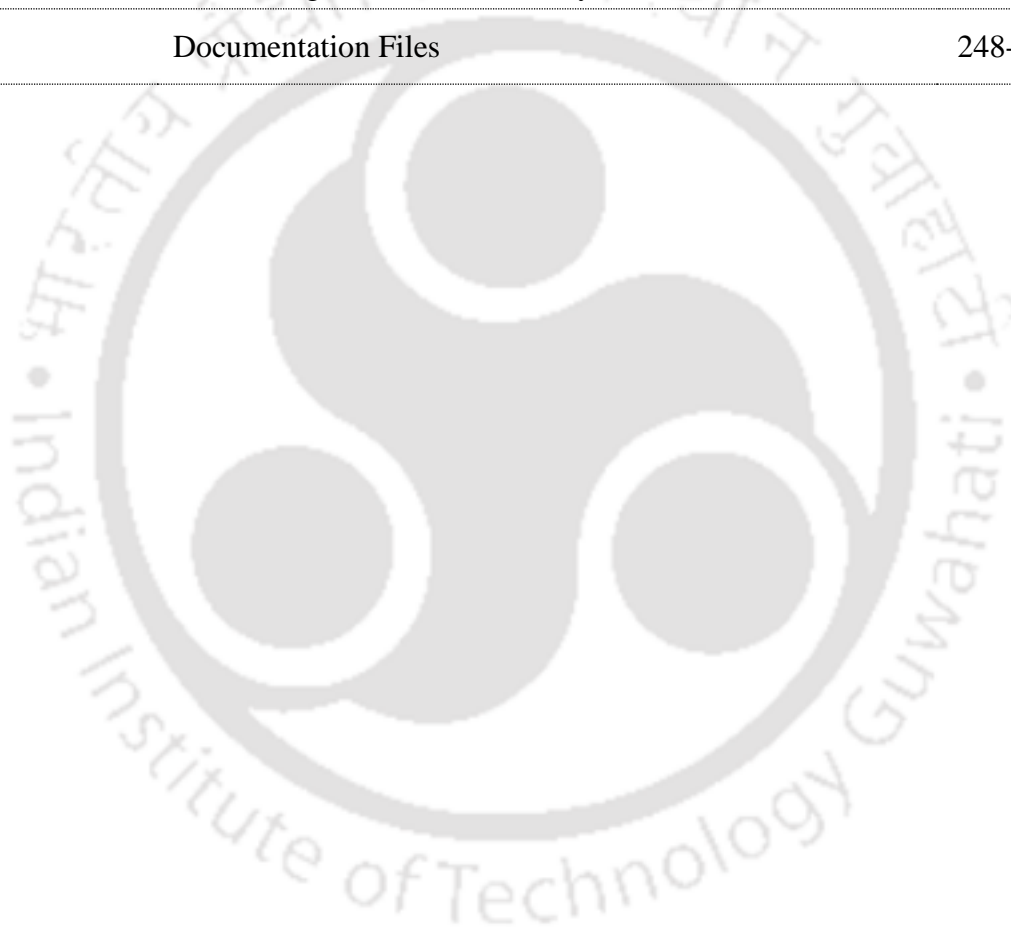
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## ABSTRACT

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The archaeological site of Kamakhya is a living temple of Goddess Kamakhya who is worshipped in a non-anthropomorphic form as a *yonī* (vulva) with no physical manifestation along with the *Dashamahavidyas*. The present study has attempted to understand the evolution of the archaeological site of Kamakhya temple with the help of material evidences left on the site in the form of its art and architecture. Understanding the context behind the material evidence can help us in understanding the process of site selection and settlement pattern. Further, making this evidence a readable text, which is easy to decipher, offers access to understanding past settlements and their way of life. The present study has used three theoretical approaches, Landscape archaeology, Sacred geography and Contextual approach to answer the following questions: 1) The prime factors behind the development of the site; 2) type of archaeological records created during the 1516 years of habitational history of the site; 3) the processes through which such archaeological records were created. We have used the archaeological survey methods and scientific methods (XRD, Thin Section Petrography, FE-SEM, EDX and Micro-optical analysis) for studying the archaeological site of Kamakhya temple. From the study, we have successfully identified five different phases of temple building activity from the 5<sup>th</sup> century A.D. to the 21<sup>st</sup> century. On the basis of architectural fragments of *kalasha*, *urushringa* and *amalaka* scattered across the site, the first stone temples were built in *Nagara* Hindu temple architecture style with prominent curvilinear *sikhara* (tower) and *urushringa* (subsidiary *sikhara*). Evidence of the brick temples constructed on the already existing stone ‘*adhithana*’ marked the evolution of a hybrid form of architecture known as *Nilachala* temple architecture famous for its bulbous polygonal dome with minarets or small side domes inspired by the Bengali temple architecture. We also found through sculptural documentation that majority of the Kamakhya sculptures belong to the Medieval Kamarupa School of Art. Further, three types of stone used for making sculptures and temples have been identified on the site. They are a) Granite, b) Sandstone and c) Basalt. The results of the present study can be utilized as a reference base for understanding the temporal changes in the archaeological site of Kamakhya and its art and architecture.

# Contextualizing the Archaeological Landscape of Kamakhya Temple in the light of Material Evidences

*Traditionally, archaeologists look for artefacts which, as material culture, constitute the exclusive text on which cultural analysis is based. But in dealing with a more dialectic research topic such as the cognition of landscape, we must ask how unaltered landscape features and spaces are recognised. In brief, how do we evaluate the absence of pattern and regularity as integrative aspects of our understanding of culture?*

*(van de Guchte 1999:165)*

## Chapter 1: Introduction

Material evidence of temple sites and religious monuments has been used to understand the social-cultural dynamics of society. The temple sites have been used as a parameter for understanding social change. These changes can be interpretive in terms of the built space (art and architecture) and can be deeply embedded in the existing culture on the site. These changes emerge as the change in the structure of belief systems or in the material manifestation of the belief system, which resulted in the formation of a complex yet readable landscape (Keenan & Arweck, 2006).

The archaeological site of Kamakhya is a standing emblem of power and prestige of the Brahmaputra Valley since 5<sup>th</sup> century A.D., covering more than fifteen hundred years of Assam history. During these fifteen hundred years the site has witnessed numerous changes which are recorded in the art and architecture and the belief system of the site. The site received political patronage from royal powers of South Asia in different periods of history. At the same time, there was a constant dialogue with the local population, which resulted in the emergence of a new form of art and architecture on the site. Certain local elements were incorporated in architecture and sculptural art, and it was challenging to use the conventional canonical literature used for interpreting the art and architecture of ancient India to define the art and architecture of the site. The present work indicates that the Kamakhya temple is more than just a religious and political centre but also a flourishing settlement site that is still evolving.

The present work documents and identifies elements of artistic variations, explains and reinterprets the art and architecture of Kamakhya. It is understood from the results of the study that the art and architectural form of Kamakhya is a part of the Kamarupa School of art. The main contribution of the thesis is:

- 1) Preparing an inventory of the sculptures and architectural ruins found on the surface of the site.
- 2) Identification of approximately 1500 years of continuous habitation on the site starting from 5<sup>th</sup> century A.D. to the present time.

### **1.1 Scope and Objective of the Research**

The present research was conducted with the following objectives:

- a. Understanding the evolution of the Kamakhya temple as an archaeological site
- b. Developing a stratigraphic sequence for understanding different historical stages of construction in the Kamakhya Temple complex. Evidence of continuous habitation of the site starting from 5<sup>th</sup> century A.D. to the present, approximately 1500 years have been identified.
- c. Creating a sculptural and GIS database/inventory for studying art and architecture. The database further helped in assigning stylistic dating to the sculptural art of the Kamakhya temple, which falls between 8<sup>th</sup> to 16<sup>th</sup> century A.D.
- d. Understanding the role of Kamakhya temple in the sacred geography of India as well as its transformation from a religious site to a historical landmark.

### **1.2 Theoretical framework to understand the archaeological site of Kamakhya Temple**

The theoretical framework works like a lens through which one can evaluate the research problems and research question. Without a theoretical understanding, every research is incomplete and unjustified. In the present study, three theoretical approaches have been applied: Landscape approach, Contextual approach, and Sacred Geography

to study the archaeological landscape of Kamakhya temple. Each approach is used to understand the different dynamics of the studied area, and each approach complemented the outcomes of the present study.

The landscape approach is used to understand the evolution of the Kamakhya temple from a religious site to a site of cultural significance or more precisely a state emblem of the state of Assam, India. However, the Kamakhya temple is an active *Shakta* site that makes the temple a part of the sacred geography of India. So the second theoretical approach we have used to study the Kamakhya temple is sacred geography. The third is a contextual approach to study the material manifestation of the belief system present on the site in the forms of art and architecture. We have used three contexts for studying the sculptural as well as architectural components available at the site. The first is spatial context (where the artefact or the monument lies on the site); second is socio-religious and cultural context (the sculpture or temple belongs to which faith or dedicated to which deity); and the last is material context (what material is used for sculpting as well as constructing the temple). The contextual approach is used as the base for understanding the site formation process and also for understanding the stylistic evolution of temple art and architecture. The contextual approach is further used in examining the spatial patterning of the past human activity on the site.

### **1.2.1 Landscape Approach**

Landscape archaeology has seen a considerable theoretical shift since it was first used by Mick Aston and Trevor Rowley (1974) in their work "*Landscape Archaeology*". The first era in the landscape archaeology works was mainly focused on studying human interaction or their impact on physical surroundings with more environmental or ecological archaeology tone rather than landscape archaeology that we have witnessed now. Many of the earlier works, such as Karl Butzer's "*Environment and Archaeology: An Ecological Approach to Prehistory* (1964) and "*Archaeology as Human Ecology* (1982)" and Erick Higgs's (1975) "*Palaeoeconomy*" and Micheal Jochim's (1978) "*Hunter-Gatherer Substance and Settlement: A Predictive Model*" mainly emphasized on the economic and settlement substance adaptive approach while looking towards the inter-relationship between past human and their surrounding environment (Bruno and Thomas, 2016, p. 29). However, these approaches led to an improvement in the archaeological field methodologies and

analyses for getting a better glimpse on the spatial patterning or distribution of settlements, and cultural objects/archaeological material scatter across the landscape and more particularly on the site formation processes. During 1970's and 1980's landscape archaeology witnessed the use of multidisciplinary approach for studying the human-environment relations, and significant work on landscape archaeology were also published during this period e.g., Shawcross (1967), Coutts (1970), Mulvaney & Golson (1971), Higgs (1975), Greenwood and Todd (1976), Ian Hodder (1978), Bakels (1978), Foard (1978), Binford (1980), Pryor (1980), Butzer (1982), Renfrew (1983), Reeves-Smyth and Hamond (1983), Hirth (1989), Stewart (1989). However, the credit goes to Ian Hodder (1978) and Renfrew's (1983) for changing the direction of landscape archaeology from an environmental concern to a social by bringing a social dimension to the study of the landscape in archaeology. Now settlement pattern and artefact types reflect the conscious decision of the human being in social inclusion and exclusion rather than simply environmental adaptability. This new outlook towards archaeological records gives a glimpse of the past human behaviour as more of social being interacting in various ways with their surrounding environment rather than simply adapting to it. In J. B Jackson's "*The Vernacular Landscape*" the landscape is expressed as a by-product of human interaction and work rather than merely a natural entity. According to him "*A landscape is not a natural feature of the environment but a synthetic space, a man-made system functioning and evolving not according to natural laws but to serve a community*" (Jackson, 1986, p. 68).

The Ethno-archaeological works of archaeologist like, Gould (1968, 1971), Binford (1978), Jacobs (1979), Hayden (1979), Gamble (1982), Binford and O'Connell (1984), and others have bridged the gap between environmental landscape and social or symbolical landscape by providing the arguments that how social interaction between the communities can lead toward the exchange of information and transformation of the style of objects and artefacts in a particular geographical periphery. They not only study the distribution of artefacts and site in a physical landscape but also shed light on the advantage of social interaction between the communities. It is this social interaction which leads to the development of a specific style or type of artefacts and also impacts their distribution, creating a social landscape (Bruno and Thomas, 2016).

These theoretical shifts in landscape archaeology from environmental to social landscape has broadened the meaning attached with landscape with the inclusion of social dimension which was earlier only constructed on the basis of behavioural mode of interaction (adaptive approach) between humans and their surrounding environment. However, as the emphasis on social dimension increased in landscape archaeology, new concepts of the cultural landscape, symbolic landscape, cosmic landscape, religious and spiritual landscape also emerged. Now the landscape is not only confined to some geographical extent or territorial boundaries but has become an idea which keeps evolving under new insight and can have multiple perspectives and perception. Thus, one land can possess multiple visions, multiple-meanings and can have multiple landscapes within a single landscape (Strang, 1979). The landscape now is not confined into a set definition, and even the same landscape can possess different meaning and can be perceived differently by people. Landscape can represent different notions of the world and can also be used to mention physical entities (Ucko & Layton, 2005). Gosden and Head use the term “*useful ambiguity*” while explaining the landscape which comprehends both the conceptual and physical world (Gosden and Head, 1994, p. 113).

However, in the field of landscape archaeology, the two prominent approaches to explain landscape remains as the dominating approaches. In the first approach, the landscape is defined purely as an environmental approach which has minimum to no impact by its inhabitant. The second approach is the cultural or social approach which defines the landscape as an integral part of human society and governs the day to day life of human beings with meaningful interaction.

In sum, landscape archaeology studies the outcome of the interaction between human beings and their surrounding environment. Landscape archaeology answers questions such as, how people visualised or perceived the surrounding environment and spaces; how they manipulated the surrounding for their survival; and how they subliminally get affected by the surroundings to perform specific tasks (Bruno & Thomas, 2016).

We have used the landscape approach to understand how the Kamakhya temple is located in the geographical landscape of the Nilachala hill and also to understand how the inhabitants or settlers of the hill transformed and utilised the existing landscape and its resources in creating sacred geography. The primary concern of our study is to

understand the spatial distribution of the site on the Nilachala hill and also to understand the geographical spread of the stylistic convention found in the art and architecture of the site. Thus, making the site a part of the sacred geography of Indian as well as a part of the artistic guild prevalent in this part of the country.

### 1.2.2 Sacred Geography Approach

The meaning attached to the term “Sacred Geography” has undergone many changes since its first use by Thomas Tucker Smiley in 1824. It was a very simple use of the term sacred geography for the sacred or holy places mentioned in the Bible. Initially the term sacred was adjectivally used with geography without any proper meaning attached to it and was simply used as an expression. For instance, Elijah Porter Barrows used the word ‘sacred geography’ in the book “*Sacred geography, and antiquities*” for establishing the historicity and the antiquity of Palestine and Israel (Barrows, 1872). It was only later that the German town planner, Dr. J Heinsch in a paper in the 1938 International Congress of Geography, gave a conceptual meaning to the term sacred geography. Since then, the notion of sacred geography become popular among anthropologist and ethnographers studying the Native North American Indian cultures (Thorley, 2016).

The study of sacred geography has also become very popular among the scholars studying Indian culture and spirituality. There are several Indian and foreign scholars who have published their work exploring the sacred geography of India. This includes the work of Lahiri (1996) “*Archaeological Landscapes and Textual Images: A Study of the Sacred Geography of Late Medieval Ballabgarh*”; Anne Feldhaus, (2003) “*Connected Places: Region, Pilgrimage, and Geographical Imagination in India*”; Nityananda Patnaik (2006) “*Sacred Geography of Puri*”; Travis L. Smith (2008). “*Rewriting the Sacred Center: The Kasikhanda and Varanasi's Visvesvara Temple*”; Benjamin J. Fleming (2009) “*Mapping Sacred Geography in Medieval India: The Case of the Twelve "Jyotirlingas"*”; Diana L Eck (2012) *India: A Sacred Geography*; J. M. Fallon & N. K Jaiswal (2012) “*Sacred Space, Sacred Water: Exploring the Role of Water in India's Sacred Places; etc.*

However, what is sacred geography? As Eck (2012) mentioned in her work “*India: A Sacred Geography*” that formation of sacred geography begins in the

physical plains which includes the features like mountains, rivers, forest, and settlement area or villages that are deeply knotted with tales, myths, stories and legends of Gods and Goddesses. Anthony Thorley in his paper "*Sacred Geography: A conceptual work in Progress*" defined sacred geography as "*the study of qualities of the sacred and related cultural activities found in certain places and expressed in a spatial context*" (Thorley, 2016, p. 8).

In simple term, the 'Sacred Geography' is a space or a place (regional as well as global) where mythological, symbolical, astrological and shamanic factors become an integral part (Identity) of the broader landscape (Eck, 2012). The powerful relationship between a belief system and the actual physical landscape creates a space under which many actors actively participate in the creation of this sacred geography. For Tilley (1994) this is an "Existential Space", a space that is continuously moving forward, constructing and reconstructing the physical plain, never remains stagnant but a movable space. The sentiments and emotional attachment of human agency into this space (life-activity) has played a very significant role in shaping and transforming the existential space. In this space, every object, buildings and local topography is infused with the symbolic, mythical and social meaning (Tilley, 1994). In her book "*India: A Sacred Geography*", Eck (2012) mentions that the religious landscape in India is not dead but a living and constantly evolving entity replete with stories, legends, and myths.

Here, the Kamakhya temple in Assam, India, is one of the examples of the living landscape united with several mythical, historical and oral legends and tales. These legends and stories attached to the landscape have played their role in providing a unique identity to the land, while also uniting this part of the landscape with the sacred geography of India. Therefore, the understanding of the concept of sacred geography is crucial for studying the spiritual landscape of the Kamakhya temple.

### **1.2.3 Contextual Approach**

Ian Hodder (1990,1992) introduced the contextual approach as a critique of post-processual archaeology. The idea behind the contextual approach is to give more meaning to the archaeological site by interpreting the contexts behind the remains rather than simply interpreting through scientific numbers and figures. This form of interpretative archaeology is used to understand the mind behind the cultural

assemblage of any given archaeological site (Johnsen and Olsen, 1992). The role of contextual archaeology in analysing and providing a socio-economic interpretation to artefacts and its depositional patterns complemented the traditional archaeological concerns by providing a new dimension to the research.

According to Ian Hodder by contextual *“I mean an analysis which attempts to “read” or interpret the evidence-primarily in terms of its internal relations rather than in terms of outside knowledge. In particular, an emphasis is placed on internal symbolic relations rather than on externally derived concepts of rationality”* (Hodder, 1990a, p. 21).

Similarly, Karl W. Butzer (1982) also defines the context for archaeology *“As a four-dimensional spatial-temporal matrix that comprises both a cultural environment and non-cultural environment, and that can be applied to a single artefact or a constellation of sites”* (Butzer, 1982, p. 4).

Ian Hodder emphasises on three contextual approaches (environmental, technological and behavioural context) while studying the material evidence left by the past societies (Hodder, 1986, p.153-54).

Thus, based on the contextual approach, we have used three contexts for interpreting the archaeological data collected from the site: a. Spatial context (environmental) is used for understanding the spatial distribution of the sculptures and structures on the Nilachal hill; b. Socio-Religious and cultural context (behavioural) is used for understanding different aspect of socio-cultural practices governing the site which influences the art and architecture of the site; c. Material context (technical) is used to understand the evolution of sculpture and architectural art.

### **1.3 Methodology**

To fulfil the aims and objectives of the research, we have used the archaeological survey methods and scientific method for studying the archaeological site of Kamakhya. The field survey method includes the reconnaissance survey technique, including casual or pedestrian survey and systematic survey techniques. The scientific methods are used for analysing the physio-chemical properties of bricks and stone samples collected from the site for understanding the variation in the construction material used on the site.

## **1.4 Plan of the Thesis**

The thesis is organised into five chapters:

### **Chapter 1: Introduction**

The introductory chapter explains the theoretical background, methodology, scope and objective of the present research. In this chapter, we have discussed three theoretical approaches: Landscape Archaeology, Sacred Geography, and the Contextual approach applied for studying the archaeological landscape of Kamakhya temple.

### **Chapter 2: The Archaeological Site of Kamakhya Temple: Making of an Archaeological Site**

In this chapter, we have used the sacred geography, and landscape archaeology approaches for understanding the complex religious site and how the present active *Shakta* temple site become an archaeologically important site in Assam. The present chapter also emphasizes over the role of geography and its surroundings in the selection of a site and its establishment as an important cultural and religious place. This chapter posits Kamakhya as an archaeological site on a physical landscape and considers her as a part of the sacred geography of India.

### **Chapter 3: Methodology**

Chapter 3 presents the research methodology used and the rationale behind the methods used for studying the archaeological site of Kamakhya. The present chapter will explain the survey techniques and data collecting method used during the research. The scientific techniques like XRD, EDX and Thin-section petrography analysis are also discussed in this chapter.

### **Chapter 4: Material Manifestation of the Belief system (Art and Architecture of the Kamakhya Temple)**

The Archaeological site of Kamakhya symbolizes the relationship of power and control out of which it has emerged. During different periods of occupation, certain architectural and iconographical characters developed which indicated diffusion and cultural adaptation. Using material evidence and the epigraphical records as sources, this Chapter will analyse the interactive and dynamic processes which operated in the

emergence of this cultural marker, the archaeological site of Kamakhya. The chapter is divided into two parts: Part I The Architecture of Kamakhya Temple; and Part II Sculptural Art of Kamakhya.

### **Chapter 5: Conclusion**

The concluding chapter will be a summing up the basic findings of the present research work, limitation and future research.



## Chapter 2

### The Archaeological Site of Kamakhya Temple

#### 2.1 Introduction

The archaeological site of Kamakhya is situated on the Nilachal hill on the Western part of Guwahati in Assam, India (Figure 1). The temple complex covers approximately 1.25 sq. km area or approximately 308.9 acres of lands. In the Kamakhya temple site, there are more than seventeen temples dedicated to different deities. Most of the temples belong to the *Shakta* tradition, such as the temples dedicated to the *Dasa-Mahavidyas* and rest of the temples are dedicated to the different forms of *Siva*, known as *Bhairavas* such as, *Aghora* (or *Heruka Siva*), *Amrakeswara* (*Sadyojata Siva*), *Kamesvara* (or *Vanadeva Siva*), *Kotilinga* (or *Tatpurus Siva*) and *Siddheswar* (or *Ishana Siva*) (Bhuyan and Nayak, 2010; Sharma S., 2010, p. 117). In the sanctum sanctorum of the majority of the temples at the site, the deity is worshipped in a non-anthropomorphic form except in the temple of *Tara* where a bronze image of the Goddess is worshipped and in the *Kotilinga* temple where a ribbed *linga* with a bulging body is worshipped. We do not find this feature in any other *Shakti Pithas* in India except the temple of *Sambaleswari* at Sambalpur in Orissa and *Ugra Tara* temple in Assam, where a sanctified water pit and a large block of flat rock is worshipped (Shastri, 2005). Here, in the Kamakhya temple (Figure 2), the vulva-shaped depression on the flatbed of rock is worshipped as Goddess *Kamakhya*. This depression always remains moist because of the presence of a perennial underground stream.

Based on epigraphical records, it is estimated that the site has a habitation history of approximately 1516 years. The first temple was constructed in 5<sup>th</sup> century A.D. as mentioned in the *Umachal* rock inscription (Sarma and Borah, 2010). The site has been patronized by different royal houses like the Varman dynasty, the Pala dynasty, Koch and the Ahom dynasty. This can be witnessed in the forms of different styles of art and architecture present at the site. Especially on the site, the *Nilachala* temple architecture famous for its bulbous polygonal dome originated. This particular style of temple building emerged during the Koch period and became the most popular style of temple architecture during the Ahom period (Sarma P., 2007, p. 334).

The evidence of this architectural transition can be witnessed through the presence of different styles of temple architecture and construction material. Throughout the temple building history of the Kamakhya temple, the site has seen tremendous changes in the Hindu temple architecture style from *Nagara* (Northern Indian Hindu temple style) to *Vesara* (Central Indian Hindu temple style) from *Pancharatha* to *Saptaratha* temple forms. Even the construction material changed from stone to bricks and lime mortar. Terracotta tiles or plaques were also used in the temple building as evident from the *Namath Kali* temple at the site. These changes are not sudden changes, but this happened gradually over a time period of approximately 1516 years. During these years Kamakhya temple not only witnessed socio-economic changes in the Brahmaputra valley, but also the changes in the religious faith among the people. Since the 5<sup>th</sup> century A.D., there was a continuous struggle between different beliefs, faiths, and power on the site to become the dominant authority of the site. In the process, powerful beliefs system subsumed minor ones into a larger doctrine of beliefs. The temple has evolved from a cave temple to a complex of seventeen temples. The faith has evolved from the worship of water, an element of nature to the worship of ten different forms of the Goddess with their five male consorts known as, *Bhairavas*. These changes make Kamakhya temple site a suitable ground for research.

The main objective of the present chapter is to understand the evolution of Kamakhya temple from a religious site to an archaeological site. In this chapter, the landscape and sacred geography approaches are used to understand the complex religious site and how the present active *Shakta* temple site become an archaeologically significant site in Assam. The present chapter also emphasises over the role of geography in site selection and the making of a culturally and religiously important place.

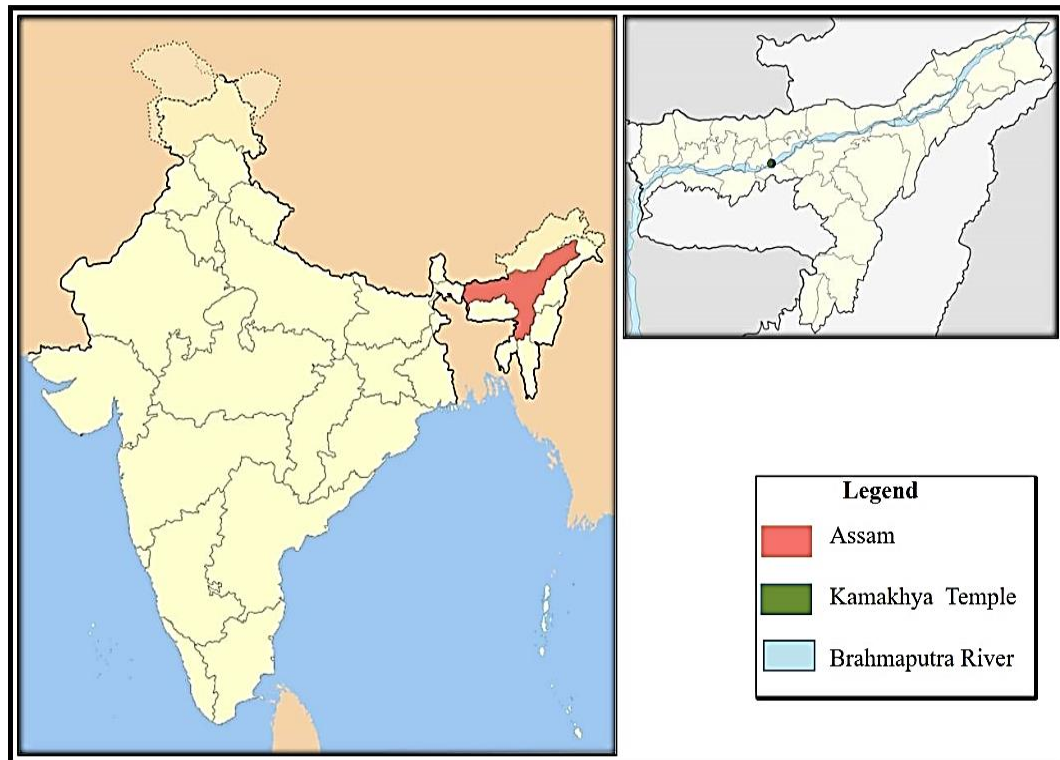


Figure 1. Locating the archaeological site of Kamakhya on the map of India



Figure 2. The Kamakhya temple, representing the unique *Nilachala* style of Hindu temple architecture known for its bulbous polygonal dome.

## 2.2 Evolution of the Kamakhya Temple as a Shakta Temple

Kamakhya temple is considered as one of the oldest *Shakti peetha* or a seat of the worship of the Mother Goddess in the entire Indian subcontinent. The mythical origin of Kamakhya temple ties its association with the sacred geography of India, creating its image as one of the famous *Shakti peetha* in India. The stories and legends of the magical land of Kamarupa (ancient Assam) are recorded in the ancient text of *Kalika Purana*. The *Kalika Purana* mentions Kamakhya temple as an important *Shakti peetha* and as the holiest place on the earth. The text is also furnished with layers of stories, myths and legends regarding the Kamakhya and her cult. *Kalika Purana* has played a pivotal role in making the Kamakhya temple a part of the sacred geography of India.

The glory of Kamakhya temple as one of the important *Shakti peetha* in the entire Indian subcontinent was further reinforced by the ancient texts like *Garuda Purana*, *Markandeya Purana*, *Skanda Purana*, *Devi Bhagavata Purana*, and *Devi Mahatmya*, and so on. These ancient texts connected the Kamakhya temple to the broader sect of *Brahmanism* with the help of the legend of ‘Goddess *Sati*’s self-immolation at *Daksa Yajna*’ and transformed this site into one of the most important *Shakti peetha* in the entire Indian subcontinent. According to this mythology, the severed body parts of the Goddess *Sati* is worshipped as her different aspects or forms in different *Shakti peetha* all across the Indian subcontinent. Here in Kamakhya, the *yoni* (vulva) is revered as mother Goddess Kamakhya. The Kamakhya temple is always considered as an important centre of a *Shakta* cult, because of her association with *Yoni*, an essential aspect of fertility in *Shakta Tantra*.

Each of the *Shakti peetha* represents one of the forms of the divine Goddess (*Mahadevi* or *Adi-Parashakti*), accompanied by the *Bhairavas* (a form of Lord *Siva*) as her husband or consort. Consequently, this legend unified the complex system of Indian Goddesses under the name of a single divinity. Moreover, through this, many local and regional Goddess cults were also subsumed in a mainstream Mother Goddess cult known as a *Shakta* cult (Kinsley, 1998, p. 187).

The *Kalika Purana* suggests how the name ‘*Kamakhya*’ originated. According to this text, the Goddess and her husband Lord *Shiva* arrive at Nilachala hill to satisfy

her amorous desire (*Kama*) and thus, she is known as *Kamakhya* (*Kama*+ *Akhya*) (Borah, 2010, p. 10, Kakati, 1989, p. 34, Shastri, 2005).

In *Devi Bhagavata Purana*, *Kamakhya* of *Kamarupa* (Ancient Assam) is mentioned as an abode or resting place of the Goddess in her different forms. The same text also suggests that the Goddess *Kamakhya* should be worshipped by the descendants of the *Bhauma* dynasty (*Dhanva* dynasty). The *Garuda Purana* and *Skanda Purana*, mention *Kamarupa/Prag-jyotisapura* (ancient name of Assam, as mentioned in *Ramayana*, *Mahabharata* and *Puranas*) and *Kamakhya* as a great centre of *Shakti* pilgrimage (Kakati, 1989, p. 1, Barua, 1933, p. 1). Among the *Purana*, *Kalika Purana* stands out as the most important source for studying the evolution of *Shakta* and *Tantric* cult in Assam. The *Kalika Purana* was composed in Assam, around 10<sup>th</sup> century A.D. This text is an excellent source for providing a glimpse of the political and cultural history of ancient Assam (Choudhury, 1959, p. 14-15; Mishra, 2004, p. 5).

In the *Mahabharata*, *Vanaparvan* section mentions about the existence of three holy places of a *Shakta* cult associated with the *Yoni* (genital) and *Stana* (breast) of *Shakti*, known as *Yonikunda* (situated at *Gaurisikhara*) and *Stanakunda* (situated at *Udyatparvata*). Out of three, two are located in eastern India. The *Pithanirnaya* mentioned the same, the *Gaurisikhara* (one among the three pilgrims place mentioned in *Mahabharata*) situated in *Kamarupa* (Assam) (Sirkar, 2004, p. 8-9).

The Buddhist and *Tantric* text such as *Hevajra* and *Sadhanamala* also mention about the *Kamakhya-Kamarupa* and other *Shakta peetha* in Assam. In *Hevajra* and *Sadhanamala* Buddhist *Tantra*, the text also mentions *Kamakhya* as one of the important *Shakti peetha* (Sirkar, 2004, p. 12-13). The *Kamarupa Yantra* (Sanskrit text), based on the *Yogini Tantra*, *Kalika Purana*, and *Kularnava*, mention the entire process and method of how to worship Goddess *Kamakhya*. The *Yogini Tantra* offers a detailed account of the ancient geography of *Kamarupa* and the cultural aspects of their society. The *Kamakhya Tantra*, mentions several legends associated with *Kamakhya* such as the legend of *Naraka-Bhagadatta*. The *Tantric* text *Tiksakalpa*, suggests a method for worshipping Goddess *Tara* and the ancient geography of the *Kamarupa*. Some other important *Tantric* texts such as *Hara-Gauri Samaveda*, *Akulavira Tantra*, *Kamakhya Guhyasiddhi*, *Kularnava Tantra*, *Kamaratna Tantra* etc. has provided valuable

information regarding the religious history of ancient Assam (Choudhury, 1959, p. 15-16).

### 2.3 Antiquity of Kamakhya Temple and Kamakhya Tradition

As per the 5<sup>th</sup> century A.D. *Umachal* rock-cut inscription the first temple on the site was dedicated to Lord *Balabhadra Swami* (one of the incarnations of Lord *Vishnu*). Scholars have also suggested the indigenous origin of the site before its transformation and integration into the broader Brahmanical faith. R. M. Nath suggested that the name Kamakhya originated from the *Khasi* mother Goddess name '*Ka-mei-Kha*'. This also indicates the relationship of the temple or Goddess Kamakhya with the *Khasi* ancestral mother worship. Many other scholars mention about the existence of different names of the Goddess Kamakhya popular among different indigenous communities, such as *Bodo-Kacharis* call her as *Kham-Maikha* (the ancient mother), *Garos*, called her *Nuting* and *Muring* (the energy behind creation) etc. (Bhuyan and Nayak, 2010, p. xv-xvi).

The *Kachari Buranji*, describe the *Kachari* royal family as devotees of Goddess *Kecaikhaiti*; even the *Chutiya* kings worshipped Goddess *Kecaikhaiti*, to whom they offered human sacrifices (Mishra, 2004, p. 5).

B. B. Kakati (1989) on the basis of *Kurmapurana*, mentions different names used for the Goddess Kamakhya as "*Kama, Kamada* etc. in which the element *-akhya* was latter attach as a pleonastic derivative used among the other less-known names of the Goddess, such as, *Sivakhya, Nadakhya, Brahmakhya, Hansakhya*, etc. (Kakati, 1989, p. 34). P. C. Choudhury (1941) suggested an Austric or Alpine origin of the name Kamakhya and Kamarupa. He used Austric derivation of the name of Kamakhya given by B. B. Kakati in his book, such as "*the Kamoi (demon) in old Khamer; Kamoit (devil) in Cham, Kamet (corpse) in Khasi; Komui (grave) or Komuoch (corpse) in Santali*" (Choudhury, 1959, p. 38; Kakati, 1941).

#### 2.3.1 Legends associated with the Kamakhya temple

There are several legends and folklore associated with Goddess Kamakhya and her cult found in different ancient texts, local and oral literature. *Borah* (2010) in his work "*Kamakhya Episodes in Traditional History*" mentioned several of these legends related to Kamakhya temple. Here, we are mentioning a few of the important legends

and folklore related to the Goddess Kamakhya and her cult for understanding the evolution of the Goddess Kamakhya as a powerful and important *Shakti* and as pantheon portrayed in different texts and local folklore.

### i) Local Oral Legends

There are several local legends associated with the Mother Goddess Kamakhya and her temple popular among the local inhabitant of Assam. One of the most important legends is about king *Narakasura/ Naraka*. According to this legend king *Narakasura* of *Pragjyotisa* (ancient Assam), influenced by the beauty of the Goddess Kamakhya, offers a proposal to marry her. After several denials, Goddess finally agrees to marry him but with the condition that he has to build a path from the foot of the Nilachala hill to her temple and a water tank near the temple within a single night. king *Naraka* accepted all these conditions and started to build a pathway and a tank. The progress of the construction of *Naraka* was so fast that Goddess Kamakhya became worried. To stop *Naraka* from achieving his goal, she sent a cock to crow to distract *Naraka* and fooled him that the night is over, even though the sun was yet to rise. When cock started crowing, in frustration and anger, *Naraka* chased the cock and cut it into two pieces. The place where the cock was slaughtered is still known as *Kukurakata* and the uncompleted pathway known as *Mekhela ujuwa bat* (Borah, 2010, p. 8; Shastri, 2005).

A similar type of legend is also popular in *Mangaldai* area of *Darrang* district of Assam. The legend mentions, the same over a deal of king *Naraka* and her marriage proposal to Goddess Kamakhya, but the only thing that differs is the condition of Goddess to the *Naraka*. Here, the Goddess put forth a marriage condition in front of *Naraka* that he must construct a stone bridge over the Brahmaputra River, linking the Nilachala hill with *Kailasa* within a single night. Again by seeing the fast progress of *Naraka* work, Goddess Kamakhya sends a *bhairavi* in the form of a cock to fool *Naraka* that night is over, and he failed in completing the condition. In a rage, *Naraka* followed the cock and killed it. The place where the cock was beheaded became a sacred site, and a shrine now dedicated to the cock, known as *Kukurakata Devalaya* still exist in the *Darrang* district of Assam.

There is another legend popular in the *Darrang* district, associated with the Goddess Kamakhya. According to this legend, there was a dedicated priest named

*Kendukalai* in the temple of Kamakhya, during the reign of Koch king, *Naranarayana*. Due to his pure devotion and his knowledge of music and dance, Goddess Kamakhya in her physical form started dancing in the temple. But she warned him not to say anything about her and her dance to anybody. But king *Naranarayana*, who previously rebuilt the Kamakhya temple and also a devotee of Goddess, came to know about the Goddess dancing. He requested *Kendukalai* to help him in getting a glimpse of the Goddess while she was dancing. One day the priest hid the king in the temple, but somehow the Goddess became aware of the presence of the king. In the furious anger, she slapped the priest so hard that his head flew up in the sky and dropped down in his native village, known as *Kalaigaon*. Goddess Kamakhya also cursed king *Naranarayana* that he and his family would never be able to get the blessings from her, and if they dare to come closer to the temple, their entire family would be destroyed. It is very interesting that still today the descendants of king *Naranaryana* never visit the temple and even do not dare to look up at the direction of the temple. A temple named, *Muradewar Devalaya*, was later constructed at the site where the priest's head was fallen.

#### ii) Legends in the *Kalika Purana*

The *Kalika Purana* covers up every inch of detail regarding the Kamakhya temple and also provided a connection with the mainland *Shakta* tradition. There are several legends which are mentioned in *Kalika Purana*, starting from the establishment of Kamakhya temple as a centre of Goddess worship to its importance as a *Shakti peetha*.

In one of the legends, mother earth (*Dhariti*) conceives a baby from the touch of Lord *Vishnu* in his boar incarnation (*Varaha Avatar*). She gave birth to the son during *Kali Yuga* (one among the four *Yuga* or ages in Hindu mythology). King *Janaka* of *Mithila* adopted the child, found in the sacrificial ground and named him *Naraka*. While the mother earth remained with him at *Janaka*'s residence disguised as his nurse named *Katyayani*. At the age of sixteen, mother earth disclosed her identity to him, and they both went to meet the Lord *Vishnu*. In the meanwhile, *Pragjyotisa* was ruled by *Kiratas* under the leadership of *Ghataka*. Lord *Vishnu* brought *Naraka* to the *Pragjyotisa* and asks him to defeat the king *Ghataka* of *Kiratas* dynasty. After throwing out the *Kiratas* from *Pragjyotisa*, Lord *Vishnu* established him as a new king of the country and told

him to worship the Goddess Kamakhya and respect Brahmins. Lord *Vishnu* also advises him that, any negligence in the worship of Goddess Kamakhya and disrespect to any saints, Brahmins, king and Gods would lead him to his death. Under the rule of *Naraka*, *Pragjyotisa* was later renamed as Kamarupa after the Kamakhya Goddess. For few centuries *Naraka* fulfilled every responsibility as a protector and as a sincere devotee of the Goddess Kamakhya, but as time passed, he went to the other direction and started avoiding his duty toward the Goddess and her temple. In one legend, it is said that it is because of the impact of the curse of saint *Vasistha* (Shastri, 2005).

According to this legend mentioned in *Kalika Purana*, sage *Vasistha* once visited Kamarupa to get the blessing from Goddess Kamakhya, but *Naraka* as a gatekeeper of the temple did not allow him to enter the temple. In anger, he cursed both Goddess Kamakhya and *Naraka*. Saint *Vasistha* cursed Goddess Kamakhya, that she will disappear from the temple and *Naraka* will become negligent toward the Goddess, and this will lead him to his death bed from the hand of a human.

With the impact of the curse, *Naraka* lost his faith in Goddess Kamakhya. *Naraka* becomes friends with *Banasura*, the king of *Sonitpura*, who influenced him to give up the worship of Goddess Kamakhya. As his negligence increase, he becomes more demonic and started to disturb everyone. And as his misdeed increases, everyone seeks the help of Lord *Vishnu*. In the very end, Lord *Vishnu* in his *Krishna avatar* (incarnation) killed *Naraka* and established *Bhagadatta* as the new ruler of Kamarupa (Borah, 2010, p. 10-11; Shastri, 2005; Goswami, 1998, p. 15-17).

Another important legend mentioned in *Kalika Purana* connects the local Goddess Kamakhya to the mainland, *Shakta* tradition. This legend, which we already mentioned in our introductory chapter, is the legend about the *Sati*'s self-immolation in the *Daksa Yajna* and the formation of different *Shakta peetha* from the body parts fallen in the earth. This legend is also mention in several other scriptures such as *Devi Bhagavata Purana*, *Matsya Purana*, *Brahmanda Purana*, *Kurma Purana*, *Padma Purana* and so on and *Kalika Purana* quoted it from the earlier existing legend mentioned in these ancient texts. An addition to the legend was made up in *Kalika Purana* to show the importance of Kamarupa, as a *shakti peetha*. According to the extended version of this legend, various sacred abode emerged from the different limbs of the Goddess *Sati* which had fallen in the different places. Here, in the Nilachala hill,

the *Yoni* (genitalia) of *Sati* fell, and the area becomes *Kubjika peetha*, one among the most sacred places of Goddess worship. The hillock where the *Yoni* (genitalia) fell turned into blue colour, and since then the hill came to be known as Nilachala. According to the legend, the *yonis* of the Goddess turned into a stone, which is now worshipped as Mother Goddess Kamakhya (Borah, 2010, p. 12).

### iii) Legends in the *Yogini Tantra*

*Yogini tantra* also provides a hand full of legends associated with the Kamakhya temple. One of the accounts mentioned in the *Yogini tantra* explains the establishment of *yonimandala* (genitalia) on the Nilachala hill.

According to the legend, Lord *Brahma* created the universe and became arrogant over his power of creation. Having seen this, Goddess *Brahmarupa Sanatani Kali* becomes so angry that she created a demon name *Kesi*, out of the body of *Brahma*. Demon *Kesi* runs toward *Brahma* to devour him, by seeing this attack, *Brahma* along with *Vishnu* fled away from the scene. Afterward, the demon *Kesi* established a city named, *Kesipura*, and become the ruler of *Trbhuvana* or three worlds (heaven, underworld and earth). Lord *Brahma* came to his senses and realised his mistake. *Brahma*, along with *Vishnu*, started praying to Goddess *Kali* for her forgiveness and to kill demon *Kesi*. Goddess *Kali* was pleased with *Brahma* and *Vishnu* praying, and she confessed that the demon was created by her from the body of *Brahma* to teach a lesson for his arrogance. She then burnt demon *Kesi* to ashes and told *Brahma* to create a mountain with his ashes. That mountain would grow the edible grass for the cattle and *Brahma* would be released from his sin of arrogance based on the quantity of grass consumed by the cattle. She further told them that, she would be worshipped in the form of *yonimandala* at the spot where demon *Kesi* was killed. Under the guidance of Goddess *Kali*, *Brahma* created a mountain known as *Govardhana parvata*, which was mentioned in the *Yogini tantra* as *Nilakuta Parvata* or the Nilachala hill and Goddess *Kamakhya* is treated as a manifestation of Goddess *Kali* (Borah, 2010, p. 12-14; Goswami, 1998, p. 17-18; Kakati, 1989, p. 34-36).

The legend of the establishment of *Naraka* as a king of *Pragjyotisa* after defeating *Kiratas* and sage *Vasistha* curse on both Goddess *Kamakhya* and *Naraka* was also mentioned in the *Yogini tantra* with modifications.

#### iv) Historical Legends

Several historical accounts prevail in various part of Assam, indicating the historical lineage of different kingdoms that ruled in Assam and their connection with Kamakhya temple (Borah, 2010, p. 14-18). The majority of the legends are associated with the Koch kingdom. The earliest account of Kamakhya is associated with *Biswa Singha*, founder of the Koch kingdom. According to the legend, the Koch king *Biswa Singha* and his brother *Siva Singha* were separated from their armies, when they were fighting against Ahom king. They reached the Nilachala hill, where they found an old lady praying to the Goddess at the *peetha* under a *Vata* tree (banyan tree). She told them to pray to the Goddess to help them in reuniting with their armies. *Biswa Singha* offered prayers to the Goddess and promised her to construct a golden temple on the *peetha* in her name. After reuniting with his army he forgot about his promise to the Goddess, but sometime later he realised his promise and excavated the site, where he discovered the main *peetha* with the *yonis mudra*. He then started construction of a brick temple under the name of Goddess *Kamakhya*, but as he promised to build a golden temple, the brick temple did not last long. Then Goddess came in his dream to remind him of his promise of constructing a golden temple, but he requested the Goddess that the present condition of the kingdom is not good and he will not be able to build the temple in gold. She then gave a solution to the king that, if he puts a minimal amount of gold with every brick, the temple will be able to stand and never fall. Under the guidance of the Goddess, king *Biswa* was able to complete the construction of the temple and allotted seventy-two *Brahman* families (*Basattar Gharia Brahman*) for regulating the daily worshipping of the Goddess in the temple.

The next famous legend popular among the locals was associated with the great Koch king *Naranarayana*, which we already mentioned under the local legend. This legend is about the curse of Goddess Kamakhya, which forbid *Naranarayana* and his ancestors and decedents to visit the Kamakhya temple.

There is another fascinating account of the destruction of the Kamakhya temple by *Kalapahar*, general of *Sulaiman Karrani* of Bengal and its renovation by the king *Naranarayana* and his brother *Chilarai*. The entire episode of the reconstruction and renovation of the Kamakhya temple is mentioned in the *Darrang Rajavamsavali*, a dynastic record of the Koch kings. According to this record, the duty of reconstructing

and renovating the temple was given to the *Meghamukdum*, a commander of the king *Naranarayana*, who completed the task within six months.

There are several other historical accounts available to us, indicating towards the Ahoms kings interest in the *Shakta* cult and the welfare of Kamakhya temple. There is an account of Ahom king *Rudra Singh*, who invited the famous *Mahanta* of the *Shakta* sect *Krsnaram Bhattacharya*, to take *Sarana* (initiation). But the king refused to kneel in front of him as his disciple, feeling humiliated the *Mahanta* return to his native place in *Shimla-Gaon* of *Santipur* of Bengal. In the meantime, Assam was struck with a devastating earthquake. King thought this was because of the discontentment of the *Mahanta* and he requested him to come again to Assam. But before the *Mahanta* reached, King *Rudra Singh* passed away. Before his death, he advised his son *Siva Singha*, to take the initiation from the *Mahanta* and offered the pontiffs of the Kamakhya temple and also granted him the *brahmottara* land. Later on the *Mahanta*, *Krsnaram Bhattacharya* was known as *Parvatia Gosain* (Borah, 2010, p. 12-14).

#### **2.4 History of Royal Patronage to the Kamakhya Temple**

The temple space or religious monuments have been used by royal powers and dynasties to legitimize their rule and display their influence and power. These temples become a symbolic representation of the royalty, power and socio-cultural aspect of that particular region or realm. The beautiful architecture and sculptural art provide ample information regarding the importance of religious space. There are several example of the powerful temples constructed under the patronage of different dynasties and royal powers throughout India like, *Ellora* (Maharashtra), *Aihole* (Karnataka), *Badami* cave temple (Karnataka), *Brihadeshwara* temple (Tanjore, Tamil Nadu), *Elephanta*, *Jaganatha* temple (Orissa), *Khajuraho* (Madhya Pradesh), *Konark* sun temple (Orissa), *Vittala* temple (Hampi, Karnataka) etc. Each of the above temple sites was constructed under the patronage of strong and powerful dynasties in different period.

Similarly, the Kamakhya temple also evolved under the patronage of different dynasties and royal courts. But the main question arises why? Why this site becomes so important that not only it has drawn the attention of local people but also the royal court. Each dynasty ruling Kamarupa (Ancient Assam) wants to associate with this site

in one form or other. This site stayed under the favour of Varman dynasty, Mlechchha dynasty, Pala-Sena dynasty, and Ahom dynasty. The site not only witnessed a change in its material culture, but its faith also evolved under the influence of these royal courts. The markers of their influences were left in the form of Kamakhya belief system and also in its art and architecture. These influences resulted in a series of a transformation of the site from a cave temple to a full-fledged temple group. Thus, while understanding the basic features of this site, we can further answer the question of the importance of religious space in creating a political identity.

Each dynasty ruling Assam has contributed to the progression of the site as evident from the epigraphical evidence found in the sites. More than eighteen inscriptions have been found written on stone, seals, and copper plates, such as *Umachal* Rock inscription; *Bhaskaravarman's Doobi* plates and *Nidanpur* plates; *Vanamala's Tezpur* and *Parbatiya Plates*; king *Indrapala's* grant inscription, several other stone inscriptions found in the *Kamakhya* temple premises. indicating the fact that adequate royal patronage had been provided to Kamakhya temple and its cult (Mishra, 2004, p. 4, Sarma and Borah, 2010, p. 126-130).

The inscriptions engraved on stone or rock basically provide information about several construction works, such as renovation, maintenance, and adding a new architectural element in the temple etc. that has been undertaken by different kings in their respective reign. The copper grants cover the information regarding several lands and other grants to the temple and temple personnel from time to time (Sarma and Borah, 2010, p. 127).

One of the earliest descriptions about temple construction activity in Nilachala hill is found in the *Umachal* hill rock inscription, which dates back to 5<sup>th</sup> century A.D. This inscription mentions the construction of a cave temple for Lord *Balabhadra Swami* (one of the forms of Lord *Vishnu*) under the patronage of *Maharajadhiraja Sri Surendra Varman*. While the earliest reference about the Kamakhya temple is found in the 1565 A.D. stone inscription at Kamakhya temple mentions that the renovation work of the Kamakhya temple was completed under the patronage of Koch king *Naranarayana* and his brother *Chilarai* (Sarma and Borah, 2010).

The *Darrang Rajavamsavali* (a dynastic record of Koch kings) mentions the entire episode of the reconstruction and renovation of the Kamakhya temple by the Koch king *Naranarayana* and his brother *Chilarai*. According to this record, the duty of reconstructing and renovating the temple was given to the *Meghamukdum*, a commander of king *Naranarayana*, who completed the task within six months. The renovators failed in two successive attempts with stone masonry and then reconstructed the temple using old stone architectural remains and bricks. A similar account is also given in two inscriptions in the *calanta* section of the Kamakhya temple (Mishra, 2004, p. 5-6).

There are several other inscriptions, which mention construction and renovation work in the Kamakhya temple as well as in the other temples located in the vicinity, completed under the patronage of numerous kings. The stone inscription of *Pandunath* temple (1585 A.D.), mentions about a palace-like temple built by the Koch king *Naranaryana's* nephew, *Raghudeva*; the stone inscriptions of *Kamesvara-Shiva* temple and *Siddheswar* temple (both dated 1718 A.D.), mentions about the construction of the respective temples by the officer *Bijoy Tarun Deka Barphukan* under the patronage of Ahom king *Siva Singha*; the *Kamaleswar* temple inscription (1728 A.D.), mentions the construction of this temple under the patronage of Ahom king *Siva Singha* wife, *Bar-raj Phuleswari*; the stone inscription of *Amratakeswara* temple (1744 A.D.), mention about the construction of a temple and a water tank *Durgasarobar*, by the the officer *Tarun Duwara Barphukan* under the patronage of Ahom king *Pramatta Singha*; *Phalgutsav* temple rock inscription (1750 A.D), mentions the construction of the *Phalgutsav* temple, by the officer *Tarun Duwara Barphukan* during the reign of Ahom king *Pramatta Singha*; *Kedar* temple stone inscription (1751 A.D.), mentions the construction of this temple by the officer *Tarun Duwara Barphukan* during the reign of Ahom king *Rajeswara Singha*; Stone inscription installed in the *Natmandir* attached to the Kamakhya temple (1759 A.D), mention about the construction of the *Utsava mandir* attached to the Kamakhya temple by the officer *Dasaratha Tarun Duwara* with the patronage of Ahom king *Rajeswar Singha* (Sarma and Borah, 2010, p. 127-129).

From time to time, several lands and money grants have been offered by different kings in the names of different Goddesses, mentioned in different copper plates and stone inscriptions scattered throughout the state. Several other stone and

copper plate inscriptions available to us, mentions numerous other grants for temple construction and renovation offered by different kings during their respective reign.

There are copper plate inscriptions, which mention about the various grants issued by different kings to the Kamakhya temple and the temple personnel such as, the land grant inscription of Kamakhya, *Pandunath* (1751 A.D.), mentions about the 400 puras of land grants was issued to the priests of three temples in Kamakhya during the reign of Ahom king *Siva Singha*, it also provided a long list of the names of *Brahmanas*; copper plate land grant to the *Bhubaneswari* temple, mentions a land grant issued by the officer *Bhitaruwal Phukan* during the reign of Ahom king *Gaurinath Singha* to the priest of *Bhubaneswari* temple; copper plate inscription of *Gourinath Singha* (1782 A.D.), mentions about one lakh sacrifices, which were offered to the Kamakhya temple by the Ahom king *Gourinath Singha* and executed by *Haranatha Barphukan*; copper plate inscription of *Brahmottar* grant in the *Bangsar-Pargana* (1717 A.D.), mentions the donation of 30 puras of wet paddy land to the Kamakhya priest *Sri Vidyavagisa Chakraborty* by the officer *Auija Duwara Barphukan* during the reign of Ahom king *Siva Singha*; copperplate inscription of *Nankar* in the *Nambar-bhag Pargana* (1763 A.D.), mentions a land grants of eighty puras given to one of *Jagatnanda Majumdar* of *Kamapitha* (Kamakhya *peetha*) during the reign of Ahom king *Rajeswar Singha* (Sarma and Borah, 2010, p. 128-129).

All these evidence are a clear indication of the royal attention to the construction and renovations of temples of *Shakta* faith. There are several accounts, where the kings have contributed a significant amount from the royal fund in the service of Goddess/*Devi* and constructed different temples, water tanks, pathways and offered sacrifices in her name. One of the accounts mentions the copper plate inscription of Ahom king *Gourinath Singha*, who offered one lakh sacrifice to the Kamakhya temple (Sarma and Borah, 2010, p. 129).

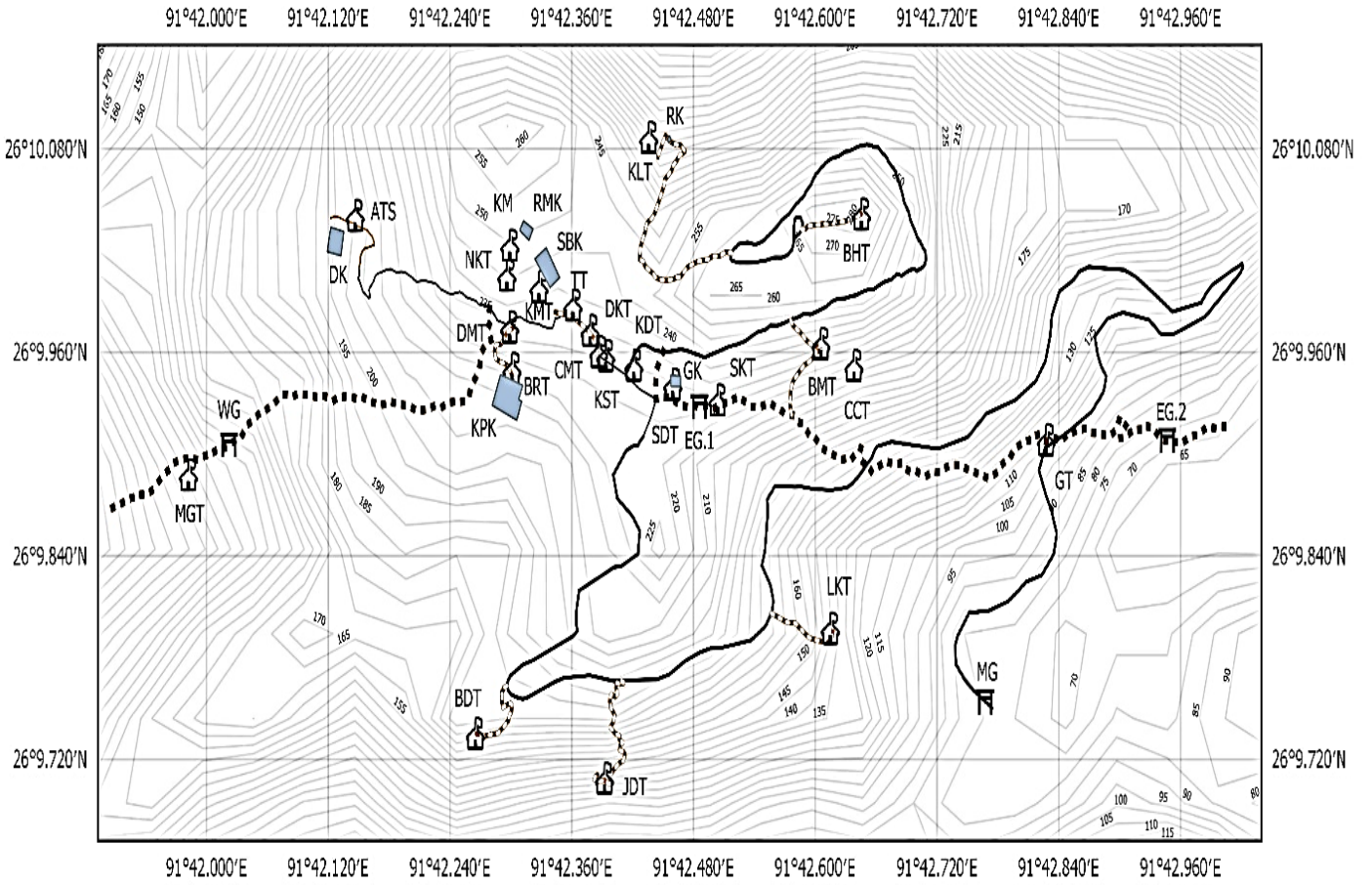
The royal attention to the temple provided a two-way benefit to both the empire and the Goddess cult. As due to the royal patronage, the Goddess cults are able to survive in the long run and accepting the local Goddess cult helped the empire to build a favourable position in the reign and also help them to subsume in the local tradition.

## 2.5 The Archaeological Setting of Kamakhya Temple

The main Kamakhya temple is situated about 180 meters above the surrounding plains between 26°09'59.9"N to 91°42'19.7" E. The contour map of the archaeological site of Kamakhya (Figure 3) display all the geophysical characteristics of the site with 5 m of the contour line (scale 1:5700). The Nilachal hill, where the Kamakhya temple is located, is surrounded by the Maligoan area in the West, Dipor bill in the South, Kalipur in the East and Brahmaputra River in the North. Today, the site is accessible from three different land routes, the modern road, known as the *Kamakhya Mandir* (temple) road and other two from eastern and western gateways. There are four gateways on the site. The *Kamakhya Mandir* (temple) road originating from the main Kamakhya temple covers a distance of around 2.98 km or 1.85 mi distance and connects to the Assam trunk road in Guwahati. The route originating from the east side of the main Kamakhya temple covers a distance of around 1.77 km or 1.1 mi and connects to the same Assam trunk road in Guwahati. The route originating from the west side of the main Kamakhya temple covers a distance of around 1.18 km or 3884.98 mi and connects to the Pandu port road in Maligoan in Guwahati.

A fourth route connects the site to the bank of Brahmaputra River. This route must have facilitated access to the complex by people living across the river which have been the only route to the complex from the north before the construction of Saraighat Bridge over the Brahmaputra River. This route starts from the bank of Brahmaputra, and a series of stairways pass through the *Kotilinga* temple and ends only a few meters away from the *Bhubaneswari* temple on the site. The numbers of dockyards present on the bank of Brahmaputra River suggest that the river route was an important way to access the temples. The pilgrims travelling through the river route must have landed on these *ghats* (docks) then used the pathway to reach the temple (Sarma P. 2010). There is a temple on the foot of this route near the bank of the Brahmaputra River, known as *Siddhi Ganesha* temple, which is approximately 556 steps down from the *Kotilinga* temple.

### Contour Map of the Archaeological Site of Kamakhya Temple



### Legend

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>⌄ ATS/TKS [Amratakeswara Temple/Tokeswara Temple]</li> <li>⌄ BDT [Bandurga Temple]</li> <li>⌄ BMT [Bagalamukhi Temple]</li> <li>⌄ BRT [Bhairavi Temple]</li> <li>⌄ BHT [Bhuvaneshwari Temple]</li> <li>⌄ CMT [Chinnamasta Temple]</li> <li>⌄ CDT [Chiddeswari Temple]</li> <li>⌄ DKT [Dakshinakali Temple]</li> <li>⌄ DMT [Dhumavati Temple]</li> <li>⌄ GT [Ganesh Temple]</li> <li>⌄ JDT [Jay Durga Temple]</li> <li>⌄ KMT [Kamakhya Temple]</li> <li>⌄ KST [Kamaeswara Temple]</li> </ul> | <ul style="list-style-type: none"> <li>⌄ KDT [Kedareswara Temple]</li> <li>⌄ KLT [Kotilinga Temple]</li> <li>⌄ LKT [Lalit Kanta Temple]</li> <li>⌄ MGT [Mahakal Ganesh Temple]</li> <li>⌄ NKT [Namath Kali Temple]</li> <li>⌄ SKT [Shasankali Temple]</li> <li>⌄ SDT [Siddheswara Temple]</li> <li>⌄ TT [Tara Temple]</li> </ul> | <ul style="list-style-type: none"> <li>■ SBK [Shubhagaya Kund]</li> <li>⌄ EG.1 [Eastern Gateway No. 1]</li> <li>⌄ EG.2 [Eastern Gateway No. 2]</li> <li>⌄ WG [Western Gateway]</li> <li>⌄ MG [Modern Gateway]</li> </ul> |
| <p>Routes</p> <ul style="list-style-type: none"> <li>— Main Road (Modern Road)</li> <li>— Concrete Walkways</li> <li>⋯ Rubble Pathways (Ancient Pathways)</li> <li>⋯ Stairways</li> <li>— Tracks</li> <li>— Contour [5m]</li> </ul>  |  |  |



Figure 3. Contour Map of the Archaeological Site of Kamakhya temple.

## 2.6 Situating Kamakhya on the Geographical and Cultural Landscape of Nilachal Hill

Scholars have studied the impact of culture on shaping the landscape, but multifaceted cultural sites like Kamakhya raise a different question altogether. The site has been exposed to different cultures over a course of fifteen hundred years (as noticed from epigraphical records), and these cultural phases are deeply embedded in the art and architecture of the site. This is not merely a coincidence that the different cultural groups have chosen the same site just because the site holds a spiritual connection to *Shaktism*, but because it shares superior geographical features that make the site stand out from the nearby regions. This cohesive relationship between geography and culture has been a matter of study since the beginning of the 20<sup>th</sup> century. Scholars like Vidal de la Blache (1926), Herbert J. Fleure (1927), Cyril Fox (1932), Myres (1953), Lehmann and Kirsten (1950, 1956, 1959) advocated the importance of geography and environment over the development of certain cultural traits and settlements and also emphasise the role of geographical space on the patterns of human behaviour (Gkiasta, 2008).

The ancient Indian text of art and architecture, known as *Sthapatya-Sastra* or *Sthapatya-Veda* (*Sthapatya*= architecture, *Sastra*= manual or principle, *Veda*= knowledge), mentions the importance of a site/region/geography while selecting a place or space for temple construction. Even in the ancient text, *Brihat Samhita* mentions of types of places that are considered ideal for the deity or God to reside or wander.

सलिलोद्यानयुक्तेषु कृतेष्वकृतकेषु च ।  
स्थानेष्वेषु सान्निध्यमुपगच्छन्ति देवताः ॥३॥

*Brihat Samhita*, L VI. 3.

According to this hymn, God or divinity loves to reside in places where there are plenty of water sources and natural as well as artificial gardens (Subrahmanya Shastri & Ramkrishna Bhat, 1946, p. 492).

वनोपान्तनदीशैलनिर्झरोपान्तभूमिषु ।  
रमन्ते देवता नित्यं पुरेषूद्यानवत्सु च ॥८॥

*Brihat Samhita*, LVI. 8.

According to the above hymns, God or divinity always played where there are forests, rivers, mountains and springs and in the town surrounded by pleasure garden (Kramrisch, 1946, p. 2; Subrahmanya Shastri & Ramakrishna Bhat, 1946, p. 493).

This indeed reflects how the surrounding geography becomes a very crucial factor in the creation of a site or a settlement, especially in the creation of sacred geography. The ancient Indian text *Sthapatya-Sastra (Upavedas)* has mentioned the precise quality or characteristics of land/site/space for the construction of a temple and a pilgrim place. This text comprises two important *Sastra*, namely, *Vastu and Shilpa Sastra*. The *Vastu Sastra* further consists of two important texts known as *Manasara* and *Mayamata*. These two ancient texts provide procedures for temple construction and guidelines for soil testing techniques, orientation, measure and proportion, astrology, and ceremonies associated with the construction of buildings (Shukla, 1972).

In *Manasara*, the process of selecting a site for temple construction is known as *Bhumi- Samgraha*, and in *Mayamata*, it is known as *Bhu-Parigraha*. The selection of land for temple construction is a very complicated process, as a temple is a place of worship, and it needs to be built on a sacred and pure fertile land. It is recommended in ancient texts that the temple should be built on the banks of a *Theerthha* (place of pilgrimage), river, lake, seashore, on a hilltop of mountain slope; in a forest, grove or garden; middle of a village, town or city or in any other lovely place. The availability of water exclusively for temple rites is necessary.

The very concept of a temple is *Moksha* (the final liberation from the cycle of rebirths). The ultimate aim adds to the importance and suitability of a site. According to *Thanthra Samuchaya*, the land is classified into three types based on flora, terrain, the texture of the soil, slope etc., i.e. *Utthama* (best or virtuous), *Madhyama* (ordinary) and *Adhama* (lowest). The main characteristics of an ideal land are that the land should have a ground level with trees, fruit groves, flowery plants, cows and people and a slope towards east. A place where a river flows in a clockwise direction is considered ideal (Shukla, 1972; Harshananda, 2001).

This in-depth description of an ideal site for temple construction is so precise that if the site missing any one of the features will be completely rejected and declared

unfit or unholy. The ancient architects followed these laws very seriously, even nowadays, these texts are considered as a manual or guiding principle for construction.

The Nilachal hill, the abode of Mother Goddess Kamakhya, shares these traits and characteristics of ideal land for temple construction. The temple site shares qualities like; situated on the top of the hill or mountain (Nilachal hill), situated on the bank of a river (Brahmaputra), and situated close to the settlement area and agricultural land. The most important among others is the availability of potable water on the hill in the form of man-made and natural ponds, accommodating the needs of the temple as well as the people residing in the area.

Here, the Brahmaputra River also has its influential role in making this specific site so important and significant. The Brahmaputra River not only brought the fertile alluvial soil to the valley but also played a very significant role in providing a trading route since ancient times. It has been known that India had its trading relationship with China through two routes, one through Silk Route and second through the Brahmaputra Valley. The reference from the Chinese text of Chang Kien (2<sup>nd</sup> B.C.), the French Sinologist and Orientalist Paul Pelliot suggest that there was a trade relationship between Assam and China as early as 2<sup>nd</sup> century B.C. (Ansari & Dhavalikar, 2006). Excavation at the site Ambari (Guwahati) reveals hordes of pottery which were both indigenous and foreign (Chinese Celadon, Arrentine, and Rouletted Ware) in character suggesting an Indo-Chinese and Indo-Roman trade route through Brahmaputra valley (Sharma T., 1989). During the period of Ahom dynasty, the place *Dighalipukhuri* (nearby the site Ambari) acted as a part of *Noubahar* of the *Paniduar* (port) facilitating the waterway conveyance across the country (Choudhury, 2006).

During this flourishing time of trade and commerce the Nilachal hill, situated on the bank of Brahmaputra River operated as a landmark for the travellers travelling to this further region of the country. The Nilachala hill served travellers with potable water, shelters and relief from a long and tiresome voyage. This is indeed a very old age tradition where the temple situated on the seashore or near riverbank becomes an important landmark for travellers. The Konark Sun temple of Odisha, also known as 'Black *Pagoda*' and Jagannatha temple of Puri, also known as 'White *Pagoda*' are the famous examples of such practices (Raezer, D., & Raezer, J. 2012).

Before the construction of Saraighat Bridge over the Brahmaputra River, this route must have provided a way for the people living across the river to visit the temple. There are eleven river docks (*ghats*) on the bank of Brahmaputra River, extended from the eastern lower level of Nilachala hill (*Kalipur*) to the western lower level of Nilachala hill (*Pandunath*). The names of the river docks (*ghats*) are, *Sagundhuti, Bahguri, Outal, Machine-Ghat/Hanumantaduar, Koharghat, Hatisila, Gosainghat, Latimaghat, Tempelghat, Amrali/Amrajulighat and Chakreswarghat*. The travellers or visitors travelling through the river route landed on these *ghats* then used the pathways on the hill (See figure 3) to reach the temple (Sarma P., 2010).

However, the annual floods in Brahmaputra River also can be one of the reasons for ancient dwellers to reach for the higher elevation instead of the plains. Every year during the monsoon season (June-September), the Brahmaputra River experiences severe flood bringing huge loss and destruction in the Brahmaputra valley (Dhar & Nandargi, 2000). In this case, these elevated ground/ hill or uplands become a haven for the settlers. These elevated grounds, on the one hand, provide relief from the devastating flood and on the other hand, provide a stable source of resources throughout the year. On the other side, the plain of the valley suffers the wrath of the Brahmaputra River during summer and drought in the winter season (Sharma S., 2007). All year round availability of the freshwater in this elevated ground, even during the winter seasons makes it suitable for settlement. The evidence of Neolithic pottery found at the site also indicates the importance of the hill among prehistoric settlers (Ratha S N., 1965-66). The hill does indeed provide a better and sustainable source of flora and fauna, and the presence of these perennial streams just added an extra advantage for the settlers. On the Nilachala hill, there are many perennial streams sprouting out from the granite crevices. These perennial streams entwined with cultural and mythical meaning become an integral part of the hill and are worshipped as sacred *peetha* and *kund* (sanctified ponds).

## **2.7 The “Sacred” Water Bodies in the Nilachala Hill**

The significance of water bodies or resources in the temple premises is mentioned in various ancient Hindu scriptures and texts. These water bodies are not merely sources of water but are endowed with spirituality and religious enigmas and are transformed into magical and wish-fulfilling entities. Now the terms like sacred and

ritualistic are attached to the water creating a different meaning altogether. In *Chandogya Upanishad*, the sacredness of water resources and their role in making any site/ place sacred is mentioned many times throughout the text. The text mentioned how water is an essence of life without which every life form will cease to exist.

I. आपो वा अन्नाद्भूयस्यस्तस्माद्यदा सुवृष्टिर्न भवति  
व्याधीयन्ते प्राण अन्नं कनीयो भविष्यतीत्यथ यदा सुवृष्टि  
र्भवत्यानन्दिनः प्राणा भवन्त्यन्नं बहुभविष्यतीत्याप एवेमा  
मूर्ताः येयं पृथिवी यदन्तरिक्षं यद् घौर्यत्पर्वता यद्देवमनुष्या  
यत्पशवश् च वयांसि च तृणवनस्पतयः श्वापदान्याकीट  
पतङ्गपिपीलकमाप एवेमा मूर्ता अप उपास्वेति ॥१॥

II. स योऽपो ब्रह्मेत्युपास्त आप्नोति सर्वान्कामांस्तृप्तिमान्  
भवति यावदपां गतं तत्रास्य यथाकामचारो भवति ।  
योऽपो ब्रह्मेत्युपास्तेऽस्ति भगवोऽद्भ्यो भूय इत्यद्भ्यो वाव  
भूयोऽस्तीति तन्मे भगवान्ब्रवीत्विति ॥२॥

*Chandogya Upanishad – 7.10-1 & 2.*

According to the above hymns, water is the reason for the existence of life on earth. The food sources on earth will not exist if there is no rain. Insufficient rain will affect the productivity of the earth and will cause drought, which ultimately causes the disturbance among the living beings, and they will starve to death. Every living being on the earth will cry, weep, and feel distraught in the absence of food because of the less rain or no rain at all. Without food, life on the earth will perish, and without water, the food sources will become nil. Therefore, without water, there will be no food, and without food, there will be no life on earth. However, in the case of an adequate amount of rainfall, all living beings will rejoice, and there will be plenty of amount of food. The element water is present everywhere; it is in the earth, sky, heaven, Gods, humans, animals, plants and even in the smallest organisms. Therefore, it is important to meditate upon the water.

The second hymns mention the merits of meditation upon the water. How one who meditates upon the water, as *Brahman* will obtain satisfaction and all of his wishes will be fulfilled. He will be independent, just like the flow of the water. Therefore, water is most celebrated among the entire elements present, and it is the essence of life (Jha, 1923, p. 188-89; Swami Krishnananda, 1982, p. 211-12).

On the Nilachala hill, these small perennial streams played a significant role in shaping the cult of Kamakhya. Majority of the deities in the site are worship in an aniconic form as a *peetha* (seat) filled or moist from the perennial underground streams oozing from the bedrock of the *garbhagriha* (sanctum sanctorum) of the temple (Figure 4). The water at the site has no gender, as the majority of the deities are worshipped in the same manner irrespective of their forms and nature. However, the treatment or sacredness of the water in the *peetha* changed from male God to female Goddess, for instance, water from the *peetha* of main Kamakhya temple is considered sacred and should be handled with precaution and respect. While the same water source flowing through these underground channels and emerges at *Kamaesvara* temple and *Siddheswara* temple are open for public use.

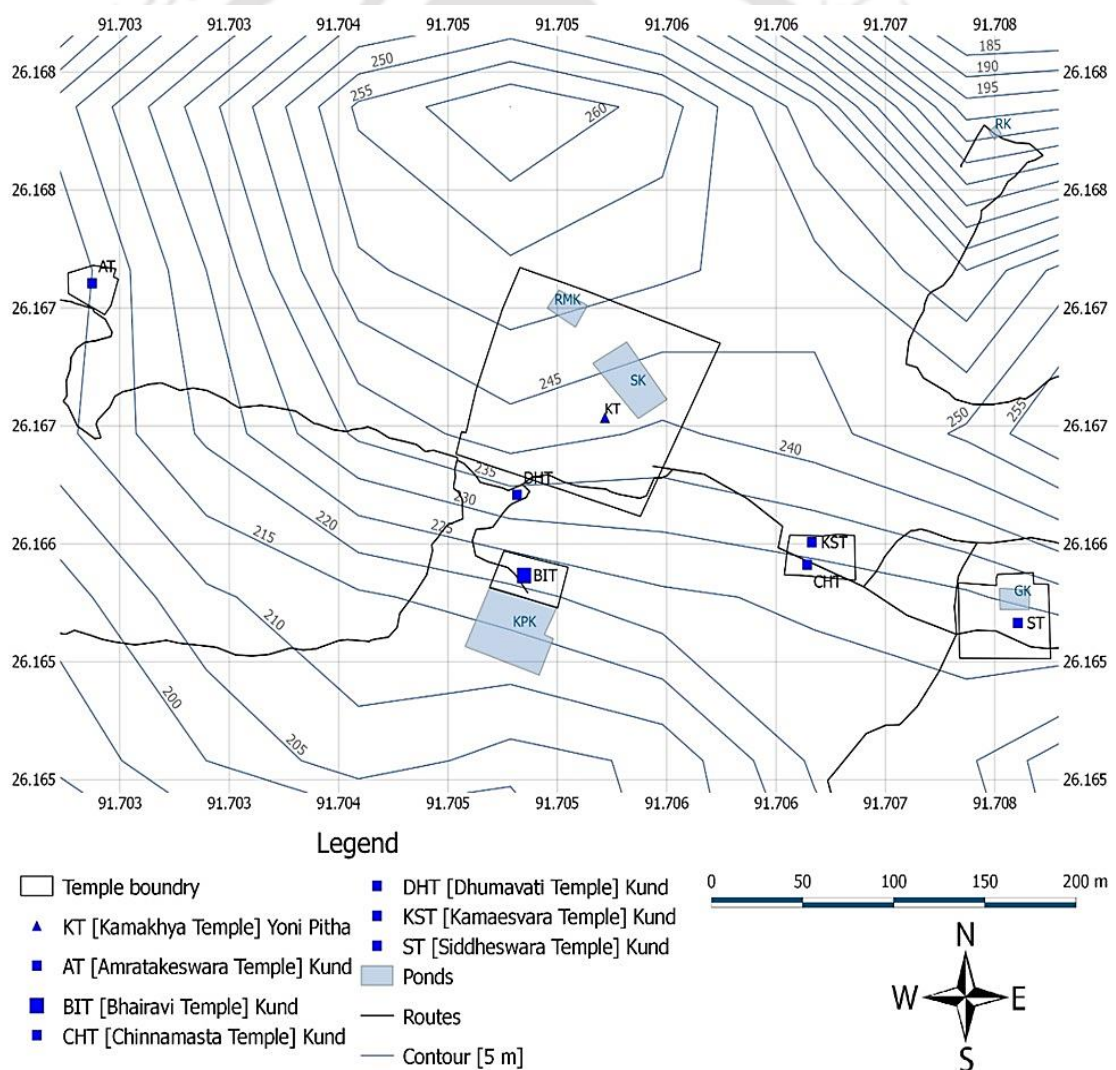


Figure 4. This map listed all the ‘*Peethas*’ and ponds found in the archaeological site of Kamakhya temple with 5 m contour line (scale 1:3400). The triangle depicts the *yoni*

*peetha* in the main *Kamakhya* temple. The contour lines are relatively broad at the top of the hill indicating that the portion is flat which makes this area more suitable for the construction of water tanks and ponds.

The local inhabitants of the hill call these perennial streams *Akashi Ganga*. These perennial streams are also one of the primary water sources for many *kund* (ponds) at the site. There are six man-made ponds at the site; namely, *Shubhagaya Kund*, *Rinmoksha Kund*, *Kacha-Pukhuri*, *Rama Kund*, *Gaya Kund* and *Durga Kund* (Table 1) and each *kund* is entirely dependent over these perennial streams and rainwater. Every *kund* (sanctified ponds) is constructed in the vicinity of the temple, such as *Shubhagaya kund* and *Rinmoksha kund* are located inside the compound of the main *Kamakhya* temple. The *Kacha-Pukhuri* is situated inside the compound of the *Bhairavi* temple, *Gaya kund* is in the *Siddheswara* temple, *Durga kund* is near the *Amratakeswara* temple, and *Rama Kund* is in the *Kotilinga* temple (Figure 4). Among these *kund*, the most important and famous is the *Shubhagaya kund* of the *Kamakhya* temple. As per the lexicon, *Shubhagaya* means good luck or good fortune. This *kund* is considered the most sacred *kund* of all and has a ritualistic value attached to it. It is necessary for everyone to take a ceremonial bath (or a symbolic one) in the *Shubhagaya kund* before visiting the Mother Goddess *Kamakhya*. The *kund* is supposed to remove all the sin of the devotee or a visitor and makes him/her suitable for the visit to the Mother Goddess *Kamakhya*.

In the adjacent *Rinmoksha kund* (*Rin* (debt) and *Moksha* (salvation)) the devotees perform ancestral worship once a year. Ancestral worship is an age-old tradition here. The water signifies a safe passage toward's heaven. In the *Rinmoksha kund*, people perform a special rite called *Pitru Tarpan* (*Pitru*=ancestor, *Tarpan*=satisfying others through offering). In this ritual, people satisfy the departed soul of their ancestors or dead relatives and God by offering them water for peace and prosperity.

Out of the six *kund*, only two serve ceremonial purposes and create an individual identity from the temple while other *kund* are just parts of the main structure of the temple. The *Subhagya kund* and *Rinmoksha kund* achieved much fame because of its locality. Both of the *kund* is situated inside the compound of the main *Kamakhya* temple.

However, the *Durga kund* is the most isolated and neglected *kund*, situated near the *Amrakeswara/Tokeswara* temple. This *kund* has lost all of its credibility and due to the negligence, the *kund* is slowly turning into a swamp. Due to the shift in the power of the Kamakhya administration in 2015 (Riju Prasad Sarma etc. etc. Versus State of Assam & Ors, 2015), several restoration works were taken under consideration. The restoration of *Durga kund* was one among the many other restoration plans sanctioned under the new administration of the *Bordeories Samaj*.

The *Kacha-Pukhuri* is another interesting *kund*, situated inside the compound of *Bhairavi* temple. Here, the '*Kacha*' means turtle and '*Pukhuri*' means water tank. This pond carries no sacred or ceremonial values but is famous because it acts as a reservoir for the endangered softshell turtles. The present tank helps in the conservation of the three most endangered species of the freshwater softshell turtle, namely *Nilssonia nigricans* (black softshell turtle or Bostami turtle), *Nilssonia gangetica* (Ganges softshell turtle) and *Nilssonia hurum* (Indian peacock softshell turtle) (Devi & Mishra, 2017).

The *Gaya kund* in the *Siddheswara* temple and *Rama kund* in the *Kotilinga* temple have somewhat been able to retain a ritualistic value but not similar to the *Shubhagaya kund* of the Kamakhya temple. Both *kund* has been renovated many times, indicating that these *kund* were able to attract the interest of the devotees as well as of the temple committee (Sharma S., 2010).

Table 1. Type of *kund* (sanctified ponds) in the archaeological site of Kamakhya.

S. No	Temple	<i>Kund</i> (sanctified pond)
1.	<p style="text-align: center;"><b>Kamakhya Temple</b></p> 	<p style="text-align: center;"><b><i>Shubhagaya Kund</i></b></p>  <p style="text-align: center;"><b><i>Rinmoksha Kund</i></b></p> 
2.	<p style="text-align: center;"><b><i>Siddheswara Temple</i></b></p> 	<p style="text-align: center;"><b><i>Gaya Kund</i></b></p> 
3.	<p style="text-align: center;"><b><i>Bhairavi Temple</i></b></p> 	<p style="text-align: center;"><b><i>Kacha-Pukhuri</i></b></p> 

4.	<p><b><i>Amrakeswara /Tokeswara temple</i></b></p> 	<p><b><i>Durga Kund</i></b></p> 
5.	<p><b><i>Kotilinga Temple</i></b></p> 	<p><b><i>Rama Kund</i></b></p> 

The main question here is who decided the sacredness of the water in these *peetha* and *kund* (pond)? What are the parameters used to define the sacredness? As mentioned in the ancient texts, *Puranas* and *Upanishads*, water is an essential element for every ritual and rites for purification, and it is the most important element of the life (Essence of the life). So how this demarcation occurs on the site and how the same water originating from the same source becomes more sacred at one point or less sacred at another point is a larger question to answer.

The parameter of “Sacredness” in a religious site is governed by many factors. This also depends on how the term “Sacred” evolved in the site. The three main factors that play a very vital role in deciding the sacredness of these water sources in the site includes, the site core belief system, locality or accessibility and the last but not least the land-human relationship.

The notion of sacredness is highly depended over the core belief of the site. As it is a *Shakta* site, which also shares the attributes of the prehistoric Mother Goddess cult, the idea or notion of fertility will always be a prime deciding factor for sacredness. Here, the water becomes a symbol of fertility, birth and a source of life and all this is

closely associated with the cult of the Mother Goddess. Symbolically here, water becomes a mother who gives birth, nurture and who ultimately also provides a passage to salvation. Therefore, the spiritual meaning attached to the water resulted due to the core belief of ‘fertility’, the *Yoni* (vulva) and this can be one the deciding factor for such a demarcation between *peetha* is a *Devi* (Goddess) temple and a *peetha* is a *Deva* (god) temple.

Apart from the theological aspect of water, being a nurturing and fertility symbol in the Hindu religion, the other factor that should be responsible for such demarcation is the locality of the *peetha* and *kund*. In the site, the Kamakhya *peetha* is considered most important and sacred because it is located inside the main temple and its association with Goddess Kamakhya. The same goes for the *Shubhagaya kund* and *Rinmoksha kund* being sacred and most popular among other *kund* in the site because it is located in the vicinity of the main Kamakhya temple. However, among the *peetha*, the most neglected one is the *peetha* of *Tokeswara/Amratakeswara* temple (Figure 4), the same goes for the *Durga kund*. Both are located in the furthest west of the site and is hardly visited by devotees. The confusion in the name itself shows that this temple hardly gets any attention from the devotees and only the inhabitants of the hill known about the existence of this temple. Surprisingly the temple also has a stone inscription installed inside the *antaral* (vestibule) of the temple that mentions that the temple was constructed by the Ahom official *Tarun Duwara Barphukan* under the patronage of king *Pramatta Singha* during 1744-1751 A.D. (Figure 5) (Sarma & Borah, 2010). How this historically significant site is missed by the devotees again raise the question of the level of sacredness attached to the temples of the Nilachal hill. The locality or the accessibility to the temple is also one of the reasons that might have affected the popularity of the *peetha* amongst the devotees. However the temple is in perfect condition, so does the other temple at the site. This is not the case for the *Durga kund*, which is located just a few meters distances away from this temple.



Figure 5. Amratakeswara temple *peetha* (covered with a red cloth) in the *garbhagriha* (sanctum sanctorum) of the temple, B) Water *kund* inside the *garbhagriha* (sanctum sanctorum) enclosed with a brick wall, C) Stone inscription (1744 A.D.) installed inside the *antaral* (vestibule) of the temple.

During the documentation, we were able to find a priest performing a daily ritual inside the temple, but this is because the priest and his family are living next to the temple complex. One small *Kund* enclosed with a brick structure originated from the same underground perennial stream of the *peetha* in the *garbhagriha* is open for public use, especially for the family of the priest (Figure 6).



Figure 6. Small *kund* enclosed with a brick structure, located inside the temple compound of *Tokeswara/ Amratakeswara* temple.

The last crucial factor of sacredness is the inter-relationship between humans and land. This also reflects how human beings changed the landscape according to their needs and understanding. The site blessed with the perennial streams sprouting from the granite crevices is part of the physiognomy of the hill. Here, the water is not defining the sacredness, but it is human beings who perceive it to be sacred (Carmichael, Hubert, Reeves, & Schanche, 1994). The site geography provides granite crevices, oozing drinkable water from the underground perennial streams, but it was the inhabitants or users of the space who decided which spring or pond should be considered sacred and worshipped.

The whole question of the sacredness starts from the conscious mind of the human being. The conscious decision of human beings was continuously shaping and reshaping the landscape and its surroundings to cater to the needs of the settlers on the hill. The 'needs' that attracted the settlers to this hill is also the prime reasons behind this artificial segregation among the certain *peetha* and ponds at the site. The conscious decision of the inhabitants and users to consider a particular *kund* for ritualistic purposes or the common use is based on the needs of the inhabitant of the hill.

However, both the faith and beliefs of the local inhabitants also unknowingly guided their action in this direction. Living under the umbrella of a strong *Shakta* cult inevitably makes them more inclined towards the *Shakta* or Goddess temples, and so does towards the Goddess *peetha* and *kund*. Being sacred or not, photography inside any temple is prohibited by the committee managing the temple. This reflects the role of humans in creating the laws and rules governing the religious integrity of the site.

The presence of underground perennial streams inside the *garbhagriha* of the temple must be, considered as a default setting of the site. The ancient dwellers must have understood the significance of such water resources and constructed the temple without specifying the notion of sacredness. In the end, this benefited both the temple and the site. On the one hand, the temple protected and preserved such water sources from being depleted and on the other hand, it provided a spiritual aspect to the temple.

The site enjoyed the geographical advantage over its nearby regions, and this indeed becomes one of the reasons that the site still enjoys its status as an important landmark in Assam. In India, where people have minimum or no information about this

furthest part of the country, but they are fully aware of the existence of the Kamakhya temple as one of most important *Shakta Peetha* in India. The site attracts lakhs of people from all around the country, from politicians to wealthy business tycoon and it now it has become a tourist destination in Assam.

By this argument, the relationship between the symbolic landscape and physical landscape is not underestimated and are equally responsible for the creation of such sacred geography. Here, Nilachal hill indeed played a significant role in providing a safe and secure ground, but it was the Kamakhya and her cult that made this land, a part of the broader pan-Indian religious landscape.

This phenomenon can be especially witnessed during the *Ambuvachi Mela* (*Ambu= water, Vachi=speech*), conducted every year in the month of *Asad* (June-July). This three to four-day festival celebrates the menstruation of the Goddess Kamakhya and is considered the most auspicious time to visit the temple. It has been said that during this period, the stream flowing through the *yonis mandala* inside the *garbhagriha* (sanctum) of the main temple turns red, thus indicating the beginning of the menstruation of the Goddess. During this period, every type of rituals is prohibited, and because the Goddess is resting inside the temple, the temple gates are closed for the devotees. Inside the *garbhagriha*, the *yonis mandala* is covered with a white cloth called *angavastra* or *rakta vastra* that turns red from the water (?). Why and how this happened, is still not clear. On the last day of her mensuration, the deity is purified by a ceremonial bath (*Suddhi*), and the piece of this red-stained *angavastra* is distributed among the devotees. Here, the red stains on the white cloth signify the menstruation blood of the Goddess (Borah, 2010). Here the water infused with the spiritual connotation of fertility cult becomes a living entity, playing its role as a sustainer and as a purifier. This represents how geography became a base for such an elaborate system of belief and also how these belief systems transformed and enhanced the significance of such geographical features.

These answer our two most important question that which evolved first, the temple site or the beliefs system. Moreover, how has this particular belief system reshaped the landscape and has had an everlasting impact on its existence? Indeed, the geographical features evolved first and it was the prime reason behind the interest of the ancient dweller, but at the end, it was the belief system, which provides a spiritual

meaning to this land. The landscape here transformed into a conscious space that encompasses the cultural and geographical features creating sacred geography.

According to the ancient Indian text of art and architecture, the temple site is a carefully chosen site following the geographical characteristics and traits specifically assigned for a religious site or a temple. The formation of a sacred landscape starts with its physical plains, but it is its cultural value, which makes the site “Sacred”. It was the belief system of the site that makes the present site one of the most important and popular *Shakta* sites in India, but the geography gave the site an added advantage to remain popular among the masses. Therefore, in the end, both the symbolic and physical landscape works together in uplifting the image of the Kamakhya and her cult to stay powerful and popular.

## **2.8 Conclusion**

The archaeological site of Kamakhya temple underwent a series of changes and transformation. The evolution of the site from a *Vishnu* cave temple to a full-fledged group of *Shakta* temples indicate the role of different dynamic factors in the formation of a religious landscape. A religious landscape is where many faiths meet and this has an ever-lasting impact. Today it can be called a multi-faith temple site. Even when the site became a ground for interaction between different beliefs and faiths and also the experimental ground for different art forms. The site somehow ends up gaining its own individuality not only in its art form but also in its beliefs system. Indeed, the present site is known as one of the important *Shakta* sites, but the presence of *Shaivism* and *Vaishnavism* co-existed in the same compound make the site a site of universal beliefs. The influence of Buddhism and *Tantricism* again elevated the site to the next level of spirituality.

In order to address the question of site ownership, we can only say one thing that the present site became a place where time and power dissolve by itself. The power of the site was combined with its strong spiritual connection attracted different political power and still continues playing its part by attracting devotees not only from India but from abroad too. This is also because of its geographical location. Nilachal hill successfully attracted ancient dwellers towards this part of the region for its geophysical advantages over the surrounding area. They transformed the existing landscape

according to their needs and requirement, resulting in a cultural activity. Once the hill was modified, more settlers were attracted towards the hill resulted in different layers of cultural activity over a single physical plain of the hill. These cultural activities resulted in the formation of a built environment in the forms of temples, monuments, houses, ponds and roads. Now the same geophysical environment that attracted the settlers in the first place had reached towards the brink of extinction. In order to protect these precious but limited resources, the religious connotation was added and thus converted them into a living entity. These entities took a personified form, attached with legends, stories and myths and began to be worshipped as a deity. The deity, which should be feared, respected and adored at the same time. Now the entire hill becomes a part of sacred geography and its resources become sacred and confined to selective uses.

The notion of selectiveness over the use of these resources brought the concept of ownership, or here the communal ownership. Those natural resources, which were earlier freely available now confide to a specific community or became private property. The recent victory of *Bordeuris Samaj* (temple priestly community) against the *Kamakhya Debutter* board over the ownership of the Kamakhya temple and its subsidiary temple on the Nilachala hill (Riju Prasad Sarma et al. Versus State of Assam & Ors, 2015) reflected the value of these sites and their resources. However, the main question still lies, has the faith that now became the sole reason for the popularity of the hill comes first, or it was just the necessity for protecting the valuable resources. The significance of geographical features during the selection of the site is essential, but it is the culture, which chooses to flourish in this landscape. As Rodning (2010) mentioned in his article "*Places are outcomes of cultural activity, and they shape practices of domestic and ritual life*". Even the cultural parameter of the site is far extended beyond its geographical parameters. The cult of Kamakhya gains its popularity beyond its geographical limits, and this shows how the site flourished beyond its physical plane (hyperplane) and entered a spiritual plane, which cannot confine itself into a set of boundaries.

However, in conclusion, the site and the culture bind together with a single aim to create this sacred geography. On the one hand, the culture or in this case the cult of Kamakhya uses the geographical features as an advantage for the growth of her belief

system, but on the other hand, also protecting the surrounding environment from the growing needs of the population. The site Kamakhya is still fulfilling the needs of the present settlers by successfully retaining its charm and not fading away in the pages of history. While temple sites in the neighbourhood like *Sri Surya Pahar* (Goalpara), *Dah Parbatiya*, *Bamuni hill* (Tezpur), *Madan Kamdev temple*, *Rajbari temple*, *Pingaleswar temple*, etc. could not sustain. The geography of the Nilachal hill played an important role in saving the temple and keeping it alive for fifteen hundred years.



## Chapter 3

### Methodology

In order to fulfil the aims and objectives of the research, for studying the archaeological site of Kamakhya, archaeological survey methods and the scientific method have been applied. The field survey method includes the reconnaissance survey technique, including casual or pedestrian survey and systematic survey techniques along with GIS survey. The scientific techniques are used for analysing the physio-chemical properties of bricks and stone samples collected from the site for understanding the variation in the construction material used on the site.

Archaeological field survey brings forth valuable information, which otherwise may remain hidden from the public eyes. Information collected during the field survey generates a valuable database for future studies. The growing use of Geographic information system (GIS) in archaeology has provided new insights to the way information is collected and analysed in the field survey and documentation methods. In the field survey method, GIS has gained popularity among archaeologists to not only survey the sites but also to document the site combining it with the spatial information. This spatial information is considered an integral part of the documentation data, which further validates the field survey (Horobik, 2007). Spatial information is also known as geospatial data or geographic information which is stored in the form of coordinates that can be further used to create a different set of illustrative maps, interactive 3D models and plots.

GIS analysis can easily define and map the geophysical characteristics of the site, such as its topographical features, boundary, and material cultural present within the site. The data collected through the GIS survey provide a better and clear understanding of the distribution and density of the material culture of any given site. Different sets of data collected throughout the survey are compiled into a GIS database with the spatial information. Further, this GIS database itself, works as a database management system, through which one can collect, retrieve, manipulate, analyse, store, and display data with their respective geographical locations (Kvamme, 1989). This information from the database is presented through the layers of maps, including both 2D and 3D maps as well as through digital elevation models (DEM). GIS

applications are also used as an analytical tool for studying the archaeological sites at different spatial scales without disturbing or causing any harm to the site (Rodning, 2010, p. 181).

GIS is a non-invasive technique that can further facilitate archaeological studies by applying GIS as a technique for recording the site and its different features while creating a database that can be used to interpret further and understand the past settlements. In India, many archaeologist and researchers have used GIS as an analytical tool for recording, documenting and analysing many prehistoric as well as historical sites. Ota and Deo (2014) used GIS as one of the analytical tools for documenting the Acheulian site discovered at Tikoda, Madhya Pradesh, India and examining the distribution pattern of artefacts and their context as well as to understand the site formation process. Recently the popularity of remote sensing and GIS in the field of archaeology has increased in India. There are many noticeable studies on the use of remote sensing and multi-sensor satellite data for understanding the evolution and migration of paleochannels in Northwest India. The role of GIS and remote sensing in the mapping of ancient river Saraswati has gained popularity among researchers and scientists (Rajani and Kasturirangan, 2011, p. 3). Researchers have also used remote sensing and satellite data for examining the distribution of sites, especially the Harappan sites found along the banks of these paleochannels (Rajani and Rajawat, 2011).

Other studies have focused on the analysis of the spatial organization of sacred sites and landscapes. Organisations like RRSSC-B (Regional Remote Sensing Service Centre, Bangalore, India) has undertaken projects for documenting the historical temple sites of Hampi in Karnataka and prepared an elaborative GIS database. The National Remote Sensing Centre (NRSC) conducted a similar kind of project for documentation and GIS mapping of the historical Buddhist site of *Nalanda* in Bihar (Rajani and Kasturirangan, 2011, p. 3). There are many other historical temple sites in India, which are documented, recorded and studied using remote sensing, and GIS, such as *Badami*, *Mahabalipuram*, *Talakadu*, *Sanchi*, and so on. The use of GIS and remote sensing is continuously growing, and incorporation of more sophisticated and advanced tools makes the archaeological site and its findings more interactive and informative.

### 3.1 Previous Archaeological Investigations at Kamakhya

Few archaeological exploration surveys have been conducted by Archaeological Survey of India, Guwahati circle and their reports on findings have been published in *Annual Report of the Archaeological Survey of India* and later on in *Indian Archaeology: A Review*. These reports are annually published by Archaeology Survey of India covering the data of all archaeological work that has been taken place since 1902 to 2001 throughout India, even includes the archaeological work that has been done in Pakistan, Burma, Nepal, Andaman and Nicobar etc.

The first known exploration at the Nilachala hill was conducted by K. N. Dikshit, and his report on the architectural findings at Kamakhya temple complex was later published in the *Annual Report of Archaeological Survey of India 1923-24*. On the basis of cutting marks in the rocks at the western slope of the Kamakhya hill and structural fragments of stone temples at the site, he made a statement that there is a possibility of having more stone temples at the site which was probably later demolished by earthquakes (Dikshit, 1926, p. 80).

The next exploration was conducted by R. D. Banerji, and his report was later published in *The Annual report of Archaeological Survey of India 1924-25*. In his report, he mentions the pre-Ahom period remains at Kamakhya hill and based on the architectural remains scattered in and around the temple complex he made a statement that these remains show the three different periods of construction, ranging from eighth to seventeenth-century A.D. (Banerji, 1927, p. 100-101). The exploration data of R. D. Banerji was later used by many scholars while talking about the antiquity of the Kamakhya temple complex. For instance, P. C. Choudhury in his book "*The History of Civilisation of the People of Assam to the Twelfth Century A.D.*" published in 1959 used this exploration data while mentioning about the structural remains found at Kamakhya (Choudhury, 1959, p. 466-477).

A joint report on the archaeological works conducted during 1930-34 was published in two parts as *The Annual Report of Archaeological Survey of India 1930-34* part I and part II. In part, I, a report on '*Images of the Kamakhya Hill, Assam*' was published. This report was based on the exploration work that has been conducted by K. N. Dikshit during 1932-33, in which he examined several rock-cut figures in the

Kamakhya hill close to the leading way from *Pandu* to the hilltop. In this report, he mentions several rock-cut sculptures like eight-handed dancing *Bhairava* locally known as *Bala-bhairava*, *Ganesa* and *Durga* figures, and so on. He also suggested bringing all the monuments within the *Ancient Monuments Preservation Act* for protecting the monument from further decay (Dikshit, 1936, p. 128).

The next exploration work at Kamakhya hill was conducted by T. N. Ramachandran, and his report was later published in the *Annual Report of Archaeological Survey of India 1936-37*. In this report, he mentioned about the sculptures carved at the western gateway of Kamakhya temple. Based on the style, he assumed that the decorative feature of the carving doesn't match with the local style but more of the Gupta and Pallava period style of Northern and Southern India respectively. He called the figures “*a rare specimen of anatomical perfection*” (Ramachandran, 1940, p. 60-61).

Since then one more exploration work was conducted at Kamakhya hill by S. N. Ratha, he discovered a site with Neolithic pottery and his report was published in “*Indian Archaeology: A Review 1965-66*”.

Epigraphical records found related to Kamakhya temple in the form of stone and copper plate inscription was published in several journals and Archaeological Survey of India records, such as *Annual Report on Indian Epigraphy*, *Epigraphia Indica*, *Journal of the Bihar and Orissa Research Society*, *Journal of Asiatic Society of the Bengal*, *Kamarupa Sasanavali etc.*

The recent documentation work on Kamakhya temple and its heritage were conducted by *Vivekananda Kendra Institute of Culture* in collaboration with several scholars, dealing with every aspect of Kamakhya temple such as its history, religion, archaeology, architecture, revenue system, temple management and so on. The report on the field investigation was later published in the form of a book, “*Heritage of Kamakhya on the Nilachala Hill*” in 2010.

### **3.2 Archaeological Field Survey Methodology/ Documentation Methodology**

We have followed the reconnaissance survey technique for our fieldwork. The reconnaissance surveys are visual or predictive surveys that identify the general

distribution, location, and nature of cultural resources within a given area of the site (Green, 2002, p.69-76; Grant, Gorin, & Fleming, 2005, p.15-18). We have used pedestrian survey in ground reconnaissance method for exploration to gain initial information of the site and its features; we have used systematic ground survey along with GIS survey to document the spatial distribution of the sculptural and architectural remains on the site and also to understand the geophysical features of the site.

**3.2.1 Ground Reconnaissance:** The ground reconnaissance includes numbers of different survey methods, even excavation. In the ground reconnaissance methods, we have used the pedestrian survey method.

**a. Pedestrian Survey:** Also known as field-walking or casual survey method (Greene, 2002). In this method, the researcher or surveyor conducted a careful ground surface search to gain in-depth knowledge about the different physical features and characteristics of the site. In this method, the researcher observes the site and artefacts found at the surface level by casually walking over the survey area. A pedestrian survey can be done in a systematic manner or unsystematic manner (Grant, Gorin, & Fleming, 2005)

**I. In the unsystematic survey,** researcher wanders through the survey area with no predetermined sampling strategy. This method can be beneficial in the survey of large area or for a casual survey of the vast landscape to find any connections between the sites.

We started a casual survey of the archaeological site of Kamakhya temple and its surrounding area just a week before from the actual fieldwork.

The main aim or objective of this casual survey is to:

1. Get familiar with the territory of *Kamakhya* temple complex
2. To know all the possible routes and roads to *Kamakhya* temple and its adjoining temples
3. To identify the numbers of structures on the site, like temples, ponds and boundary wall
4. To estimate the quantity of work and time frame in which we can complete the fieldwork.

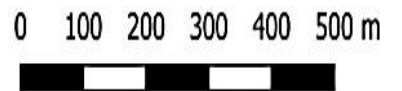
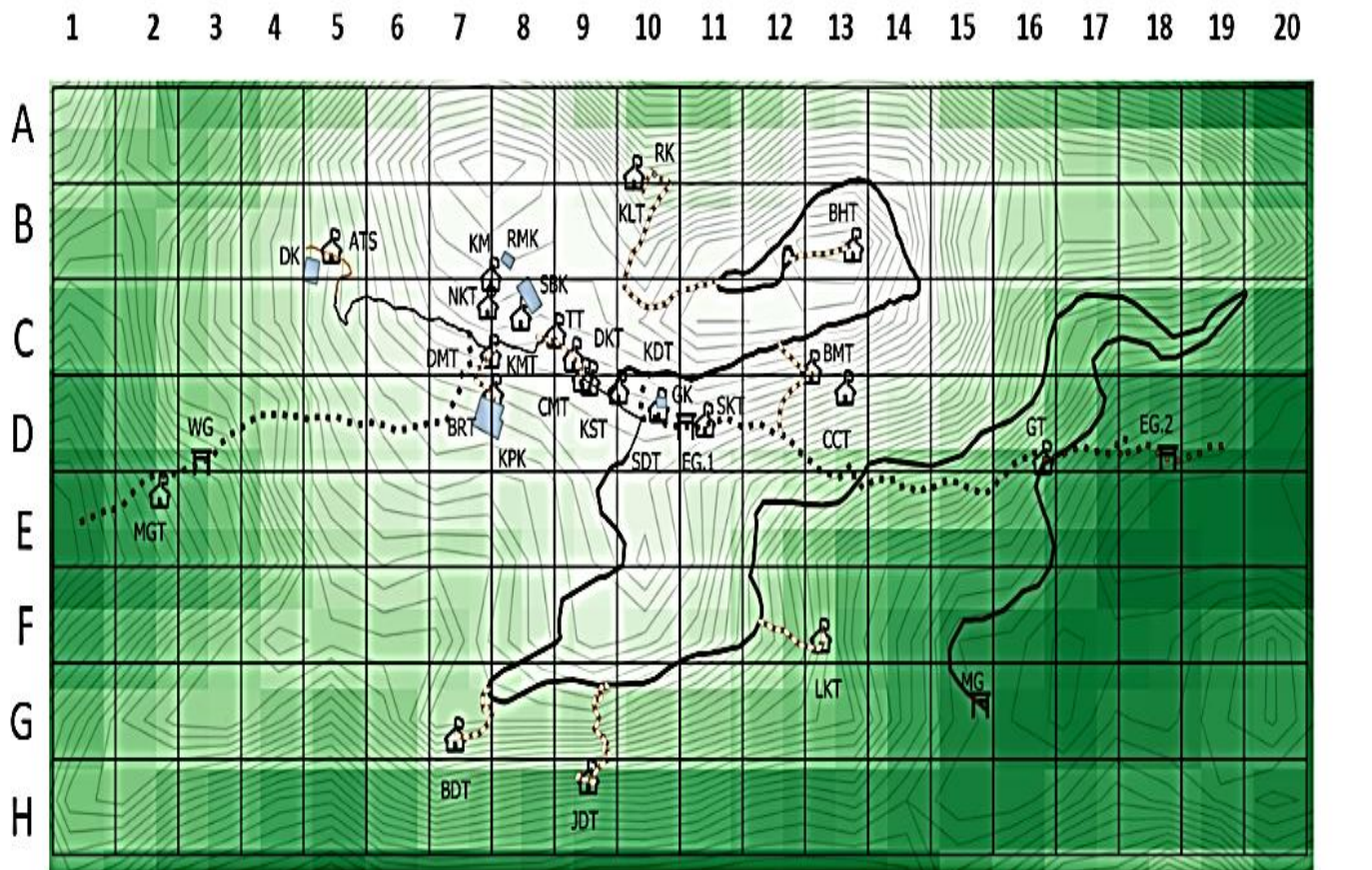
These casual surveys provide a pre-exploration insight into the subject matter for building up a better understanding as well as a base for future exploration work.

**II.** In a **systematic survey**, the researcher has a well-defined sampling strategy to fulfil the predetermined research goal. In this method, the entire survey area is divided into units and data is gathered from respective units and are recorded separately (Greene, 2002).

A systematic pedestrian survey and a GIS survey was conducted in 2015-16 to gain detail information about the studied area. The GIS survey was performed not only to document the geophysical characteristics of the site, but also to document the existing art and architecture of the site.

During our documentation, we have covered 1.79 sq. Km area or approximately 442.3 acres, of which the temple site covers approximately 1.25 sq. Km area or approximately 308.9 acres. In the temple site, we have documented twenty-one temples dedicated to different God and Goddess, six ponds and four gateways (Table 2). The entire documented site was divided into 20 X 8 grids, and each grid covers 0.011 sq. Km area on the site (Figure 7). Each grid is labelled with numbers and alphabet to understand the concentration of the temples and other physical features on the present site. The grids are laid on the selected area with the help of Tombio plugging in QGIS software over the 5m contour line. The point-based GPS coordinates were recorded with the handheld GPSmap 76CSx Garmin GPS receiver. The grid map also displays the elevation of the site. Based on this map, the maximum height of the site is estimated at 243 m and the minimum height at 44 m. The light green colour indicates The GIS database was created with SRTM 3arc (90m) (Shuttle Radar Topography Mission) spatial resolution data to create Digital Elevation Modeling (DEM) and others maps included aspect map, slope, and contour map of the studied area.

### Grid Map of the Archaeological Site of Kamakhya Temple



#### Legend

Temples	Stairways	132
Kunds [Ponds]	Tracks	154
Gateway	<b>Elevation in Meters</b>	176
<b>Routes</b>	44	198
Main Road (Modern Road)	66.1	220
Concrete Walkways	88.1	243
Rubble Pathways (Ancient Pathways)	110	Contour [5m]



Figure 7. Grid map of the archaeological site of the Kamakhya temple. Nilachal hill SRTM data indicate that the majority of temples at the site located between 176-243 m height on the hill (scale 1:6700).

Table 2. Numbers of structures documented from the archaeological site of Kamakhya temple (ASKMT).

S. No	Name of the Temple	Abbreviation	Location	Elevation (m)	Area (m*m)
1.	Amratakswara Temple/ Tokeswara Temple	AKT/TKT	26°10'2.4"N 91°42'8.8" E	202.24	533.5233
2.	Bandurga Temple	BDT	26°09'45.8"N 91°42'17.6" E	165.71	Undefined
3.	Bhairavi Temple	BRT	26°09'57.0"N 91°42'18.1" E	206.08	864.87
4.	Bagalamukhi Temple	BMT	26°09'57.9"N 91°42'36.3" E	212.09	Undefined
5.	Bhuvaneshwari Temple	BHT	26°10'2.2"N 91°42'39.7" E	307.26	608.09
6.	Chinnamasta Temple	CMT	26°09'57.6"N 91°42'23.2" E	226.0	445.49
7.	Chiddeswari Cave Temple	CCT	26°09'47.1"N 91°42'38.2" E	219.09	Undefined
8.	Dakshinakali Temple	DKT	26°09'58.4"N 91°42'22.7" E	220.74	221.22
9.	Dhumavati Temple	DMT	26°09'58.5"N 91°42'17.9" E	230.60	Undefined
10.	Durga Kund	DK	26°10'2.1"N 91°42'7.7" E	203	755.80
11.	Eastern Gateway No. 1	EG.1	26°09'54.3"N 91°42'57.7" E	225	Undefined
12.	Eastern Gateway No. 2	EG. 2	26°09'55.7"N 91°42'29.1" E	103	Undefined
13.	Ganesha Temple	GT	26°09'54.5"N 91°42'49.6" E	79.67	Undefined
14.	Gaya Kund	GK	26°09'57.0"N 91°42'27.8" E	196.95	236.48
15.	Jay Durga Temple	JDT	26°09'42.5"N 91°42'23.5" E	124.37	Undefined
16.	Kacha-Pukhuri Kund	KPK	26°09'56.7"N 91°42'18.1" E	216	1,567.5
17.	Kamakhya Temple	KMT	26°09'59.9"N 91°42'19.7" E	229.15	12470.31
18.	Kamakhya Museum	KMM	26°10'1.7"N 91°42'18.1" E	248.09	2009.02
19.	Kamaeswara Temple	KST	26°09'57.5"N 91°42'23.6" E	226.03	445.49
20.	Kedareswara Temple	KDT	26°09'57.1"N 91°42'25.3" E	229.87	68.54
21.	Kotilinga Temple	KLT	26°10'5.2"N 91°42'26.2" E	196.95	Undefined
22.	Lalit Kanta Temple	LKT	26°09'47.7"N	128.22	Undefined

			91°42'36.8" E		
23.	Mahakal Ganesh Temple	MGT	26°09'53.6"N 91°41'59.2" E	105.62	609.44
24.	Namath-Kali Temple	NKT	26°10'0.8"N 91°42'18.2" E	244.15	Undefined
25.	Rama Kund	RK	26°10'4.7"N 91°42'26.7" E	217	27.91
26.	Rinmoksha Kund	RMK	26°10'1.76"N 91°42'18.8" E	229.15	242.43
27.	Shasankali Temple	SKT	26°09'55.9"N 91°42'30.2" E	218.10	Undefined
28.	Shubhagaya Kund	SBK	26°10'0.346"N 91°42'19.92" E	229.15	823.46
29.	Siddheswara Temple	SDT	26°09'56.5"N 91°42'27.6" E	219.30	2215.55
30.	Tara Temple	TT	26°09'59.3"N 91°42'21.7" E	230.84	235.38
31.	Western Gateway	WG.1	26°09'54.3"N 91°42'1.34" E	121.09	Undefined

In this table, the word 'Undefined' in the column of 'Area' represent the site or temple is either a cave temple or the temple is constructed adjoining the mountain cliff. We have measured the area of the temples, and other structure in meter square and the length of the pathways and routes are measured in meters.

### **The objective of the systematic pedestrian survey**

The main objective of this survey is to document the spatial distribution of the sculptural and architectural remains on the site and the existing art and architecture, along with the geophysical features of the site. This survey provides a visual aid in exhibiting the different cultural features of the Kamakhya temple site. The GIS application was used as the most convenient analytical tool for fulfilling the following specific objectives:

#### **1. Providing a visual representation to the site with the help of GIS Maps and creating a GIS database**

The GIS database created during the survey includes detail information about the site, including its topographical and physical features as well as the database also stores and manages the documentation database with spatial information. With the help of a GIS database, a different set of maps are created by using the QGIS and SAGA software. These maps are divided into two major groups: a. physical and topographic

maps, and b. thematic maps. The first group of maps cover the physical and topographic features of the study area such as geographical features, elevation, height, slope, contour and different types of routes. The second group of maps is thematic maps, which covers different features of the site, such as types of monuments and structures, boundaries, ponds, pithas, and structural and sculptural remains. The thematic maps are further divided into two groups a. architecture maps and b. sculpture maps. The sculpture maps are further divided into three groups: a. sculptures installed on the wall of the temple, boundary, and gateways; b. rock-cut sculptures; and c. sculptural fragments. In the first category, we have recorded all the sculptures which are fixed or installed on the walls of different temple, gateways and the boundary wall. The second category of sculptures is those sculptures which are carved on the surface of a mountain cliff. The third and the last category of sculptures are the broken fragments of sculptural remains found scattered in the archaeological site of Kamakhya. These thematic maps play a very pivotal role in understanding and analysing the distribution pattern of the sculptural art and architectural remains on the site.

We are not able to collect GIS data of those sculptures which are installed inside the temples, due to poor network and restricted permission for using any electronic gadget inside the temples. We have documented the interior of the temple using the conventional method of plotting them in a map for which we have used AutoCAD. This will not affect the final quantification of the sculptures, but these sculptures are omitted from the GIS maps.

## **2. Documentation of the existing art and architecture of the site**

The main aim of documentation is to understand the complexity and diversity in sculptural art and architecture. The sculptural art was documented with the spatial details and categories based on the types of sculptures and then sub-grouped under different subject matters. The documentation data is collected in the form of photographs, layout drawings of standing structures with measurements and iconometric data of the sculptures.

The data collected during documentation is recorded in many formats such as sculptural and architectural documentation are recorded in word, excel and QGIS files; maps and photographs in TIFF and JPEG format; and temples layout and measurement

in standard size drawing sheets and AutoCAD diagrams. An in-depth inventory of the sculptures and architectural art of the archaeological site of Kamakhya have been prepared.

**Data Sample:** The inventory of the architectural and sculptural art of the archaeological site of Kamakhya includes:

**a. Word documentation sheets**

The word documentation sheet is used for a qualitative analysis of the data collected during the documentation (Table 3). The word documentation file is best for qualitative analysis, where you are able to provide in-depth information about the study. Data like images, drawings and photographs are also easy to present in the word document file in comparison to excel based documentation sheets.

We have created the following word documentation files:

1. Kamakhya temple
  - a) Sculpture on the facade of temple's *Garbhagriha*
  - b) Sculpture on the facade of the temple's *Antarala*
  - c) Sculpture on the facade of the temple's *Mandapa* (*Bhogamandapa* and *Natmandapa*)
  - d) Sculptures inside the *Balighar* of the Kamakhya temple
  - e) Sculptures on the entrance door of Kamakhya temple (Eastern and Western Gateway)
  - f) Others structures and sculptures remain found inside the premises of Kamakhya temple.
  - g) Sculptures inside the *Bhogamandapa* of Kamakhya temple
  - h) Sculpture inside the *Natmandapa* of Kamakhya temple
2. Broken fragments displayed at the Kamakhya temple museum;
3. Broken fragments displayed at the *Mahakal Ganesh* temple;
4. Sculptures in the *Dakshinakali* temple;
5. Sculptures in *Tara* temple;
6. Sculptures in the *Kamaesvara* temple;
7. Sculptures in the *Kedareswara* temple;
8. Sculptures in the *Kotilinga* temple;

9. Sculptures in the *Tokeswara/ Amratakeswara* temple;
10. Sculptures in the eastern and western gateway of Kamakhya temple complex;
11. Sculpture and Sculptural Fragments found on the eastern and western pathway of Kamakhya temple complex;

**Table 3:** Example of Word documentation file sample. This is one of the examples of word documentation file. The table shows sculptures on the facade of *garbhagriha* in Kamakhya temple. In this word documentation sheets, we have created nine column table files. These columns cover details like an image of the sculpture, its location, name and the attributes, material and measurement of the sculpture in mm.


### Kamakhya temple documentation word file



#### Documentation Sheet


#### Kamakhya Temple


Location: 26°09'59.9" N 91°42'19.7" E

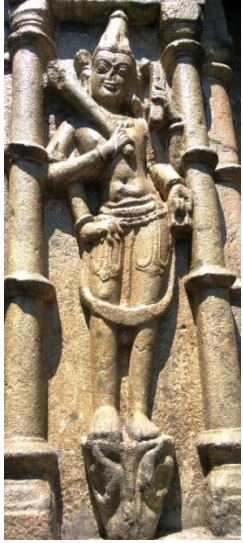
#### 1. Sculptures on the facade of the Kamakhya temple's *Garbhagriha*

S N o	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1		26°9'58.82"N 91°42'19.26"E	Lord <i>Chaturbhuj Ganesha</i> . The four-handed <i>Ganesha</i> sculpture is standing on the flower pattern pedestal in a <i>Samabhanga/ Samapada-sthanaka</i> posture with its trunk curved on the left side touching a <i>Modaka</i> (sweet rice ball) placed on the left front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in its left backhand and an <i>Ankusa</i> (goad) in the right backhand. In its right front hand, the deity is depicted holding an <i>Akshamala</i> (rosary). Painted in red (orange)	Granite	1m79	87.5	26	1m36

			colour. Several coins are pasted on the sculpture by devotees. The sculpture is installed on the south-west corner of the temple. Stylistically dated 14 <sup>th</sup> -15 <sup>th</sup> c A.D.					
2		26° 9'58.61"N 91°42'19.19"E	<i>Yakshini</i> sculpture standing on a flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ). The left hand is rested on the waist in <i>Kati-hasta Mudra</i> , and the right-hand holds a fly-whisk ( <i>chamara</i> ). Her eyes are wide open, and her nose tip is broken. There is a third eye on the forehead (?). The sculpture is installed on the south-west corner of the temple. Stylistically dated 11th-12th c A.D.	Granite	1m79	54	31	1m66
3		26° 9'58.78"N 91°42'19.25"E	Lord <i>Nirruti (Dikpala)</i> The four-handed <i>Nirruti</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, such as earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), sacred thread ( <i>yajhopavita</i> ) and <i>Kiritamukuta</i> (headgear).	Granite	1m 98	91.5	54	1m 67

			<p>The deity is carrying different ayudhas (implements). In the front right hand, the deity is holding a <i>Khadga</i> (sword) and on the backhand a <i>Kapala</i> (skull cup). The front left hand is rested on the waist in <i>Kaṭi-hasta Mudra</i> and the backhand holding a severed head. The sculpture is depicted with the third eye on the forehead, has a beard and thick moustache. The sculpture is installed on the south-west corner of the temple. Stylistically dated 11th-12th c A.D.</p>					
4		<p>26° 9'58.68"N 91°42'19.08"E</p>	<p>Lord <i>Ishana (Dikpalas)</i>. The four-handed <i>Ishana</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kirita Mukata</i> (headgear). The deity is carrying different ayudhas (implements) in backhands, such as <i>Trisula</i> (trident) in the right hand, and a <i>Khatvanga</i> (a bone club with a skull on the top) in the left hand. In <i>Hastamudra</i> (hand gesture) the deity is depicted with both <i>Kaṭi-hasta Mudra</i> and <i>Karana</i></p>	Granite	1m 98	98	53	1m73

			<i>mudra</i> (in downward position). The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the south-west corner of the temple. Stylistically dated to 11th-12th c A.D.					
5		26° 9'58.78"N 91°42'19.34"E	Lord <i>Kamadeva</i> . The two-handed <i>Kamadeva</i> sculpture is depicted standing on the flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kiritamukuta</i> (headgear). Two-handed deity is depicted holding a bow ( <i>dhanusa</i> ) in the right hand and an arrow ( <i>bana</i> ) in the left hand. The sculpture is placed on the south-west corner of the temple. Stylistically dated to 11th-12th c A.D.	Granite	1m 98	93	54	1m 73

6		<p>26° 9'58.73"N 91°42'19.19"E</p>	<p>Lord <i>Yama (Dikpala)</i>. The four-handed <i>Yama</i> sculpture is depicted standing on the flower pattern pedestal in <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, such as earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). The right hand is rested on the waist in <i>Kaṭi-hasta Mudra</i>, and the back right hand is holding a <i>Musala</i> (pestle). The front left hand is posing in a <i>Karana mudra</i> (in downward position) and in the back left hand is depicted holding a scripture (book). The sculpture is depicted with the third eye on the forehead. The sculpture is installed on the south-west corner of the temple. Stylistically dated 11th-12th c A.D.</p>	Granite	1m 98	92	50	1m74
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**b. Excel documentation sheet**

We have used the Microsoft Excel file to record quantifiable documentation data in detail for quantitative analyses (Figure 8). These excel files records location of the structures, sculptures and remains along with and a very brief description of the specimens. One advantage over working on the excel file is that you are able to create

a long column table and can store the maximum number of data in a single file and can serve as an easy tool for quantitative analyses.

wkt	geom	ele	name	cmt	src	Descrip	desc	descp	XCOORD	YCOORD	DegreeX	MinX	SecondX	DegreeY	MinY	SecondY
POINT	(91,	222.1887		1	#####	Grabhagriha			91.70535	26.16634	91	42	19.2672	26	9	58.8204
POINT	(91,	222.4291		2	#####	Grabhagriha			91.70533	26.16628	91	42	19.1916	26	9	58.6116
POINT	(91,	223.8711		3	#####	Grabhagriha			91.70535	26.16633	91	42	19.2564	26	9	58.788
POINT	(91,	224.8324		4	#####	Grabhagriha			91.7053	26.1663	91	42	19.0872	26	9	58.68
POINT	(91,	225.0728		5	#####	Grabhagriha			91.70537	26.16633	91	42	19.3428	26	9	58.788
POINT	(91,	226.0339		6	#####	Grabhagriha			91.70533	26.16631	91	42	19.1916	26	9	58.7304
POINT	(91,	229.1582		7	#####	Grabhagriha			91.7055	26.16633	91	42	19.7964	26	9	58.7916
POINT	(91,	229.6389		8	#####	Grabhagriha			91.70548	26.16636	91	42	19.7388	26	9	58.8996
POINT	(91,	227.7163		9	#####	Grabhagriha			91.7055	26.16637	91	42	19.8036	26	9	58.9176
POINT	(91,	229.3986		10	#####	Grabhagriha			91.70557	26.16631	91	42	20.0484	26	9	58.7268
POINT	(91,	230.6002		11	#####	Grabhagriha			91.70557	26.16634	91	42	20.052	26	9	58.8276
POINT	(91,	230.3599		12	#####	Grabhagriha			91.70554	26.16641	91	42	19.926	26	9	59.0724
POINT	(91,	232.0421		13	#####	Grabhagriha			91.70568	26.16656	91	42	20.43	26	9	59.6088
POINT	(91,	232.0421		14	#####	Grabhagriha			91.70554	26.16653	91	42	19.9332	26	9	59.508
POINT	(91,	233.2438		15	#####	Grabhagriha			91.70555	26.16662	91	42	19.9764	26	9	59.8392
POINT	(91,	232.2825		16	#####	Grabhagriha			91.70553	26.16663	91	42	19.8972	26	9	59.8752
POINT	(91,	231.5615		17	#####	Grabhagriha			91.70547	26.16666	91	42	19.6848	26	9	59.9724
POINT	(91,	231.5615		18	#####	Grabhagriha			91.70551	26.16665	91	42	19.8468	26	9	59.9472
POINT	(91,	233.4841		19	#####	Grabhagriha			91.70539	26.16661	91	42	19.3932	26	9	59.7816
POINT	(91,	233.0034		20	#####	Grabhagriha			91.70541	26.16664	91	42	19.458	26	9	59.9004
POINT	(91,	235.4067		21	#####	Grabhagriha			91.70541	26.16666	91	42	19.4832	26	9	59.9652
POINT	(91,	234.926		22	#####	Grabhagriha			91.70545	26.1666	91	42	19.6164	26	9	59.742
POINT	(91,	236.1278		23	#####	Mandapa's wall out side			91.70528	26.16666	91	42	19.0044	26	9	59.9688
POINT	(91,	239.0117		24	#####	Mandapa's wall out side			91.70519	26.16664	91	42	18.6912	26	9	59.9148
POINT	(91,	240.4537		25	#####	Mandapa's wall out side			91.70515	26.16669	91	42	18.5364	26	10	0.0768
POINT	(91,	239.973		26	#####	Mandapa's wall out side			91.70522	26.16673	91	42	18.7812	26	10	0.2136
POINT	(91,	241.1747		27	#####	Mandapa's wall out side			91.70519	26.16673	91	42	18.6912	26	10	0.21
POINT	(91,	239.0117		28	#####	Mandapa's wall out side			91.70516	26.16668	91	42	18.5688	26	10	0.0588
POINT	(91,	239.2521		29	#####	Mandapa's wall out side			91.70511	26.16668	91	42	18.4068	26	10	0.0336
POINT	(91,	239.2521		30	#####	Mandapa's wall out side			91.70508	26.16669	91	42	18.288	26	10	0.066
POINT	(91,	238.0504		31	#####	Mandapa's wall out side			91.70511	26.16665	91	42	18.3924	26	9	59.94
POINT	(91,	239.4923		32	#####	Mandapa's wall out side			91.70508	26.16666	91	42	18.2844	26	9	59.9724
POINT	(91,	237.8101		33	#####	Mandapa's wall out side			91.70512	26.16667	91	42	18.414	26	10	0.1164
POINT	(91,	238.5311		34	#####	Mandapa's wall out side			91.70505	26.16673	91	42	18.1872	26	10	0.2172
POINT	(91,	239.973		35	#####	Mandapa's wall out side			91.70505	26.16674	91	42	18.1908	26	10	0.2712
POINT	(91,	239.2521		36	#####	Mandapa's wall out side			91.70503	26.16672	91	42	18.0936	26	10	0.1848
POINT	(91,	240.9343		37	#####	Mandapa's wall out side			91.70498	26.16662	91	42	17.9316	26	9	59.8464
POINT	(91,	240.2134		38	#####	Mandapa's wall out side			91.70488	26.16661	91	42	17.5572	26	9	59.8104
POINT	(91,	233.9647		39	#####	Kamakhya entrance's far left si			91.7057	26.16626	91	42	20.5056	26	9	58.5252
POINT	(91,	233.7244		40	#####	Kamakhya entrance's left out s			91.70572	26.16626	91	42	20.574	26	9	58.518
POINT	(91,	226.2743		41	#####	Kamakhya entrance's right fron			91.70581	26.16632	91	42	20.9304	26	9	58.7592
POINT	(91,	234.926		42	#####	Kamakhya entrance's right fron			91.70575	26.16624	91	42	20.6856	26	9	58.4712
POINT	(91,	236.1278		43	#####	Kamakhya entrance's far right f			91.70561	26.16637	91	42	20.2068	26	9	58.914
POINT	(91,	235.1664		44	#####	Kamakhya entrance's right fron			91.70559	26.16634	91	42	20.1204	26	9	58.8132
POINT	(91,	235.1664		45	#####	Kamakhya entrance's left from			91.70566	26.16635	91	42	20.358	26	9	58.8672
POINT	(91,	235.4067		46	#####	Kamakhya entrance's far left fr			91.70555	26.16635	91	42	19.9944	26	9	58.842
POINT	(91,	233.2438		47	#####	Krishna temple near left side o			91.7056	26.16637	91	42	20.1672	26	9	58.9248
POINT	(91,	234.4454		48	#####	Right side of temple gravagriha			91.7054	26.16651	91	42	19.4328	26	9	59.4288
POINT	(91,	235.4067		49	#####	Right side of temple gravagriha			91.70546	26.16659	91	42	19.6524	26	9	59.7276
POINT	(91,	238.0504		50	#####	Right side of temple gravagriha			91.70545	26.16655	91	42	19.6272	26	9	59.5692
POINT	(91,	235.4067		51	#####	Right side of temple gravagriha			91.70542	26.16656	91	42	19.494	26	9	59.6088
POINT	(91,	237.0891		52	#####	Right side of temple gravagriha			91.70544	26.16657	91	42	19.5696	26	9	59.6664
POINT	(91,	236.6085		53	#####	Right side outer wall of gate 1			91.70543	26.16663	91	42	19.5408	26	9	59.8536
POINT	(91,	237.0891		54	#####	Elephant			91.70536	26.16655	91	42	19.278	26	9	59.58
POINT	(91,	233.7244		55	#####				91.70524	26.16665	91	42	18.8748	26	9	59.9544
POINT	(91,	234.6858		56	#####	Bali ghar sculpture			91.70504	26.16653	91	42	18.144	26	9	59.4936
POINT	(91,	235.8873		57	#####	Bali ghar sculpture			91.70499	26.16651	91	42	17.9676	26	9	59.4504
POINT	(91,	233.9647		58	#####	Bali ghar sculpture			91.7048	26.16664	91	42	17.2656	26	9	59.9112
POINT	(91,	232.0421		59	#####	Bali ghar sculpture			91.70486	26.16655	91	42	17.4852	26	9	59.5836
POINT	(91,	229.6389		60	#####	Main Entrance			91.70566	26.16631	91	42	20.3868	26	9	58.7016

Figure 8. Example of Microsoft excel documentation file showing different attributes of sculptures at Kamakhya temple. The excel sheet covers the information like elevation, date and time, description and coordinates.

### c. QGIS data sheets

QGIS (previously known as "Quantum GIS") is a cross-platform free and open-source desktop geographic information system (GIS) application used for data viewing,

editing, and analysing geospatial data. QGIS software also helps in geo-referencing of photographs and images. Data in this software is store as an ESRI shapefiles. The geographical information system software saves the shapefiles in is a geospatial vector data format. QGIS uses the OGR library to read and write vector data formats, including ESRI shapefiles, MapInfo and MicroStation file formats, AutoCAD DXF, PostGIS, SpatiaLite, Oracle Spatial and MSSQL Spatial databases, and many more.

A shapefile consists of several files. The following three are the most common files required:

1. **.shp** file containing the feature geometries
2. **.dbf** file containing the attributes in dBase format
3. **.shx** index file

A shapefile is generally used the tabular format for data recording, which can be easily edited and converted into other formats too (Figure 9). As like the excel file, this shapefiles also have multiple columns separated by defined characters and each row separated by a line break (ESRI Shapefile Technical Description 2004).

Attribute table - Temples = Features total: 18, filtered: 18, selected: 0

	Accuracy	Arc_style	Direction	Material	Chambers	Grabhagrih	Antral	Mandapa	Plan	Vimana	waterpond	Inscrip	gat
0	0	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
1	0	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
2	0	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
3	0	NULL	west	Brick	Three	Square, Deity is ...	Rectangular, ha...	Rectangular, ha...	NULL	NULL	Small Kund insi...	No	
4	0	NULL	west	Brick	Three	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
5	0	NULL	South	Brick	Single	Deity is worship...	NULL	NULL	NULL	NULL	No	No	
6	0	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
7	0	NULL	west	Brick	Three	Square,	Rectangular	Rectangular, Do...	Three ratha	Poygonal dom	Gaya kund	No	
8	0	NULL	South	Stone, brick, lime	Three	Octagonal	Square	Square,12 pillar ...	Three ratha	shikara is adora...	no	No	
9	0	NULL	South	Brick	Three	Octagonal, deit...	Rectangular	rectangular	NULL	The dom shape...	no	no	
10	0	NULL	west	Stone and brick	Five	Octagonal, The...	NULL	Three mandapa...	Pancharatha	The Sikhara of t...	two, Rinnmoksh...	Two inscription...	
11	0	NULL	south	Brick	two	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
12	0	NULL	South	Brick	three	NULL	NULL	Rectangular	NULL	NULL	Keacha Pukhuri	No	
13	0	NULL	South	Brick	Three	Octagonal, A s...	Rectangular	Rectangular	NULL	Shikhara as do...	Two water pon...	Inscription in th...	
14	0	NULL	East	NULL	NULL	Deity is worship...	NULL	NULL	NULL	NULL	Rama Kunda	No	
15	0	NULL	West	Brick	Three	Octagonal shap...	Squre	Rectangular	NULL	NULL	No	No	
16	0	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	
17	0	NULL	West	Brick	two	Octagonal,Deit...	Rectangular	NULL	Look like septat...	NULL	No	No	

Figure 9. Example of QGIS documentation shapefiles: Attribute table showing different characteristics of temples in Kamakhya temple complex. This shapefile covers information like architecture style, the direction of the temple, construction material, numbers of chambers, and shape of different chambers.

#### d. Photographs

Photographic documentation has been conducted during our fieldwork (Figure 10). A wide range of subject matters is covered under this documentation such as photographs of architectural structures, sculptures (on the temple and boundaries wall), rock-cut sculptures, structural & sculptural remains and so on. These photographs are stored in a JPEG (Joint Photographic Expert Group) file format. The photographic documentation is done with the Nikon D3300 DSLR (Digital single-lens reflex) camera with 18-55 mm lens.



Figure 10. Example of photographic documentation of sculptures panel on the outer wall of *grabhagriha* in *Kamakhya* temple)

#### e. Layouts Drawings

Out of twenty-one temples on the site, we have drawn the ground plan of the eight ancient temples using AutoCAD software. All the architecture details of structures, gateways, ponds have been sketched on the A4 page drawing book. The dimension of the structure is measured with the help of three-meter-long metal measuring tape. In these sketches, we have mentioned, length, height, width, and diameter. Different attributes like the position of sculpture installed on the wall and

direction of doors, windows and temple face are also indicated on these layouts. The layouts act as a great source of information about the architectural style of each monument in the *Kamakhya* temple complex. The layout drawings are properly labelled with an index box mentioning all the architectural features and terms used during the sketching.

The main aim of the handmade sketch is to record

1. The architectural style of the monuments;
2. Recording dimension of the structure and sculptures like its width, length, height, and diameter;
3. Recording direction and shape of the structure and sculpture with proper labelling;
4. Recording the minutes detail of the monuments like the numbers of doors, windows, stairs and pillars;
5. Recording sculptural details found on the wall of the structure, on the niches and on the door of the structure.

With the help of this hand-made layout drawings or sketches, we created a computer-generated layout drawing with AutoCAD (computer-aided drafting) (Figure 11). AutoCAD software is used for creation, modification, analysis, or optimisation of a handwritten design. One of the advantages of electronic layouts over handmade layout is that it gives the researcher a clean and clear drawing data set with a proper scale. These AutoCAD drawings are easy to store and maintain. We can also modify and edit the drawings as the study progress. The onsite hand-made drawings are used as a primary reference base for the AutoCAD drawings.

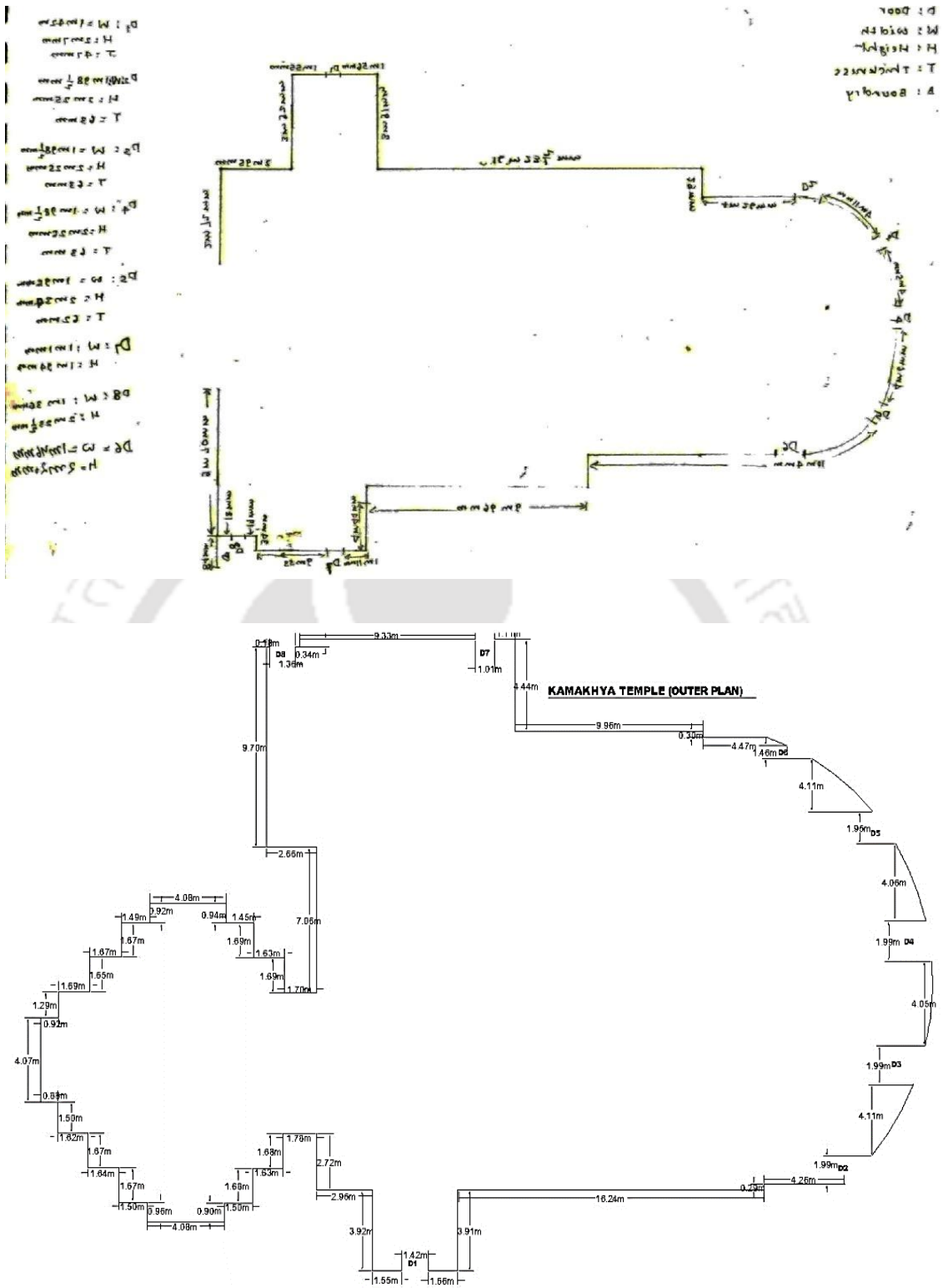
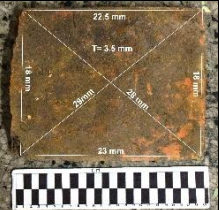


Figure 11. Example of a) handmade and b) AutoCAD layout drawings: The outer plan of the *mandapa* and *garbhagriha* (sanctum sanctorum) of the main Kamakhya temple.

### 3.2.2 Scientific Experiments for Understanding the Physio-Chemical Properties of Brick and Stone Samples

The aim of this study is to analysis the physio-chemical properties of bricks and stone samples collected from different temples site in Assam with the intention to correlate the art and architectural developments of the Kamakhya temple complex with the development of art and architecture in other parts of Assam in different historical periods (Table 4 & 5). Our main focused area from which the majority of samples are taken is Kamakhya temple complex, but we have also collected some samples from the temple sites such as *Madan Kamdev* temple (Guwahati), *Dirgheshwari* temple (Guwahati), *Kamakhya Devalaya* (Nagaon), and *Na-Nath* temple (Nagaon). Among the brick and stone samples, one mortar (Lime-*surkhi*) sample collected from *Chinnamasta* temple in the Kamakhya temple complex is also studied. The Physio-chemical properties of brick and stone samples are analysed using four techniques; i) X-Ray Powder Diffraction (XRD); ii) Field Emission SEM (FE-SEM) & Energy Dispersive X-ray Spectroscopy (EDX); iii) Micro-Optical Analysis; iv) Thin Section Petrographic Analysis. Each technique has its own benefit, for example with the help of XRD we can able to identify different mineral phases from diffraction peaks; from FESEM we are able to produce 2D images of nanometre-sized pores of the samples. From EDX we are able to count the volume of the minerals present in the sample. The thin section helps in identifying the minerals and texture of the sample with the microscopic images. The micro-optical analysis provided the microscopic images of surface texture of the sample. The laboratory procedures undertaken are described in the following pages.

Table 4. Numbers and location of the brick samples collected for the scientific experiments.

S. no	Name	Abbreviation/ Sample name	Type of Sample	Coordinates	Images
1.	Kamakhya Temple, Guwahati	KMT- B-01	Brick	26°09'59.9"N 91°42'19.7" E	

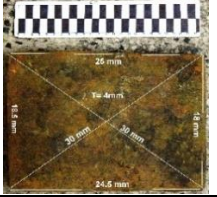
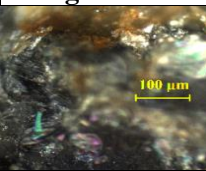
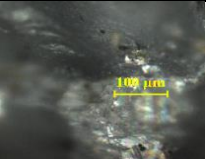

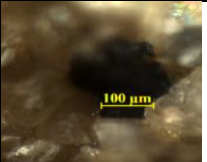
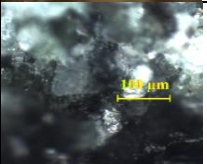
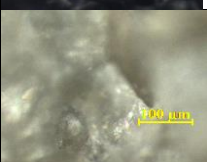
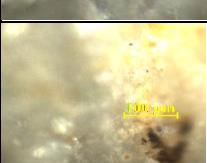
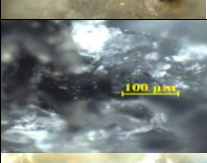
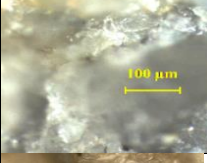
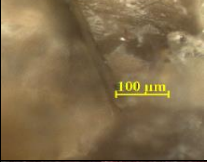
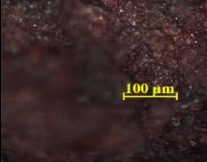
2.	Chinnamasta (lime surkhi) Mortar Sample, Guwahati	CMT-M-01	Mortar	26°09'57.6"N 91°42'23.2" E	----- -
3.	Namath-Kali Temple, Guwahati	NKT-M-01	Brick	26°10'0.76" E 91°42'18.2" N	----- -
4.	Dirgheshwari Temple, Guwahati	DST-B-01	Brick	26°14' 37"N 91°44'57.8" E	
5.	Madan Kamdev Temple, Guwahati	MDK-B-01	Brick	26°19'06.9"N 91°44'23.2" E	-----
6.	Kamakhya Devalaya, Nagaon	KMD-B-01	Brick	26°36'46.2"N 92°56'12.3"E	
7.	Na-Nath Temple, Nagaon	NNT-B-01	Brick	26°01'59.3"N 92°46'28.9"E	

Table 5. Numbers and location of the stone samples collected from the archaeological site of Kamakhya temple.

S. no	Name	Abbreviation/ Sample name	Type of Stone	Coordinates	Micro-optical Images
1.	Siddheswara Temple	KMT-01 SDT-01	Porphyritic Granite	26°09'56.5"N 91°42'27.6" E	
2.	Siddheswara Temple	KMT-02 SDT-02	Porphyritic Granite	26°09'58.5"N 91°42'27.6" E	
3.	Kedareswara Temple	KMT-03 KDT-01	Porphyritic Granite	26°09'57.1"N 91°42'25.3" E	

4.	Chinnamasta Temple	KMT-04 CMT-01	Sandstone	26°09'57.6"N 91°42'23.2" E	
5.	Kamakhya Museum	KMT-05 KMM-01	Basalt	26°10'2.1"N 91°42'18.1"E	
6.	Kamakhya Museum	KMT-06 KMM-02	Fine-Grained Granite	26°10'1.76"N 91°42'18.8" E	
7.	Kamakhya Museum	KMT-07 KMM-03	Fine-Grained Granite	26°10'1.6"N 91°42'17.7"E	
8.	Kamakhya Museum	KMT-08 KMM-04	Basalt	26°10'1.8"N 91°42'18.6"E	
9.	Kamakhya Museum	KMT-09 KMM-05	Fine-Grained Granite	26°10'1.9"N 91°42'17.7"E	
10.	Kamakhya Museum	KMT-10 KMM-06	Sandstone	26°10'2.2"N 91°42'18.1"E	
11.	Ancient Western Pathway	KMT-11 AWP-01	Sandstone	26°09'54.3"N 91°42'1.34" E	

### 3.2.2.1 Experimental Details

#### 1. X-Ray Diffraction (XRD)

The X-ray diffraction (XRD) is an analytical technique used for mineral phase identification of crystalline material. XRD results are based on the constructive interference between a crystalline sample and monochromatic X-rays. A cathode-ray tube filtered to produce monochromatic radiation, which collimates directly toward the sample and results in X-rays. A Bragg's law ( $n\lambda=2d \sin \theta$ ) is applied to study these

constructive interferences (a diffracted ray) produced during the interaction between the incident rays with the sample. The Bragg's law relates the wavelength of electromagnetic radiation to the diffraction angle in a crystalline sample. Each diffracted X-rays peaks are counted, processed and converted to d-spacing. Each mineral has a unique set of d-spacing and by comparing with standard reference pattern, identification of minerals in the sample is possible.

### Sample preparation and Experiment

For XRD analysis, every sample should be ground into a fine powder (Figure 12). Only a small amount of powder is required for XRD analysis. We have ground each sample with the help of aluminium mortar-pestle and stored in the transparent zip-lock bag with proper labelling.

The next step is the sample analysis. In this process, the ground powder sample is placed in the “Zero Diffraction Plate” and then placed inside the TTRAX III Rigaku X-Ray Diffractometer (Figure 13).

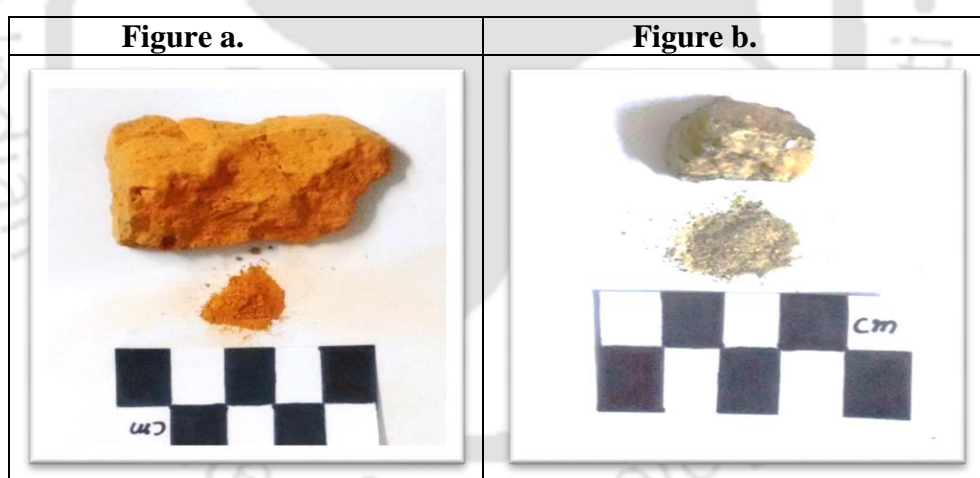


Figure 12. a) Example of ground brick sample and b) Example of ground stone sample collected from the archaeological site of Kamakhya temple.

The X-Ray Powder Diffraction Spectra were recorded on **TTRAX III Rigaku X-Ray Diffractometer** using  $\text{CuK}\alpha$  radiation at a wavelength of  $1.5406\text{\AA}$ . The Spectra were recorded in the  $2\theta$  range from  $10\text{-}80^\circ$ . Data obtained by the diffractometer are analysed with the help of ORIGIN 6.0, X-ray powder diffraction analytical software and MATCH, mineral phase identification software.

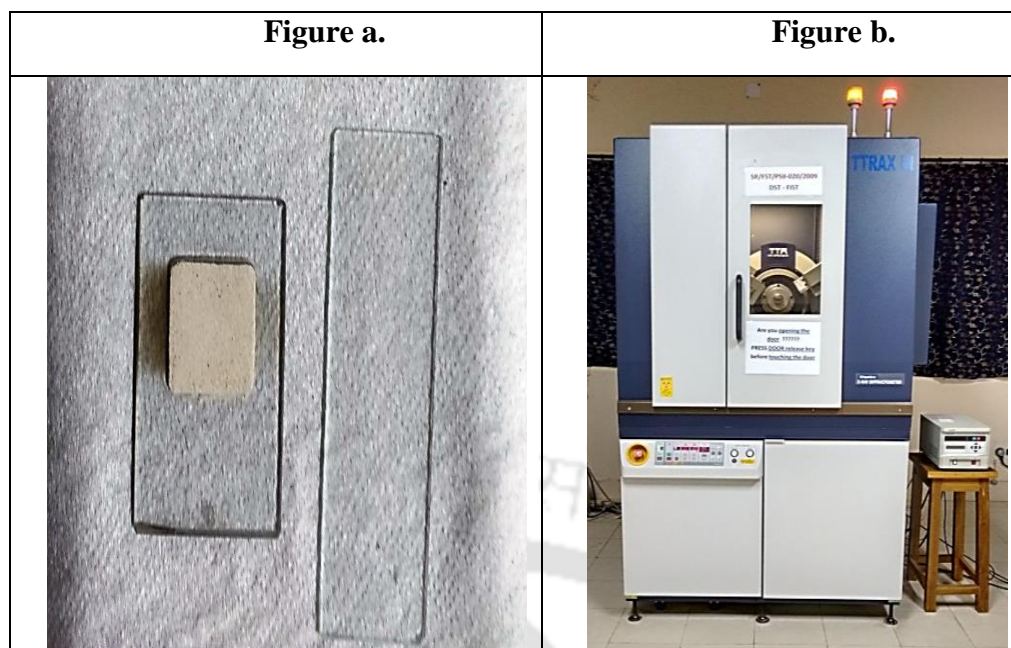


Figure 13. a) Powder sample placed in the Zero Diffraction plate and b) TTRAX III Rigaku X-Ray Diffractometer.

## 2. Thin-Section Petrographic Analysis

Thin-section petrography analysis is one of the earliest techniques used by geologist, archaeologist and conservation scientists to characterise and identify inorganic materials, for understanding and locating the source of the materials of the object and also to understand the cause of deterioration and weathering in the object and the effects of conservation treatment. With the help of thin-section petrography analysis one can identify the material and its geological origin, and manufacturing techniques. The same analysis can also help in identifying the cause of deterioration in the inorganic object and development of an effective conservation method. The relative or quantitative percentage of different elements present in the sample, sample texture and coarseness can also be identified through thin-section petrography analysis (Reddy, 1994, p. 115).

### Sample Collection

For Thin-section petrography analysis we have collected brick samples from different temple sites, such as Kamakhya temple (Guwahati), *Dirgheshwari* temple (Guwahati), *Madan Kamdev* temple (Guwahati), *Na-Nath* temple (Nagaon), and

*Kamakhya Devalaya* (Nagaon). One mortar sample collected from *Chinnamasta* temple (Guwahati) is also studied.

### Preparation of Thin-Section Slides

For preparing the thin section slides, the first step is the preparation of the sample. The sample is prepared by cutting into small pieces by a blade or by machine. The small piece of sample then ground in the grinding wheel. Then the sample material is mounted on a glass slide using epoxy resin with a refractive index (1.54–1.55) (Figure 14). Sample on the thin section glass slide is again polished in the grinding wheel to get a uniform thickness of 30  $\mu\text{m}$ . The thin section slide must be protected by a coverslip, and this step is particularly crucial for fragile specimens and other materials that might damage during the sample making procedure. The prepared thin-section slides are studied under the polarizing microscope. Minerals in mounted thin sections can be identified through a variety of optical properties, usually at magnifications ranging from 16 $\times$  to 400 $\times$ . For transmitted plane-polarized light, the properties include transparency versus opaqueness, colour, pleochroism, refractive index, relief, morphology, and cleavage.

Between crossed polarizers, important properties in the sample can be identified include isotropism versus anisotropic, birefringence, extinction angle, and the presence or absence of other features such as zoning, twinning, undulose extinction, and anomalous polarization colours.

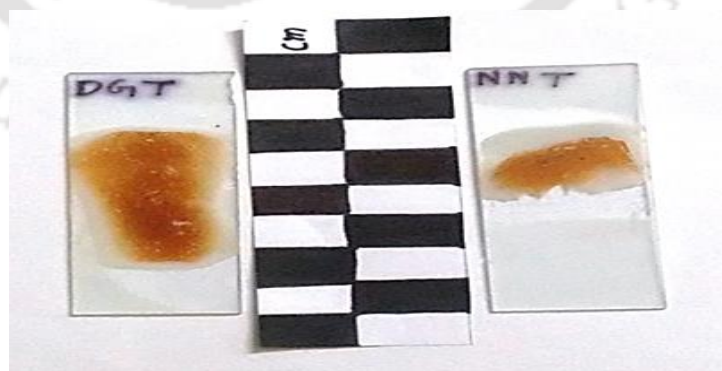


Figure 14. Example of the prepared thin-section glass slides prepared for the thin-section petrographic analysis.

### **3. Field Emission Scanning Microscopy (FE-SEM) & Energy Dispersive X-Ray Analysis (EDX)**

The Field Emission Scanning electron microscopy (FE-SEM) is a very useful tool for high-resolution surface imaging. Through FE-SEM nanometer-sized pores images can be generated in 2D form. Through these nanometer sized pores images, one can able to study the surface topography and internal morphology of the sample at the magnifications of 10x to 300,000x and more. These images are supported by the Energy Dispersive X-ray analysis (EDX). EDX provided a qualitative and quantitative elemental analysis of the samples on the bases of FE-SEM images. EDX can able to provide spatially resolved elemental analysis from areas as small as few nanometers in diameter. The x-rays produce from the impact of the electron beam on the sample identify the different elements present in the sample. EDX analysis is used to determine the composition of elemental in individual points, and from the imaged area, one can easily map out the lateral distribution of elements present in the sample.

One brick sample from *Namath-Kali* temple (Kamakhya temple complex) was examined using the Field Emission Scanning electron microscopy (FE-SEM) and EDX techniques. The Field Emission Scanning electron microscopy (FE-SEM) images were generated using the Zeiss FE-SEM instrument model: Sigma and the Energy-dispersive X-ray (EDX) analysis was obtained with an EDX detector installed on the same FE-SEM instrument.

#### **Sample preparation**

For FE-SEM & EDX, we used the powder (crystalline) form of brick sample. The brick is ground using mortar and pestle into a powder form. Only a small amount of sample is required for the analysis. The sample is mounted on the pin disc made of aluminium using the double-stick carbon adhesive tape with the help of clean tweezers. Excess sample on the pin should be removed to get more accurate nanoparticle images of the sample. The double gold coating is applied in the sample before placing the pin in the Zeiss FE-SEM instrument.

#### 4. Micro-optical Analysis

The micro-optical analysis is one of the methods of identifying minerals in archaeological materials through petrographic analysis. It is closely related to petrology and deals with determining the texture, occurrence and, structure of minerals in the sample.

##### Sample Preparation

The sample for micro-optical analysis is prepared by cutting into a small piece by a blade or by machine. Then, a small pallet is made with phenolic powder in the heat compressing machines (Figure 15). The surface of the pallet is polished in the grinding wheel. Then this pallet with the sample is investigated by Leica DLMSP polarizing microscope, to identify the samples texture and mineral compounds. Photomicrographs were obtained using a camera attached to the microscope, and the relative abundance of each constituent was determined using Prior Model G point counter. Characteristics observed under the microscope include color, the color variation under plane polarised light (pleochroism, produced by the lower Nicol prism, or more recently polarising films), fracture characteristics of the grains (Figure 16).

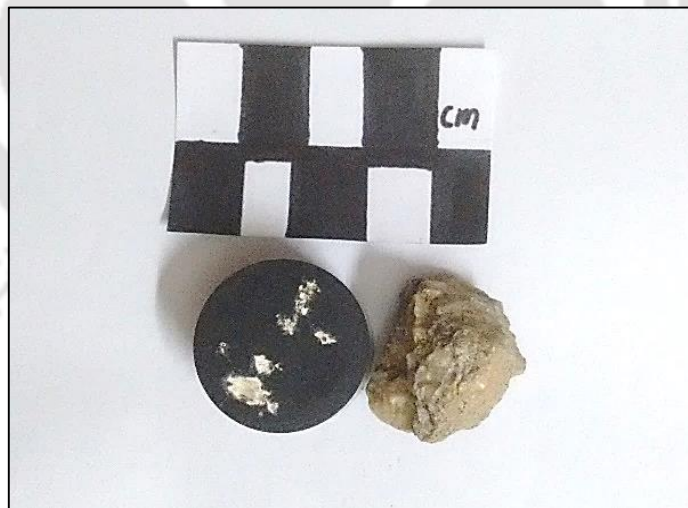


Figure 15. Example of the sample pallet made for the micro-optical analysis.

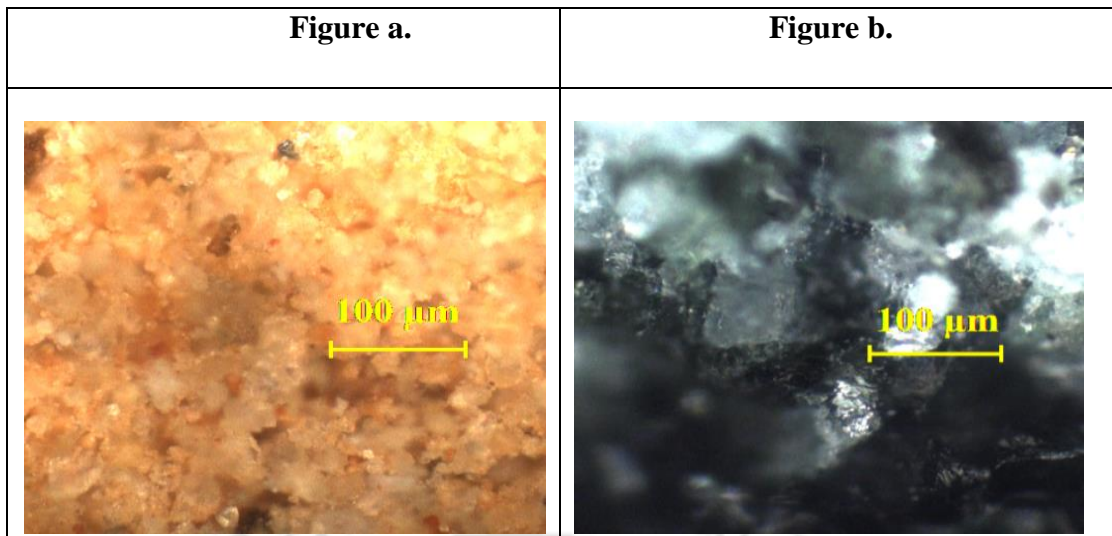


Figure 16: Example of the Micro-Optical Images a) Red colour grains in the brick sample (*Namath Kali* temple, Guwahati) showing the presence of Hematite in the sample and b) White colour crystalline grains in the stone sample (KMT 5) showing the large grains of Quartz present in the sample.

## Chapter 4

### Material Manifestation of the Belief system (Art and Architecture of the Kamakhya Temple)

#### Part I

### The Architecture of Kamakhya Temple

*“Architecture is the painting-press of all ages and gives a history of the states of society in which it was created.”*

*(Morgon 1859: 165)*

#### 4.1.1 Introduction

The archaeological site of Kamakhya temple plays a significant role in crafting the image of Assam, as one of the popular pilgrim places in India. Every year lakhs of pilgrims and devotees arrive at Kamakhya to acquire the blessing from a Goddess who has no physical form but worshipped in an aniconic form. A crevice on a flat granite rock with a perennial underground stream flowing on it is revered as the *Yoni* (vulva) of the divine mother Goddess. The things that make Kamakhya distinctive from the other *Shakta* site is not because of its symbolic representation of the higher power (*Adi Para Shakti*) but due to its strong association with the ancient or somewhat prehistoric cult of Mother Goddess. The enduring need of the changing era indeed affected the belief system of Kamakhya by turning its existing system to a modernised version of mainland Brahmanical sect, but the remnant of these old age tradition of “Mother Goddess Cult” is still present at the core of this site (Shastri, 2005).

The archaeological site of the Kamakhya temple brings Assam to the map of ancient and historical monuments of India. The site itself is a ground of living traditions continuously evolving and transforming to the extent that the site becomes a narrative of a 1516-year-old history of Assam. The archaeological site of Kamakhya narrates its history through its monuments, sculptural art, and architectural remains.

The earliest evidence to any building activity in the Nilachala hill is traced back to the 5<sup>th</sup> century A.D. as mentioned in the *Umachal* rock-cut inscription. The inscription mentions, the construction of a cave temple for Lord *Balabhadra Swami* (one of the incarnations of Lord *Vishnu*) by *Maharajadhiraja Sri Surendra Varman*.

The Varman dynasty was ruling ancient Assam in the 5<sup>th</sup> century A.D., but in the list of kings of Varman dynasty, we do not find the name of *Shri Surendra Varman*. From the *Umachal* rock-cut inscription his association with the ruling Varman dynasty can be assumed (Sarma and Borah, 2010).

Since the 5<sup>th</sup> century A.D., there was a continuous struggle between different beliefs, faiths, and power on the site to become the dominant authority of the site. In the process, powerful beliefs system subsumed minor ones into a larger doctrine of belief.

Today, it is a cultural identity marker of the state of Assam within which it is located. Its diverse faiths and beliefs have been appropriated by powerful legends to the dominant faith of the land. The temple has evolved from a cave temple to a complex of twenty-one temples. The faith has evolved from the worship of water, an element of nature to the worship of ten different forms of the Goddess with their five male consorts known as, *Bhairavas*.

The site itself represents and symbolises the relationship of power and control out of which it has emerged (Robertson and Richards, 2003). During different periods of occupation, certain architectural and iconographical characters developed which indicated diffusion and cultural adaptation.

The main objective of the present chapter is to study the evolution of Kamakhya temple architecture from a simple cave temple to a group of temples. The primary source of information is the data we have gathered during an extensive field survey, and the secondary source of information is the epigraphical records and previous work published on the Kamakhya temple.

#### **4.1.2. Methodology: Documentation of existing architecture in the archaeological site of Kamakhya temple**

During our documentation, we have covered 1.79 sq. Km area or approximately 442.3 acres, of which the temple site covers approximately 1.25 sq. Km area or approximately 308.9 acres. We have documented twenty-one temples, six *kund* and four gateways at the site and created a detailed inventory which facilitates us in fulfilling the aim of the present study. We have created architectural ground plans of

selected temples using AutoCAD. The main criteria for selection of temples are based on the architectural style of the temple, such as the temple should follow the architectural norms as mentioned in different ancient texts on architecture like *Vastusastra*, should have minimum three chambers- *Garbhagriha* (sanctum sanctorum), *antarala* (vestibule), and *mandapa* (hall); and not recently constructed.

#### **4.1.3. Temple Building History: Evolution of Kamakhya Temple Architecture**

The evidence of architectural transition can be witnessed on the site through the presence of different styles of temple architecture and construction material. Throughout the temple building history of the Kamakhya temple, the site has seen tremendous changes in the Hindu temple architecture style from *Nagara* (Northern Indian Hindu temple style) to *Vesara* (Central Indian Hindu temple style), from *Pancharatha* to *Saptaratha* temples forms. The construction material also changed from stone to bricks and lime mortar. Terracotta tiles or plaques were also used in the temple building as evident from the *Namath Kali* temple at the site. These changes are not sudden changes, and this happened gradually over the time period of approximately 1516 years (5<sup>th</sup> century A.D. to 21<sup>st</sup> A.D.).

If the legend from *Kalika Purana* and local legends are considered the temple building in the Nilachal hill started with the construction of the *Mekhela ujuwa bat* (Figure 17) by the mythical demon king *Narakasura* (Borah, 2010, p. 8; Shastri, 2005). Our field data supported the fact that these pathways were indeed constructed with the remains of old stone structures but its affiliation with the demon king *Naraka* is difficult. The popular legend of king *Narakasura* has found its place in many ancient texts and act as source material for the local legends regarding the Kamakhya temple. According to this legend king, *Naraka* of the *Bhauma* dynasty of *Pragjyotisha* (ancient Assam) accepted the challenge from Goddess Kamakhya for her hand in marriage. The challenge was to construct an entire pathway and a water tank from the foothill of the Nilachala hill to the temple in one night. Which he failed, now the uncompleted pathway is known as *Mekhela Ujuwa Bat* (Borah, 2010, p. 8; Shastri, 2005) and we mentioned it as an ancient western pathway in our study.



Figure 17. The *Mekhela ujuwa bat* or western pathway in the archaeological site of Kamakhya temple.

The next local legend connected the temple to the Koch dynasty of Assam and Bengal. According to this legend, the Koch king *Biswa Singha* (founder of the Koch kingdom) and his brother *Siva Singha* discovered the ruined site of Kamakhya temple. Later while excavating the ruined site, they found the *yoni peetha*, and above that, they constructed a brick temple. However, the same legend shed no light on the background of the temple history and who might have constructed the temple in the first place? There is a reference about the temple being a stone temple, and the Goddess is worship as a *yoni peetha*, but apart from this, there is no other information provided by this legend. The entire legend reflected the role of king *Biswa Singha* in re-building Kamakhya temple but shed no lights on the background of the previous temple.

If epigraphical evidence is considered the temple building in Nilachal hill started with the construction of a cave temple for Lord *Balabhadra Swami* (one of the forms of Lord *Vishnu*) as mentioned in the *Umachal* hill rock inscription (Figure 18). Nevertheless, this inscription sanctified the place as it recorded the first-ever temple building activity in this region.

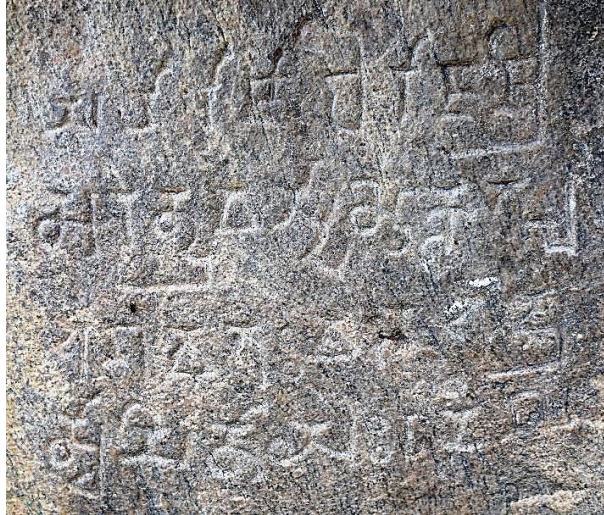


Figure 18. Umachal Rock Inscription (This cave (temple) of the illustrious Lord *Balabhadra Swami* has been constructed by *Maharajadhiraja Sri Surendra Varmana*, 5<sup>th</sup> century A.D.

The next epigraphical inscription found on the site is the Kamakhya stone inscription, dated to 1565 A.D. The stone inscription of king *Naranarayana*, dated 1565 A.D. shed light on the building activity in the Nilachala hill. The stone inscription at the Kamakhya hill, reveals that the reconstruction and renovation of the Kamakhya temple by Koch king *Naranarayana* and his brother *Sukladhvaj* alias *Chilarai* in 1565 A.D. There is a considerable time gap between the *Umachal* rock inscriptions (5<sup>th</sup> century A.D.) and the Kamakhya rock inscription (1565 A.D.) resulting in many speculative conclusions.

However, two stone inscription found installed on the temple wall, shed light on the temple building activity during the Ahom period (Figure 19). The stone inscriptions installed inside the *Natmandapa* of main Kamakhya temple describes that the *Utsava Mandir* attached to the main Kamakhya temple was constructed by the officer *Dasaratha Tarun Duwar* under the patronage of Ahom king *Rajeswar Singha* (1751-1769 A.D.). The second stone inscription installed inside the *Amrakeswara* temple at Kamakhya temple describes that the temple was constructed by *Tarun Duwarah Barphukan* under the patronage of Ahom king *Pramatta Singha* (1744-1751 A.D.) (Bhuyan & Nayak, 2010; Sarma and Borah, 2010).



Figure 19. a) A stone inscription at *Natmandapa* of Kamakhya temple (1759 A.D.); b) Stone inscription at *Amratakeswara* temple (1744 A.D.)

On the basis of the architectural remains and sculptures lying in the vicinity of the main temple, P. C. Choudhury dated the temple to 7<sup>th</sup>-8<sup>th</sup> century A.D. by comparing the gigantic capitals of pillars and the style of plinth of an older structure below the present Kamakhya temple to the sun temple of Tezpur dated back to 7<sup>th</sup>-8<sup>th</sup> century A.D. (Choudhury, 1959, p. 466). While, Dr Sukanya Sharma, on the ground of stylistic characteristics of the decorative panels found in the remains such as, inter alia, floral patterns carved on the granite stone etc. dated them to 6<sup>th</sup>-7<sup>th</sup> century A.D. She concluded on the basis of the stylistic characteristics of the several architectural remains, sculptures and decorative motif, that *“the first phase of temple building on the Nilachala hill had taken place around 5<sup>th</sup> century A.D. with the establishment of the cave temple, which was later followed by the phase of the construction of the structural temples and continued to the 10<sup>th</sup> century A.D.”* (S. Sharma, 2010, p. 116).

Pranav Joyti Deka (2004) in his book *“Nilacala Kamakhya: Her History and Tantra”* provides two different carbon dates of around 2200 years and 1500 years, one from the soil layers below the earliest construction and other from the soil layers above the construction level respectively. Carbon Isotope age determination experiment was conducted by the Department of Geo-Science of Guwahati University. According to him, the ancient part of the temple is the stone construction around the cave with the water fountain. Which he argues that this must belong to the Mahiranga or even Pre-

Mahiranga period. He made a conclusive statement on the basis of the carbon dating that the construction work may start in and around 200 B.C. to 500 A.D. He further states that the bottom part of the stone platform must be constructed around 2000 years (approximately 8<sup>th</sup> century A.D.) ago, while the second stage of construction can be dated to 500 A.D.

Pranav Joyti Deka (2004) gives a chronological sequence of the temple building activities in the Nilachala hill from the period of Pre-Mahiranga to Koch period, according to his sequence, the upper part of the stone temple was constructed around 500 A.D., and due to certain circumstances such as earthquake and so on, the roof of the temple collapsed around 13<sup>th</sup> century A.D., and this was later reconstructed with bricks and mortar in 1560-65 A.D. The temple of *Vishnu Balabhadra* was constructed during 500 A.D. on a demolished or ruined stone platform of Pre-*Naraka* I period (Deka, 2004, p. 76). But there is no evidence on the site to prove any temple building activity before 5<sup>th</sup> century A.D so this statement is quite based on the author's own theories and speculation.

R. D. Banerji conducted the exploration on the Nilachala hill and published his data in the annual reports of Archaeological Survey of India (1924-25). This is one of the earliest works that has ever been done on the Kamakhya temple. In his report, he mentioned several ancient architectural remains and features such as (Banerji, 1927, p. 100-101):

- 1) The carved stone blocks, used in the steps from the landing stage on the river to the top of the Nilachala hill, which he states must belong to the 7<sup>th</sup> or 8<sup>th</sup> century A.D. but not earlier than the *Dah-Parbatiya* remains.
- 2) The immense size capitals of pillars indicate that they must have been the part of a gigantic temple-like the sun temple of Tezpur.
- 3) The lower part or the plinth in the *garbhagriha* of the temple is the remains of the ancient structure, which was later utilised in the construction of the present temple, most likely during the reconstruction of the Kamakhya temple by the Koch king *Naranaryana* and later on by the Ahom kings.

- 4) Above the old plinth, one can find the dados of the *Khajuraho* or the central Indian type in the sunken panels.
- 5) There are several sculptures and architectural fragments of the Koch period scattered around the site recognised by the crude outline of the human figure.
- 6) The remains found at the back of the main shrine belonged to at least three different periods, ranging from 8<sup>th</sup> to 17<sup>th</sup> century A.D.

This data provided by R.D. Banerji was also used by P.C. Choudhury, while mentioning the ancient remains at Kamakhya in his work “*The History of Civilisation of the People of Assam to The Twelfth Century A.D.*” (Choudhury, 1959, p. 466-467).

During our field survey, we also noticed the western ancient pathway and eastern ancient pathway are covered with various stone architectural fragments (Figure 20). Even the stairway on the western side of the main Kamakhya temple is constructed using architectural stone fragments. These fragments have been reused to build the pathway, which indicates that these pathways were built after the stone temple collapsed. The architectural fragments are scattered throughout the Kamakhya temple site, of which the higher concentration of the fragments is confined to the western part of the site. The distribution of architectural or structural fragments can be seen more clearly with the help of GIS map (Figure 20).

### The Concentration of the Structural Fragments in the Archaeological Site of Kamakhya

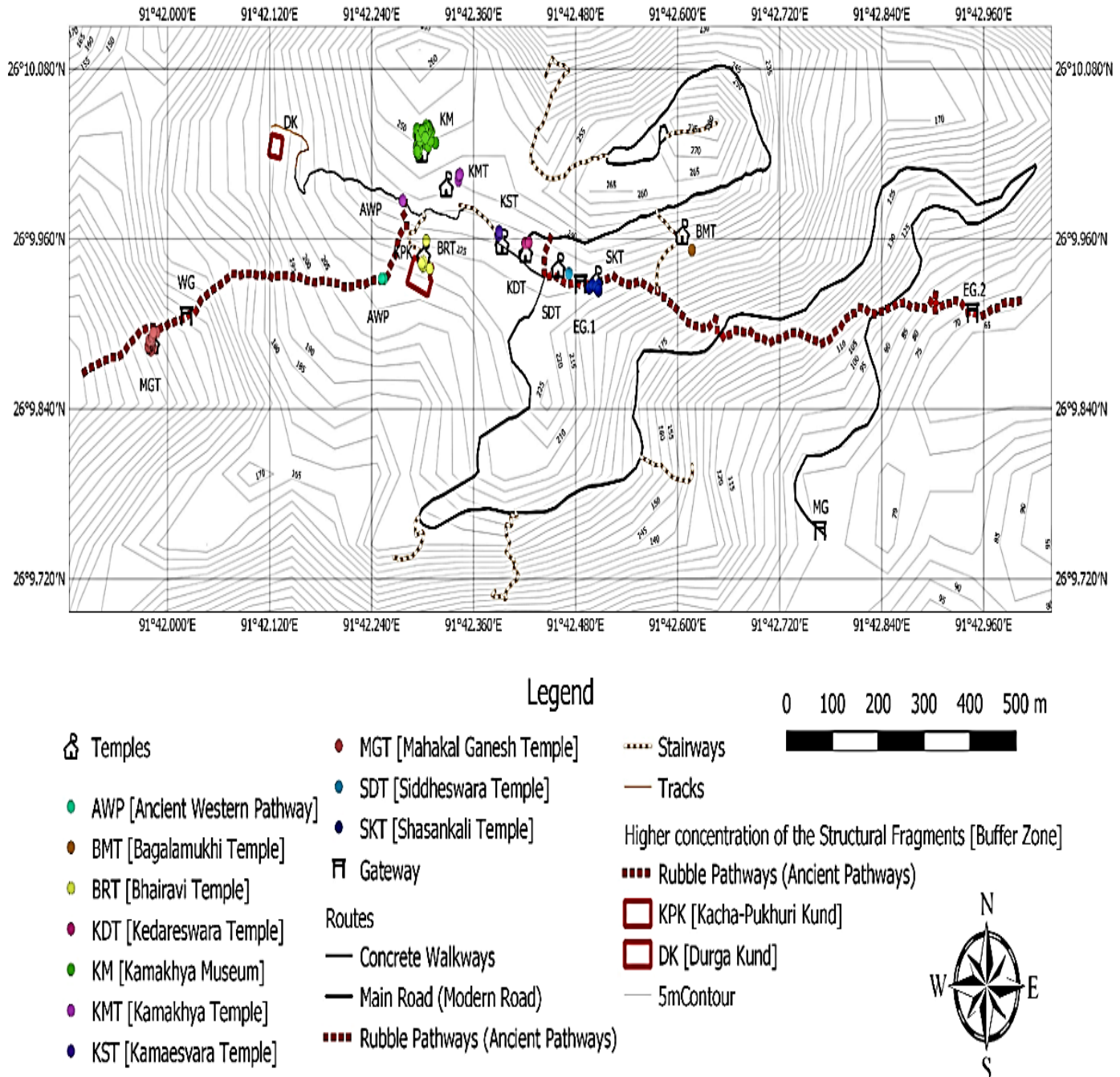


Figure 20. The concentration of the architectural or structural fragments in the archaeological site of Kamakhya temple.

In this map, all the structural fragments and remains found throughout the Kamakhya temple site is displayed with 5 m contour lines (scale 1: 4000). The different colour code indicates the location or area where the structural remains are found. Here, the bright red colour shows the area with a higher concentration of the structural or

architectural remains. The red colour area includes the area of the western ancient pathway, eastern ancient pathway, *Durga kund* (near *Tokeswara* temple) and *Kachapukhuri* (in *Bhairavi* temple). The fluorescent green colour in this map represents the area of the Kamakhya temple museum with a higher concentration of the structural remains. The next higher concentration of the architectural or structural fragments can be seen in the *Mahakal Ganesha* temple. In the area of *Mahakal Ganesha* temple and in the museum, different architectural fragments are displayed for public view.

Evidence of small *urushringa* (subsidiary tower) and *amalaka* (disk on the top of the *sikhara*) fragments are displayed in both the Kamakhya temple museum and *Mahakal Ganesha* temple (Figure 21). These are the characteristic features of a *Nagara* Hindu temple. We have also found the miniature *Nagara* style temples carved in the mountain face of the *Mahakal Ganesha* temple (Figure 22). The carved miniature temple suggests the presence of the *Nagara* style of Hindu temple architecture on the site. This finding is further confirmed by the presence of various fragments of *amalaka*'s and *urushringa*'s (subsidiary *sikhara*) on the site.

On the basis of our observations, it can be suggested that the stone temples which collapsed were built in *Nagara* Hindu temple style with prominent curvilinear *sikhara* (tower) and *urushringa* (subsidiary *sikhara*).



Figure 21. Fragment of *urushringa* (subsidiary tower) and *amalaka* (disk on the top of the *sikhara*) attached with a *kalasha* fragment found at the site



Figure 22. Miniature *Nagara* style temples carved in the mountain face in the *Mahakal Ganesha* temple.

The above observations are also supported by the presence of three forms of stone architectural fragments on the site. The three forms of fragments include the architectural limbs (pillars, the base of pillars, *amalaka*, etc.), the dressed stone and the undressed stone blocks. Majority of the architectural limbs and dressed stone fragments are displayed in the museum and in the *Mahakal Ganesha* temple. Dressed stone is also seen installed on the temples walls, boundary walls, pathways, and stairways. Few dressed stones are found scattered in a different part of the site (Figure 23). The undressed stone blocks are mostly used for making pathways, stairways and boundary walls. Piled up discarded undressed stone blocks are also visible on the site (Figure 24). There is a higher density of architectural fragments towards the North-West side of the site, especially on the western pathway.

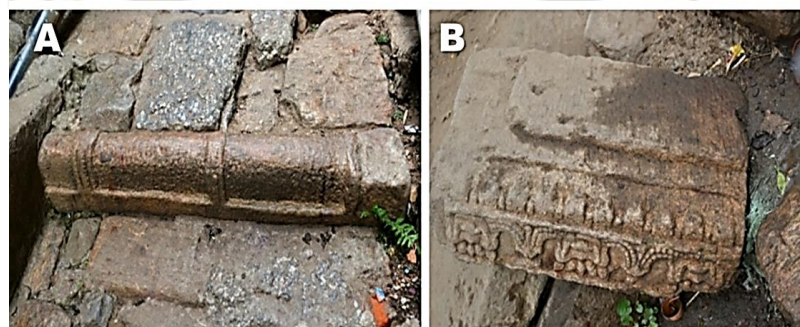


Figure 23. Example of dressed stone fragments in the archaeological site of Kamakhya temple: Figure A) A-pillar fragment in the stairway located on the backside of the main Kamakhya temple on the course of the western pathway. B) Dressed stone block lying inside the boundary of *Kacha Pukhuri* in the *Bhairavi* temple.



Figure 24. Example of undressed stone fragments in the archaeological site of Kamakhya temple: Figure A) & B) Undressed stone blocks in the stairways located on the backside of the main Kamakhya temple and in the western pathway.

#### 4.1.4. Types and Form of Architecture Present in the Archaeological Site of Kamakhya Temple

During our documentation, we have recorded twenty-one temples dedicated to different Gods and Goddesses, six ponds and four gateways (Table 6 & Figure 25). Apart from the main temple of Goddess *Kamakhya*, there are seven others temples dedicated to the seven manifestations of the Goddess, such as *Tara*, *Kali*, *Dhumavati*, *Bagala*, *Bhuvanesvari*, *Bhairavi*, and *Chinnamasta*. While the three different manifestations of the Goddess, known as *Sodasi*, *Matangi* and *Kamala* are worshipped within the *Manobhava Guha* (sanctum sanctorum) of the main *Kamakhya* temple. Apart from the temple dedicated to the *Dasa-Mahavidyas*, there are five other temples, dedicated to the *Bhairavas* (manifestation of Lord *Siva*), such as, *Kamesvara* (or *Vanadeva Siva*), *Siddheswara* (or *Ishana Siva*), *Aghora* (or *Heruka Siva*), *Kotilinga* (or *Tatpurlusa Siva*) and *Amratakeshwara* (*Sadyojata Siva*). We have also documented three newly constructed temples dedicated to Goddess *Vanavasini Durga*, *Lalita-Kanta*, and *Jaya Durga*. They are three different manifestations of Goddess *Dikkaravasini*. Though this is a *Shakti peetha*, we can also find the sculptures and a shrine dedicated to the Lord *Vishnu*, i.e., the temple dedicated to *Kamalesvara* (one of the forms of Lord *Vishnu*). Two temples are dedicated to Lord *Ganesh*, they are known as *Mahakal Ganesh* temple (on the western pathway) and *Darpul Ganesh* temple (on the main road) (Sharma, 2010; P. Sarma, 2010; P. Sarma, 1981-82)

The archaeological site of Kamakhya temple is the only surviving temple site where we can find the presence of each *Dasa-Mahavidyas* (ten manifestations of the goddess). There are several temples, where you can find one or two among the *Dasa-Mahavidyas* worshipped as the main deity or subordinate deity, but the presence of all manifestation at the same complex is very difficult to find.

Table 6. Numbers of structures, ponds and gateways documented from the archaeological site of Kamakhya temple (ASKMT)

S.No	Name of the Temple	Abbreviation	Location
1.	Amratakeshwara Temple/ Tokeswara Temple	AKT/TKT	26°10'2.4"N 91°42'8.8" E
2.	Bandurga Temple	BDT	26°09'45.8"N 91°42'17.6" E
3.	Bhairavi Temple	BRT	26°09'57.0"N 91°42'18.1" E
4.	Bagalamukhi Temple	BMT	26°09'57.9"N 91°42'36.3" E
5.	Bhuvanesvari Temple	BHT	26°10'2.2"N 91°42'39.7" E
6.	Chinnamasta Temple	CMT	26°09'57.6"N 91°42'23.2" E
7.	Chiddeswari Cave Temple	CCT	26°09'47.1"N 91°42'38.2" E
8.	Dakshinakali Temple	DKT	26°09'58.4"N 91°42'22.7" E
9.	Dhumavati Temple	DMT	26°09'58.5"N 91°42'17.9" E
10.	Durga Kund	DK	26°10'2.1"N 91°42'7.7" E
11.	Eastern Gateway No. 1	EG.1	26°09'54.3"N 91°42'57.7" E
12.	Eastern Gateway No. 2	EG. 2	26°09'55.7"N 91°42'29.1" E
13.	Ganesh Temple	GT	26°09'54.5"N 91°42'49.6" E
14.	Gaya Kund	GK	26°09'57.0"N 91°42'27.8" E
15.	Jay Durga Temple	JDT	26°09'42.5"N 91°42'23.5" E
16.	Kacha-Pukhuri Kund	KPK	26°09'56.7"N 91°42'18.1" E
17.	Kamakhya Temple	KMT	26°09'59.9"N 91°42'19.7" E
18.	Kamakhya Museum	KMM	26°10'1.7"N 91°42'18.1" E
19.	Kamaeswara Temple	KST	26°09'57.5"N 91°42'23.6" E
20.	Kedareswara Temple	KDT	26°09'57.1"N 91°42'25.3" E
21.	Kotilinga Temple	KLT	26°10'5.2"N 91°42'26.2" E
22.	Lalit Kanta Temple	LKT	26°09'47.7"N 91°42'36.8" E
23.	Mahakal Ganesh Temple	MGT	26°09'53.6"N 91°41'59.2" E

24.	Namath-Kali Temple	NKT	26°10'0.8"N 91°42'18.2" E
25.	Rama Kund	RK	26°10'4.7"N 91°42'26.7" E
26.	Rinmoksha Kund	RMK	26°10'1.76"N 91°42'18.8" E
27.	Shasankali Temple	SKT	26°09'55.9"N 91°42'30.2" E
28.	Shubhagaya Kund	SBK	26°10'0.346"N 91°42'19.92" E
29.	Siddheswara Temple	SDT	26°09'56.5"N 91°42'27.6" E
30.	Tara Temple	TT	26°09'59.3"N 91°42'21.7" E
31.	Western Gateway	WG.1	26°09'54.3"N 91°42'1.34" E



Figure 25. Types of gateways in the archaeological site of Kamakhya temple: A) Eastern gateway No. 1 located near *Siddheswara* temple and the ancient eastern pathway begins from this gateway. B) Eastern Gateway No. 2, the ancient eastern pathway ends here. C) Western gateway located on the ancient western pathway. D) Northern gateway, here the modern road to the Kamakhya complex begins.

Based on the GIS database, it is estimated that a majority of the temples in the site are located between 176-242.5 m height on the Nilachala hill (Figure 26). The main Kamakhya temple is situated about 180 meters above the surrounding plains between 26°09'59.9"N to 91°42'19.7" E. Majority of the temples are located in close proximity, except *Bhuvaneshwari*, *Kotilinga*, *Mahakal Ganेशa*, *Amratakेशwara (Tokeswara)* and *Darpul Ganेशa* temple. The *Bhuvaneshwari* temple is located on the highest peak

of the hill which is around 307.2 m from the sea level, while the *Kotilinga* temple is located at 196.95 m height of the hill. Three newly constructed temples, *Jay Durga*, *Bandurga* and *Lalit Kanta* temple, is located on the lowest peak of the hill, which is around 165.71-128.22 m. It can be assumed that the south-west facing area of the hill is most preferred for temple building activity as most of the temples are located between 160.41-239.47 degree aspect. This area of the hill is comparatively flat, in which most of the temples are located between 1.89°-13.17° slopes.

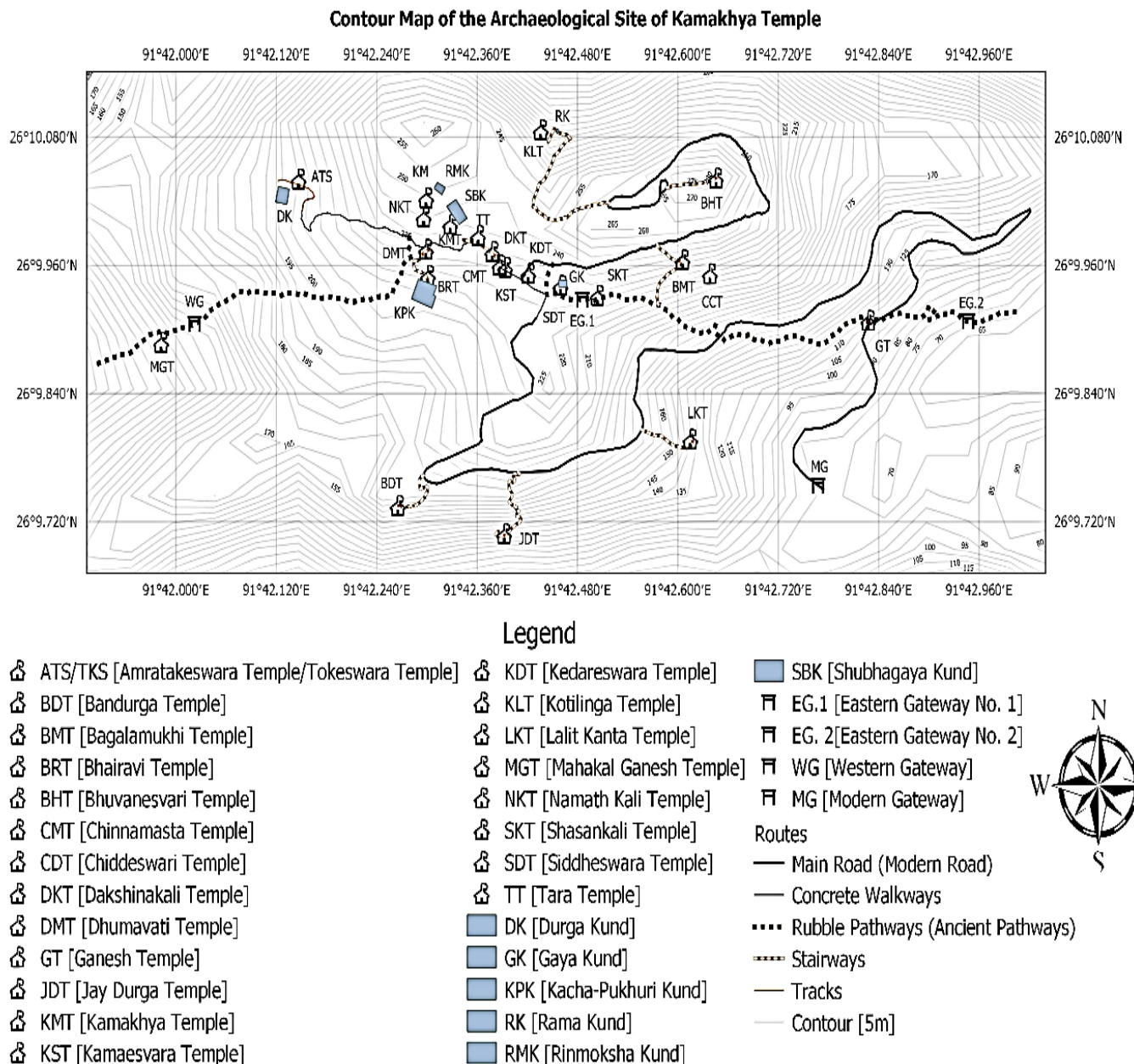


Figure 26. Contour map of the archaeological site of Kamakhya temple.

The understanding of directional alignment is very important, especially in the study of Indian temple art and architecture (Daware, 2015). Three orientation of the temple is mentioned in Indian *Vastu Sastra* text of *Manasara* and *Mayamata*, and they are East-West, West-East and South-North orientation (Shukla, 1972). The orientation of the temple is decided by two factors, the first is the nature of the deity and the second is the orientation of the plan of the temple for the placement of the deities inside. The orientation of the temple is greatly influenced by the nature of the deity residing in the temple. For instance, the majority of the Hindu Gods and Goddesses temple faces east. East-West is the most preferable temple orientation seen in Indian temple art and architecture. While the second most preferable temple orientation is west, is for the pantheon of the *Shaivite* tradition like Lord *Shiva* and his different forms, Lord *Ganesha*, and the different benevolent manifestation of Goddess *Adhipara Shakti*. The third orientation of the temple is south, is for those malevolent and furious forms of deities like Lord *Yama*, Goddess *Bhairavi*, Goddess *Kali*, etc. The second deciding factor of the orientation is the plan of the temple itself. If the temple is constructed east-facing, then the deity is also facing east, vice versa in the case of west and south-facing temple (Batham, Rathore and Tandon, 2018).

Here, in the archaeological site of the Kamakhya temple, the majority of the temples were built in west-east alignment, where the deity is worshipped facing east and south-north alignment, where the deity is worshipped facing north. Only one temple of Lord *Ganesha* on the site was built in east-west alignment. The west-facing temples on the site, are *Kamakhya* temple, *Kamaeswara* temple, *Kedareswara* temple, *Kotilinga* temple, *Bogaladevi* temple, *Bhubanesvari* temple, *Chinnamasta* temple, *Mahakal Ganesha* temple, and *Siddheswara* temple. The south-facing temples on the site are *Dakshina Kali* temple, *Tara* temple, *Bhairavi* temple, *Dhumavati* temple, and *Amrakeswara* temples (Table 7).

As mentioned in the *Manasara* and *Mayamata* the *Shaivite* deities should be worshipped facing east, which can explain the reason behind the orientation of the various temple is west-east direction, due to being a *Shakta* site with the temples dedicated to *Shaivite* deities. Similarly, the malevolent or the furious forms of deities should be worshipped facing north, explaining the placement of the temples dedicated

to the furious forms of Goddess *Adhipara Shakti* like Goddess *Dakshinakali*, *Bharavi*, *Dhumavati*, *Shadankali* in a south-north direction.

However, there are few temples of benevolent deities, like the temple of Goddess *Tara*, *Amrakeswara* temple, *Lalit Kanta* and *Jay Durga* temple also placed in the south-north direction and the temple of Goddess *Chinnamasta* a furious Goddess was built in a west-east direction and *Ganesha* temple in the east-west direction. These deities are placed in this direction to suit the flat hill area and followed the temple plan on the hill, as we have described earlier.

Table 7. Directional alignment of the temples in the archaeological site of the Kamakhya temple

S. No	Name of the Temple	Deities and Affiliation	Location
1.	Amrakeswara Temple/ Tokeswara Temple	Lord <i>Amrakeswara</i> ( <i>Shiva</i> temple)	S-N (south facing-north back)
2.	Bhairavi Temple	Goddess <i>Bhairavi</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)
3.	Bogaladevi Temple	Goddess <i>Bogaladevi</i> ( <i>Shakta</i> temple)	W-E (west facing-east back)
4.	Bhuvaneshwari Temple	Goddess <i>Bhuvaneshwari</i> ( <i>Shakta</i> temple)	W-E (west facing-east back)
5.	Chinnamasta Temple	Goddess <i>Chinnamasta</i> ( <i>Shakta</i> temple)	W-E (west facing-east back)
6.	Dakshinakali Temple	Goddess <i>Dakshinakali</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)
7.	Dhumavati Temple	Goddess <i>Dhumavati</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)
8.	Ganesha Temple	Lord <i>Ganesha</i>	E-W (east Facing -west back)
9.	Jay Durga Temple	Goddess <i>Jay Durga</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)
10.	Kamakhya Temple	Goddess <i>Kamakhya</i> ( <i>Shakta</i> temple)	W-E (west facing-east back)
11.	Kamaeswara Temple	Lord <i>Kamaeswara</i> ( <i>Shiva</i> temple)	W-E (west facing-east back)
12.	Kedareswara Temple	Lord <i>Kedareswara</i> ( <i>Shiva</i> temple)	W-E (west facing-east back)
13.	Kotilinga Temple	Lord <i>Kotilinga</i> ( <i>Shiva</i> temple)	W-E (west facing-east back)
14.	Lalit Kanta Temple	Goddess <i>Lalit Kanta</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)

15.	Mahakal Ganesh Temple	Lord <i>Ganesha</i>	W-E (west facing-east back)
16.	Shasankali Temple	Goddess <i>Shasankali</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)
17.	Siddheswara Temple	Lord <i>Siddheswara</i> ( <i>Shiva</i> temple)	W-E (west facing-east back)
18.	Tara Temple	Goddess <i>Tara</i> ( <i>Shakta</i> temple)	S-N (south facing-north back)

#### 4.1.5. Archaeometric Analysis of Temple Construction Material

Two types of masonry work are observed in the archaeological site of Kamakhya, the stone masonry work and the brick masonry work. The *adhithana* of the temples like, Kamakhya temple, *Chinnamasta* temple and the *Siddheswar* temple, are still preserving some of the stone masonry work. While the eastern and northern wall of the cella in the *Chinnamasta* temple and *Kali* temple respectively is built using Granite-gneiss stone blocks. They all are the surviving example of the stone masonry phase at the site, which was overcome by the brick masonry work in the later period. Though the existing superstructures of most of the temples are constructed by using brick masonry, it can be suggested with the help of these above examples that the original temple was built using the stone masonry and later replaced by the brick masonry (S. Sharma, 2010, p. 124).

##### I. Stone Masonry

On the basis of thin-section petrography and XRD analysis of stone samples collected from the site, it is now known that the rock used for masonry work is not quarried from Nilachala hill. As the Nilachala hill have porphyritic granite rock, which due to its coarse texture considered less preferable raw material for sculpture and architecture. The coarse texture of porphyritic granite is due to the presence of large grains of feldspar. The Biotite rich granite is also not suitable for construction and sculpting purposes. As these rock gets easily weathered and chipped in a high humid environment. This is the main reason behind the presence of badly deteriorated and weathered rock-cut sculptures at Nilachala hill because they are carved on the porphyritic granite cliff. Most of the surviving stone temple foundation (*adhithana*) and stone architectural remains at the site is made using the Granite gneiss rock quarried from other places. Gautam Sengupta & Sambhu Chakrabarty (2017) in his paper

“Ancient quarries in Guwahati, Assam” mentioned four ancient quarry sites in Guwahati, Assam: a) Phatasil Ambari, b) Southern foothill of Nilachal hill, c) South of Durgasarobar, and d) Maj Bargaon (Sengupta & Chakrabarty, 2017).

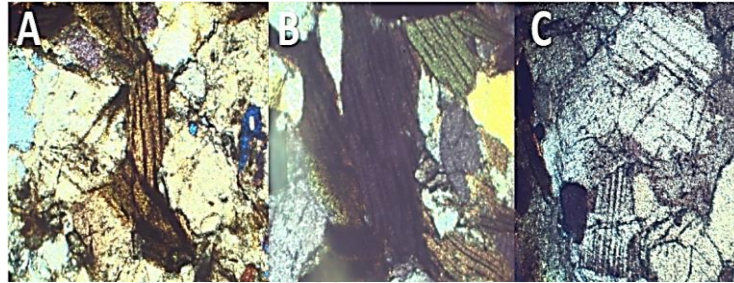


Figure 27. Thin-section microscopic images of porphyritic granite showing the presence of A) biotite. B) microcline feldspar. C) large Quartz grains in the stone sample KMT-01-SDH-01, KMT-02-SDH-02, and KMT-03-KD-01

During our fieldwork, we have found one architecture fragment made from Basalt rock (Figure 28 & 29). Basalt rock is not found on the hill and must have been quarried from some other places.



Figure 28. Example of the Basalt stone: Architectural fragments in the Kamakhya Museum.

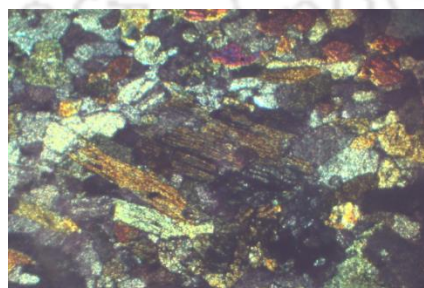


Figure 29. Thin-section microscopic image of Basalt showing the presence of Quartz, hornblende, biotite within a fine-grained groundmass in the stone sample No. KMT-05-KMM-01

## II. Brick Masonry

Majority of the temples in the site is constructed using brick masonry (Figure 30).

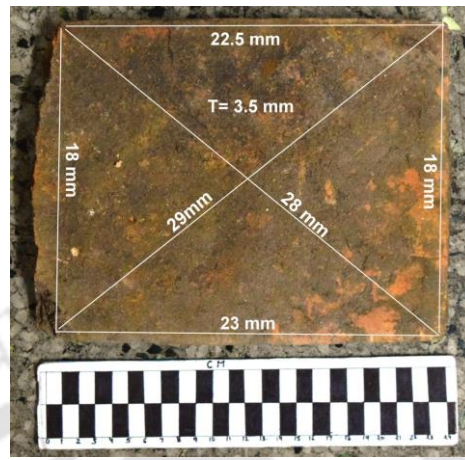


Figure 30. Sample of brick collected from Kamakhya Temple

On the basis of XRD and thin-section analysis the firing temperature of the bricks can be estimated by identifying the different mineral phases present in the sample such as, the presence of Wollastonite and Hematite indicate that the firing temperature of the bricks is more than 900° C. The prominent red colour grains in the brick samples also indicated the presence of hematite. The transformation of Iron-Oxides (goethite and other) into hematite only occur when the temperature reaches 850° C. The high percentage of Quartz in the brick sample, indicate toward the use of some sand particles as an additive material in brick manufacturing. A large amount of quartz in the sample can also belong to detritus sands coming from the rocks in the Brahmaputra valley (Raheijuddin & Gohain, 2013). Apart from the Quartz, there are other mineral phases present in the brick sample that includes, Goethite, Hematite, Magnetite, Kaolinite, Gypsum, Micas, Feldspars and Berlinite. The presence of the mineral phase of Gehlenite (Calcium-Aluminium) and Diopside Magnesium Silicate) indicated the presence of Calcite and Dolomite in the bricks samples. Presence of Gehlenite (Calcium-Aluminium) also shows the reaction between the mineral of clay (Illite) and Calcite at the firing temperature of 800° C to 900° C (Fort, Buergo, Heras, & Calvo, 2006). In sum, the firing temperature of the brick sample from the Kamakhya temple complex must be between the 800-1000°C. XRD and thin-section analysis indicated towards the presence of the Inorganic material (Sulfur/ pyrite) in one of the mortar sample collected from the *Chinnamasta* temple (Figure 31 & Table 8).

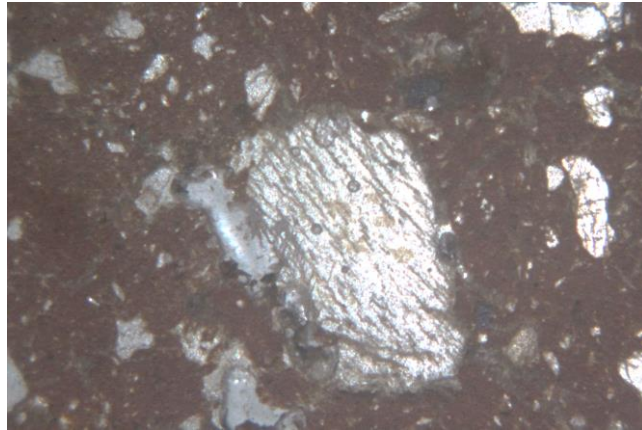


Figure 31. Example of Thin-section analysis of mortar sample collected from *Chinnamasta* CMT- Feldspar. Brown colour matrix with green colour and the irregular spots of yellowish colour populous indicating the inclusion or presence of Sulphur.

Table 8. The XRD analysis of mortar sample collected from *Chinnamasta* temple (CHT-M).

List of matching phases from sample CHT-M (Mortar Sample)			Graph
Mineral Groups	d= $\lambda/2\sin\theta$ (in Å)	Mineral identification	
Feldspar	6.4665	Anorthoclase	
Micas	4.4832	Muscovite	
Plagioclase Feldspar	4.1856	Bytownite	
Oxides, hydroxides	4.023	Berlinite	
Feldspar	3.8446	Anorthoclase	
Feldspar	3.2889	Sanidine	
Carbonates	3.0327	Calcite	
Sulfate mineral	2.6503	Gypsum (deuterated)	
Oxides, hydroxides	2.4932	Cristobalite	
Iron(III) Oxide	2.4548	Magnetite	
Oxides, hydroxides	1.9781	Quartz	
Oxides, hydroxides	1.6227	Graphite	
Feldspar	1.2555	Anorthoclase	

#### 4.1.6 Architectural Characteristics of Temples at the Site

##### 1. Kamakhya Temple

The essential elements present in the architectural plan of Kamakhya temple are, *Vimana* (the main temple), *Antarala* (the vestibule), and three *Mandapas* (halls), locally known as *Calanta* or *Jagamohana*, *Bhogamandapa*, and *Natmandir* (Figure 33). The *Natmandir* is the later addition to the earlier stone temple, which was added during the renovation conducted by the Koch kings *Naranaryana* in 1565 A.D. The domes over each chamber carry different architecture features, and all chambers are aligned in an east-west axis with the west-facing entrances. Inside the temple premise of Kamakhya, there are two water tanks, *Subhagya* and *Rinmoksha kund* can be seen (Figure 32).

As per the temple architecture style is concerned, the Kamakhya temple is more close to the northern Indian temple style, known as *Nagara*, but some features that differentiate the Kamakhya temple from rest of the *Nagara* temples is the bulbous and hemispherical or polygonal dome *sikhara* and its octagonal *garbhagriha*. The architectural plan of the Kamakhya temple, especially the octagonal *garbhagriha*, is similar to the plan of *Raja-Rani* temple at Bhubaneswar at Odisha, dated back to 11<sup>th</sup> century A.D. (Tomory, 2006, p. 73). The *vimana* of the temple is based on the *Pancharatha* temple style. *Ratha* is the number of projections on the outer wall of a temple, for example, *Pancharata* means five projections, and *Saptaratha* means seven projections on the outer wall of the *garbhagriha*.

On the basis of the temple architecture and epigraphical records three phases of temple construction can be identified:

**Phase I:** 8<sup>th</sup> to 10<sup>th</sup> century A.D.; Only the stone *adhithana* (foundation) of the temple is survived of this phase.

**Phase II:** 10- 12<sup>th</sup> century A.D.: In this phase, the temple is constructed over the old stone *adhithana* (foundation). This phase utilises and reused the stone architectural fragments of the previously built stone temple. The life-sized sculpture installed on the outer wall of the temple *grabhagriha* belongs to this phase.

**Phase III:** 15<sup>th</sup> century A.D. onwards. This phase shows the tremendous change in the temple art and architecture of the Kamakhya temple. The evolution of *Nilachal* style of temple architecture begins from this phase with the introduction of the polygonal dome instead of curvilinear *sikhara*. All the brick construction and renovation were taken place during this phase, including the addition of the *natmandir mandapa* to the existing temple structure by Ahom king *Rajeswar Singha* in 1759 A.D.



Figure 32: Kamakhya temple (8<sup>th</sup>-17<sup>th</sup> century A.D.), *Shubhagaya kund*, and *Rinmoksha kund*.

Due to several reconstruction and renovation in the temple, one can easily find the differences between the lower parts of the temple, known as *Bada*, to the upper part of the temple, known as *sikhara*. One of the significant differences between the *bada* and *sikhara* is that the earlier one is built using stone masonry, while the later one is built using brick masonry. The *bada* of the temple consists of three parts, namely, *Pabhaga* (plinth of the *Vimana*), *Jangha* (middle part of the *bada*, between *pabhaga* and *varanda*), and the *Varanda*. The *pabhaga* consists of several horizontal bands. The first *paga* band from the bottom of the *bada* has no decoration, but the second and the third *paga* have different decorative features. The *Jangha* in the *bada* is also fully

sculptured, in its *anuratha* and *kanika* corners, each adorned with a standing figure in *tribhanga* posture. The *raha* portion of the *Jangha* has decorative vertical bands.

The *sikhara* of the temple is a bee-hive shaped bulbous dome, which is a common characteristic feature of many temples in lower Assam. The *sikhara* is adorned with many of *angasikharas* (minarets or small side domes) inspired by the Bengali style known as, *charchala*. Both the *sikhara* and *angasikharas* are renovated during the *Koch* period by using brick masonry. Pradeep Sarma, in his paper “*Antiquity of the Kamakhya temple on the Nilacala hill*” named the particular style of the temple with stone *bada* and a *sikhara* made of bricks as ‘*Nilachala temple style*’. According to him, one of the reasons behind the use of bricks as a construction material for *sikhara* was the lack of knowledge of stone masonry or the craftsmen and architect appointed for the renovation work were more familiar with brick masonry, rather than stone (Sarma, 1981-82).

In the *Darrang Rajavamsavali*, a dynastic record of Koch kings is mentioned that the temple Kamakhya was renovated under the guidance of *Meghamukdum*, commander of king *Naranarayana*. According to this record, *Meghamukdum* started facing difficulty with stone masonry, so he decided to use brick masonry to ease out the renovation process, which he later completed within six months (Borah, 2010, p. 17).

The main deity Kamakhya inside the *garbhagriha* is worshipped in the form of *yoni* (vulva). The depression is about 10 inches deep on a sheet of stone. The *garbhagriha* is two and a half meters below the floor level of the other chambers. The *garbhagriha* is known as ‘*Manobhava guha*’ and devotees can reach the *guha* (cave) with the help of stone steps.

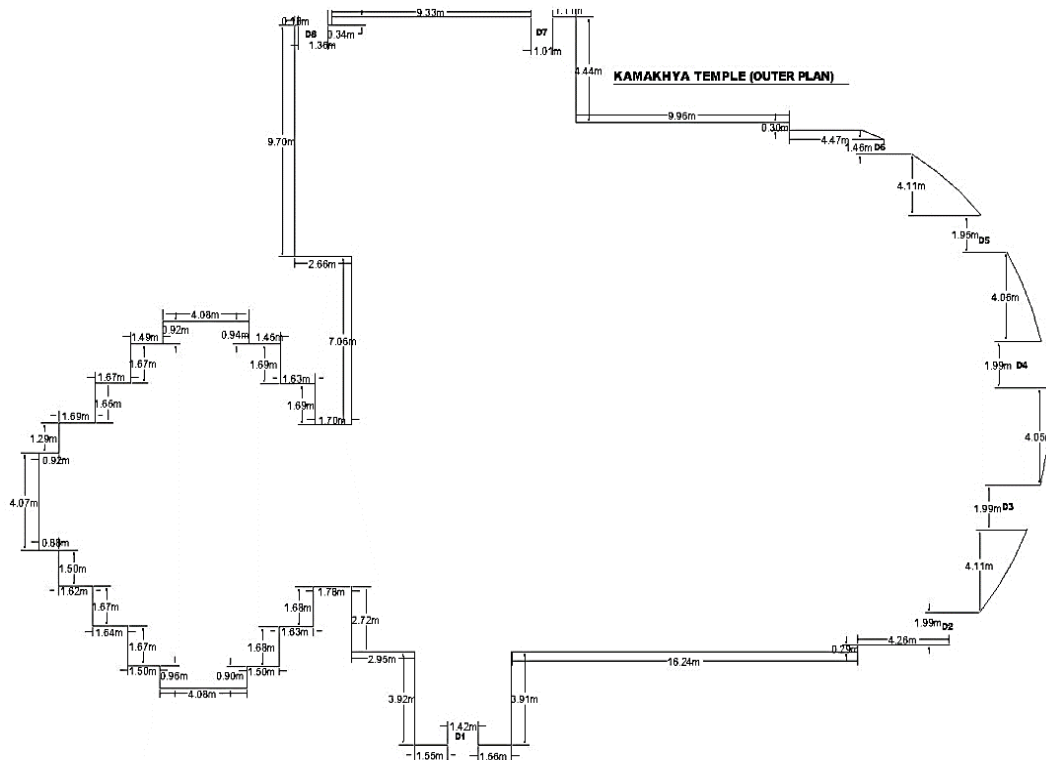


Figure 33. AutoCAD Ground Plan of Kamakhya Temple (Outer phase)

The *calanta* is a square shape mandapa, which has four exit doors placed in four different directions. Two of the doors in the east and west direction lead to *garbhagriha* and *bhogamandapa*, respectively. While the other two doors in north and south direction are used by the devotees to enter and exit the *mandapa*. An anti-chamber attached to the northern wall of the *mandapa* was most likely used to facilitate the devotees to visit the main shrine without disturbing any ritualistic ceremony executing inside the *mandapa*. The ceiling of the *mandapa* is supported by twelve stone pillars raised from the centre of the *mandapa*. We didn't get the permission to document the *calanta* but the previous work conducted by Dr Sukanya Sharma in the temple has documented the *calanta* and provided an AutoCAD ground plan of the temple in her work "Art and Architecture" published in the book "Heritage of Kamakhya on the Nilachala hill" (Figure 34).

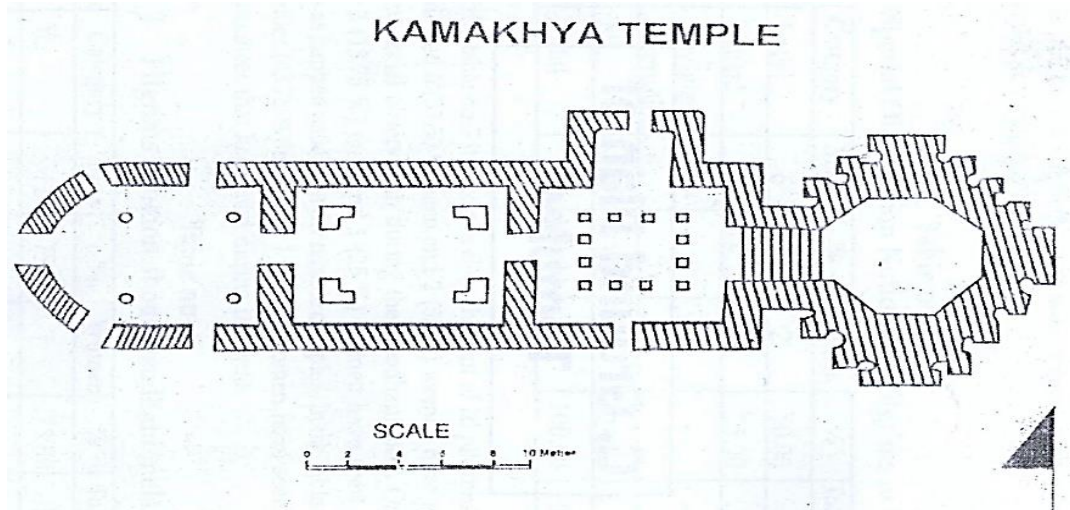


Figure 34. Ground Plan of Kamakhya Temple (Source: S. Sharma, 2010, p. 186)

The next *mandapa* is the *bhogamandapa*, also known as *pancaratna*, a square shape *mandapa* with two exit doors (Figure 35). One door in the east direction connected the *bhogamandapa* to *calanta*, and the western door connected with the *natmandir*. In the middle of the *bhogamandapa*, a small area enclosed with four open walls without any roof are created to enshrine Goddess *Manasa* during *Manasa puja*. The *puja* is performed every year during the juncture of *Asada* and *Sarvana* months (mid-August) for three consecutive days (Borah, 2010, p. 50).

**KAMAKHYA TEMPLE BHOGMANDAPA (INNER PLAN)**

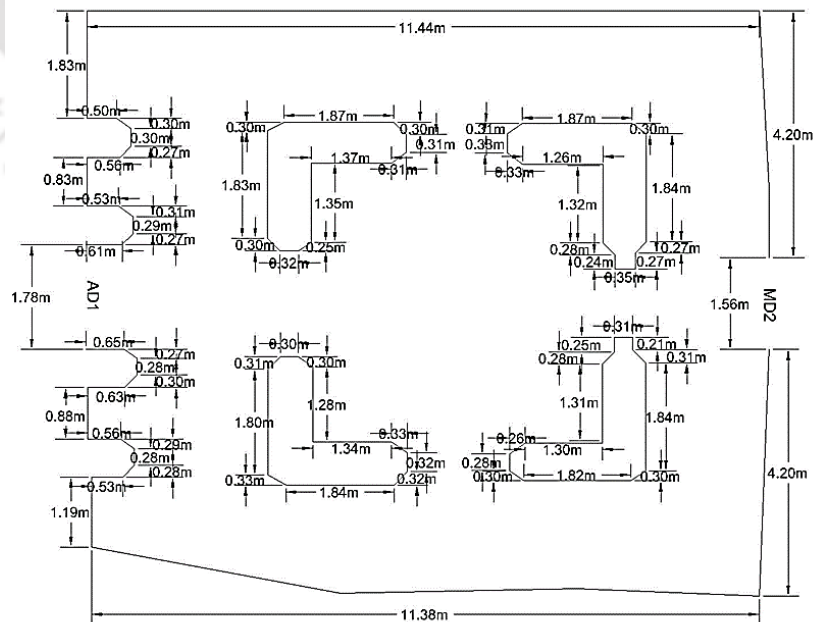


Figure 35. AutoCAD Ground Plan of *Bhogmandapa* of Kamakhya Temple

The *natmandir* is an apsidal shape *mandapa*, with multiple exit door (Figure 36). The *natmandir* is connected with *bhogamandapa* and *balighar* from the eastern and western side, respectively. There are two exits on each side in the northern and southern part of the *mandapa*. The stone inscription dated, 1759 A.D. installed in the *natmandir*, mentions that under the patronage of Ahom king *Rajeswar Singha*, his officer *Dasaratha Tarun Duwara* has constructed the *natmandir* mandapa, also known as *Utsava-mandir* attached to the main temple. The *natmandir* has an apsidal front with *Gajaprstha* roofing (an apsidal roof) and a *garuda paksi* over it. The *Gajaprstha* or *Hasti-prstha gajaprstha* is a term used for the apsidal based structure, prevalent among *Pallava*, *Chola*, and later *Dravidian* architecture.

### KAMAKHYA TEMPLE MANDAPA (INNER PLAN)

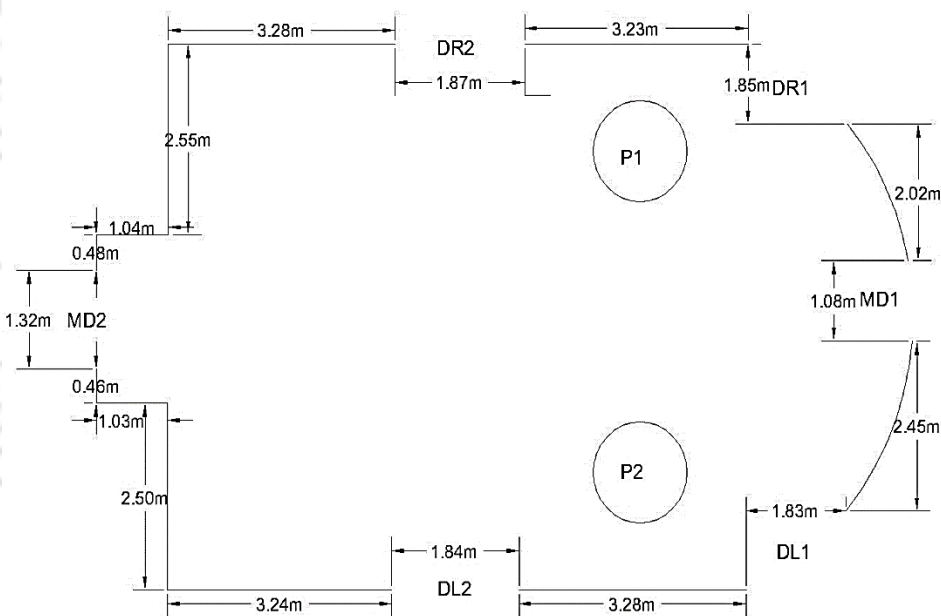


Figure 36. AutoCAD Ground Plan of *Natmandapa* of Kamakhya Temple.

## 2. Tara Temple

The *Tara* temple is constructed using brick masonry (Figure 37). The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 38). Inside the *garbhagriha*, the Goddess *Tara* is worship in an anthropomorphic form. This feature makes the temple one of her own kind because, in rest of the temples, the Goddesses are worshipped in an aniconic form. The *garbhagriha* of the temple

is octagonal in shape, and the *antarala* and the *mandapa* are rectangular in shape. The previous study conducted on the temple by S. Sharma (2010) shows the square-shaped *garbhagriha* (Figure 39). Indicating that the temple is later renovated and the shape of *garbhagriha* is changed from square to octagonal. The floor of the *antarala* and *garbhagriha* in comparison to the floor of the *mandapa* are slightly elevated. On the basis of the architecture of the temple, it is suggested the temple must be constructed around 15<sup>th</sup> to 17<sup>th</sup> century A.D. during the Koch and Ahom period. The temple is built in *Nilachal* temple style with dome flanked with numbers of small side domes.



Figure 37. *Tara* Temple (15<sup>th</sup> to 17<sup>th</sup> century A.D.)

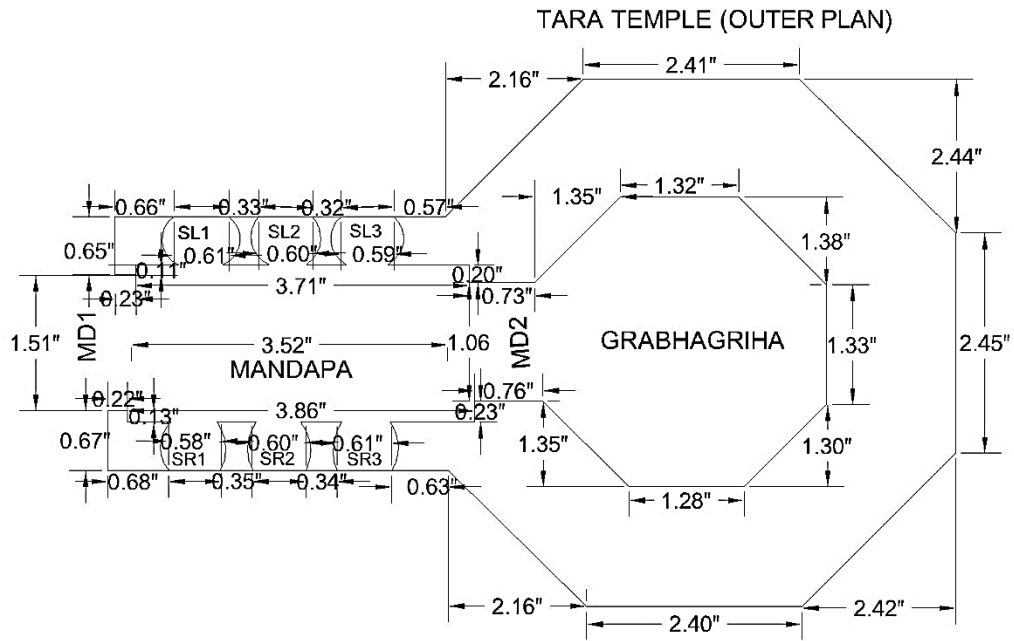


Figure 38. AutoCAD Ground Plan of *Tara* Temple

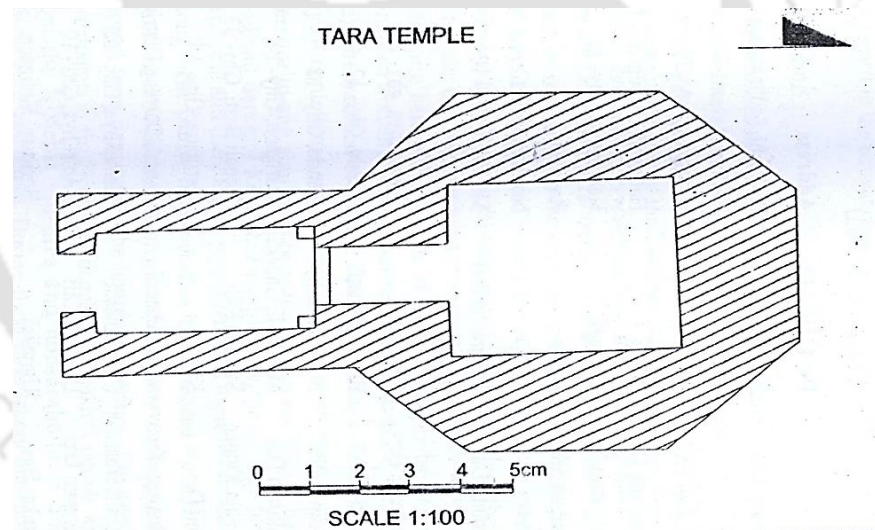


Figure 39. AutoCAD Ground Plan of *Tara* Temple (Source: S. Sharma, 2010, p. 187)

The *bada* of the temple consists of *pabhaga*, *jangha* and *varanda*. There are some plain horizontal bands in the *pabhaga* portion of the *bada*, while the *jangha* portion is divided into two parts *tala jangha* and *upara jangha*. The lower half of the *jangha* is decorated with the full-blown lotus in the horizontal bands (*bandhanas*). On the *jangha*, there are shallow niches flanked by carved pilasters. The wooden entrance door has a multi-foliated arch with a pointed apex, decorated with floral patterns. The

*sikhara* in the temple is circular in plan (dome) with six *angasikharas*. Over the surface of the *sikhara*, there are few decorative horizontal bands. The temple is surrounded by a brick wall with a south-facing gate.

### 3. Bhuvanesvari Temple

The temple is situated on the highest point of the Nilachala hill, around half a kilometre away from the main temple site (Figure 40). The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 41). The west-facing temple has different shapes of chambers, for example, the *garbhagriha* is octagonal shape, and *antarala* is square shape, while the *mandapa* is rectangular in shape. Inside the *garbhagriha*, Goddess *Bhuvanesvari* is worshipped in an aniconic form as a *pitha*. The present temple superstructure follows the Koch-Ahom style of temple architecture, also known as *Nilachal* style of temple architecture. Thus, the present structure should be dated to the 15<sup>th</sup> -17<sup>th</sup> century A.D.

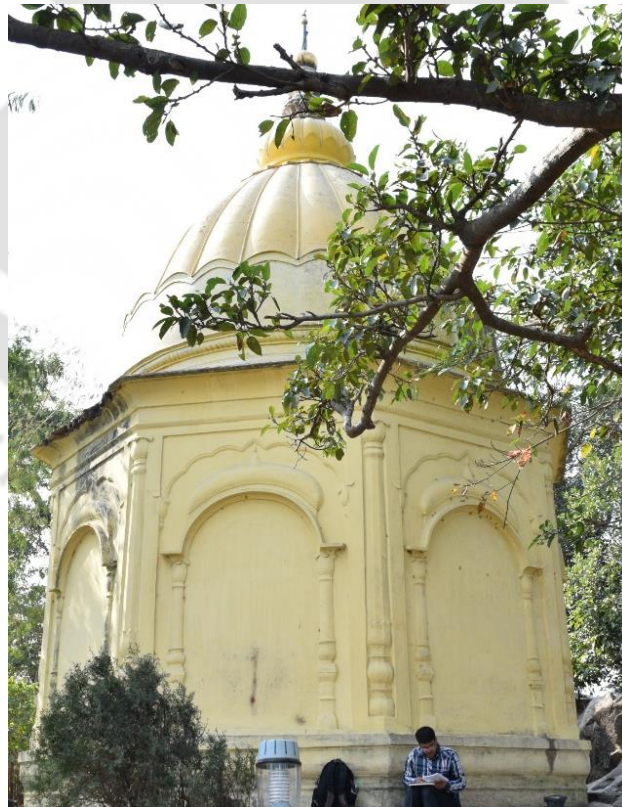


Figure 40. *Bhuvanesvari* Temple (15<sup>th</sup>-17<sup>th</sup> century A.D.)

### BHUVANESVARI TEMPLE (OUTER PLAN)

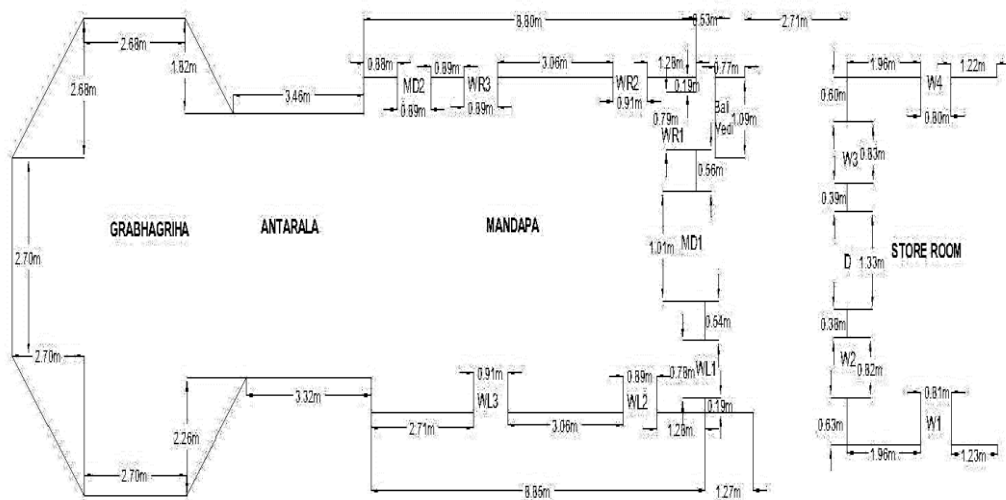


Figure 41. AutoCAD Ground Plan of *Bhuvaneshwari* Temple

The *bada* portion of the temple consists of three parts, *pabhaga*, *jangha* and *varanda*. The *pabhaga* portion of the *bada* consists of several plain horizontal bands. On the *jangha*, there are shallow niches flanked by pilasters, and in the *varanda*, there are few decorative horizontal bands. The *mastaka* on the *sikhara* consist of three kettledrums in descending order. The temple is surrounded by a brick wall with two entrance gates. One gate is situated on the foot of the hill from where a flight of steps leads to the second gate, and from there the footpath leads to the main temple.

#### 4. Kameswara Temple

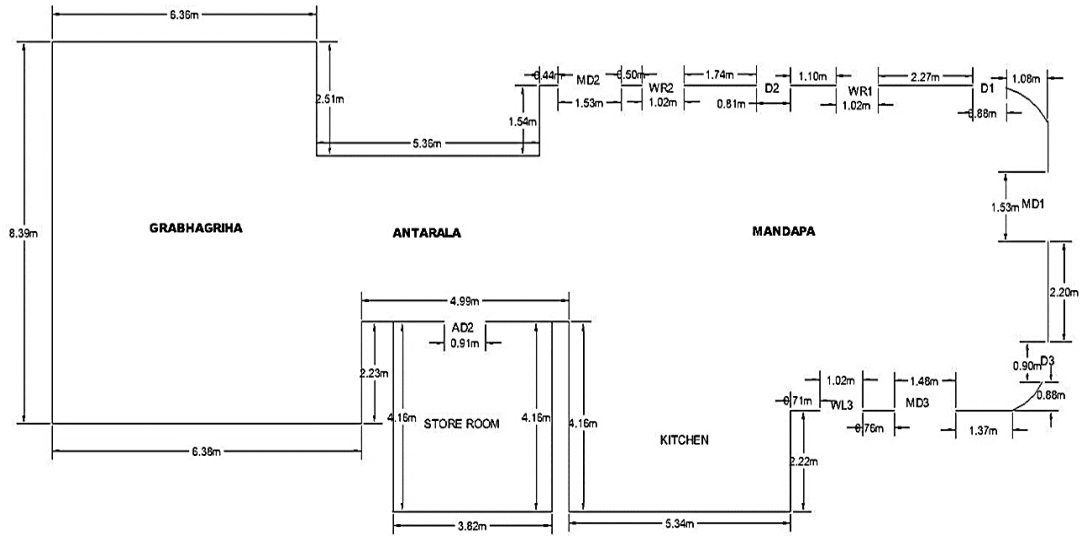
The *Kameswara* temple is the only temple in Kamakhya, which has a square *kund* (pond) approximately two sq. foot deep inside the *garbhagriha*. The *kund* is located at the centre of the cella, where it is said that the main deity is in a linga form and submerged inside the *kund*. The temple was built using brick masonry work (Figure 42). One stone inscription found inside the temple, mention that the temple was constructed under the patronage of Ahom king *Siva Singha* by his officer *Tarun Deka Barphukan* in 1718 A. D. (Sarma & Borah, 2010)



Figure 42. *Kamaeswara* Temple (1718 A.D.)

The west-facing temple has three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) and all of them are rectangular in shape, except the outer wall of the *garbhagriha* is a square shape (Figure 43). The *garbhagriha* is more than three and a half meters below the floor level of the other chambers (Figure 44). The *garbhagriha* is approximately 19 sq. meters in size and devotees can reach the cave with the help of stone steps. The *pabhaga* and the *jangha* carry no decorative elements, except on the top of the vertical wall there is a motif of four flying lions at every four corners. The *sikhara* of the temple is pyramidal in form, and the *mastaka* on it consists of three separate pinnacles. The roof of the *antarala* is *do-cala* type, while the roof of the *mandapa* is covered with CI sheets. The temple is surrounded by a brick boundary wall with two gates, one on the east and the other on the west.

**KAMESHWARA TEMPLE (OUTER PLAN)**



**KAMESHWARA TEMPLE (INNER PLAN)**

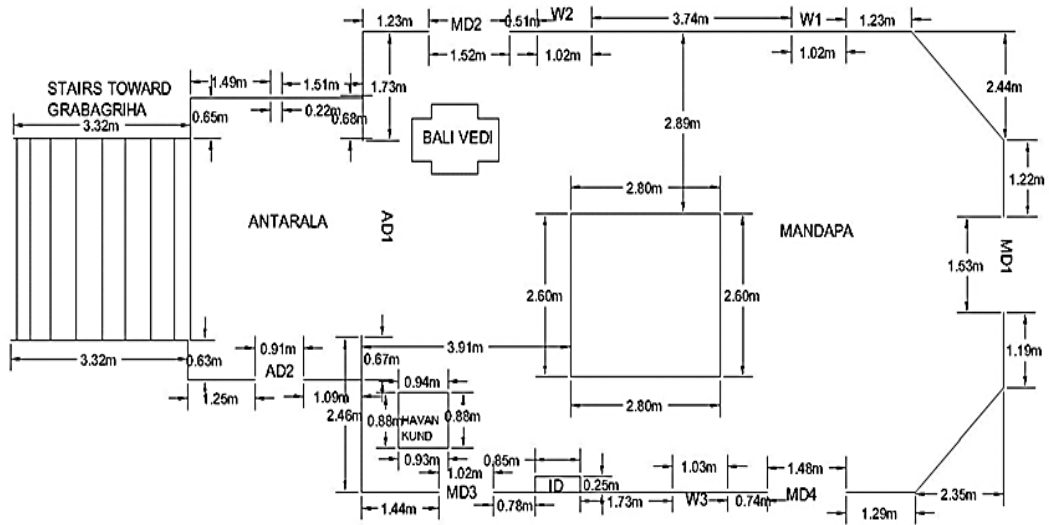


Figure 43: AutoCAD Ground Plan of Kameswara Temple (outer and inner plan)

**KAMESHWARA TEMPLE GRABHAGRIHA  
(INNER PLAN)**

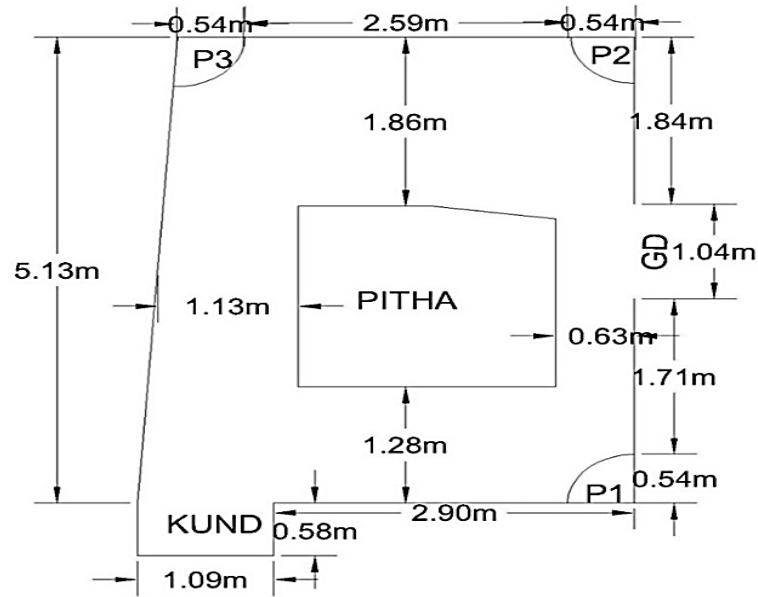


Figure 44: AutoCAD Ground Plan of *Kameswara* Temple *Garbhagriha* (Inner plan)

### 5. Dakshinakali Temple

The *Dakshinakali* temple is constructed using brick masonry (Figure 45). The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 46). All the chambers of the west-facing temple are of different shapes. The *garbhagriha* is octagonal in shape, and *antarala* and the *mandapa* are rectangular in shape. The *mandapa* of the temple is standing on six pillars, and this makes the *Dakshinakali* temple, the only temple in Kamakhya with pillared hall (Figure 47). Tin-Shade roofing of the *mandapa* indicates that this is recently added to the previously built structure. Inside the *garbhagriha*, Goddess *Dakshinakali* is worshipped in an aniconic form. On the basis of the architectural style, the temple must be constructed during 15<sup>th</sup> to 17<sup>th</sup> century A.D. However, the *mandapa* is recently added to the present temple structure.

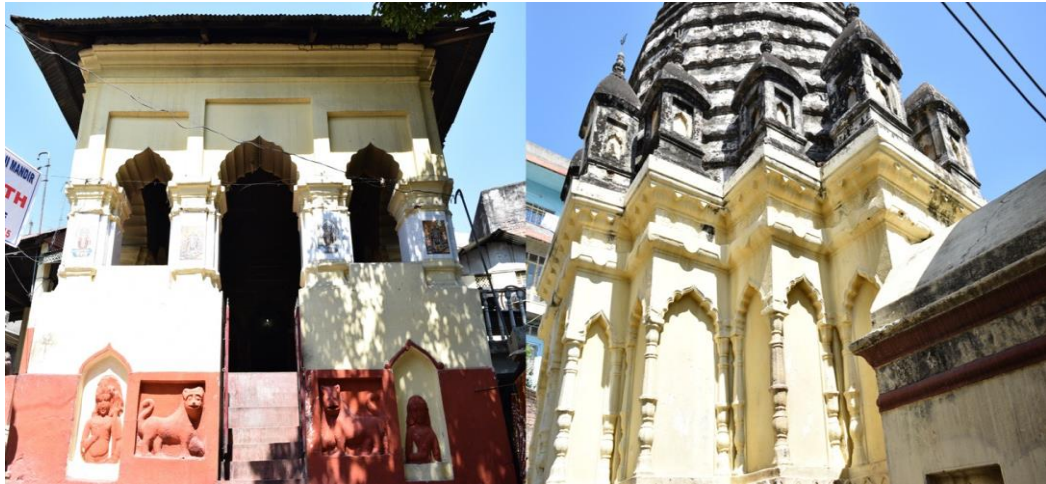


Figure 45. *Dakshinakali* Temple (15<sup>th</sup>-17<sup>th</sup> century A.D.)

The *bada* of the temple consists of *pabhaga*, *jangha* and *varanda*. There are some plain horizontal bands in the *pabhaga* portion of the *bada*, while the *jangha* portion is divided into two parts *tala jangha* and *upara jangha*. On the *jangha*, there are shallow niches flanked by carved pilasters. The *sikhara* in the temple is circular in plan (dome) with many of *angasikharas* (minarets or small side domes) inspired by the Bengali style known as, *charchala*.

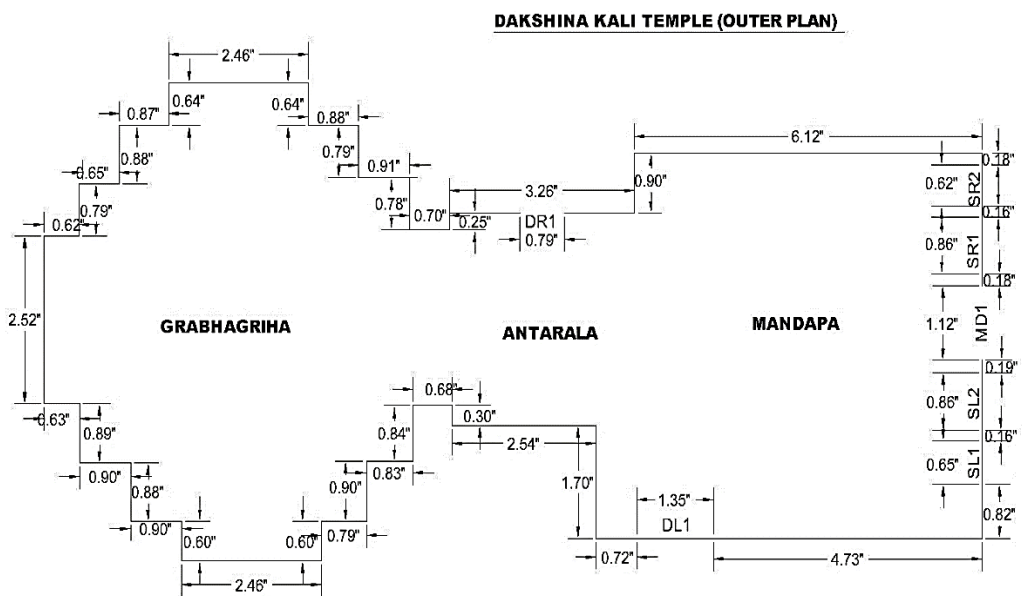


Figure 46. AutoCAD Ground Plan of *Dakshinakali* Temple

### **DAKSHINA KALI TEMPLE MANDAPA (INNER PLAN)**

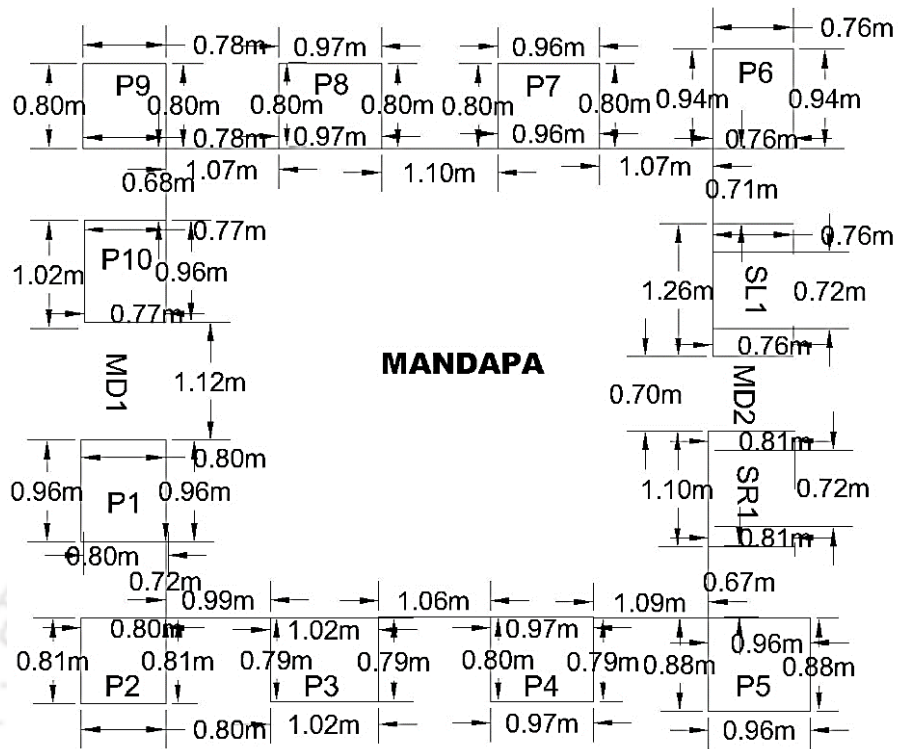


Figure 47. AutoCAD Ground Plan of *Mandapa* of *Dakshinakali* Temple

### **6. Siddheswara Temple**

The *Siddheswara* temple is constructed using brick masonry. A stone inscription found inside the temple mention that the temple was constructed under the patronage of Ahom king *Siva Singha* by his officer *Bijoy Tarun Duwara Barphukan* in 1718 A.D. (Sarma & Borah, 2010).

Inside the temple premise of *Siddheswara* temple, one water tank, known as *Gaya kund* can be seen (Figure 48). The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 49). Inside the *garbhagriha*, similarly like the *Kamaseswara* temple, the Lord *Siddheswara* is worshipped in the form of small water-filled *kund* (pond). The *kund* is located at the centre of the cella. The *garbhagriha* of the temple is octagonal in shape, and the *antarala* and the *mandapa* are *rectangular* in shape. The *garbhagriha* is more than two and a half meters below the floor level of the other chambers. The *garbhagriha* is approximately 12 sq. m in size and devotees can reach inside with the help of stone steps.

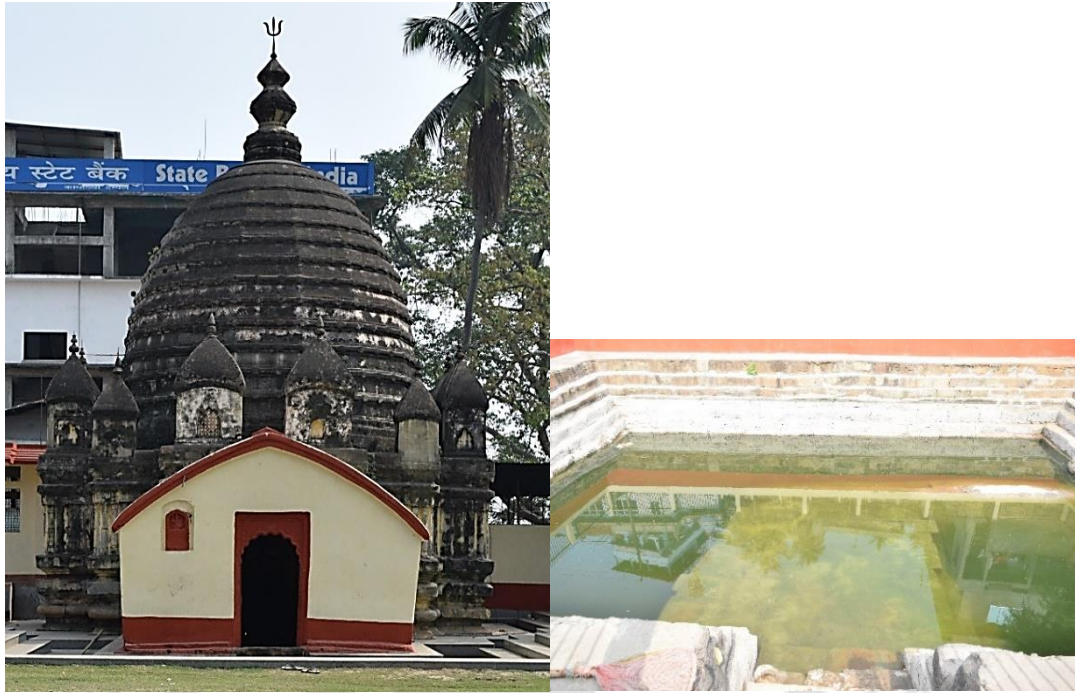
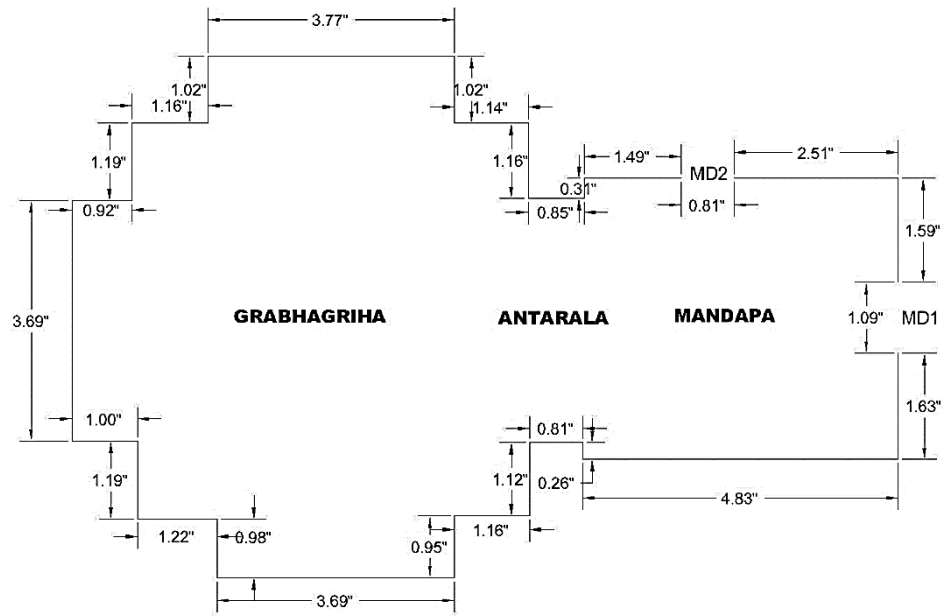


Figure 48. *Siddheswara temple and Gaya kund (1718 A.D.).*

The *bada* of the temple consists of *pabhaga*, *jangha* and *varanda*. There are some plain horizontal bands in the *pabhaga* portion of the *bada*, while the *jangha* portion is divided into two parts *tala jangha* and *upara jangha*. On the *jangha*, there are shallow niches flanked by carved pilasters. The *sikhara* in the temple is circular in plan (dome) with many *angasikharas* (minarets or small size domes) inspired by the Bengali style known as, *charchala*. The *mastaka* on the *sikhara* consist of three kettledrums in ascending order. There is a *trisula* on the top of these kettledrums.

### SIDDHESWARA TEMPLE (OUTER PLAN)



### SIDDHESWARA TEMPLE (INNER PLAN)

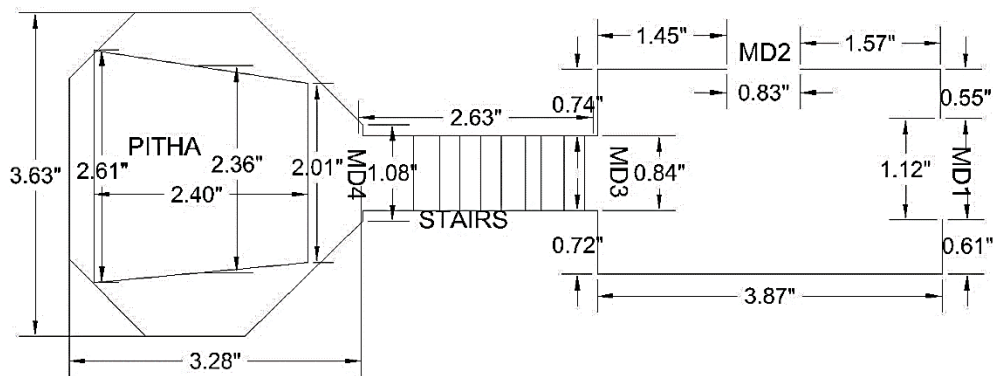


Figure 49: AutoCAD Ground Plan of Siddheswara Temple (Outer Plan and inner plan)

## 7. Bhairavi Temple

The *Bhairavi* temple is a modern structure constructed using brick masonry (Figure 50). The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 51). Two additional *mandapa* or halls are recently constructed and attached to the temple. Inside the *garbhagriha*, the Goddess *Bhairavi* is worshipped in an aniconic form. The *garbhagriha*, *antarala* and the *mandapa* are square in shape. The *sikhara* of

the temple is pyramidal in form, and the *mastaka* on it consists of three separate pinnacles. Nearby the temple, there is a water tank, known as *Kacha-Pukhuri*. The temple is recently constructed in the site.



Figure 50. *Bhairavi* Temple (21<sup>st</sup> century A.D.) and *Kacha-Pukhuri*

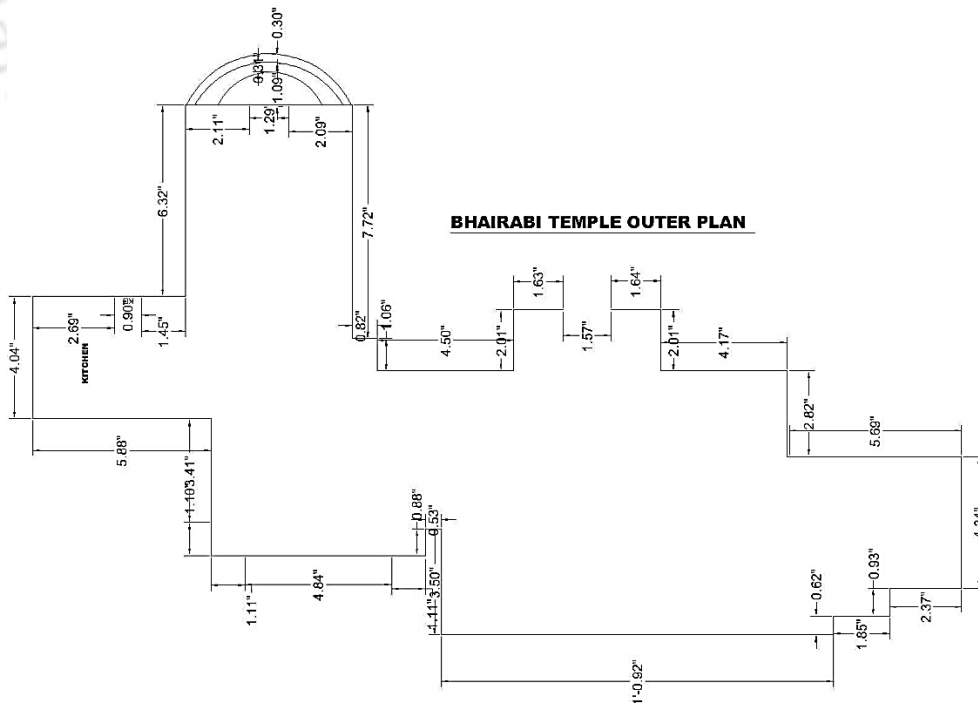


Figure 51. AutoCAD Ground Plan of *Bhairavi* Temple

## 8. Amrakeswara Temple/Tokeswara Temple

Based on the stone inscriptions found inside the *Amrakeswara* temple and near the *Durgasarobar*, mentions that the temple and a water tank known as *Durgakund* or *Durgasarobar*, was constructed under the patronage of Ahom king *Pramatta Singha* by his officer *Tarun Duwara Barphukan* in 1744-1751 A.D. using brick masonry (Sarma & Borah, 2010) (Figure 52 and 53).



Figure 52. Amrakeswara/Tokeswara temple (1744-1751 A.D.)

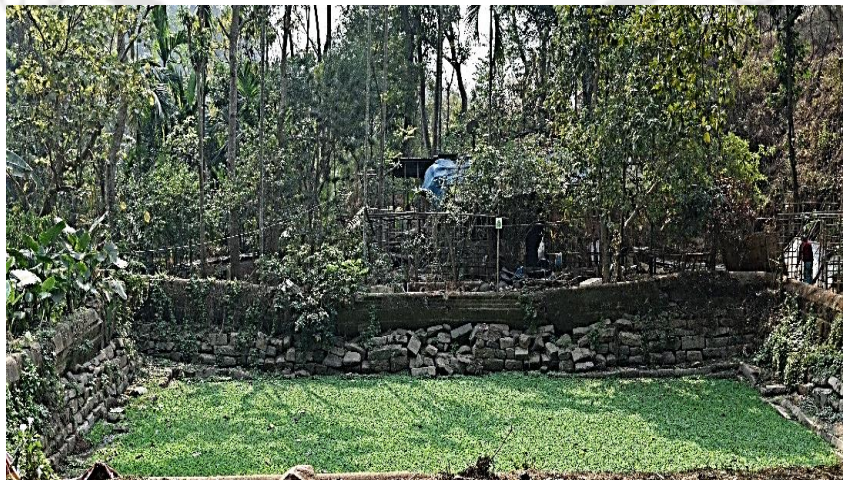


Figure 53. *Durgakund* at Amrakeswara/Tokeswara temple (1744 A.D.)

The architectural plan of the temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall) (Figure 54). Inside the *garbhagriha*, the Lord *Amratakeswara* is worshipped in an aniconic form. The *garbhagriha* of the temple is octagonal in shape, and the *antarala* and the *mandapa* are rectangular in shape.

The *bada* of the temple consists of *pabhaga*, *jangha* and *varanda*. There are some plain horizontal bands in the *pabhaga* portion of the *bada*, while the *jangha* portion is divided into two parts *tala jangha* and *upara jangha*. On the *jangha*, there are shallow niches flanked by carved pilasters. The *sikhara* in the temple is circular in plan (dome), the *mastaka* on the *sikhara* consist of three kettledrums in ascending order. There is a *trisula* on the top of these kettledrums.

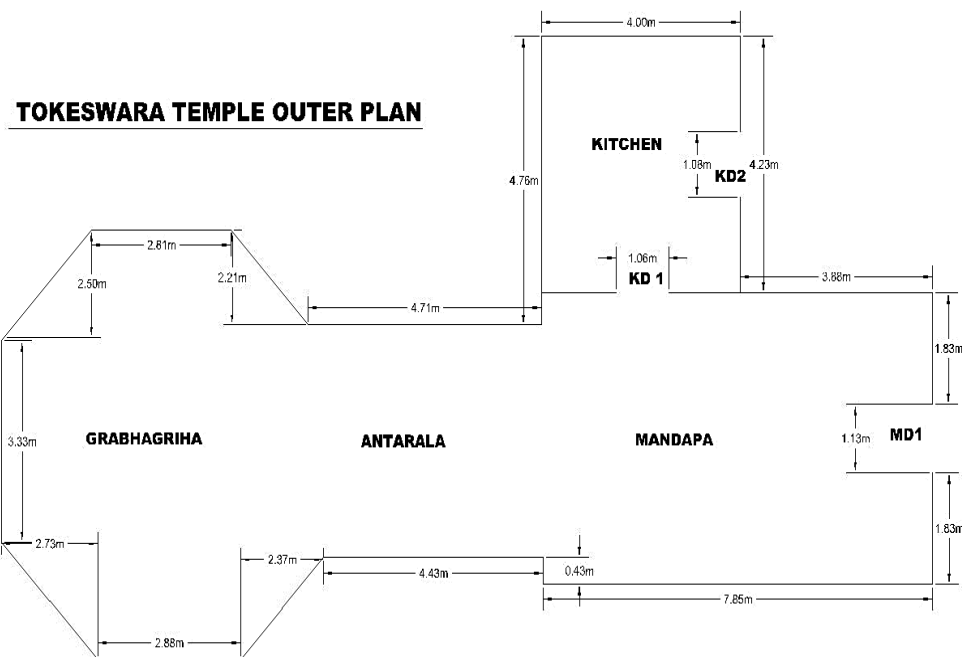


Figure 54: AutoCAD ground plan of *Amratakeswara* temple/*Tokeswara* temple.

## 9. Chinnamasta Temple

The west-facing temple consists of three chambers, the *garbhagriha* (sanctum sanctorum), *antarala* (vestibule) and the *mandapa* (hall). The *garbhagriha* of the temple is based on *Saptaratha* plan from the outer side, while the inner cella is square in shape. The *antarala* and the *mandapa* are square in shape from both sides. The

Goddess *Chinnamasta* is worshipped in an aniconic form. The *Chinnamasta* temple is the only surviving temple with *Saptaratha* architecture at the site (Figure 55). The present temple plinth has a remnant of a stone *adhithana* of 11<sup>th</sup> to 12<sup>th</sup> century A.D., but the superstructure was built with brick with dressed stone blocks. Due to the reconstruction of the temple the current temple is placed to 21<sup>st</sup> century A.D.



Figure 55. *Chinnamasta* Temple (11<sup>th</sup>-12<sup>th</sup> century A.D. to 21<sup>st</sup> century A.D.)

The *pabhaga* portion of the temple is constructed using stone masonry, while the rest of the temple is built using brick masonry. The dressed stone blocks are used in the lower portion of the inner wall of *garbhagriha* and in the stairway connecting *antarala* with the *garbhagriha*. Up to the *varanda* level, the temple is built in the *Saptaratha* plan. The *jangha* is divided into two equal parts by a few horizontal bands, and the similar band can also be noticed in the *varanda* portion of the *bada*.

The *sikhara* in the temple is built in *nagara* style, similar to the Orissa's *sikhara* style, known as *rekha deul*. The *sikhara* is further adorned with twin *angasikharas* in each of the four corners at the springing line. The circular *mastaka* on the *sikhara* adorns two *amalakas* in the descending order.

The floor level of the *garbhagriha* is approximately two and a half metres below in comparison to the floor level of *antarala* and *mandapa*. The temple is surrounded by a brick boundary wall with one west-facing entrance gate. We were unable to document

the structure, as the temple was completely under renovation. The temple was previously documented by S. Sharma (2010) and provided an AutoCAD diagram, which gives an idea of the structure of the temple (Figure 56).

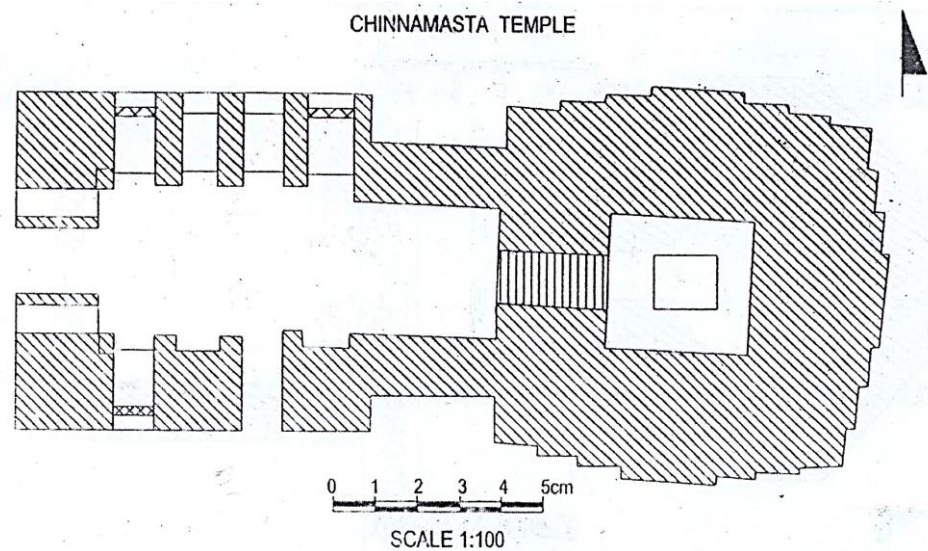


Figure 56. Ground Plan of *Chinnamasta* Temple (Source: S. Sharma, 2010, p. 189)

### 10. Other Temples on the site

Recently there are several new temples constructed on the site, adding numbers to the already rich temple site of Kamakhya. However, these temples did not follow the ancient norms of architectures. They are simple one chamber temple, except the *Bagalamukhi* temple which was constructed above an old cave temple and had more than three chambers. Two big *mandapas* or hall were recently constructed to facilitate devotees.

The *Kotilinga* temple is a cave temple with two entrance door, one on the east and the other on the west. The deity *Kotilinga* is worshipped in the form of *linga*, situated on the eastern side of the cave. Nearby the temple, there is a water tank, known as *Rama kund* (Figure 57).



Figure 57. *Kotilinga temple and Rama kund*

The *Namath Kali* temple is not even a temple but recently transformed into a *Kali* temple. The structure of the temple is already on the brink of collapse. The *Mahakal Ganesha* temple is again a recently constructed temple, but the location of the temple is crucial for understanding the evolution of the Kamakhya temple architecture. A number of miniature *Nagara* style temples are found on the cliff of the mountain where the *Mahakal Ganesha* temple is located. Several stone temple architectural fragments have been recovered from this location on the site. The temple is constructed adjoining the cliff of the mountain in which a huge *Ganesha* is carved. The recently constructed temples are *Bandurga* temple, *Darpul Ganesh* temple, *Shasankali* temple, *Jay Durga* temple, and *Lalit Kanta* temple. These temples only have one chamber, where the deity resides in non-anthropomorphic form, except the *Darpul Ganesh temple* where the rock-cut image of Lord *Ganesha* is worshipped. Many of them are constructed adjoining the cliff of the mountain on the site (Table 8).

#### 4.1.7 Conclusion

Based on the present study, we can conclude that the first stone temples were built in *Nagara* Hindu temple architecture style with prominent curvilinear *sikhara* (tower) and *urushringa* (subsidiary *sikhara*). These temples were later collapsed, and the architectural remains of these temples were used in the creation of a new form of architecture in the site. The new style of temple architecture evolved in the site through

the assimilation of different temple art forms. The temple during this phase retains most of the *Nagara* and *Vesara* temple idioms with *ratha* form of architecture. The significant change can be seen in the treatment of the *sikhara*, now instead of tall curvilinear *sikhara*, the construction of a bulbous polygonal dome with minarets or small side domes inspired by the Bengali style was started. This mark the evolution of *Nilachal* temple architecture, which further gain its popularity in the temple architecture of the Ahom period. This style of architecture become a hybrid form of temple architecture, which not only assimilate the *Nagara* and Bengal architecture style but the use of both stone and brick as a construction material in the same temple further makes the temple stand out from the rest of temple architecture.

The study further shed light on the temple building activity on the site. As per the epigraphical records of 5<sup>th</sup> century A.D. *Umachal* hill rock inscription, the first stone temples were built collapsed on the site. This created the first layer of sculpture and architectural remains distributed on the site. In the second phase of reconstruction, stylistically dated to 11<sup>th</sup>-12<sup>th</sup> century AD, as per the epigraphical records of 1565 A.D. stone inscription, the fragments of these stone temples have been reused or refitted in the body of the temples, in the boundary walls and in the stone pathways. The third phase of reconstruction, beginning from the 14<sup>th</sup> century AD was undertaken by the Koch and Ahom kings using bricks and lime mortar. These brick temples were constructed above the stone *adhithana* (foundation) of ancient temple, i.e. Kamakhya temple, *Chinnamasta* temple and the *Siddheswar* temple *adhithana* was built using granite stone blocks. However, majority of the standing temple structures on the site today are from this phase of reconstruction. The pattern of sculptural and architectural remains distribution, identified by the present study, might have been formed during this phase. Renovation and reconstruction of the site are still continuing further adding to the cultural processes of site formation operating on the site.

## Chapter 4

### Material Manifestation of the Belief system (Art and Architecture of the Kamakhya Temple)

#### Part II

#### Sculptural Art of Kamakhya

##### 4.2.1 Introduction

The sculptures found from different archaeological sites indicate towards the presence of a highly skilled sculptor's (*Shilpi's*) guild or community, which were capable of transforming a piece of stone into an icon or a sculptural panel and relief. The sculptors followed iconographic detail mentioned in different canonical literature or canons. The *Shilpa Shastra* was mainly associated with art and craft of ancient India. The *Shilpa Shastra* consists of several ancient texts of art and crafts and is a guiding source or a manual for sculptures making in India since ancient times. The *Shilpa Shastra* provides ample information about different principles, norms, rules, and standard for sculpture making (iconometric), not to mention the detailed iconographic description with the exact size or proposition of sculpted figures is highly emphasised in these texts. The iconometric texts are *Manasara*, *Mayamata* of *Mayasura*, *Sakaladhikara* of *Agastya*, *Amsumadbheda* of *Kasyapa*, *Vastusastra* of *Mandana*, *Aparajitprccha* of *Bhuvanadeva*, *Samarangana Sutradhara* of *Maharaja Bhoj*, and *Visvakarma Prakasa*. Even non-iconometric texts like *Puranas* (*Matsya Purana*, *Agni Purana*, *Visnu Purana*, *Garuda Purana*, *Skanda Purana*), *Agamas* (*Kamikagama*, *Karnagama*, *Vaikhanasagama*, *Amsumadbhedagama* and *Suprabhedagama*) and *Tantras* (*Shiva Tantra*, *Vaisnava Tanta*, *Kali Tantra*, *Mahnirvana Tantra*, *Gautami Tantra*, *Hayasirsa-Pancaratra Tantra*) have passages in detail explaining the art of making sculptures (iconometric) and iconography (Gupta & Asthana, 2002, p. 101-104).

All these texts and the present archaeological evidence of sculptures indicate towards the importance of sculptures and sculpture-making art in ancient India. This sculptural evidences can also be used to study the development of art in a particular region under a specific political and economic condition of sculptors and its soundings environments.

Thus, a piece of sculpture becomes a significant source for understanding the dynamics of ancient Indian artistic evolution. Political shift, dynastic patronisation, artistic influence from different regions, and even the influence and amalgamation of different faiths has been a crucial factor bringing the more significant change in the sculptural art of India. The markers of these changes are left carved on the mountain face, stone slabs and in the temple walls in the forms of sculptures. The same changes can be seen in the sculptural art of Kamakhya temple

The main objectives of the present chapter is to study the evolution of Kamakhya sculptural art under the *Kamarupa* school of art. The primary source of information is the data we have gathered during an extensive field survey and GIS survey covering 1.25 sq. Km area or approximately 308.9 acres' land of the archaeological site of Kamakhya. During the survey, we have documented 426 sculptures and created a detailed inventory which is also one of the objectives of the present study. This chapter will outline the method we have used to understand different facet in the sculptural art of Kamakhya and to understand the variation in the sculptural art due to economic, political and cultural dynamics of the region.

#### **4.2.2 Methodology: Documentation of sculptural art of Kamakhya**

The nuances of Kamakhya sculptural art cannot be described accurately without studying each and every specimen of the sculptures found on the site. For the present study, we have conducted an extensive archaeological survey along with GIS mapping of the site with an objective of understanding the complexity and diversity in the sculptural art and architecture and also the geospatial placement and distribution of the sculptures on the Nilachala hill. With the help of documentation database and GIS database, we were able to divide the sculptural art of Kamakhya into different categories based on the types of sculptures and then divided them into sub-groups under different subject matters. Individual GIS maps are created in order to gain more precise knowledge about the density and distribution of each category in the Kamakhya temple site.

During our documentation, we have covered 1.79 sq. Km area or approximately 442.3 acres land, of which the temple site covers approximately 1.25 sq. Km area or approximately 308.9 acres land. The data is recorded in many formats such as

documentation of sculptures are recorded in word, excel and QGIS files; maps and photographs in TIFF and JPEG format; hand drawing of sculptures in standard size drawing sheets.

For fulfilling the objective of the present study, we have documented a total of 426 sculptures from the site (Table 9). The sculptures are divided into different categories based on the typology and subject matter. In a study carried out by Pradeep Sarma (2010), sculptures in the Kamakhya temple complex were divided into four categories, a) sculptures on the body of the temple, b) sculpture on the gateways and c) isolated and scattered sculptures and d) rock-cut sculptures (Sarma 2010). Based on the present work, the sculptures are classified into three broad categories, 1. sculptures installed on the wall of the temple, boundary, and gateways; 2. rock-cut sculptures; and 3. sculptural fragments (Figure 58).

Documented sculptures include 234 (55 %) sculpture installed on the body of the temples, gateways and boundary wall, 57 (13 %) rock-cut sculptures, and 135 (32 %) sculptural fragments scattered around the site.

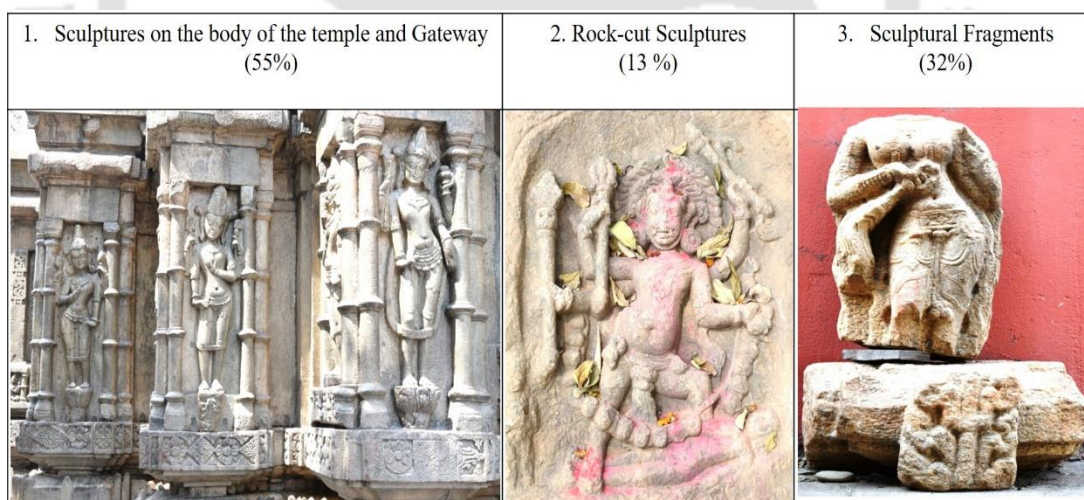


Figure 58. Types of Sculpture in the Archaeological Site of Kamakhya: a) Life-sized sculptures of different deities installed on the exterior wall of the sanctum sanctorum (*garbhagriha*) of the main Kamakhya temple; b) The rock-cut figure of eight-handed dancing *Bala-Bhairava* is located at the backside of the *Bhairavi* temple; c) Broken sculptural fragment of *Yakshini* holding a *Chauri* (flywhisk) in the Kamakhya museum.

These three categories of sculptures are further divided into four groups on the basis of the subject matters, includes a) religious sculptures; b) secular sculptures; c) sculptures relief with flora and fauna motifs and geometrical designs; d) miscellaneous sculptures (Deka 2013). Under these three broad categories, 175 (38%) are religious sculptures, 64 (22%) are secular sculptures, 120 (32 %) are reliefs with flora & fauna motifs and geometrical designs, and 67 (8%) are miscellaneous sculptures (Figure 59).

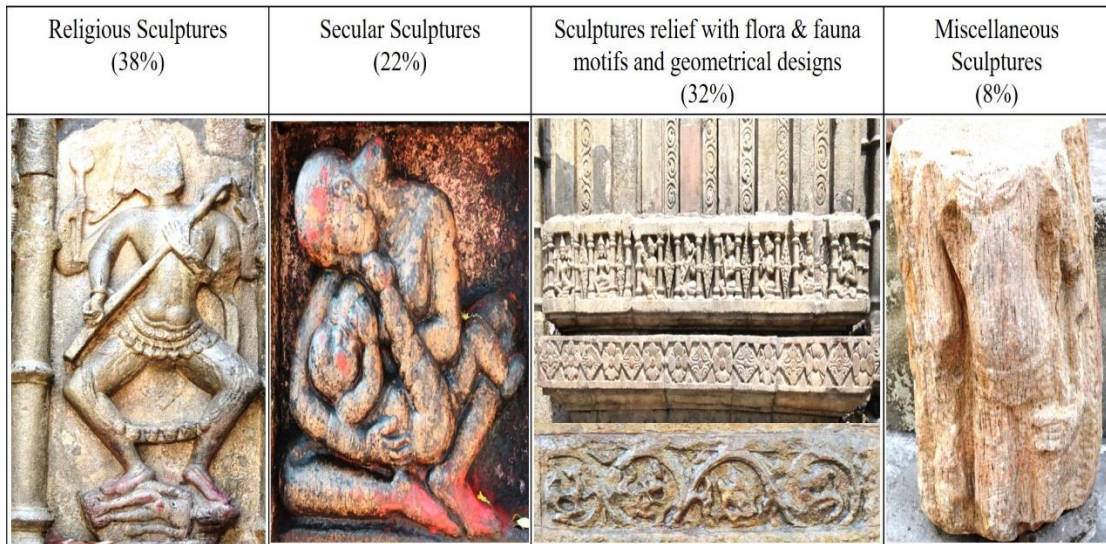


Figure 59. A representative sample of each subject matters of sculpture in the archaeological site of Kamakhya temple: a) Lord *Vinadhara Dakshinamurti Shiva* sculpture installed on the exterior wall of the *garbhagriha* (sanctum sanctorum) of the main Kamakhya temple. b) A mother and child sculpture installed on the wall of the western gateway in the main Kamakhya temple. c) Sculptural relief of *Gandharva* and flora and fauna motifs are installed on the exterior wall of the *garbhagriha* (sanctum sanctorum) of the main Kamakhya temple. d) Unknown sculpture fragment in the Kamakhya museum.

The religious sculptures include divine and semi-divine male and female figures. This includes the *Shaivite* and *Bhairavas* sculptures, *Shakta* sculptures, *Vaishnavite* sculptures, *Ganesha* sculptures and other divine sculptures. The secular sculptures include all the human figures illustrating the everyday lifestyle of contemporary society (Sarma, 2010, p. 111). The third group of sculptures include all the flora & fauna and geometrical designs. The last group includes all the other sculptures and remains found on the site. We have recorded, 62 (35%) *Shakta* and

*Shaivite* sculptures, 18 (10%) *Vaishnavite* sculptures, 29 (17%) *Ganesha* sculptures and 66 (38%) other divine and semi-divine sculptures (Figure 60).

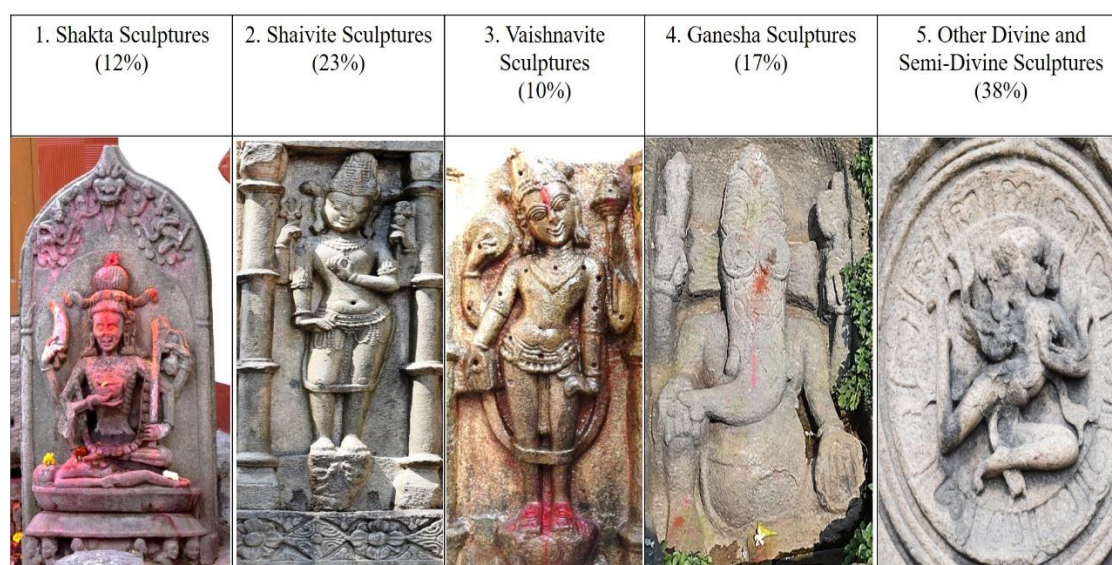


Figure 60. Types of Religious Sculpture in the Archaeological Site of Kamakhya: Figure 1) Goddess *Chamunda* sculpture placed inside the compound of the *Kedareswara* temple. 2) Lord *Ishana* sculpture installed on the exterior wall of the sanctum sanctorum (*garbhagriha*) of the main Kamakhya temple. 3) Lord *Vishnu* sculpture installed on the exterior wall of the *mandapa* of the main Kamakhya temple. 4) Rock-cut *Ganesha* sculpture is carved on the rock surface in the *Siddheswara* temple. 5) A fragment of *Apsara* (celestial nymph) sculpture placed inside the compound of the *Mahakal Ganesha* temple.)

Table 9. Sculptures documented in the archaeological site of Kamakhya temple

<b>A. Types of Sculptures Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
1. Sculptures on the Body of the Temples and Gateways	234	55 %
2. Rock-cut Sculptures	57	13 %
3. Sculptural Fragments	135	32 %
<b>Total Numbers of Sculptures</b>	<b>426</b>	<b>100 %</b>
<b>1. Thematic Wise Sculptures on the Body of the Temples and Gateways Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
a. Religious Sculptures	89	38 %
b. Secular Sculptures	51	22 %

c. Sculptures Relief with Flora & Fauna Motifs and Geometrical Designs	76	32 %
d. Miscellaneous Sculptures	18	8 %
<b>Total Number of Sculptures</b>	<b>234</b>	<b>100 %</b>
<b>2. Thematic Wise Rock-cut Sculptures Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
a. Religious Sculptures	43	75 %
b. Secular Sculptures	0	0 %
c. Sculptures Relief with Flora & Fauna Motifs and Geometrical Designs	1	2 %
d. Miscellaneous Sculptures	13	23 %
<b>Total Number of Sculptures</b>	<b>57</b>	<b>100 %</b>
<b>3. Thematic Wise Sculptural Fragments Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
a. Religious Sculptures	43	32 %
b. Secular Sculptures	13	9 %
c. Sculptures Relief with Flora & Fauna Motifs and Geometrical Designs	43	32 %
d. Miscellaneous Sculptures	36	27 %
<b>Total Number of Sculptures</b>	<b>135</b>	<b>100 %</b>
<b>B. Thematic Wise Sculptures Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
a. Religious Sculptures	175	41 %
b. Secular Sculptures	64	15 %
c. Sculptures Relief with Flora & Fauna Motifs and Geometrical Designs	120	28 %
d. Miscellaneous Sculptures	67	16 %
<b>Total Numbers of Sculptures</b>	<b>426</b>	<b>100 %</b>
<b>a. Types of Religious Sculptures Documented</b>	<b>Total Number of Sculptures</b>	<b>Percentage (%)</b>
1. Shakta Sculptures	22	12 %
2. Shaivite and Bhairava Sculptures	40	23 %
3. Vaishnavite Sculptures	18	10 %
4. Ganesha Sculptures	29	17 %
5. Other Divine and Semi-Divine Sculptures	66	38 %
<b>Total Numbers of Sculptures</b>	<b>175</b>	<b>100 %</b>

### 4.2.3 Iconographic and Iconometric Analysis of Kamakhya Sculptural Art

Iconography is known as a grammar of icon-making, which have an in-depth description of icons and their different features. While, iconometric (*Talamana*) is a 'sub-science' of iconography, derived from two words Icon (Images or sculptures) + Metric (measurement unit), thus iconometry means the measurement units of icon or the study of icon proportion (Gupta & Asthana, 2002; Mosteller, 1988). T.A. Gopinatha Rao (1968) in his work “*Elements of Hindu Iconography*” explain many technical terms used for the measuring units for icons as mentioned in *Agamas*. There are six different types of measurement are mentioned in *Vaikhanasagama* (South Indian iconometry text), such as, *Mana* (height), *Pramana* (width), *Unmana* (depth), *Parimana* (circumference), *Upamana* (measurement of interspaces) and *Lambamana* (Measurements taken along the plumb lines) (Rao, 1968; Mosteller, 1988; Gupta & Asthana, 2002). In our present study, we have also used the measurement units for understanding the iconometry of Kamakhya sculpture art. We have documented height, width, and depth in mm of the sculptures that are installed on the walls, and along with these measurements, we have also recorded the circumference of sculptural fragments. These measurements are noted in the word sculptural documentation files for future references (see Appendix).

The attributes of sculptures are used for iconographic study of the Kamakhya sculptural art includes, *Sarira Mudras* (body posture), *Asanamudra* (sitting postures), *Hasta Mudra* (hand gesture), *Mukutas* (headgears), *Asana* (pedestals), *Abhusana* (ornaments), and *Ayudhas* (implements) (Gupta & Asthana, 2002, p. 101-129).

In the iconographic study, the *mudra* (posture) of the sculpture is very important and is a very noticeable attribute. The style of sculpture standing or sitting or its hand gesture can help in differentiating one sculpture to another. Many iconometric texts, such as *Natyasastra* and *Abhinaya Darpana*, has mentioned different *mudras* of deities. *Tantrasasta* mentioned various *mudras* of deities based on attributes, for instance, *Shiva* (10 *mudras*), *Vishnu* (19 *mudras*), *Ganesha* (7 *mudras*), *Saraswati* (7 *mudras*), *Agni* (19 *mudras*), *Surya* (1 *mudra*) and many more others. These *mudras* are based on the *Ayudhas* (implements) carried by the respective deities. On *Samarangana*, *Sutradhara* mentioned nine different body postures (*mudras*), six different *Pada mudra*

(leg posture) and sixty-four different *Hasta Mudra* (hand gesture) (Gupta & Asthana, 2002, p. 108).

In Kamakhya sculptural art, we have found two postures of sculptures, standing and sitting posture (Figure 61 & 62). These sculptures possess different attributes, which we will explain further in detail in here:

1. **Sarira Mudras (body posture):** Most of the sculpture in the site are standing in the *tribhanga* posture. *Tribhanga* means three folds or division. The entire body of the sculpture bends in three places: neck, waist and knee, hence, proving a gentle 'S' shape to the body. The first sculpture of Lord *Vashu* in figure 61 (a) is depicted in *tribhanga* posture. The *Vinadhara Shiva*, second sculpture in figure 61 (b) is depicted in a dancing posture, and this is one of the postures associated with Lord *Shiva*. The third most common posture seen in the sculptures closely resembled *Samabhanga/ Samapada–Sthanaka* posture. Under this posture, the sculpture is seen standing straight without any curves or bends. Lord *Vishnu* sculpture, third sculpture in figure 61 (c) is depicted standing in this posture. However, a slight bend can be seen around the waist of the sculptures, which gives an illusion of movement in the sculpture.

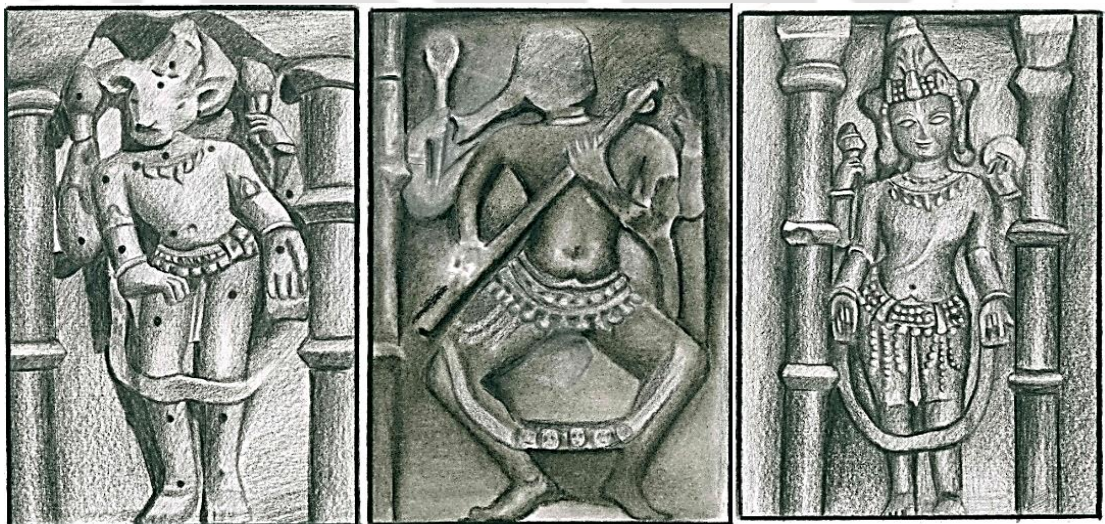


Figure 61. A representative sample of standing postures of sculptures in the Kamakhya sculptural art: a) Lord *Vashu* is standing in *tribhanga* posture; b) The *Vinadhara Shiva* is depicted in dancing posture; c) Lord *Vishnu* sculpture is depicted standing in *Samapada –Sthanaka* posture.

2. **Asanamudra (sitting postures):** There are very few numbers of sculptures on the site depicted in sitting posture. But among them, the types of *asana* we have noticed are *Paryanka asana* where the sculpture is seated on *Padamasana* both legs crossed. Goddess *Chamunda* sculpture, first in figure 62 (a) depicted sitting in *Dhyana asana* over a *pretasana* (prostrate corpse). Two rock-cut sculpture of Lord *Vishnu*, one Lord Buddha, the rock-cut sculpture of *Sadashiva* and *Ardhanareshwara* sculpture fragment are depicted sitting in *Dhyana asana* in the site. In this *asana*, the deity is depicted sitting crossed legs in meditation. Goddess *Lajja Gauri*, second sculpture in figure 62 (b) sitting in *Uttanapada*. This is the only example of *Uttanapada* posture found in the site. In this *asana*, the deity is sitting in squatting position with both of her legs open exposing the genital of the deity. Lord *Kubera*, third sculpture in figure 62, is depicted sitting in *Ardhaparyanika*, also known as *Maharajalila posture*. In this posture, the sculpture one leg is folded near the hip touching the thigh of another leg, and other leg hangs on the pedestals with slightly raised heels. We have recorded two sculptures of Goddess *Tara* sitting in *Ardhaparyanika/Maharajalila* posture from the site.

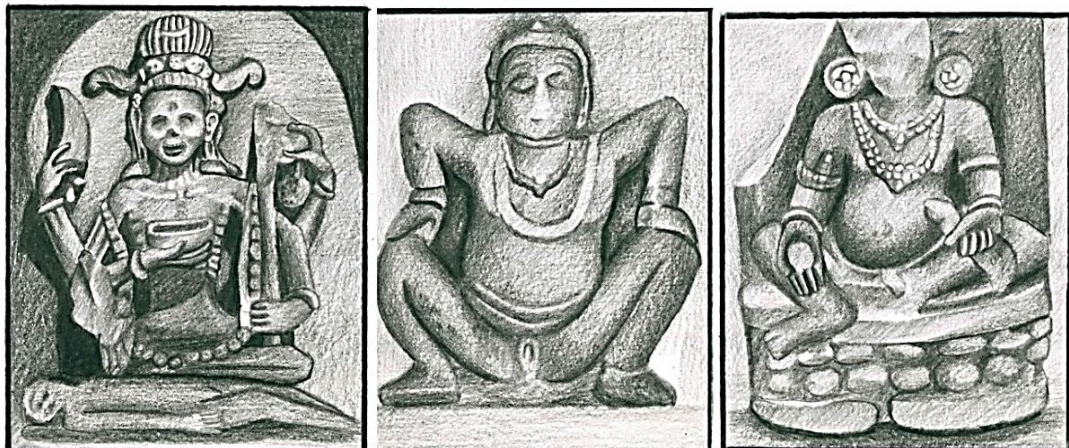


Figure 62. A representative sample of sitting postures of sculptures in the Kamakhya sculptural art: a) Goddess *Chamunda* sculpture sitting in *Dhyana asana* over a *pretasana* (prostrate corpse); b) Goddess *Lajja Gauri* sitting in *Uttanapada* posture; c) Lord *Kubera* is sitting in *Maharajalila* posture.

3. **Hasta Mudra (hand gesture):** *Katihasta Mudra*, also known as *Katyavalambita Mudra*, is the most common hand gesture (*Hasta Mudra*) found

in the sculptural art of Kamakhya. In this *mudra*, the deity is standing with one hand placed on the hip (*Kati*). First three sculptures in figure 63 (a-c) depicted the sculptures in *Katihasta Mudra*. The second sculpture in figure 63 (b), is also depicted in *Jnana Mudra*. In this *mudra* the thumb and the middle finger meet each other and hand is raised touching the chest. Many sculptures on the site are depicted in *Abhaya Mudra*, in which the deity hand is raised upward with an open palm facing forward showing as a symbol of assurance for protection from evils. Some of the rock-cut *Ganesha* sculpture in the site is depicted in *Varada mudra*, in which the deity hand is hanging down with open palm slightly touching the thumb and index finger. The hand is facing forward toward the devotee as a symbol of blessing. The fourth sculpture in figure 63 (d) showing the sculpture in *Anjali* or *Namaskara Mudra*, in which the deity both the palms are joint together and placed near the chest showing gratitude. The third and fifth sculpture in figure 63 (c & e) depicts the sculpture in *Karana Mudra*. In this *mudra*, the thumb is pressing down the middle and right finger towards the palm, whereas both small and index finger is pointing straight upward.

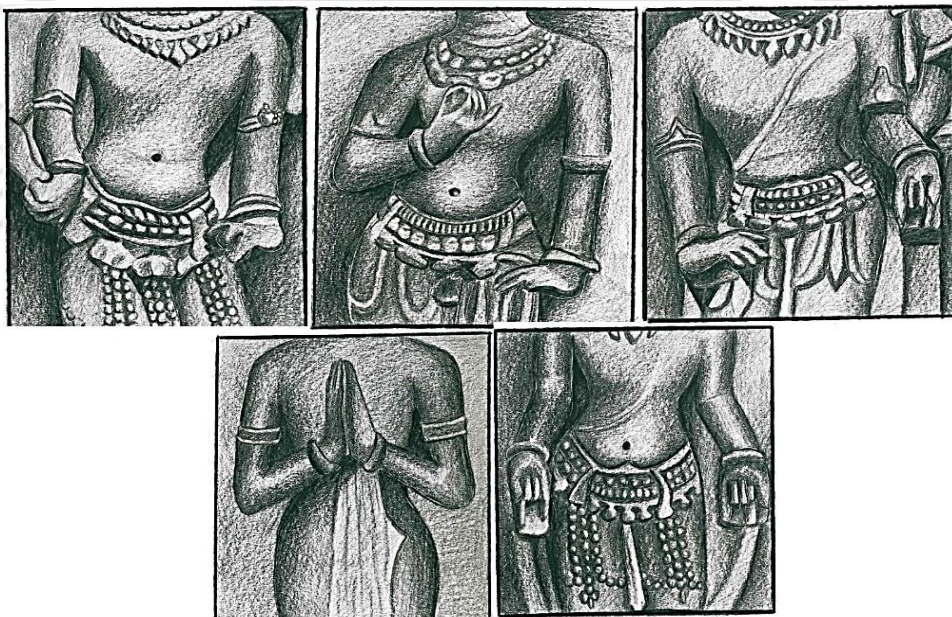


Figure 63. A representative sample of hand gesture (*hastha mudra*) of sculptures in the Kamakhya sculptural art: a) *Katihasta Mudra*; b); *Jnana Mudra* c) *Katihasta* and *Karana Mudra*; d) *Namaskara Mudra* and e) *Karana Mudra*.

4. **Mukutas (headgears):** Majority of the sculptures are depicted with *Kirita Mukuta*. The only variation in the *kirita mukuta* is the amount of decoration or ornamentation used. First four sculptures in figure 64 (a-d) represent variation in the form of *kirita mukuta* found at the site. The *kirita mukuta* is a conical headgear with a heavily decorated headband and small a disc on the top of the headgear. The *Varaha Avatara* of Lord *Vishnu*, fifth sculpture in figure 64 (e) depicted the *Karanda Mukuta*. *Karanda Mukuta* is a tall elongated headgear with diminishing tiers of a disc on top. Only a few sculptures are recorded on the site with *Jatamukuta*. Goddess *Chamunda* sculpture, sixth in figure 64 (f) depicted with *Jatamukuta*.



Figure 64. Representative samples of headgears (*Mukutas*) of sculptures in the Kamakhya sculptural art: a-d) Types of *Kirita Mukuta*; e) *Karanda Mukuta*; f) *Jatamukuta*.

5. **Abhusana (ornaments):** A wide variety of ornaments can be seen in the sculptures of the Kamakhya temple. Goddess *Tara* sculpture, first sculpture in figure 65 (a) is depicted with beautifully carved earrings that have flying *vidhyadhara* on the centre. Goddess *Chamunda* is depicted wearing earrings with skulls design. The variation in *Kati-bhusana* (hip ornaments) can be seen

in the third and fourth sculpture of figure 65 (c & d). The last sculpture of figure 65 (d), has *Kriti-mukha* as a decorative element in the *Katibandha* (girdle). Lord *Vinadhara Dakshinamurti Shiva* (Lord *Shiva*) sculpture on the site is depicted with *Katibandha* (girdle) made out from human skulls. The *Katibandha* is used to tie the draper (*dhoti*) around the waist. The sculptures in the site are depicted with numbers of ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headbands. Majority of the male deities are depicted wearing a loop earring, also known as *Karnavali*, whereas the female deities are depicted with heavily decorated earrings. Many male deities are also seen wearing *Yajnopavita* (sacred thread) across their chest.

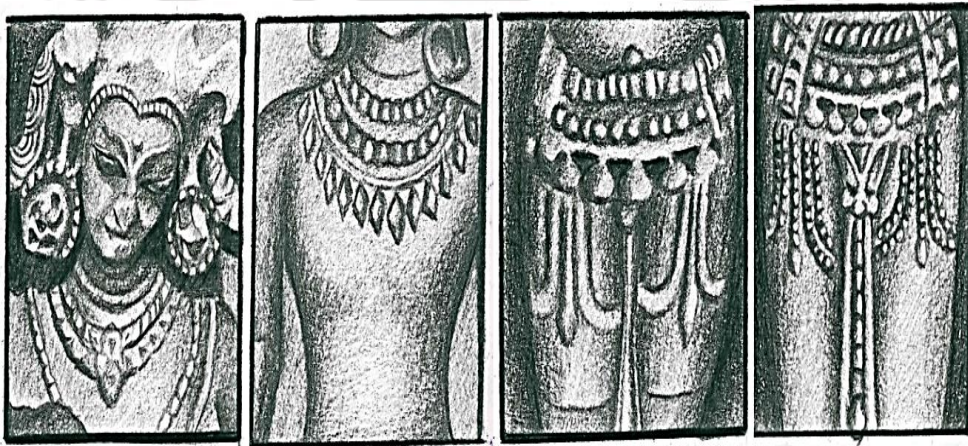


Figure 65. A representative sample of ornaments (*Abhusana*) of sculptures in the Kamakhya sculptural art: a) earrings (*Kundala*); b) necklace (*Hara*); c & d) girdle (*Katibandha*).

6. **Ayudha (implement):** Sculpture at the site are depicted holding different *ayudhas* (implements) in their hands (Figure 66). The types of *ayudhas* (implements) carried by the sculptures helps in identification of the sculpture. Every deity carries *ayudhas* (implements) based on the iconographic requirements of the deity mentioned in the ancient texts. The sculptures in the site are depicted carrying the *ayudhas* (implements) like, *Trisula* (trident), *Ankusa* (Goad), *Cakra* (disc), *Katari* (dagger), *Dhanusa* and *Bana* (bow and arrow), *Khadga* (sword), *Gada* (mace), *Khatvanga* (bone club with skull on the top), *Pasa* (noose), *Vajra* (thunderbolt), *Parsu* (battleaxe), *Agni* (fire), *Musala*

(pestle), *Kapala* (skull cup), *Sankha* (conch shell), *Chauri* (flying whisk), *Sruka* (sacrificial spoon), *Kamala* (lotus bud), *Vina* (musical instrument) and many more, which could not be identified mainly due to the weathering of the rock.

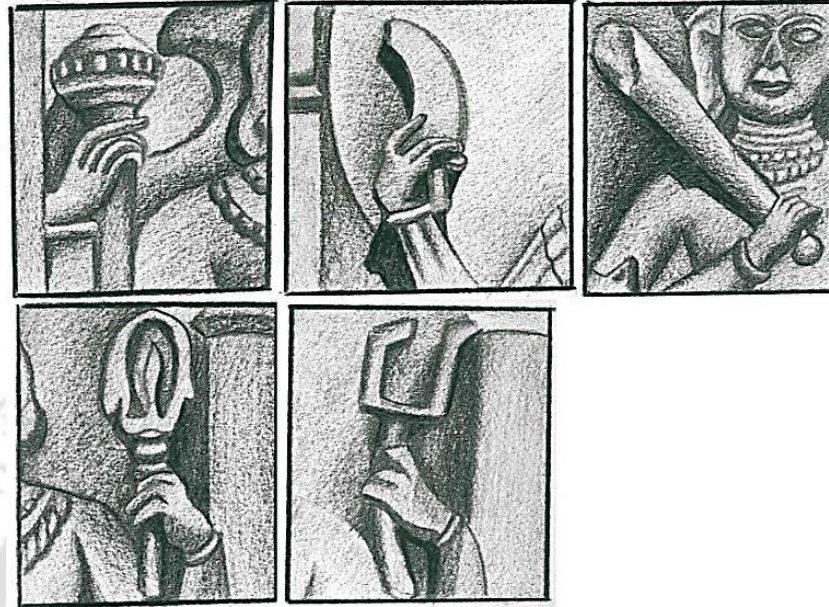


Figure 66. A representative sample of implements (*Ayudhas*) of sculptures in the Kamakhya sculptural art: a) *Gada* (mace) b) *Katari* (dagger); c) *Musala* (pestle); d) *Trisula* (trident), e). *Sruka* (sacrificial spoon).

#### 4.2.4 The Material Used for Sculpting

Three varieties of stone used for sculpting were documented. They are a) Granite, b) Sandstone and c) Basalt. A large number of sculptures found on the site are carved from the stone blocks of granitic gneiss and sandstone. These two types of stone are locally available and easy to procure for sculpting purposes. The third category of stone, basalt used for sculpting is not locally available in the Assam region and must have been imported from elsewhere. In Kamakhya, the sculptures made from basalt are very few in number.

##### a) Granite

The sculptures installed on the body of the main Kamakhya temple are carved on granite gneiss blocks (Figure 67 (a)). The rock-cut sculptures in the Kamakhya hill like *Ganesha*, *Vishnu*, miniature *Nagara* temples, *Bal-Bhairava*, *Shiva-linga*, and *Surya*, etc., are carved on granite gneiss cliff on the hill. Among these varieties of

granite, porphyritic granite heavily weathers when exposed to moisture. This is due to the presence of a higher amount of feldspar in the stone (figure 67). Majority of the sculptures on the site are highly weathered and deteriorated beyond a point of recognition as they are sculpted on porphyritic granite (Sengupta and Charaborty, 2017, p.14-16). The granite gneiss blocks for sculpting must have been quarried from the ancient quarry sites of a) *Phatasil Ambari*, b) Southern foothill of Nilachal hill, c) South of *Durgasarobar*, and d) *Maj Bargaon*. Three types of granite rocks are found in the Guwahati region of Assam. They are granite gneiss, porphyritic granite and fine-grained granite (Sengupta and Chakrabarty, 2017). Lack of any debitage at the site indicate that the stone block was shaped and dressed either at the query site or in some sculptural workshop like the Ambari site, Guwahati (Sengupta and Charaborty 2017, 9).



Figure 67. Example of Granite Gneiss and Porphyritic Granite Sculpture and Fine-grained Granite: a) Lord *Agni* granite sculpture installed on the exterior wall of the sanctum sanctorum (*garbhagriha*) of the main Kamakhya temple; b) Rock-cut sculpture of Lord *Sadasiva* is carved on the porphyritic granite in *Bogaladevi* temple; c) A fragment of Lord *Shiva* sculpture sculpted on the fine-grained granite block in the Kamakhya Museum.

Although the fine-grained granite looks like sandstone, the colour or stain of the stone is resulted due to the leaching of iron from Biotite and Magnetite in the stone. As noticed with the thin section and XRD experiment. The Ambari collection of sculptures are sculpted using this variety of granite.



Figure 68. Thin-section microscopic images of porphyritic granite showing the presence of biotite and microcline deformed plagioclase feldspar with large Quartz grains in the stone sample KMT-01 SDT-01 and KMT-03 KDT-01.

#### b) Sandstone

The next variety of stone sculptures found on the site is sculpted on sandstone. Sandstone is the most common material used in the majority of the sites in Brahmaputra valley like Deopani, Ambari, Kamrup, Sibsagar, Borpathar, Uzan Bazar, Kaki, Numaligarh, Ulubari. Very few numbers of sandstone sculptures are found at the archaeological site of Kamakhya. Many times fine-grained granite sculptures are mistaken for sandstone sculptures due to its close resemblance to the material (Figure 69 & 70).



Figure 69. Example of the sandstone sculpture: Flying *Vidhyadhara* sculpture fragment in the Kamakhya Museum.

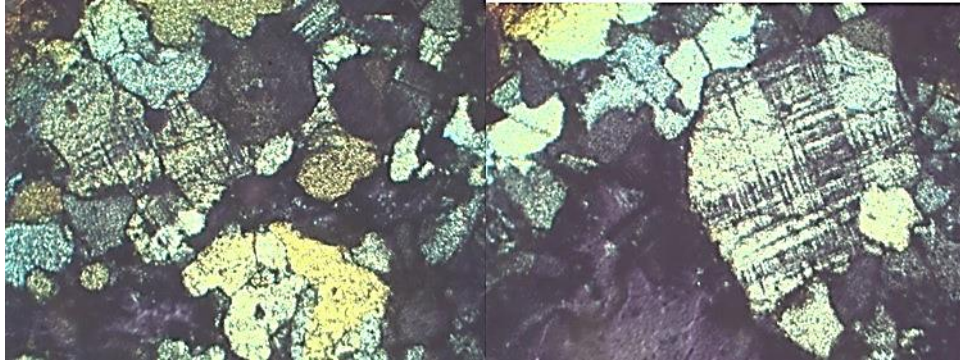


Figure 70. Thin-section microscopic image of sandstone showing the presence of well-rounded grain of quartz, hornblende, biotite within a fine-grained groundmass in the stone sample No. KMT-04-CNT-01.

### c) Basalt

The next variety of stone sculptures found on the site is sculpted on basalt. However, the basalt sculpture is very few in number. Three sculptural fragments sculpted on basalt stone block is found on the western pathway near the main Kamakhya temple (Figure 71 & 72).



Figure 71. Example of the basalt stone sculptures: Two sculptural fragments found on the western pathway.

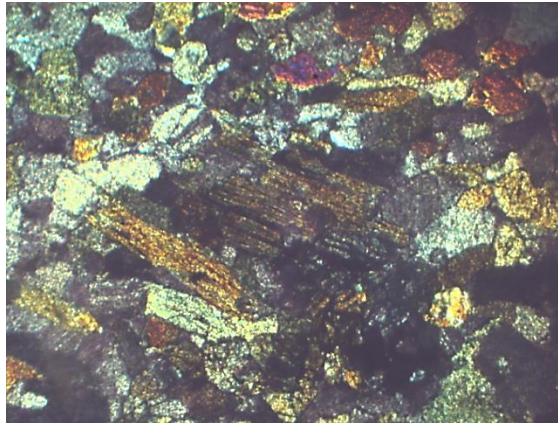


Figure 72. Thin-section microscopic image of basalt showing the presence of quartz, hornblende, biotite within a fine-grained groundmass in the stone sample No. KMT-05-KMM-01.

#### **4.2.5 Evolution of Kamakhya Sculptural Art Under the Roof of Kamarupa School of Art**

A sculptor guided by ancient texts and regional tradition of sculpture making transformed a piece of stone into a fascinating art object to be viewed and praised by the commoners. While looking at the stone sculptures, one has to imagine the lengthy process of quarrying, cutting and crafting the stone, which ultimately turns the stone into an object of admiration and veneration. The sculptor makes the stone a living image of deities adorned in different temples walls and sanctum sanctorum (*garbhagriha*) of the temples being worshipped and respected by the masses.

The sculptor introduces its own trademark style into the art followed with the pre-existing sculptural art in order to make it unique and different from the rest of the sculptures. This uniqueness in the sculptures introduced by the sculptor or by the sculptor's guild resulted in the formation of individual style of sculptural art. Here, in Assam, this particular uniqueness in the sculptural art leads towards the formation of its own art form known as "Kamarupa School of Arts". This particular school of art is named after the ancient Kamarupa kingdom also known as *Pragjyotisha* (ancient name of Guwahati), as the majority of the sites confined within the parameter of this kingdom (Mukherjee, 2007, p. 350). The Kamarupa school of art is the amalgamation of the local and indigenous art with the art style prevalent in the rest of India. On the stylistic ground, the Kamarupa school of art is divided into three phases, a) The ancient

Kamarupa school of art (4<sup>th</sup> to 10<sup>th</sup> century A.D.); b) The early medieval Kamarupa school of art (10<sup>th</sup> to 15<sup>th</sup> century A.D.); and c) The late medieval Kamarupa School of art (15<sup>th</sup> century onwards) (Mukherjee, 2007; Kouli, 2012). The ancient Kamarupa school of art comprises the influence of Gupta art, whereas the early medieval and late medieval comprises the influence of Pala-Sena and Ahom period art, respectively. The amalgamation of all these influences with the local and indigenous art resulted in the formation of this distinctive Kamarupa school of art (Mukherjee, 2007, p. 351-52). Each phases of the Kamarupa school of art has its own characteristic features, but South and South-East Asian influences are also witnessed in some specimens. The difference can be noticed in the treatment of the stone block, icon-plastic (Iconographic) characteristics of the sculptures, anatomical variation in the facial and physical features, use of decorative motifs and ornamentation and so on. These difference are very noticeable, and even the slightest differences in the raw material can give an insight into the socio-economic condition of that period.

**a) Ancient Kamarupa School of Arts (4<sup>th</sup>-10<sup>th</sup> century A.D.)**

The ancient Kamarupa School of art flourished under the patronage of Varman dynasty and Salasthambha dynasty. The Varman dynasty was the counterpart of the Gupta dynasty in the northeastern region of India, known as Kamarupa. The art which flourished under there rule was highly influenced by the Gupta idiom infused with the regional and indigenous art of this region. There are very few surviving evidences of this phase of the art form. The most remarkable example of this art form is the sculptural evidence from the *Dah-Parbatiya* ruins in Tezpur (Figure 73). The beautiful image of Goddess *Ganga* and *Yamuna* carved on the lower parts of the door jamb is the finest example of the Gupta period art. The half-closed eyes, slim and elongated torso, broad chest, attenuated waist, bulging hips, erotic posture and the sense of the third dimension etc. are all the chief characteristics of the Gupta sculptures. But the physical appearance of the figures such as the short nose, broad lips, and round faces are unmistakable of local origin (Ahmed, 1994, p. 55).



Figure 73. Decorative door jamb at *Dah-Parbatiya* ruins near Tezpur, Assam.

In the Kamakhya temple, we do not find any sculptural evidence of ancient Kamarupa school of art on the site, but it does not indicate that the site was not active during this period. It is clear from the *Umachal* rock inscription that the temple building activity on the site begins from 5<sup>th</sup> century A.D. (Dikshit, 1936; Sarma, 2010). However, T. N. Ramachandran (1940) found some pieces of stone blocks in Kamakhya temple, which bears decorative scrolls pattern similar to the Gupta scrolls of *Bhumara* of 4<sup>th</sup>-5<sup>th</sup> century A.D. (Figure 74). On the stylistic ground, the decorative feature of the carving does not match with the local style but more of the Gupta and Pallava period style of Northern and Southern India respectively. He called the figures “*a rare specimen of anatomical perfection*” (Ramachandran, 1940, p. 60-61).





Figure 74. Example of decorative scrolls pattern similar to the Gupta scrolls of *Bhumara* of 4<sup>th</sup>-5<sup>th</sup> century A.D.: a) Relief of floral motifs is installed on the exterior wall of the main Kamakhya temple; b) The second relief of floral motifs found installed on the stairs of *Vishnu* temple inside the main Kamakhya temple premises

However, the contribution of establishing an independent school of arts falls into the head of Salasthambha dynasty. During the Varman dynasty, there were only a few local and indigenous traits in the art form, while during the Salasthambha period, the theme and techniques of the art object remain the same as central India. But the physiognomic and anatomic representation becomes purely local. The sculptural specimens from the Bamuni hills are one of the examples of that period sculptural art. Traces of sculptures of this period are also found in the Nilachala hill at Kamakhya temple. The report on the exploration conducted by R. D. Banerji was published in the “*annual report of an Archaeological Survey of India 1924-25*”. In this report, he mentions the pre-Ahom period remains at Kamakhya hill and based on architectural remains scattered in and around the temple complex he made a statement that these remains show the three different periods of construction, ranging from 8<sup>th</sup> to 17<sup>th</sup> century A.D. (Banerji, 1927, p. 100-101).

**b) Early Medieval Kamarupa School of Arts (10<sup>th</sup>-15<sup>th</sup> century A.D.):**

The early medieval Kamarupa school of arts flourished under the rule of Pala-Sena. The early medieval Kamarupa school of arts marked a transitional phase in the history of sculptural art of Assam. The major changes can be noticed in the treatment of the stone blocks. Now the *silapatta* or *siracakra* become compulsory, and this is further decorated with the figures of *Vidyadharas* and *Kritimukha* at the top. Most of the sculptures found in *Ambari* has this particular feature. Thus, the *Ambari* collection becomes the finest example of the Pala-Sena style of sculptural art in Assam (Sharma & Sengupta, 2014; Saraswati, 2014).

The majority of the sculptures in the site belong to the early medieval period of the Kamarupa school of art. This is evident in the treatment of the sculptures, especially the life-sized sculptures of different deities installed on the exterior wall of the sanctum sanctorum (*garbhagriha*) of the main Kamakhya temple (Figure 75). The four-handed sculptures of *Astha Dikpalas*, *Vishnu* and *Kamadeva*, are depicted with a slender body with refined waist and broad shoulders, wearing different types of ornaments and headgears (*kiritamukuta*) (Figure 75). Surprisingly none of the sculptures has any knee and ankle joints. The sculptures are standing in a *tribhanga* posture, slightly tilted to their right side. The oval face sculptures are depicted with eyes wide open and fuller parted lips (creating a weird smile). These sculptures are one of the examples of early medieval Kamarupa school of art present on the site. The early medieval Kamarupa school of art follows the classical norms of sculptural iconographic or iconology that was already prevalent in the region of Bengal, Bihar, and Orissa (Saraswati 2014).



Figure 75. Example of early medieval Kamarupa school of art: Lord *Ishana* and Lord *Vinadhara Dakshinamurti Shiva* sculptures installed on the exterior wall of the sanctum sanctorum (*garbhagriha*) of the main Kamakhya temple.

Apart from the religious sculptures, mention may be made of women with her child and a women worshiper kneeling and pouring water from a spouted vessel (Figure 76). The facial features of the women worshiper closely resemble with the features of the local population of Assam (Bodo tribe of Assam?). The sculptor has beautifully

carved the expression, ornaments, dress and anatomic representation in stone (Ahmed, 1994, p. 62; Mukherjee, 2007).



Figure 76. The example of early medieval Kamarupa school of arts in Kamakhya temple: a) Mother and child; b) Women worshipper sculpture installed on the wall of the western gateway of the main Kamakhya temple.

### c) Late Medieval Kamarupa School of Arts (15<sup>th</sup> century A.D. onwards)

The late medieval Kamarupa school of arts represent the art that flourished in the period of Ahom, Koch, and Kachari. In this phase, we have noticed that heavy emphasis is given to the incorporation of folk elements, which was otherwise very limited in the former phase (Figure 77). Majority of the sculptures of this phase are religious sculptures, but the decorative panels, animal and bird figurines, geometrical designs and secular sculptures are also found (Sharma & Sengupta, 2014; Saraswati, 2014; Mukherjee, 2007).

From the Ahom period onwards, the human figures become crude, angular and two-dimensional. The treatment of human figures and particularly of the divine figures are generally static and frontal. The Mongolian features in the sculptures become more prominent such as a round face with half-open eyes (almond shape eyes), thick lips slightly flat nose and short torso with feet look like stumps (Ahmed, 1994; Mukherjee, 2007). However, the presence of turban and the tilted sword in some sculptures, represent the influence of Mughal Art (?) (Mukherjee, 2007, p. 356) (Figure 77 a). During the late medieval Kamarupa school of art, more emphases were given to the

indigenous and folk traits and features. The *Makara* or the crocodiles on the semi-vaulted roof become a well-known part of the Ahom period art and architecture (Sarma, 2010) (Figure 77 c).



Figure 77: Example of the late medieval Kamarupa school of art: a) A soldier sculpture in the Kamakhya museum. b) Women are standing next to a kneeling man sculpture installed on the wall of the *Balighar* (animal sacrifice house) in the main Kamakhya temple. c) A *Makara* (crocodiles) on the semi-vaulted roof of the *Kamaeswara* temple.

#### 4.2.6 Kamakhya Sculptural Art

The Kamakhya sculptural art indicates that the art evolved as a part of temple architecture, where the majority of the sculptures found installed on the wall of the temple, gateways and boundary wall. In the sanctum sanctorum (*garbhagriha*) of the majority of the temples, the main deity is worshipped in a non-anthropomorphic form as a *peetha* (sanctified water) except in the temple of *Tara* where a bronze image of the Goddess is worshipped and in the *Kotilinga* temple where a ribbed linga with a bulging body is worshipped. In the rest of the temples, the deity is worshipped in his/her non-anthropomorphic forms. This does not indicate that these sculptures have less sacred or aesthetic value, or they are simply used as decorative elements as a part of temple architecture. But it is a very common practice of placement of religious sculptures on the wall of temples and has been an integrated part of temple architecture of India. Each sculpture installed on the walls have their unique purposes, and they are carefully installed taking into the consideration of cardinal planes and axis guided by the

*Sthapatya-Sastra (Upavedas)*, *Vastu Sastra* and *Shilpa Sastra* (ancient texts of architecture and sculptural art). Many of the sculptures installed outside on the temple wall also served as protecting guardians of the main deity in the sanctum sanctorum (*garbhagriha*) of the temple.

There are several examples of temples throughout India following this ancient tradition of placing sculptures, and sculptural relief panels on the temple wall some time in miniature forms and sometimes the life-sized images of different deities, semi-divine sculptures and mythical animals. The famous examples are: *Khajuraho* temple, Madhya Pradesh; *Chausathi Jogini Mandir*, Odisha; *Konark Sun temple*, Odisha; *Rajarani* temple, Odisha; *Jagannatha* temple, Puri; *Virupaksha* temple, Hampi; *Airavatesvara* temple, Tamil Nadu; *Brihadishvara* temple (*Rajarajesvaram* or *Peruvudaiyar Kovil*), Thanjavur, Tamil Nadu; and so on.

The influence of these architectural norms are also followed in Assam, as we have noticed several temple sites in Assam, like the ruins *Madan Kamdev* temple, Guwahati; The ruins of *Pingaleswar* temple, Guwahati; The ruins of *Bamuni* hill temple, Tezpur, The ruins of *Da Parbatia* temple, Tezpur; The ruins of *Na-Nath* temple, Nagaon; The ruins of *Sankhadevi* temple, Nagaon; The ruins of *Rajbari* temple, Nagaon; *Hayagriva Madhava* temple, Hajo; The ruins of *Deoparvat*, Golaghat; The ruins of *Ambari*, Guwahati; and *Kamakhya* temple, Guwahati following the tradition.

In *Kamakhya* temple apart from these installed sculptures, we have also noticed numbers of stone sculptural fragments scattered on the site. These fragments are the part of the previous stone temples which had either collapsed or were broken, and some of these stone sculptures are refitted on the brick walls of the *mandapa* of the main *Kamakhya* temple and also on the walls of other temples on the site and hence, carrying forward the tradition of placing or installing the sculptures on the walls of the temples. These newly refitted sculptures on the walls of *Kamakhya* and other temples might not have followed any pattern or the canonical literature rules for placement of sculptures, as noticed by the placement of the *Vaishnavite* sculptures (different incarnation of Lord *Vishnu*) along with *Shakta* as well as *Shaivite* sculpture on the same wall. But the temple builders followed this tradition irrespectively to honour the art of the previous builders and sculptors and utilise these sculptural fragments for enhancing the royalty and aesthetic sense of the temple premises.

As we have mentioned before in this chapter, that the entire sculptural art of the Kamakhya temple is divided on the basis of subject matters. The subject matters include A) religious sculptures; B) secular sculptures; C) sculpture reliefs with flora & fauna motifs and geometrical designs; D) miscellaneous sculptures (Deka, 2013). In each category of sculptures, we have documented sculptures and sculptural fragments of different periods. Hence the variation in the style of sculptures is used as a parameter for understanding the evolution of the Kamakhya sculptural art.

### A) Religious Sculptures

Being an active temple site, the majority of sculptures found on the site are religious sculptures. The religious sculptures include divine and semi-divine male and female figures. This includes the *Shakta* sculptures, *Shaivite* and *Bhairava* sculptures, *Vaishnavite* sculptures, *Ganesha* sculptures and other divine and semi-divine sculptures. Based on the sculptural data collected during the survey, we have noticed that the number of male deities belonging to *Shaivite* and *Vaishnavite* pantheon and *Ganesha* sculptures is comparatively higher than the female deities. Out of 175 religious sculptures, 87 sculptures are *Shaivite-Vaishnavite* pantheon, and *Ganesha* sculptures, while only 22 sculptures and sculptural fragments belong to *Shakta* tradition and other female deities on the site. This is also due to the fact that most of the main *Shakta* deities on the site are worshipped in a non-anthropomorphic form (aniconic forms) as a *peetha* (sanctified water).

#### 1. *Shakta* and other female deities sculptures

Here, in the Kamakhya temple, the Goddess Kamakhya is worshipped as a Goddess of wealth and prosperity, as a kind-hearted mother who fulfilled all the wishes of her devotees. Goddess Kamakhya is accompanied by *Dasa Mahavidyas*, a group of Goddesses which include Goddess *Kali*, *Tara*, *Sodasi*, *Bhuvaneshvari*, *Bhairavi*, *Chinnamasta*, *Dhumavati*, *Bagalamukhi*, *Matangi*, and *Kamala* (Borah, 2010). Among the *Dasa Mahavidyas*, the Goddess *Kali*, *Bhairavi*, *Chinnamasta*, *Dhumavati*, *Matangi* are the ferocious manifestation of the Goddess *Adi Para Sakti*. The word “*Mahavidya*” is itself understood as the Goddess of great knowledge or wisdom. A detailed description of each Goddess is mentioned in different texts like *Devi-Bhagavata Purana*, *Devi Mahatmya*, *Kalika Purana*, *Chandi Purana Agni Purana*, and *Matsya*

*Purana*, and so on. All the *Dasa Mahavidyas*, whether gentle or ferocious is worshipped as a benevolent mother. Even the most ferocious form of Goddess poses no harm to her devotee, and act as a protector from adversary and danger (Shastri, 2005).

Among, *Dasa Mahavidyas* the sculptures of Goddess *Bhairavi* and *Tara* are found in the site, while the rest of *Dasa Mahavidyas*, including *Kamakhya*, is worshipped in a non-anthropomorphic form (aniconic forms).

Apart from the *Dasa Mahavidyas*, one sculpture of Goddess *Lajja Gauri* in the site indicate the presence of much older and ancient mother Goddess cult. Presence of two sculptural remains of Goddess *Chamunda* indicates the existence of *Matrika* cult in the site. During our survey, we have recorded sculptures and remains of different female deities (Figure 78).



Figure 78. A representative sample of female deities found in the archaeological site of Kamakhya temple.

**a) Goddess *Lajja Gauri***

The sculptural art of *Lajja Gauri* is the surviving remnants of an ancient Goddess cult, where the concept of fertility is celebrated and worshipped. There are no textual information regarding the iconography of *Lajja Gauri*. Carol Radcliffe Bolon

(1992) in his work “*Forms of the Goddess Lajja Gauri*” classified the sculptural art of Goddess into four groups based on the types of sculptures found throughout India.

**I Type:** The sculpture of this category generally have a pot like torso with outstretched legs, exposing the genital of the Goddess and have lotus head instead of a face.

**II Type:** The sculpture of this category have no arms and face but depicted with prominent breasts and sitting outstretched legs exposing the genital of the Goddess.

**III Type:** The sculpture of this category depicted with arms and lotus head. Sometimes the deity is depicted holding lotus stalks in her hands.

**IV Type:** The sculpture of this category is depicted with a human head with outstretched legs, exposing the genital of the Goddess.

The Kamakhya *Lajja Gauri* (Figure 79) falls into the IV type category of Bolon classification of Goddess *Lajja Gauri*. Here, the Goddess is not only depicted in an anthropomorphic form but also decorated with different ornaments. The Kamakhya *Lajja Gauri* shares the iconographic characteristics of *Lajja Gauri* found in the other part of the country. The Goddess is depicted sitting in *Uttanapada* posture, where both of her legs are outstretched in birth-giving positions, exposing the genital of the Goddess. The deity seems wearing different ornaments, like, headband, two necklaces (*hara*), loop earring (*Karnavali*), bangles in both of her hands and a thread (*Yajnopavita?*) across her chest. The tensed expression of the Goddess is beautifully depicted through the depiction of the stress line on the forehead of the sculptures as, if the Goddess is really pushing or giving birth. The roundness of her belly and the open genital also suggested the same. This is the only recorded sculpture of *Lajja Gauri* sculpture in Assam.



Figure 79. *Lajja Gauri* sculpture installed on the exterior wall of the *mandapa* (hall) of the main Kamakhya temple (10<sup>th</sup>-12<sup>th</sup> century A.D.).

**b) Goddess *Chamunda***

The earliest description of Goddess *Chamunda* as an important deity comes from the text *Devimahatmya* dated 6<sup>th</sup> to 7<sup>th</sup> century A.D., while the evidence of Goddess *Chamunda* as one of the *Saptamatrika* comes from different temple sites of 5<sup>th</sup> to 8<sup>th</sup> century A.D., such as *Aihole*, *Elephanta* and from the *Saptamatrika* panel of *Kailashnath* temple Ellora (Hatley, 2012). Two sculptural specimens of Goddess *Chamunda* (CL1 & CR1) are found inside the compound of *Kedareswara* temple at Kamakhya (Figure 75). These beautifully carved sculptural specimens are the standing examples of the earliest form of sculptural art of Assam, and they also shed light on the history of amalgamation of *Yogini* or *Matrikas* sect into the *Mahavidyas* sect in the complex (Shin, 2010).

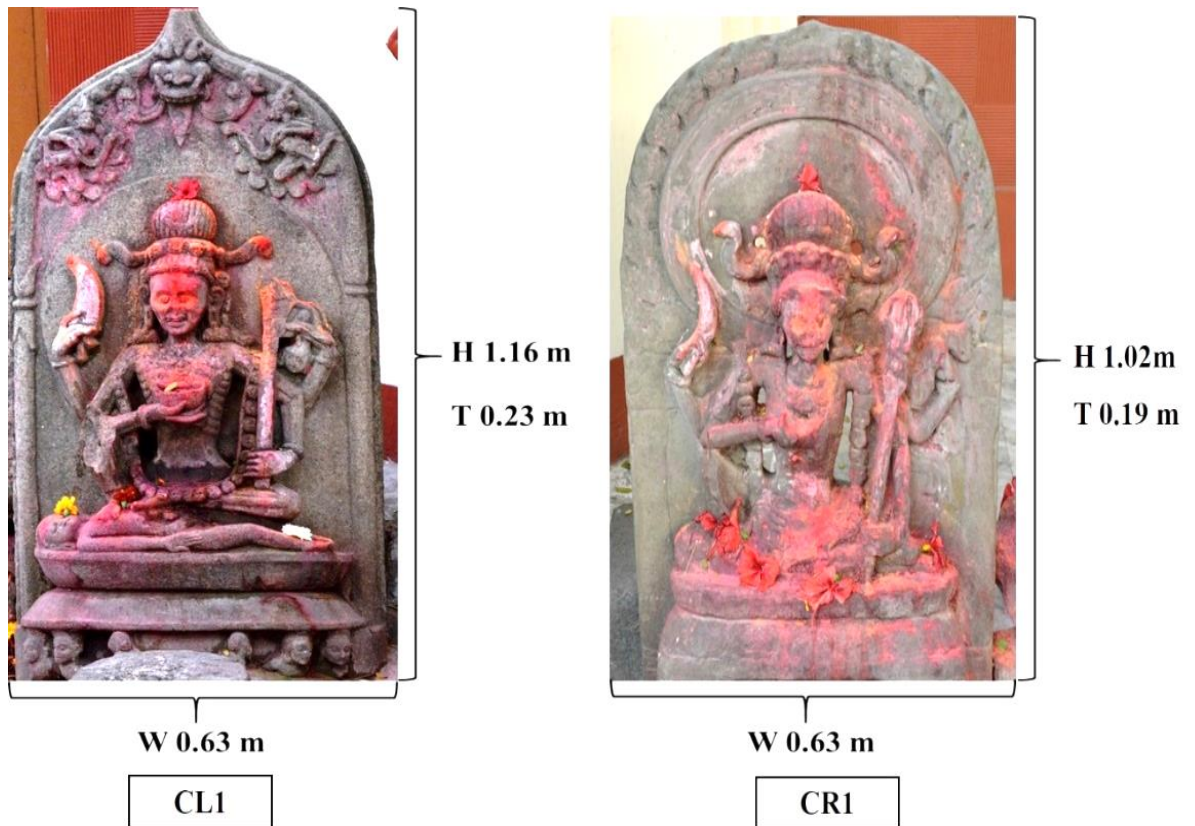


Figure 80. Sculpture of Goddess *Chamunda* (CL1 & CR1) placed inside the compound of the *Kedareswara* temple in the archaeological site of Kamakhya (10<sup>th</sup>-15<sup>th</sup> century A.D.).

Both the sculptures are almost identical in appearance with slight variation in the carving style and ornamentation (Figure 80). The *Chamunda* sculpture on the left side (CL1) is stylistically carved with intricate detailing, while the *Chamunda* sculpture on the right side (CR1) is plain in sight. Both of the sculptures depicted the Goddess in a ferocious form. Based on the carving style, Saraswati (2014), assigned the first *Chamunda* sculpture (CL 1) to 9<sup>th</sup> century A.D. and the second sculpture (CR1) belongs to a later period. On the basis of stylistic dating, Ahmed (1994) in his work “*The art and architecture of Assam*” placed them in the time period between 11<sup>th</sup> to 12<sup>th</sup> century A.D. In Assam, there are only a few surviving remains of Goddess *Chamunda* sculptures. Besides the two Kamakhya *Chamunda* sculptures, there are two other *Chamunda* sculptures found in the *Na-bhanga* (Nagaon) and *Borpathar* (Golaghat) archaeological sites (Ahmed, 1994; Saraswati, 2014).

The *Chamunda* sculpture from *Na-bhanga* in the Nagaon district of Assam is identical to the sculptural specimens found in the archaeological site of the Kamakhya temple, but here the Goddess is depicted with six hands. The sculpture is carved on a stone, in which the six-handed *Chamunda* is sitting on a corpse in her ferocious form. Here, the Goddess is shown holding a bow and arrow in her uppermost hands. In the pedestal on her right side, there is an image of a vulture, and on the left side is a jackal. There is also a depiction of human skull and bones on the pedestal of Goddess *Chamunda*. This sculpture is severely eroded (Ahmed, 1994; Saraswati, 2014).

### I. Chamunda Sculpture (CL1)

The Goddess *Chamunda* sculpture is carved in a stone panel or *silapatta* depicting the Goddess in her fierce form (Figure 80). Two pillars have been carved on the lateral edges of the panel. Both these pillars are supporting an arch within which is a *Kritimukha* on the top centre position and two flying *Vidyadharas*, holding flower creepers in their hands above the head of the fiery Goddess. In this sculpture Goddess, *Chamunda* is depicted sitting on a prostrate corpse (*pretasana/savasana*) in *Maharajalila* posture over a double petal lotus. Her hair is neatly tied up in a *Jatamukuta* with two snake heads spreading out from each side. She has a skeleton-like body with three sunken eyes and an open mouth with fangs. The four-handed Goddess is wearing *Kundala* (earrings) and snakes as ornaments. In her left hands, she is carrying a *katari* (sharp knife) and a *kapala* (skull cup). On her right hand, she is holding a sword and a severed head. On the pedestal of this stone block, numerous *Bhutas* (ghosts) can be seen.

### II. Chamunda sculpture (CR 1)

This sculpture is identical to the CL1 sculpture. The fundamental difference between these two sculptures is in the preparation of the panel or *silapatta*. While CL1 is a square panel in CR1, the top corners have been rounded. The head is placed inside a circle or disc (halo), the edges of which are decorated with floral designs. In Indian sculpture art, this particular type of halo is known as *Prabhamandala* or *Siras-cakra*. The placement of halo in the sculptures can be noticed in both Buddhist as well as *Brahmanical* sculptural art. (Bhattachali, 1929). There is no *Kriti-Mukha*, *Vidyadharas* and *Buthas* carved in this panel. Here, the Goddess is also depicted in her ferocious

form with a skeleton body and exposed rib-cage. She is sitting on a prostrate corpse (*pretasana*) over a double petal lotus. Her hair is neatly tied up in a *Jatamukuta* with two snake heads spreading out from each side. She has a skeleton-like body with three sunken eyes and an open mouth with fangs. The four-handed Goddess is carrying a skull cup (*kapala*) and a dagger (*Katari*) on her left hands. On her right hand, she is holding a *trishula* and a severed head. In the ornaments, she is depicted wearing a garland of skulls (*mundamala*) and big earrings (*kundals*).

Scholars have dated CR1 *Chamunda* sculpture to the later period in comparison to CL1 *Chamunda* sculpture, on the basis of the absence of *Kirti-Mukha*, flying *Vidyadharas* and ghostly figures (*Bhutas*) (Saraswati, 2014; Ahmed, 1994). But as the panel is complete and there is no indication of any attempt to include these decorative elements, it is difficult to accept this as a marker of dating.

**c) Goddess Tripura Bhairavi**

Another terrible and fierce Goddess among *Dasa-Mahavidyas* is *Bhairavi*, also known as *Tripura Bhairavi*. In the texts, she is portrayed as a Goddess who has a reddish complexion and wears the garland of skulls and clothes made from the skin of demons. She has four hands. In two of her hands, she holds a rosary and a book, and the other two hands are in the posture of giving assurance of wellbeing and giving boons. In *Kalika Purana*, she is depicted with rolling her eyes standing on a corpse, resembling an intoxicated look of a human being.

In Kamakhya temple, we have found one specimen of *Tripura Bhairavi* carved on the porphyritic granite rock face near the main Kamakhya temple (Figure 81). The sculpture is weathered, beyond the point of recognition, and smeared with vermilion all over the sculpture. We can see some of the features of the sculpture, such as the Goddess is sitting in a *Dhyana asana* over a *pretasana* (prostrate corpse), wearing a *mundamala* (Garland made of severed humans head), in one of her hand she is holding a *Pustaka* (book), and *kapala* (skull cup) on the other. There is one unknown male figure carved beside her.



Figure 81. Goddess *Tripura Bhairavi* sculpture carved on the porphyritic granite rock face inside the premises of the main Kamakhya temple (10<sup>th</sup>-12<sup>th</sup> century A.D.).

#### d) Goddess Durga

In texts, the Goddess *Durga* is depicted in attacking position, riding on the back of a lion and killing *Mahisasura*, which also lead to her second name *Mahisasuramardini*. *Durga* in one hand is invincible, unconquerable and unassailable and on the other hand is a soft-hearted mother who is ready to protect her disciples/children from every trouble (Amazzone, 2010, p. 3). A furious Goddess was the subject centre of *Devimahatmya*. Some of the manifestations of Goddess *Durga* are *Candika*, *Ambika*, *Uma-Parvati*, *Mahisasuramardini*, *Gauri* and *Sakambhari* etc. (Mookerjee, 1999, p. 58-59).

In Kamakhya temple, we have found Goddess *Durga* in her *Mahisasuramardini* avatar (incarnation) (Figure 82). Due to weathering, attributes of the sculpture is difficult to understand. The chief characteristics of the sculptures of Goddess *Mahisasuramardini* are: The Goddess is depicted with various hands carrying different *Ayudhas* (implements) like *Katari* (knife), *Dhanusa* and *Bana* (bow and arrow), *Khadga* (sword) etc. the deity is depicted in attacking position and killing *Mahisasura*. Goddess is depicted with big loop earring known as *Karnavali*. One sculptural fragment found in the *Siddheswara* temple is one of the most beautiful depictions of Goddess *Mahisasuramardini* in the sculptural art of Kamakhya (Figure 82 a). The

youthful appearance of the Goddess with calmness in her facial expression makes her stand out from the rest of the sculptures in the site.



Figure 82. Example of the Goddess Durga sculptures found in the archaeological site of Kamakhya: a) Goddess Durga sculpture found in the *Siddeshwara* temple (11<sup>th</sup>-12<sup>th</sup> century A.D.); b) Rock-cut sculpture of Goddess *Durga* is carved on the porphyritic granite rock face near the *Ganesh* temple (15<sup>th</sup> century onwards); c) Badly weathered Goddess *Durga* sculpture installed on the wall of *Amrakeswara/ Tokeswara* temple (15<sup>th</sup> century onwards); d) Goddess *Durga* sculpture installed on the interior wall of *mandapa* of the main Kamakhya temple (16<sup>th</sup>-17<sup>th</sup> century A.D.).

#### e) **Goddess Tara**

In the texts, the appearance of Goddess *Tara* and *Kali* are much alike, both have a dark complexion, and both are depicted as standing upon a corpse or supine *Siva*. She also has a fierce appearance. However, she is described as a blue colour Goddess, who has four hands. She is depicted holding a sword, skull cup, lotus and a scissor in her hands. Her hair is tied in a long braid. She wears tiger skin and some time is shown standing in the midst of a cremation fire.

However, the sculptural iconography of Goddess *Tara* in the site depicted her as a beautiful young woman sitting in *Ardhaparyanika*, also known as *Maharajalila* posture. Two ribbons, one on each side, can be seen flaking behind the Goddess's head.

She is wearing different ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headbands. One sculptural fragment found at the backside of the *Bhairavi* temple depicted Goddess with beautiful earrings and flying *vidyadhara* on the centre (Figure 83 a). She is also depicted wearing *Yajnopavita* (sacred thread) across her chest. This sculpture is one of the finest representation of the sculptural art of Kamakhya. The facial features of the Goddess separated her from the other sculptures found at the site. There is one rock-cut image of Goddess *Tara* found installed in the backside of the Kamakhya temple western gateway (Figure 83 b). Here, she is depicted wearing different ornaments and sitting in a *Maharajalila* posture. Here, the Goddess is seen wearing a *Karanda Mukuta* (headgear) with a decorated headband. The right hand of the Goddess is placed near her chest like she is singing a song, while her left hand is placed on her knee. She is also depicted wearing *Yajnopavita* (sacred thread) across her chest. The figure is also weathered. Another broken sculpture of Goddess *Tara* is found inside the pilgrim shelter on the southern courtyard of the main Kamakhya temple (Figure 83 c). She is sitting in *Ardhaparyanika/Maharajalila* posture on a broken flower pattern pedestal. Her face, hands and her legs are deteriorated or broken. A hint of ornamentation is visible on the sculpture. An artificial glaze is applied to the sculpture. The sculpture is depicted wearing a loop earring, also known as *Karnavali* with no headgear. Two ribbons, one on each side, can be seen flanking behind the Goddess's head.



Figure 83. Example of the Goddess *Tara* sculptures found in the archaeological site of Kamakhya: a) The sculptural fragment of Goddess *Tara* found at the backside of the *Bhairavi* temple (11<sup>th</sup>- 12<sup>th</sup> century A.D.); b) Goddess *Tara* found installed in the

backside of the Kamakhya temple western gateway (12<sup>th</sup>-14<sup>th</sup> century A.D.); c) broken sculpture of Goddess *Tara* is found inside the pilgrim shelter on the southern courtyard of the main Kamakhya temple (15<sup>th</sup>-16<sup>th</sup> century A.D.).

**f) Goddess *Lakshmi***

Goddess *Lakshmi* is the Goddess of wealth and prosperity. We have documented two specimens of four-handed Goddess *Lakshmi* from the site (Figure 84). One rock-cut sculpture of Goddess *Lakshmi* is found in the *Bagalamukhi* temple in the site (Figure 84 a). The sculpture is depicted sitting in the *dhyana mudra*. The sculpture is smeared with vermilion, making it difficult to understand the other attributes of the Goddess. A lotus bud can be seen on the hand of the Goddess. The sculpture is highly weathered. One small sculpture of Goddess is seen installed on the outer wall of the *mandapa* of main Kamakhya temple (Figure 84 b). Four-handed sculpture sitting looking downwards. Her front left hand is in *Varada mudra*, and her front right hand is in *vyakhyana mudra*. In two of her hands, the Goddess is seen carrying a lotus bud and a purse. Both of the sculptures are seen wearing *Karana mukuta* (headgear).



Figure 84: Goddess Lakshmi sculpture: a) Rock-cut image of Goddess *Lakshmi* at *Bhogaldevi* temple (11<sup>th</sup>-12<sup>th</sup> century A.D.); b) Goddess *Lakshmi* sculpture installed on the outer wall of *mandapa* of the main Kamakhya temple (11<sup>th</sup>-12<sup>th</sup> century A.D.).

### g) Goddess *Saraswati*

Goddess *Saraswati* is the Goddess of knowledge and music. In Kamakhya, we have recorded two sculptures of Goddess *Saraswati* both sculptures are a very simple depiction of the Goddess. Both sculptures are found in the main Kamakhya temple and depicted playing *Vina* (Figure 85). The first sculpture is found on the outer wall on the *mandapa* of the main Kamakhya temple (Figure 85 a). The Goddess depicted in *tribhanga* posture, carrying a *vina* in her hand. Goddess depicted wearing different ornaments, such as *kiritamukuta*, *hara* (necklace) and *karnavali* (earrings). The similar style of Goddess *Saraswati* sculpture is also found installed inside the *bhogamandapa* of the main Kamakhya temple (Figure 85 b). The sculpture inside the *bhogamandapa* is larger than the sculpture installed on the outer wall of the temple.



Figure 85. Goddess *Saraswati* Sculptures: a) Goddess *Saraswati* sculpture installed on the outer wall of *mandapa* of main Kamakhya temple (12<sup>th</sup> to 14<sup>th</sup> century A.D.); b) Goddess *Saraswati* sculpture installed inside the *bhogamandapa* of main Kamakhya temple (16<sup>th</sup> century A.D.).

### h) Other Female deities

There are several other sculptures of semi-divine female deities found in the site. This includes:

## I. Nymphs (*Apsara*)

Nymphs or *Apsara* sculptures have been used as decorative elements in the temple architecture. They are used to enhance the aesthetic sense of the temple. Different specimens of this variety of the sculptures are recorded from the site, among them, few are worth mentioning. The two sculpture fragments are found installed on the stairways near the main Kamakhya temple (Figure 86). These stone sculpture fragments are unique and one of its own kind, as one stone block is used for carving two faces of the sculptures by connecting their back. In the front side of the stone block, the nymphs are depicted in dancing posture. One hand raised above the head and other below the bust. While on the backside of the stone block, the nymphs are depicted in a serious posture, looking straight forward. The placement of this sculpture block on the entrance toward the Kamakhya premises indicates that the front face greeted the devotees with cheerfulness. While the backside shows seriousness or the peace attended by the devotee after leaving the temple premises (Saraswati, 2014). On both sides, the nymphs are depicted wearing different ornaments with prominent big flower motif earrings. However, the front side is more decorative in the sense that the sculptures are seen wearing ribbons which flank the backside of the head of the sculptures, and there is also an ornamented headband. On the backside, the sculpture is wearing very few ornaments, representing simplicity.



Figure 86. Four sculpture of nymph carved on two different stone block is found installed on the stairways near the main Kamakhya temple (12<sup>th</sup>-14<sup>th</sup> century A.D.).

The second noteworthy nymph sculptural fragment is found inside the *Mahakal Ganesha* temple in the site (Figure 87). The sculpture is carved on the granite stone block, and it is the broken part of the temple structure most probably installed on the ceiling of the temple. The face of the sculpture is badly eroded, but the beauty of the sculpture is still intact. the sculpture is carved inside a full-blown lotus, either flying or dancing.



Figure 87. One sculpture of nymph is found carved on the stone ceiling fragment found inside the *Mahakal Ganesha* temple (10<sup>th</sup> -11<sup>th</sup> century A.D.).

## II. *Yaksini*

*Yaksini* is the female counterpart of male *yaksha*, and they are considered very important in Indian temple art. The *Yakshini* are often portrayed as young beautiful female figures, holding a *Chauri* (fly-whisk). There are several *Yakshini* sculptures recorded from the site standing in a *tribhanga* posture with a flying whisk (*chauri*) (Figure 88). They are beautifully depicted as a youthful deity with big round breasts, narrow waist, wide hips, and wearing different ornaments. They are depicted wearing *Kirita Mukuta* (headgear).



Figure 88. Various forms of *Yakshini* sculptures found in the archaeological site of Kamakhya temple (11<sup>th</sup> – 14<sup>th</sup> century A.D.).

### III. *Naga Kanya*

One sculpture fragment depicting two *Naga Kanya* is found in the Kamakhya museum (Figure 89). The *naga kanya* is depicted wearing big round loop earrings (*Karnavali*), and their hands are joined in *Anjali* or *Namasakra* posture. They are depicted with half human and half serpent body.



Figure 89. The *Naga Kanya* sculptural fragment is found in the Kamakhya museum (15<sup>th</sup>-17<sup>th</sup> century A.D.).

## 2. Shaivite Sculptures

Lord Shiva in Kamakhya sculpture art is depicted in both *phallic* (aniconic) and iconic forms.

### a) *Shiva linga*

Numbers of *Shiva linga* are recorded from the site. The rock-cut *linga* in the *Mahakal Ganesha* temple is one of the examples of *Shiva* in the phallic form (Figure 90). These are the simplest depiction of Lord *Shiva* in sculpture art.



Figure 90. Five rock-cut *Shiva linga* found carved on the porphyritic granite rock face in the *Mahakal Ganesha* temple (8<sup>th</sup> – 10<sup>th</sup> century A.D.).

### b) Lord *Sadasiva*

Two sculptures of Lord *Sadasiva* is recorded from the site (Figure 91). The first is the rock-cut sculpture of *Sadasiva* found carved on the face of granite rock at *Bogaladevi* temple (Figure 91 a). The ten-armed deity is depicted holding different *ayudhas* (implements). Most of the deity attributes are unrecognisable due to the highly weathered condition of the sculpture. Three head of the deity is adorned with *jatamukuta*, and one of his hand is seen in the *abhayamudra*. The deity is sitting in *Dhyana asana*.

The second sculpture of Lord *Sadasiva* is installed inside in the *bhogamandapa* of the main Kamakhya temple (Figure 91 b). This is a very crude depiction of the deity and carries less artistic value, except the sculpture, is a life-size sculpture of Lord *Sadasiva*. The ten-armed deity is depicted holding different *ayudhas* (implements), in

which only a *Dhaunsa* (bow) and a *khadga* (sword) is clearly seen on the sculptures. Rest is very unclear. The three head of the deity is adorned with *jatamukuta*. The deities left hand is in *varadamudra*, and the right hand is in *abhayamudra*. The deity is in standing posture with one leg slightly raised from the ground.



Figure 91. Lord Sadasiva: a) The rock-cut sculpture of Lord *Sadasiva* found carved on the face of granite rock at *Bogaladevi* temple (8<sup>th</sup>-10<sup>th</sup> century A.D.); b) Sculpture of the Lord *Sadasiva* is installed inside in the *bhogamandapa* of the main Kamakhya temple (16<sup>th</sup>-17<sup>th</sup> century A.D.).

### c) Lord *Nataraja*

One sculpture blocks depicted *Shiva* in *Nataraja* (dancing Shiva) form found installed on the wall of Amratakeshwara/ Tokeswara temple at the site (Figure 92). Three different dancing posture of Lord *Shiva* can be seen carved on this stone block.



Figure 92. The *Nataraja* sculpture found installed on the wall of *Amratakeshwara/ Tokeswara* temple (10<sup>th</sup> to 12<sup>th</sup> century A.D.).

**d) Lord Vinadhara Dakshinamurti Shiva**

One *Vinadhara Dakshinamurti Shiva* sculpture is found installed on the exterior wall of *garbhagriha* of the main Kamakhya temple (Figure 93). The four-handed *Shiva* is depicted in dancing posture and standing on a prostrate corpse (*apasmarapurusha*) depicted lying vertically on a lotus pedestal. His front two hands are carrying or playing *vina*. His back left-hand holds a *sruka* (sacrificial spoon), and his back right-hand holds some unidentifiable object. His face is deteriorated beyond the point of recognition. He is depicted wearing a *Katibandha* (girdle) and *vanamala* made of a skull.



Figure 93. Lord *Vinadhara Dakshinamurti Shiva* sculpture is found installed on the exterior wall of *garbhagriha* of the main Kamakhya temple (11<sup>th</sup>-12<sup>th</sup> century A.D.).

**e) Lord Ardhanareeswara**

Two *Ardhanareeswara* sculpture are recorded from the site. *Ardhanareeswara* is the composite form of Lord *Shiva* and Goddess *Parvati*, in which the deity is depicted as half male (*Shiva*) and half female (*Parvati*). One sculpture fragment of *Ardhanareeswara* is recorded from the compound of *Siddheswara* temple at the site (Figure 94 a). The four-handed deity is depicted sitting in *Dhyana asana*. The right side of the sculpture depicted Goddess *Parvati* and left side Lord *Shiva*. The front hands are rested on the knee, and the other two hands are carrying different *ayudhas* (implements), but are broken, making it difficult to identify the *ayudhas*. The deity is

depicted wearing various ornaments, like, big loop earring (*Karnavali*), bangles (*Kankana*), necklace (*Hara*) and *Yajnopavita*.

The other sculpture of *Ardhanareeswara* is found installed on the wall of *Amrakeswara/Tokeswara* temple (Figure 94 b). This sculpture shares the same attributes of *ardhanareeswara* sculpture found at *Siddheswara* temple, except that the deity is depicted with one bull and lion sitting beneath the feet of the deity. The bull represents *Nandi*, *vahana* of Lord *Shiva* and the lion is the *vahana* of Goddess *Parvati*. The four-handed deity is depicted sitting in *Dhyana asana*. The right side of the sculpture depicted Goddess *Parvati* and left side Lord *Shiva*. The front hands are rested on the knee, and the other two hands are carrying different *ayudhas* (implements), but are broken, making it difficult to identify the *ayudhas*. The deity is depicted wearing various ornaments, like, big loop earring (*Karnavali*), bangles (*Kankana*), necklace (*Hara*) and *Yajnopavita*. The sculpture is highly eroded.



Figure 94. Lord *Ardhanareeswara*: a) A broken sculpture fragment of Lord *Ardhanareeswara* sculpture is found in the compound of the *Siddheswara* temple (14<sup>th</sup>-15<sup>th</sup> century A.D.); b) Sculpture of Lord *Ardhanareeswara* is found installed on the wall of the *Amrakeswara/Tokeswara* temple (14<sup>th</sup>- 15<sup>th</sup> century A.D.).

#### f) *Bhairava*

There are several sculptures recorded from the site depicted the ferocious form of Lord *Shiva*, commonly known as *Bhairava*.

One *Bhairava* sculpture is found installed on the outer wall of *mandapa* of the main Kamakhya temple (Figure 95 a). This eight-handed *Bhairava* sculpture is depicted standing on a prostrate corpse (*pretasana*) in *samapada-sthanaka* posture. The deity is depicted holding different *ayudhas* (implements). Some of the *ayudhas* are unclear, but the visible *ayudhas* are, *Kapala*, *Vajra*, *Trisula*, etc. In his front left hand, he is depicting holding a skull cup (*kapala*) and his two other front hands holding a garland of severed heads (*mundamala*). His upper right-hand holds a bone club with a skull on the top (*khatvanga*) and his middle right hand holding a thunderbolt (*vajra*). His upper and lower left hands are carrying some object. His middle left hands carrying a bone club with a skull on the top (*khatvanga*). The deity is wearing different ornaments, such as *Karnavali* (big loop earring), *Katibandha* (griddle) made of a skull, and *Kirita Mukata* (headgear), bangles (*Kankana*), necklace (*Hara*) and *Yajnopavita*. An artificial glaze is applied to the sculpture. This sculpture is installed on the west side of the *Natmandapa* inside an arched shelf. One similar but a crude depiction of *Bhairava* sculpture is found inside the *Natamandapa* of the main Kamakhya temple (Figure 95 b).

One rock-cut sculpture of *Bhairava* is found carved on a cliff of granite on the backside of the *Bhairavi* temple at the site (Figure 95 c). The four-handed sculpture of *Bhairava* is depicted with a moustache in *pratyolidha* posture standing on a prostrate corpse. The deity is depicted carrying different *ayudhas* (implements). In his front right hand, he is holding a *trisula* (trident), and on the backhand a *Khatavanga* (a bone club with a skull on the top). In his left front hand, he is holding a *vajra* (thunderbolt) and back left hand holding an *ankusa* (goad). The deity is wearing different ornaments, such as *mundamala* (garland of a skull), fan-shaped headdress and *Karnavali* (big loop earrings), *Katibandha* (griddle) made of skulls, bangles (*Kankana*), necklace (*Hara*) and *Yajnopavita*.



Figure 95. *Bhairava*: a) The *Bhairava* sculpture found installed on the outer wall of *Natmandapa* of the main Kamakhya temple (14<sup>th</sup>-15<sup>th</sup> century A.D.); b) *The Bhairava* sculpture is found inside the *Natamandapa* of the main Kamakhya temple (16<sup>th</sup>-17<sup>th</sup> century A.D.); c) The rock-cut sculpture of *Bhairava* is found carved on a cliff of granite on the backside of the *Bhairavi* temple (10<sup>th</sup>-12<sup>th</sup> century A.D.).

### 3. *Vaishnavite* Sculptures

*Vaishnavite* sculptures in Kamakhya depicted Lord *Vishnu* in his different forms or *avatars* (incarnation). The *Dasaavatar* of Lord *Vishnu*, includes *Matsya*, *Kurma*, *Varaha*, *Narasimha*, *Vamana*, *Parashurama*, *Rama*; *Krishna*, *Balarama* and *Kalki*. Lord Buddha is also considered as one of the *avatars* of Lord *Vishnu*.

On the site, we have recorded different *Vaishnavite* sculpture (Figure 96). Two broken doorjamb fragments depicted the Lord *Vishnu* *Matsya*, *Kurma*, *Narasimha*, and *Rama* *avatar* (Figure 96 a & b). These are found installed on the wall of main Kamakhya temple. These panels are part of the stone doorjamb fragments. The outer wall of Kamakhya temple *mandapa* is covered with the *Vishnu* and *Vishnu's* *avatar* sculptures. One sculpture fragments found in the Kamakhya museum at the site has a crude depiction of *Narasimha* *avatar* of Lord *Vishnu* (Figure 96 d).



Figure 96. A representative sample of *Vaishnavite* sculptures: a) A sculpture panel depicting Lord *Vishnu Narasimha avatar* and *Kurma avatar* is installed on the outer wall of the *mandapa* of the main Kamakhya temple (14<sup>th</sup> to 15<sup>th</sup> century A.D.); b) A sculpture panel depicting Lord *Vishnu Matsya avatar* and *Rama avatar* is installed on the eastern gateway wall of the main Kamakhya temple (10<sup>th</sup> to 12<sup>th</sup> century A.D.); c) Four-handed Lord *Vishnu* sculpture installed on the outer wall of the *natamandapa* of the main Kamakhya temple (14<sup>th</sup> to 15<sup>th</sup> century A.D.); d) A sculptural fragment of Lord *Vishnu Narasimha avatar* is found in the *Kamakhya* museum (16<sup>th</sup> to 17<sup>th</sup> century A.D.)

Two rock-cut sculptures of *Venu-Gopal Krishna* are found carved on the granite cliff face inside the *Bogaladevi* temple in the site. Both of the sculptures share the same iconographic attributes, except the one inside the temple, is carved alone without any female sculpture. In both sculptures, the deity is depicted standing under a tree in a *tribhanga* posture and holding a flute. The other sculptures are depicted with two female sculpture, most probably the sculpture of *Rukmini* and *Satyabhama*. Both of the sculptures are highly weathered.

Two rock-cut sculptures of Lord *Vishnu* is found carved on the cliff near the eastern pathway (Figure 97). Both of the rock-cut sculptures have similar iconographic attributes. The four-handed deity is depicted sitting in *Dhyana asana* with both front hands rested on the knee in *Karanamudra*. The other two hands of the deity depicted carrying lotus bud in the left hand and an *ankusa* in the right hand.



Figure 97. Two rock-cut sculptures of Lord Vishnu is found carved on the cliff near the eastern pathways in the site (10<sup>th</sup> to 12<sup>th</sup> century A.D.).

#### 4. Ganesha Sculptures

*Ganesha*, the Lord of *Gana* and elder son of Lord *Shiva* and Goddess *Parvati*, also known as *Vighneswar* (remover of obstacles), *Vighantaka* (remover of misfortunes), and *Siddhidata* (bestowed of success), have found its unique place in the sculptural art of India. In Indian sculpture art, Lord *Ganesha* is depicted standing, sitting and in dancing posture. The most common sitting posture of *Ganesha* is *Padmasana*, *Lalitasana* or *Maharajalila*, *Bhadrasana* and *Utkatikasana*. The tip of the trunk of Lord *Ganesha* is placed either on the right, left or in the centre. When it is curved on the right side the sculpture is known as *Valampuri* when the trunk is curved on the left side, it is known as *Edampuri*. In *Hastamudra* (hand gesture) the *Ganesha* sculpture is mostly depicted with *Vardamudra* (offering of boon) and *Abhayamudra* (protection from fear) and dancing *Ganesha* is depicted in *Dolahasta mudra*. The deity is shown carrying different *ayudhas* (implements), such as, *Trisula* (trident), *Gada* (mace), *Kardga* (sword), *Ankusa* (goad), *Pasa* (noose), *Parasu* (battel-axe), *Khetaka* (shield), *Danda* (stick), *Mudgara* (hammer), *Bhagna-Danta* (broken tusk), *Iskshu-Karmuka* (bow make of sugar cane), *Kamandalu* (water vessel), *Akshamala* (rosary) and *Modaka* (sweet rice ball) (Chowdhury, 2011, p. 22-24).

From the site, we have recorded, twenty-nine *Ganesha* sculptures. This include, twenty-three rock-cut *Ganesha* sculpture, three *Ganesha* sculpture are found installed on the wall of temple, gateway and boundary wall, and three are fragments of Lord

*Ganesha* sculptures found at the site. The rock-cut *Ganesha* sculptures are carved on the face of porphyritic granite hill of Nilachal hill. These sculptures suffered the most damages because of the heavy weathering of porphyritic granite in a hot and humid environment. Due to weathering, other attributes of the *Ganesha* sculpture is difficult to understand. Only because of the presence of trunk these sculptures can be identified as Lord *Ganesha* sculpture (Figure 98).



Figure 98. Example of highly weathered Lord *Ganesha* sculpture found carved on the face of porphyritic granite hill of Nilachal hill in the site.

The *Ganesha* sculpture of Kamakhya is described on the basis of the direction of the trunk. The group is divided into two sub-groups, a. Trunk curved on right side of *Ganesha* (*Valampuri*) and b. Trunk curved on the left side of *Ganesha* (*Edampuri*).

**a) Trunk curved on right side of *Ganesha* (*Valampuri*)**

Four rock-cut *Ganesha* sculpture is found carved on the porphyritic granite of the hill on the course of eastern ancient pathway. They all share the same iconographic attributes. Four-handed (*catturbhuja*) Lord *Ganesha* sculpture is depicted sitting in *Maharajalila asana* and wearing a *Kiritamukuta*. The attributes of the sculpture are not clear as they are heavily weathered. The front left hand is depicted in *Varada mudra*, while the right hand is rested on the right knee. Some *ayudhas* (implements) are visible in the upper hands of the deity. They are *Parasu* (battel-axe) and *Sakti* (ornamental blade). The trunk of the deity is rested on the right knee.

One *Ganesha* sculpture of this group is found installed on the wall of a western gateway of main Kamakhya temple at the site (Figure 99 a). The four-handed

(*catturbhuja*) *Ganesha* sculpture is one of the few examples of *Ganesha* sculpture in the site, where the deity is depicted with his *Vahana* (mount) *Musaka* (rat). One crude sculpture of *Ganesha* sitting in *Musaka* is found installed on the outer temple wall of the *Siddheswara* temple. Here, the *Ganesha* trunk is curved on the left side. The *Ganesha* sculpture found in the main Kamakhya temple is sitting in *Maharajalila asana*, also known as *Ardhaparyanka asana* with the trunk curved on the right side touching a *Modaka* (sweet rice ball) placed on the right front hand. The sculpture is also eroded, making it difficult to understand the attributes of the sculpture. The deity is depicted holding a *sruka* (sacrificial spoon) in the right backhand and an *Akshamala* (rosary) in the left front hand.

The *Ganesha* sculpture fragment found in the courtyard of the *Siddheswara* temple has coin-shaped big eyes (Figure 99 b). The four-handed (*catturbhuja*) *Ganesha* sculpture is sitting in *Maharajalila asana* with his trunk curved on his right side, touching a *Modaka* (sweet rice ball) placed on his right front hand. The deity is wearing a *Kiritamukuta*. The deity is depicted holding a *Parasu* (battel-axe) in his left backhand and an *Ankusa* (goad) in his right backhand. In his left front hand, the deity is depicted holding an *Akshamala* (rosary). No other *Ganesha* sculpture with coin-shaped eyes has been found in Kamakhya. There are numbers of rock-cut *Ganesha* sculptures are found in the course of the western pathway at the site representing the *Valampuri* style of *Ganesha* sculpture (Figure 99 c-f).



Figure 99. *Valampuri Ganesha* sculpture: a) The *Ganesha* sculpture installed on the wall of the western gateway of the main Kamakhya temple; b) A coin-shaped eyes

*Ganesha* sculpture found in the courtyard of the *Siddheswara* temple; c-f) A representative sample of the rock-cut *Ganesha* sculpture of *Valampuri* style found in the archaeological site of Kamakhya.

**b) Trunk curved on the left side of *Ganesha* (*Edampuri*)**

One *Ganesha* sculpture of this type is found carved on the porphyritic granite on eastern pathway (Figure 100 a). The four-handed (*catturbhuja*) Lord *Ganesha* sculpture is depicted sitting in *Maharajalila asana* and wearing a *Kiritamukuta*. The attributes of the deity are not clear due to the weathered condition of the sculptures. Some *ayudhas* (implements) are visible in the upper hands of the deity, that include *Parasu* (battel-axe) and *Sakti*. The trunk of the deity is rested on the left knees.

One rock-cut *Ganesha* sculpture is found inside the *Mahakal Ganesha* temple at the site (Figure 100 b). The four-handed (*catturbhuja*) *Ganesha* sculpture is sitting in *Maharajalila asana* with his trunk curved on the left side touching a *Modaka* (sweet rice ball) placed on his left front hand. The deity is wearing a *Kiritamukuta*. The deity is depicted holding a *Parasu* (battel-axe) in the left backhand and an *Ankusa* (goad) in the right backhand. In the right front hand, the deity is depicted holding an *Akshamala* (rosary). The sculpture is also highly eroded.

Four rock-cut *Ganesha* sculptures are found carved on the porphyritic granite of the hill in *Kotilinga* temple at the site (Figure 100 c & d). They all share the same iconographic attributes. The four-handed (*catturbhuja*) *Ganesha* sculpture is sitting in *Maharajalila asana* with its trunk curved on the left side touching a *Modaka* (sweet rice ball) placed on the left front hand. The deity is wearing a *Kirita Mukata*. The deity is depicted holding a *Parasu* (battel-axe) in its right backhand and an *Ankusa* (goad) in its left backhand. In the right front hand, the deity is depicted holding an *Akshamala* (rosary).

One *Ganesha* sculpture is found installed on the outer wall of *Garbhagriha* of main Kamakhya temple at the site (Figure 100 e). The sculpture is also eroded, making it difficult to understand the attributes of the sculpture. The four handed (*catturbhuja*) *Ganesha* sculpture is standing on the flower pattern pedestal in a *Samabhanga/Samapada-sthanaka* posture with its trunk curved on the left side touching a *Modaka* (sweet rice ball) placed on the left front hand. The deity is wearing a *Kiritamukuta*. The

deity is depicted holding a *Parasu* (battel-axe) in its left backhand and an *Ankusa* (goad) in the right backhand. In its right front hand, the deity is depicted holding an *Akshamala* (rosary). There are several other examples of *Edampuri* style of *Ganesha* sculpture found at the site.



Figure 100. *Edampuri Ganesha* Sculptures: a-d) A representative sample of the rock-cut *Ganesha* sculpture of *Edampuri* style found in the archaeological site of Kamakhya; e) The *Ganesha* sculpture installed on the outer wall of *Garbhagriha* of main Kamakhya temple at the site.

### 5. Other divine and semi-divine male sculptures

There are several other sculptures of semi-divine and semi-divine male deities found in the site. This includes:

#### a) *Ashta Dikpalas*

The '*Dikpalas*' are the guardian deities governing the eight cardinal and inter-cardinal directions of the universe. These deities are placed on the different cardinal direction on the temple walls and considered as the guardian and protector of the temple and its main deity. The ancient text, *Agni Purana* has mentioned the iconographic features of these guardian deities in detail with the information regarding their placement on the wall of temple, gateway and other parts of the temple. The '*Astha*

*Dikpala* mentioned in this text with the cardinal direction they govern, are *Indra* (east), *Varuna* (West), *Kubera* (north) *Agni* (South-East), *Yama* (South), *Nirrtuti* (South-West), *Vayu* (North-West), and *Ishana* (North-East).

The name and the numbers of the *dikpalas* vary from text to texts. Some of these deities are mentioned as *Lokapals*. In *Ramayana*, the *Indra*, *Varuna*, *Yama*, and *Kubera* are mentioned as *lokapals*. Eight *lokapals* are mentioned in *Manusmriti*, that include, *Agni*, *Surya*, *Yama*, *Kubera*, *Indra*, *Soma*, *Vayu*, and *Varuna* (Rao, 1916; Barpujari, 1990; Banerjee, 2002).

In Kamakhya sculpture art, we have documented *asthadikpala* sculptures installed on the outer wall of *garbhagriha* of the main Kamakhya temple (Figure 101). Life-size *asthadikpala* sculptures are depicted in between the pilasters standing in a *tribhanga* and *samabhanga/samapada-sthanaka* posture and carrying different *ayudhas* (implements). These deities are installed on the wall based on the cardinal direction mentioned in the different *Sastra*.

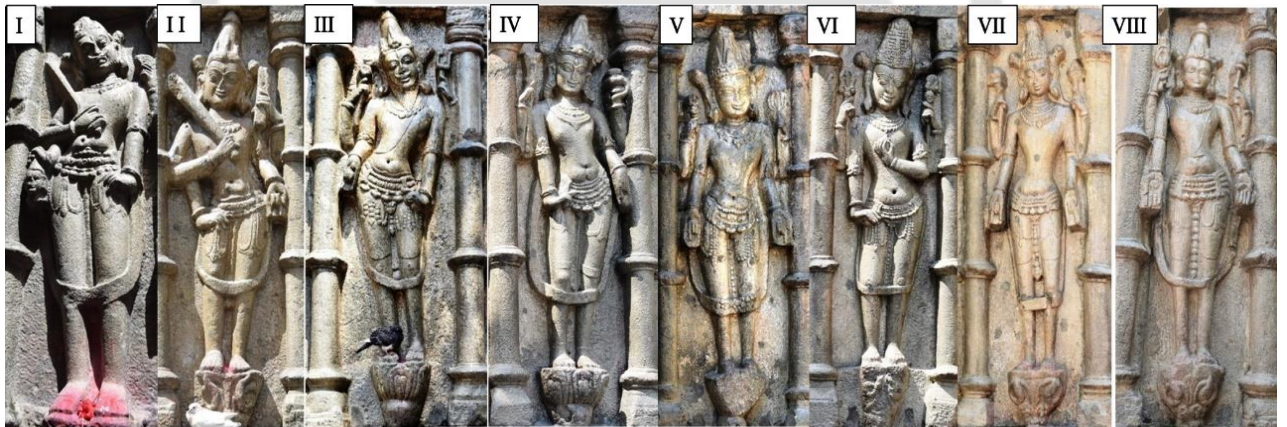


Figure 101. *Ashta Dikpalas* sculpture mounted on the outer wall of the *garbhagriha* of the main Kamakhya temple: I. *Nirrtuti*, II. *Yama*, III. *Agni*, IV. *Kubera*, V. *Indra*, VI. *Ishana*, VII. *Vayu*, VIII. *Varuna* (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

- I. ***Nirrtuti***: A four-handed *Nirrtuti* sculpture is depicted standing on a flower pattern pedestal in a *tribhanga* posture (Figure 101 I). The sculpture is depicted wearing different ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*Yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). In the front right hand, the deity is holding a *Khadga*

(sword) and on the backhand a *Kapala* (skull cup). The front left hand is rested on the waist in *kaṭi-hasta mudra* and the backhand holding a severed head. The sculpture is depicted with the third eye on the forehead, has a beard and thick moustache. The sculpture is installed in the south-west corner of the temple.

**II. Yama:** A four-handed *Yama* sculpture is depicted standing on a flower pattern pedestal in *tribhanga* posture (Figure 101 II). The sculpture is depicted wearing different ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). Right hand rests on the waist in *kaṭi-hasta mudra*, and the back right hand is holding a *Musala* (pestle). The front left hand is posing in a *Karana mudra* (in downward position) and in the back left hand is depicted holding a scripture (book). The sculpture is depicted with the third eye on the forehead. The sculpture is installed in the south-west corner of the temple.

**III. Agni:** A four-handed *Agni* sculpture is depicted standing on a flower pattern pedestal in a *tribhanga* posture (Figure 101 III). The sculpture is depicted with the third eye on the forehead and a beard. The sculpture is depicted wearing different ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). Left hand is rests on the waist in *kaṭi-hasta mudra*, and the back right hand is holding a *Sruva* (sacrificial spoon). The front right hand posing in a *Karana mudra* (in downward position) and the back left hand is depicted holding a *Sruka* (sacrificial spoon). The sculpture is installed in the south-east corner of the temple.

**IV. Kubera:** A four-handed *Kubera* sculpture is depicted standing on a flower pattern pedestal in a *tribhanga* posture (Figure 101 IV). The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, such as earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). Right hand is rests on the waist in *kaṭi-hasta mudra*, and the back right-hand is holding a club. The front left hand is holding some round

object, and in the back left hand, he is depicted holding a *Ratna-Patra* (jewel-pot). The sculpture is installed in the south-east corner of the temple.

**V. *Indra*:** A four-handed *Indra* sculpture is depicted standing on a plain pedestal in a *samabhanga/samapada-sthanaka* posture (Figure 101 V). The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). Both the front hands are in *karana mudra* (in downward position). In the back left hand is depicted holding a full-blown lotus with a long stem and in his back right-hand holds a *Vajra* (thunderbolt). The sculpture is installed in the north-east corner of the temple.

**VI. *Ishana*:** The iconographic features of *Ishana* is very similar to Lord *Shiva*. In the outer wall of the *garbhagriha* of the Kamakhya temple, we have recorded five *Ishana* sculptures with different attributes (Figure 102). The four-handed *Ishana* sculptures are depicted standing on a flower pattern pedestal in a *tribhanga* posture. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headgear (*Kiritamukuta*). Two sculpture of *Ishana* is depicted wearing a sacred thread (*yajhopavita*). The deity is carrying different *ayudhas* (implements), such as *Trisula* (trident), *Gada* (club), *Khatvanga* (a bone club with a skull on the top), *Kapala* (skull cup), and *Damuru*. In *Hastamudra* (hand gesture) the deity is depicted with both *kaṭi-hasta mudra* and *karana mudra* (in downward position). The sculptures of *Ishana* is depicted with the third eye on the forehead. Two *Ishana* sculpture is installed in the south-east corner, and others are installed in the south-west and north-east corner of the temple.



Figure 102. Lord *Isana* sculpture installed on the outer wall of the *garbhagriha* of the main Kamakhya temple (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

**VII. *Vayu*:** A four-handed *Vayu* sculpture is depicted standing on a flower pattern pedestal in a *samabhanga/samapada-sthanaka* posture (Figure 101 VII). The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). Both the front hands are in *karana mudra* (in downward position). In the back left hand is depicted holding a mace (*gada*) and the back right hand is holding a lotus bud. The sculpture is installed in the north-west corner of the temple.

**VIII. *Varuna*:** The four handed *Varuna* sculpture is depicted standing on a flower pattern pedestal in a *samabhanga/samapada-sthanaka* posture (Figure 101 VIII). The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), sacred thread (*yajhopavita*) and headgear (*Kiritamukuta*). The deity is carrying different *ayudhas* (implements). The front hands are in *karana mudra* (in downward position). The back right hand is depicted holding a *Pasa* (noose), and in the back left-hand there is a lotus bud. The sculpture is installed in the north-west corner of the temple.

**IX. Surya.** The sun God known as *Surya* is considered as one of *Lokapala*. We have added *Surya* among *dikpalas* because the deity is depicted on the same wall with other *dikpalas*. In the outer wall of *garbhagriha* of main Kamakhya temple, we have recorded four *Surya* sculptures with different attributes (Figure 103). The four-handed *Surya* sculptures are depicted standing on a flower pattern pedestal in a *samabhanga/samapada-sthanaka* posture. One four-handed *Surya* sculpture is depicted standing on a plain pedestal in a *tribhanga* posture. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headgear (*Kiritamukata*). In *Hastamudra* (hand gesture), one *Surya* sculpture front left hand is depicted in *kaṭi-hasta mudra* and right hand in *jnana mudra*. The front hands of the other three *Surya* sculptures are depicted in *karana mudra* (in downward position). The sculptures of *Surya* are depicted with the third eye on its forehead. One sculpture of *Surya* is depicted with full-blown lotus, while the other three are holding lotus bud. Three *Surya* sculptures are placed in the north-east corner, and one sculpture is placed in the south-west corner of the temple.



Figure 103. Lord *Surya* sculpture installed on the outer wall of the *garbhagriha* of the main Kamakhya temple (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

**X. Vishnu:** In the temple art of Java and Bali, Lord *Vishnu* is considered as part of *Navadikpalas* (the guardian deities of nine directions). The presence of *Vishnu* sculptures on the same wall with the *Astadikpala* sculptures indicates a strong influence of South Asian temple art on the sculpture art of Kamakhya. In the outer wall of the *garbhagriha* of main the Kamakhya temple, we have recorded two identical *Vishnu* sculptures (Figure 104). The four-handed *Vishnu* sculptures are depicted standing on a flower pattern pedestal in *Samabhanga/Samapada-sthanaka* posture. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headgear (*Kiritamukuta*). Both the *Vishnu* sculptures are depicted with similar attributes. The left hand of the deity is depicted holding a *chakra* (wheel), and the right hand is holding a *Gada* (mace). The front hand of the deity is depicted in a *Karana mudra* (in downward position). One *Vishnu* sculpture is placed in the north-east corner and others in the north-west corner of the temple.



Figure 104. Lord *Vishnu* sculpture installed on the outer wall of the *garbhagriha* of the main Kamakhya temple (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

## b) Kamadeva

*Kamadeva*, the God of love and romance and have a special place in the sculpture art of the *Kamarupa*, as witnessed by the presence of the only temple dedicated to Lord *Kamadeva* in Assam, known as *Madan Kamdev* temple. Here, in the Kamakhya temple, we have also found some sculptures of Lord *Kamadeva*. The two sculpture of Lord *Kamadeva* is recorded installed on the outer wall of the *garbhagriha* in the main Kamakhya temple (Figure 105). The two-handed *Kamadeva* sculptures depicted standing on a flower pattern pedestal in a *samabhanga/samapada-sthanaka* posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (*Kundala*), necklace (*Hara*), armlets (*Bajubandha*), girdle (*Katibandha*), bangles (*Kankana*), and headgear (*Kiritamukuta*). Two-handed deity is depicted holding a bow (*dhanusa*) in the right hand and an arrow (*bana*) in the left hand. One *Kamadeva* sculpture is placed in the south-west and other in the north-west corner of the temple.



Figure 105. Lord *Kamadeva* sculpture installed on the outer wall of the *garbhagriha* of the main Kamakhya temple (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

## B) Secular Sculptures

From the site, we have recorded 64 secular sculpture specimens out of 426 sculptures found at the site. The secular sculptures include sculptures of devotees, soldiers, a sculptural panel depicting dancing scenes, hunting scene, sports etc. These sculptures depicted the everyday lifestyle of contemporary society (Sarma, 2010, p.111). The most famous examples represent secular sculpture at the site are:

### a) Mother and child

Two sculptural specimens of mother and child are recorded, installed inside a square shelf in the western gateway of Kamakhya temple (Figure 106). The sculpture depicted a woman sitting and breastfeeding her child. The woman is looking at her child while breastfeeding him/her. Women left hand is wrapped around the child, and the right hand is touching the breast, moving it toward the mouth of the child. The child is lying on the lap, clutching the breast, and his/her right leg is rising up and touching the chin of the mother. The mirror image of the same sculpture is found on the other wall of the same gateway. The sculpture is deteriorated beyond the point of recognition.



Figure 106. Mother and child sculpture installed on the wall of the western gateway of the main Kamakhya temple (11<sup>th</sup>-12<sup>th</sup> century A.D.).

### b) Female devotees

More than ten sculptures of female devotees are recorded from the site. These sculptures are female devotees in standing posture with both hands joined together in a position of praying. Few sculptures are depicted with covered head, and the rest of the

female sculpture's hair is nicely tied into a bun. One seated female devotee sculpture is found installed inside a shelf on the outer wall of *mandapa* of the main Kamakhya temple (Figure 107).



Figure 107. A representative sample of the female devotee's sculpture found in the archaeological site of Kamakhya (16<sup>th</sup> to 17<sup>th</sup> century A.D.).

### c) Soldiers

More than five soldiers' sculptures are recorded from the site. The sculptures depicted a standing male figure holding a sword and armour and wearing a turban (Figure 108).



Figure 108. A representative sample of the soldier sculptures found in the archaeological site of Kamakhya (16<sup>th</sup> to 17<sup>th</sup> century A.D.).

#### d) The sculptural panel depicting dancing scenes

Numerous stone sculpture panels are recorded from the site depicting a dancing scene. One of the sculptural panels found installed inside an arched shelf on the outer wall of *natmandapa* of the main Kamakhya temple depicts a dancing scene (Figure 109 a). In this panel, the central female figure is depicted dancing, and the other small male figurine is depicted playing the drum. There is a pillar between these figurines. Both figures are well ornamented and stylized. An artificial glaze is applied to the sculpture. The second sculptural panel is found installed on the stairs of the *Vishnu* temple located inside the main Kamakhya temple compound (Figure 109 b). In this panel, six female figures are sculpted on a horizontal stone block in a different dancing pose.



Figure 109. The example of the sculptural panel depicting a dancing scene: a) A sculptural panel found installed on the outer wall of *natmandapa* of the main Kamakhya temple; b) A sculptural panel is found installed on the stairs of the *Vishnu* temple located inside the main Kamakhya temple compound.

#### e) The sculptural panel depicting different scenes

Numerous sculptural panels are recorded from the site depicting different scenes of hunting, sports and females in yogic posture. A large number of these panels are recorded from the compound of *Mahakal Ganesha* temple at the site. An elephant fighting scene is depicted in one of the sculpture panels (Figure 110 a). In this panel two elephants are depicted fighting with each other while their riders are sitting on

them. The elephants are controlled by a *mahout*, and their riders are sitting on the elephant with crossed arms. One similar sculptural panel is found installed on the wall of the *Vishnu* temple inside the compound of the main Kamakhya temple (Figure 110 b). These types of sculptural panels are also found in the *Khajuraho* group of temples in Madhya Pradesh.

Another sculptural panel found in the courtyard of the *Mahakal Ganesha* temple depicts two female figures in different postures (Figure 110 c). The one from the left side is depicted as an archer, and the one from the right side is depicted in some *yoga* posture. Both figurines are separated by a pillar.

In the courtyard of the *Mahakal Ganesha* temple, one male horse rider and one female in dancing posture are depicted in the sculptural panel (Figure 110 d). The one from the left is depicting a male figure riding a horse and shooting a *javelin* (*Sula*). On the right side, the female figure is depicted in a dancing posture. The right figurine is deteriorated, and many features of this figurine are broken or missing. Both figurines are separated by a pillar.



Figure 110. The sculptural panel depicting different scenes (10<sup>th</sup>-14<sup>th</sup> century A.D.): a) A sculpture panel depicting an elephant fighting scene is found from the compound of *Mahakal Ganesh* temple; b) A sculpture panel depicting an elephant fighting scene is found installed on the wall of the *Vishnu* temple inside the compound of the main Kamakhya temple; c) A sculpture panel depicting two female figures in different postures is found from the compound of *Mahakal Ganesh* temple; d) A sculpture panel

depicting one male horse rider and one female in dancing posture is found from the compound of *Mahakal Ganesha* temple.

### C) Sculptures relief with flora & fauna motifs and geometrical designs

The flora and fauna designs are used as a decorative element to enhance the beauty of the temple. There are several sculpture panels with flora and fauna motifs used profusely in the Kamakhya group of temples on the Nilachala hill. On the site, we have recorded 120 sculptural specimens depicting flora & fauna motifs and with geometrical designs.

The exterior wall of the *garbhagriha* of the main Kamakhya temple is adorned with decorative bands of different flora, and geometrical designs (Figure 111). The same panel depicted numbers of *Gandharva* (heavenly beings) sitting in *vaisnavam* posture and playing different musical instruments. The *gandharvas* are carved on the top *paga* band of *pabhaga*. Beneath this band, there is another band with decorative full-blown lotus motifs. On the *raha* portion of *jangha*, there are several decorative vertical bands with geometrical design. One decorative scroll motif is found on the outer wall of the main Kamakhya temple, depicts a seated man holding two branches of a creeper (Figure 112). The arches over the doors of many temples at Nilachala hill are also decorated with floral motifs. A fragment of ceiling slab has been found with a carved full-blown lotus.



Figure 111. Decorative motifs on the outer wall of *garbhagriha* of main Kamakhya temple (11<sup>th</sup>-12<sup>th</sup> century A.D).



Figure 112: Decorative scrolls pattern similar to the Gupta scrolls of *Bhumara* of 4<sup>th</sup>-5<sup>th</sup> century A.D found installed on the exterior wall of the main Kamakhya temple.

There are numbers of sculptures, and sculptural fragments are recorded from the site depicting different fauna. The sculpture of *Simha* (lions) among other animals are more often depicted on the temple site (Figure 113). One beautiful *Simha* (lion) sculpture is found installed on one of the pillars inside the *Balighar* (sacrificial ground) of the main Kamakhya temple (Figure 113 a). The *Simha* sculpture here is shown a Tibetan art influence (Sarswati, 2014). Few *Simha* (lion) sculpture fragments are also recorded from the Kamakhya museum (Figure 113 b). These fragments were the part of stone temple architecture. Two sculptures of *Simha* (lion) are found installed on the eastern gateway of the main Kamakhya temple (Figure 113 c). Two very crude depictions of *Simha* (lion) sculptures are found installed on the wall of the *Dakshinakali* temple (Figure 113 d). The stylistic feature of the lion suggests that these sculptures were a later addition to the temple structure.



Figure 113. A representative sample of *Simha* (lion) sculpture found in the archaeological site of Kamakhya temple: a) The sculpture of *Simha* installed on the wall of *Balighar* of the main Kamakhya temple; b) The sculptural fragment of *Simha* found in the Kamakhya museum; c) The sculpture of *Simha* installed on the eastern gateway of the main Kamakhya temple; d) The sculpture of *Simha* (lion) installed on the wall of the *Dakshinakali* temple.

Here, in the site, we have recorded two sculptural panels depicting a Tibetan style lion from the *Tara* temple (Figure 114) (Saraswati, 2014). One of these sculptural panels is installed on the stairs of the *Tara* temple, and the other is installed inside the *antrala* of the temple. Both of the sculptural panels are identical, except the panel inside the *antrala* is deteriorated.



Figure 114. Two sculptural panels depicting a Tibetan style lions are found in the *Tara* temple (14<sup>th</sup>-16<sup>th</sup> century A.D.).

We have also recorded some *Gaja-Simha* sculpture from the site. Two of the *Gaja-Simha* sculptures are installed on the eastern gateway wall of the main Kamakhya temple. One sculpture of *Gaja-Simha* is found installed on the outer wall of the *mandapa* of the main Kamakhya temple. In this sculpture form, a lion (*Simha*) is depicted riding or standing on the back of an elephant (*Gaja*). The stylized lion is depicted holding his own tail (Figure 115).



Figure 115. *Gaja-Simha* sculptures found from the main Kamakhya temple (16<sup>th</sup> to 17<sup>th</sup> century A.D.).

One carved sculptural panel fragment depicting a lion and a deer is found on the western pathway at the site. the panel is decorated with *kritimukha* and animals are depicted inside the creepers (Figure 116).



Figure 116. the stylized sculptural panel is found on the western pathway in the archaeological site of the Kamakhya temple (10<sup>th</sup> to 12<sup>th</sup> century A.D.).

Four flying lions of Ahom period (flying dragon) are found on the four corners of the roof of the *Kamaesvara* temple (Figure 117).



Figure 117. Flying dragon/ lion figures are found on the roof of the *Kamaesvara* temple (16<sup>th</sup> to 17<sup>th</sup> century A.D.).

Sculptures of *Gaja-Vidala* (*Vidala* or *Vyala*) are found on top of the entrance door of *natmandapa* of the main Kamakhya temple. This mythical animal is depicted eating a raw fish while holding another fish in its hands. This animal has a stylized body

of a lion with wings and the head of some other animal with an elephant trunk (Figure 118).



Figure 118. The sculptures of *Gaja-Vidala* are found on top of the entrance door of the *natmandapa* of the main Kamakhya temple (16<sup>th</sup> to 17<sup>th</sup> century A.D.).

Depiction of a *magara/makara* can be noticed on the roof of some temples at the site (Figure 119).



Figure 119. A sculpture of *Makara* found on the roof of the *Kamaesvara* temple (16<sup>th</sup>-17<sup>th</sup> century A.D.).

Apart from the lion sculpture, we have also recorded *Nandi* (bull) sculpture from the site. One broken *Nandi* (bull) sculpture is found inside the compound of the main Kamakhya temple (Figure 120 a). One rock-cut sculpture of *Nandi* (bull) is found carved on the mountain face in the *Kotilinga* temple at the site (Figure 120 b). Both sculptures depicted *Nandi* in a sitting posture.



Figure 120. *Nandi* (bull) Sculpture: a) A broken sculpture of *Nandi* (bull) is found inside the compound of the main Kamakhya temple (14<sup>th</sup>-15<sup>th</sup> c A.D.); b) One rock-cut sculpture of *Nandi* (bull) is found carved on the mountain face in the *Kotilinga* temple (16<sup>th</sup>-17<sup>th</sup> century A.D).

Some fragments containing rows of *Kiritimukha* motif is also found on the site. The *Kiritimukha* in the sculptural art of Kamakhya is used as a decorative element (Figure 121).



Figure 121. A representative sample of *Kiritimukha* motif found in the archaeological site of the Kamakhya temple.

One peacock figure is found installed inside an arched shelf on the western gateway of main Kamakhya temple. The entire figure is painted in a bright orange colour which has now faded to red colour (Figure 122).



Figure 122. A peacock figure is found on the wall of the western gateway of the main Kamakhya temple (16<sup>th</sup>-17<sup>th</sup> century A.D.).

One broken fragment of five-headed *Sheshanaga* (mythical snake) is found inside the compound of *Kedareswara* temple at the site (Figure 123).



Figure 123. A broken sculpture of the *Sheshanaga* (mythical snake) is found inside the compound of *Kedareswara* temple (16<sup>th</sup>-17<sup>th</sup> century A.D.).

#### D) Miscellaneous Sculptures

This group of sculpture includes all the other sculptures and sculptural remains found on the site, which are completely eroded and weathered beyond the point of recognition. From the site, we have recorded 67 sculptures and sculptural remains out of 426 sculptures found at the site. The attributes of the sculpture are difficult to identify because these sculptures are either broken or heavily weathered (Figure 124).



Figure 124. A representative sample of miscellaneous sculptures found in the archaeological site of Kamakhya temple.

#### 4.2.7 Spatial Distribution of Sculptures and Sculptural Fragments on the Site

With the help of the data collected during the survey, we have created different GIS maps, providing a visual aid in exhibiting the spatial distribution and density of sculptures and sculptural fragments on the site. These thematic maps play a very pivotal role in understanding and analysing the distribution pattern of sculptural art. The combined data from both the GIS database and sculptural database is illustrated through different maps. With the help of each map, we can easily display the concentration and clusters of sculptures and sculptural fragments distributed throughout the site. The GIS maps illustrated the distribution of sculptures in the archaeological site of Kamakhya under three broad categories; a) sculptures installed on the wall of the temple, boundary, and gateway; b) rock-cut sculptures; and c) sculptural fragments. In the first category, we have recorded all the sculptures which are fixed or installed on the walls of different temple, gateways and the boundary wall. The second category of sculptures are those sculptures which are carved on the surface of a mountain cliff. The rock-cut sculptures are found in the *Mahakal Ganesha* temple, *Bogaladevi* temple, *Bhairavi* temple,

*Kamakhya* temple, *Kotilinga* temple, and in the western and eastern pathway at the site. The third and the last category of sculptures are the broken fragments of sculptural remains found scattered in the archaeological site of Kamakhya.

Subject matters of the sculptures as a parameter have been used for displaying the concentration and distribution of these three categories of sculptures on the map. The subject matters include a) religious sculptures; b) secular sculptures; c) sculptural relief with floral & faunal motifs and geometrical designs; d) miscellaneous sculptures. We have used different symbols representing each category, for instance, we have used green colour pentagon for religious sculptures, blue colour rhombus for secular sculptures, orange colour circle for sculptural relief with floral & faunal motifs and geometrical designs and red colour square for miscellaneous sculptures.

We are not able to collect GIS data of those sculptures which are installed inside the temples, due to the GPS network problem and our restricted permission for using any electronic gadget inside the temples. We have documented the interior of the temple using the conventional method of plotting them in a map for which we have used AutoCAD. This will not affect the final quantification of the sculptures, but these sculptures are omitted from the GIS maps.

The GIS and documentation database created during this survey will further facilitate future work on the site. These databases can be used to understand the evolution of the sculptural art and architecture in the site. We can also use the database to analyse the movement of the specimens and cultural material across the site.

### **Map displaying the distribution and concentration of sculptures in the Archaeological site of Kamakhya**

#### **a) Map displaying the concentration of the sculptures installed on the wall of the temple, boundary, and gateway in the archaeological site of Kamakhya temple**

This map (Figure 125) in the series, displays the concentration of the sculptures which are installed or fixed on the wall of the temples, the gateway and on the boundary wall with the 5m contour line (Scale 1:5500). Based on the data and GIS map, we can see the highest concentration of religious sculptures around the area of the main

Kamakhya temple, *Siddheswara* temple, *Kedareswara* temple and on the eastern pathways, especially near the *Darpul Ganesha* temple. A higher concentration of secular sculptures are found at the area near the main Kamakhya temple, and near the *Siddheswara* temple at the site.

As indicated in this map, a majority of these sculptures are located in the core or central area at the archaeological site of Kamakhya. No fixed or installed sculptures are recorded from the *Amrakeswara* temple, *Bandurga* temple, *Kotilinga* temple, *Lalit Kanta* temple, *Mahakal Ganesh* temple and the Kamakhya museum. The museum is not an official museum but an open-air space, where local people have collected and placed some of the sculptural and architectural fragments found on the hill without any pattern and context.



**Sculptures Installed on the Wall of the Temple, Boundary, and Gateways in the Archaeological Site of Kamakhya Temple**

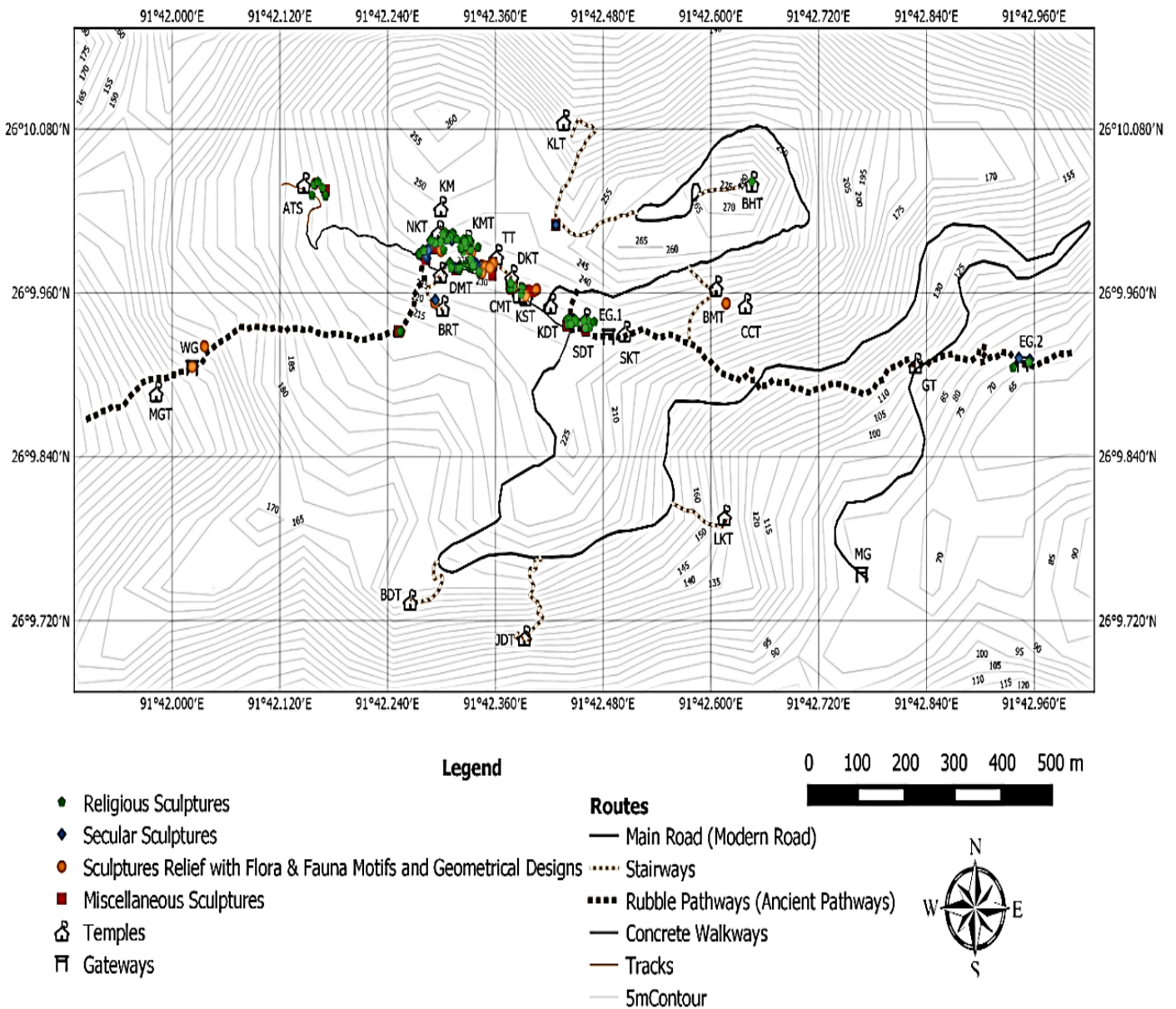


Figure 125. Map displaying the concentration of the sculptures installed on the wall of the temple, boundary, and gateways in the archaeological site of Kamakhya temple.

**b) Map displaying the concentration of the rock-cut sculptures in the archaeological site of Kamakhya temple**

This map in the sculptures map series will display the concentration of the rock-cut sculpture in the Kamakhya temple site with 5 m contour line (Scale 1: 5500) (Figure 126). Among the rock-cut sculptures, the numbers of rock-cut *Ganesha* figure are comparatively higher than others. Miniature *Nagara* style temples carved on the face of a mountain in the *Mahakal Ganesha* temple is yet another type of the rock-cut art

found in the Kamakhya temple site (Dikshit, 1936). Among the rock-cut *Shaivite* and *Shakta* sculptures, some *Vaishnavite* sculptures are also noticeable. Two rock-cut sculptures of Lord *Krishna* in the *Bogaladevi* temple is among them. Another interesting rock-cut figure of eight-handed dancing *Bala-Bhairava* is located at the backside of the *Bhairavi* temple. A higher concentration of religious rock-cut sculptures on the site is seen around *Bogala* temple, *Ganesha* temple, *Mahakal Ganesha* temple and at the eastern pathway.

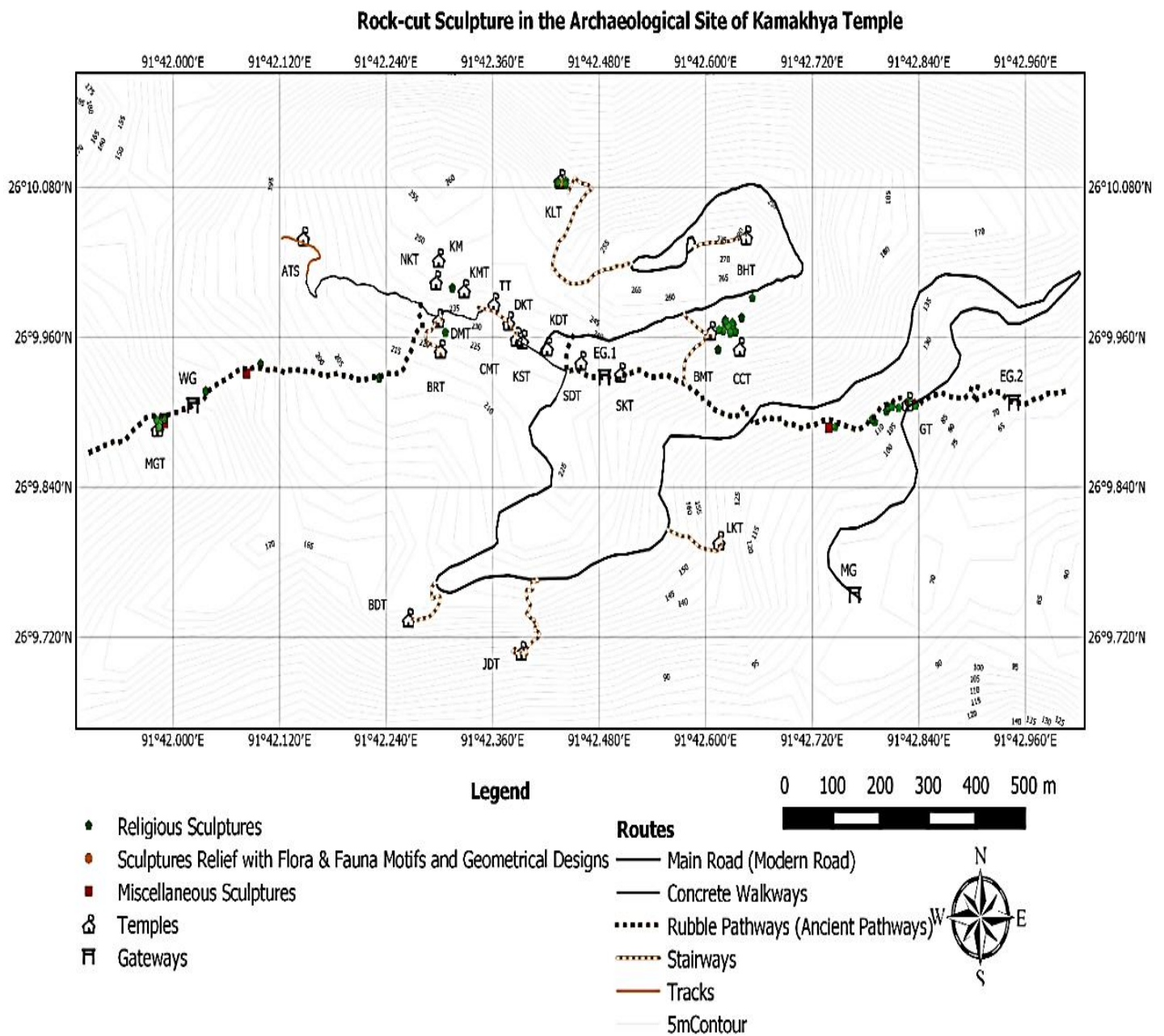


Figure 126. Map displaying the concentration of the rock-cut sculptures in the archaeological site of Kamakhya temple.

c) Map displaying the concentration of the sculptural fragments in the archaeological site of Kamakhya temple

The last map in this series will display the concentration of all the sculptural fragments found scattered in the Kamakhya temple site with 5 m contour line (Scale 1: 5500). Different symbols are used to display the concentration of the sculptural fragments found at the sites (Figure 127). Here, the concentration pattern indicates that in the main Kamakhya temple, there are very few sculptural fragments, and they are mainly religious in nature. A higher concentration of secular sculptural fragments is found in the *Mahakal Ganesha* temple. However, the area known as Kamakhya museum exhibits a variety of sculptural fragments dealing with different subject matters.

**Sculptural fragments in the Archaeological Site of Kamakhya Temple**

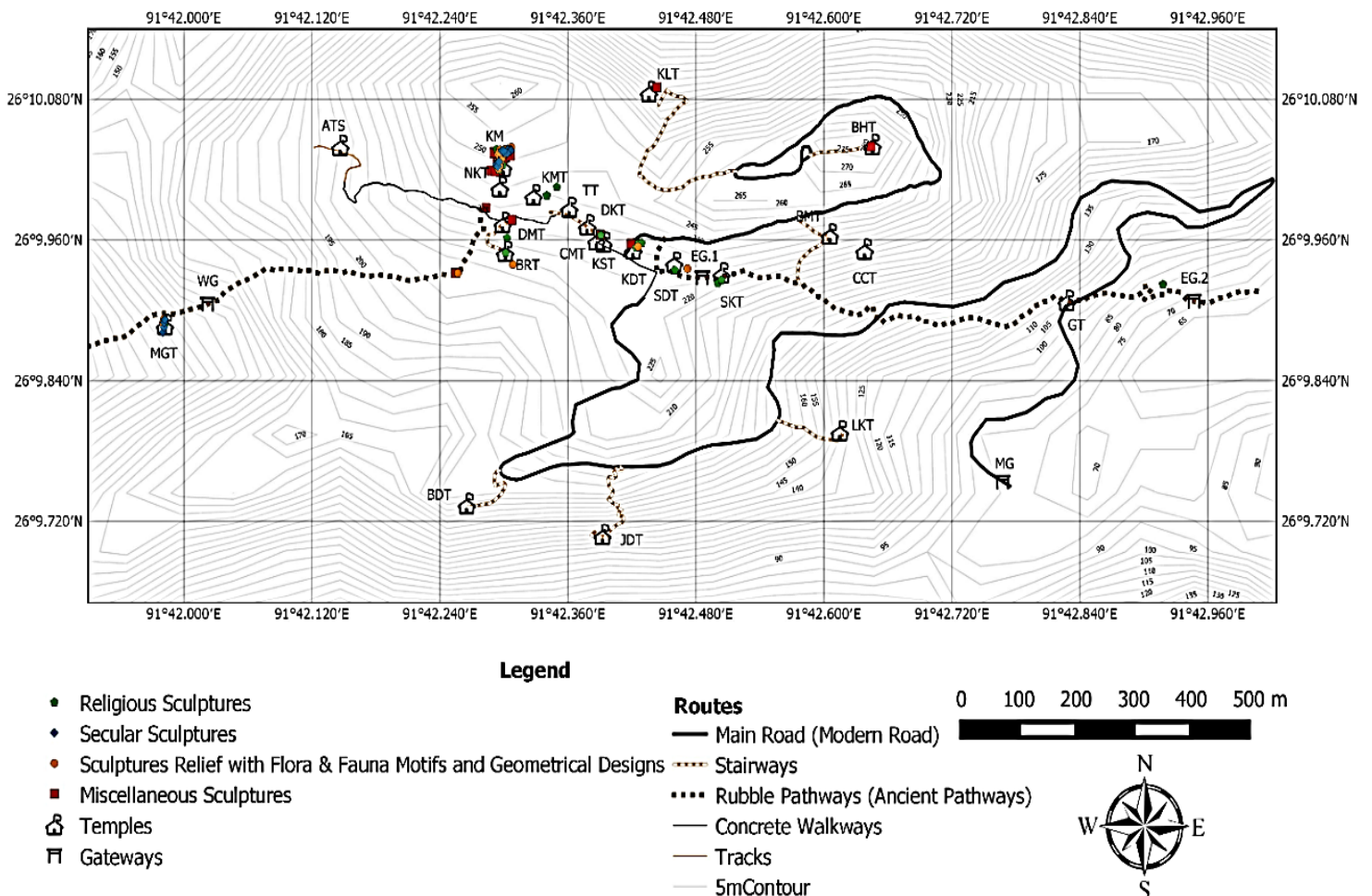


Figure 127. Map displaying the concentration of the sculptural fragments in the archaeological site of Kamakhya temple.

As evident from these maps, there is a higher concentration of sculptures in and around the main Kamakhya temple. Such concentrated distribution of sculptures makes this a core or central area of the site, where the majority of the temples are located. Out of the 426 sculptures, 291 (68%) are installed, or fixed sculptures specimens including rock-cut sculptures and 135 (32%) are sculptural fragments. Out of 291 installed or fixed sculptures, 234 (55%) sculptures are installed on the walls of temples, gateways, and boundary walls and 57 (13 %) are rock-cut sculptures.

The core or central area at the site houses a larger number of temples, and subsequently, the percentage of sculptures fixed on the walls are comparatively higher than other areas of the site. More than 172 (74%) sculptures out of 234 sculptures (installed on the walls) are installed in the main Kamakhya temple only (Table 2). This area is also high in concentration of sculptural fragments, as the Kamakhya temple museum is located in this area. This area is a temporary place for storing the sculptural remains at present. The Kamakhya temple museum displays a higher number of sculptural fragments, which covers more than 67 (50%) sculptures of the total sculptural fragments found on the site. The *Mahakal Ganesha* temple is yet another area within the site where the concentration of sculptural fragments is comparatively higher. Both areas display different types of sculptural as well as structural fragments.

The rock-cut sculptures are distributed throughout the site without any major pattern. The rock-cut sculptures found at the site shares two localities, the first within the proximity to the temples, like the rock-cut sculptural found carved on the mountain cliff in the *Bogala* temple and the *Mahakal Ganesha* temple. Then the second locality of the rock-cut sculpture is found along the eastern and western pathway. This indicates that the sculptures carved on a cliff or rock boulder along the pathway might be used as a landmark. Among the rock-cut sculptures, the percentage of *Ganesha* sculptures is comparatively higher in comparison to the other deities at the site. Out of 63 (25%) rock-cut sculptures 19 (30%) are rock-cut *Ganesha* sculptures. The miniature *Nagara* style temples carved in the mountain face of the *Mahakal Ganesha* temple is another interesting image among other rock-cut figures found on the site. These carved miniature temples suggest the presence of the *Nagara* style of Hindu temple architecture on the site. This finding is further confirmed by the presence of various fragments of *amalaka*'s and *urushringa*'s (subsidiary *shikhara*) on the site.

With the help of the database generated during documentation, it is estimated that out of 426 sculptures, 175 (41%) are religious sculptures, of which 18 (10%) are *Vaishnavite* sculptures. The presence of *Vaishnavite* sculpture in a *Shakta* temple site, even in this small number is noteworthy. This amalgamation of *Vaishnavite* sculpture in a *Shakta* temple makes Kamakhya temple a unique and rare site of diverse religious beliefs. The majority of these *Vaishnavite* sculptures are found installed in the main Kamakhya temple. We have found two sculptural panels depicting the *Narasimha*, *Kurma*, *Matsya* and *Rama avatar* of Lord *Vishnu* installed on the outer wall of the *natamandapa* and eastern gateway of the main Kamakhya temple (Figure 96 a & b). On a similar kind of stone block, the carved image of Lord *Vishnu* in his *Narasimha avatar* is displayed in the Kamakhya temple museum (Figure 96 d). We have also found a small *Vishnu* temple inside the boundary of the main Kamakhya temple. Among the *Vaishnavite* sculptures, two beautifully carved *Krishna* images in the *Bogala* temple are worth mentioning. The presence of these *Vaishnavite* sculptures indicates the possibility of a *Vaishnavite* tradition on the site.

#### 4.2.8 Conclusion

The Kamakhya sculptural art evolved with the support of different ruling power of ancient Assam, but the current site emerged as a sole powerful site gaining its individuality in the art form, which is a pure amalgamation of different art forms evolved during different period. The Kamakhya sculptural art flourished under the patronage of Pala-Sena, Koch and Ahom kingdom. The sculptural art developed during this period comprises of two phases: Phase I - Early medieval Kamarupa school of art (10<sup>th</sup>-15<sup>th</sup> century A.D.) and Phase II - Late medieval Kamarupa school of art (15<sup>th</sup> century onwards). A majority of the sculpture on the site belongs to the phase I, for example, the life-sized *astadikpalas* sculpture installed on the outer wall of the *garbhagriha* of the main Kamakhya temple belongs to the phase I dated to 11<sup>th</sup>-12<sup>th</sup> century A.D.

During both the phases, the sculptural art of Kamakhya has absorbed the stylistic traits from Bengal, Orissa, central India as well as from South-East Asia. Their influence can easily be seen in the present sculptural art of the Kamakhya. This is also due to the royal interest in the Kamakhya temple. Since the 5<sup>th</sup> century A.D., the site keeps attracting the royal power from Varman dynasty to Pala-Sena and then from Koch

to Ahom. They all have invested in the construction and renovation of the temple at the site. The account from *Darrang Rajavamsavali* reveals that the Koch king *Naranarayana* appointed *Meghamukdum* for the renovation of Kamakhya temple. They brought Bengal temple art and architecture to the site.

Similarly, during the Ahom period for the construction and the renovation of the temples, masons and artisans were brought to Assam from East Bengal. The influence of Bengal art emerges in the temple art and architecture during the Koch period, which resulted in the formation of the *Nilachala* temple style known for its bulbous polygonal dome. The *Nilachala* temple style gains immense popularity in the temple art and architecture of Ahom period. All these royal support to the temple and its art expand the horizon for the Kamakhya sculptural art. However, in the later phase we have witnessed a decline in the quality of sculptural art, especially during the Ahom period where the sculptures become static and two dimensional without any striking features and plain at the site. More secular sculptures like soldiers, devotees and saint sculptures started to emerge in the sculptural art of Kamakhya, which does not follow the earlier religious theme of the Kamakhya sculptural art. The decline of stone sculpting art or the cessation of political patronage might be the reason behind making of such crude sculptures. However, the present temple wall is adorned with the stone sculpture of early medieval *Kamarupa* school of arts (11<sup>th</sup> to 12<sup>th</sup> century A.D.).

## Chapter 5

### Conclusion

The present research has attempted to understand the evolution of the archaeological site of Kamakhya temple from the 5<sup>th</sup> century A.D. to the present with the help of the landscape approach, sacred geography, and the contextual approach. Through these approaches we have tried to answer the following questions: 1) the prime factors behind the development of the site; 2) type of archaeological records created during the 1516 years of habitational history of the site; 3) the processes through which such archaeological records were created. Here, the term ‘archaeological records’ are used for the cultural and material artefacts found on the site which emulated the antiquity of the present site.

In chapter 2, we have explained the role of geography in the formation of the site and how the inhabitants of the site modified the existing landscape features according to their needs and their understanding of the importance of the natural resources of the site. The above interaction represents the inter-relationship between land and human being, which plays a crucial role in the formation of the Kamakhya temple as an archaeological site that we have witnessed today. Availability of potable water in the form of underground perennial streams and natural as well as man-made ponds make the Nilachala hill, where the present site is situated, a favourable place for habitation since ancient times. The geographical advantage of the hill over its nearby region and the role of the Brahmaputra River further explain the prime reason behind the establishment of the site on the Nilachala hill. However, the role of human agency over continuously shaping and reshaping the landscape has resulted in the present archaeological site of the Kamakhya. The geographical advantages attracted the ancient dwellers, but it was the belief system of inhabitants which makes the present site a part of the sacred geography of India. Thus, indicating that the popularity of Kamakhya temple cannot be confined within physical or geographical boundaries of the site, rather the site manifests itself as a symbolic landscape. It is a unique feature of the Kamakhya site, where a relationship between the symbolic landscape and physical geography can be observed.

In chapter 3, we have mentioned the research methodology used and the rationale behind the methods used for studying the archaeological site of Kamakhya.

The present chapter will explain the survey techniques and data collecting method used during the research. The scientific techniques like XRD, EDX and Thin-section petrography analysis are also discussed in this chapter.

In chapter 4 (Part I & II), we have identified the archaeological records created during the 1516 years of habitation history of the site, in the form of art and architecture and also provided the context behind their emergence. The context behind the archaeological remains shed light on the mind of the creator or the settler and their surroundings. Understanding the context behind the archaeological records can help us in understanding the process of site selection and settlement pattern. Further, making these records a readable text, easy to decipher and offers access to understanding past settlements and their way of life.

During our research, we have not only observed the evolution of Kamakhya temple architecture from a simple cave temple to a group of temples but also witnessed the formation of *Nilachala* style of temple architecture from an assimilation of *Nagara* and *Vesara* temple architecture prevalent in the northern and central part of India. For this study, we have documented twenty-one temples, six *kund* (pond) and four gateways.

On the basis of the present study, it can be concluded that the stone temples which were first built on the site, collapsed on the site. And the remains of these temples were reused in the construction of the temple on the site during 10<sup>th</sup>-12<sup>th</sup> century A.D., and since then the temple building activity is still continuing on the site. From the findings of the present study and epigraphical records, we have identified different phases of temple building activity at the site:

**I Phase:** The first phase of the temple construction at the site, must have begun in 5<sup>th</sup> century A.D. as mentioned in the *Umachal* rock inscription with the construction of cave temple dedicated to Lord *Balabhadra Swami* constructed by *Maharajadhiraja Sri Surendra Varmana*.

**II Phase:** The second phase of construction must have taken place in 8<sup>th</sup>- 10<sup>th</sup> century A.D. using stone masonry. The temple constructed during this phase also did not able to survive but the remains of gigantic capitals of pillars, fragments of *urushringa* (Figure 21), and the style of the plinth of an older structure and few

decorative scroll motifs (Figure 74) found refitted on the wall of the present Kamakhya temple indicate the presence of a gigantic *Nagara* style temple-like the sun temple of Tezpur dated to 8<sup>th</sup>-10<sup>th</sup> century A.D. (Banerji, 1927; Choudhury, 1959). The *Salastambhas* dynasty was ruling in the Assam during 7<sup>th</sup>-10<sup>th</sup> century A.D., and they have erected buildings following the post-Gupta style with heavy emphasis on Northern *Nagara* temple style that includes tall *shikhara* with multiple *urushringa* and addition with *rathas* (P. Sarma 2007).

Except for the carved stone blocks, pillars fragments and some decorative scroll motif, we do not find any standing temple belonging to this phase. However, on the basis of the structural fragments, it is assumed that the present western pathway (*Mekhela Ujuwa Bat*) was constructed using the stone remains of this phase (Figure 17). The identification of this phase is completely dependent on the structural fragments found on the site, as there are no epigraphical records and any other source of information of this period available.

**III Phase:** The third phase of temple construction must have taken place in 11<sup>th</sup> to 12<sup>th</sup> century A.D. during the Pala-Sena period. During this phase, the temple builders must have followed the trails of earlier temple styles and built the temples following the norms of northern and central Indian temple architecture using stone masonry. The placement of a large number of sculptures and other decorated motifs on the outer wall of the temple also shows the parallel development of the Kamakhya temple art with the art of Northern (*Nagara*) and Central (*Vesara*) India. For instance, the cardinal placement of *Asthadikpala* sculptures on the outer wall of the *garbhagriha* of the main Kamakhya temple resembles the temple art of *Khajuraho*, where the *Asthadikpala* are also placed outside the temple with their respective cardinal position (Figure 101). Majority of the sculpture on the site belong to this period also named as the early medieval period of the Kamarupa school of art. The sculptures found on the site follows the Pala idioms with the influence of regional art.

The stone temples built in this phase also have not survived, and only the sculptural remains and the stone plinth or the foundation of the temple survived over which the brick temples were erected in the later period.

**IV Phase:** The fourth phase of temple construction is dated to 15<sup>th</sup> to 17<sup>th</sup> century A.D. during the Koch and Ahom period. The majority of the standing temple on the site belongs to this phase. These temples were built over the stone temple foundation of the 11<sup>th</sup> to 12<sup>th</sup> century A.D. using brick and lime mortar. During this phase, the temple builders had followed the original outer profile of the stone plinth and constructed the temple using brick masonry. In this phase, the temple building activity was more focused on the renovation and remodelling of the temple form, which has survived from the previous phase. This includes the utilization of the previously built stone foundation and construction of the brick temple over them copying the original plan, refitting the stone sculptural fragments on the wall of the temple, gateways and boundary wall and the construction of the pathways using the old stone structure fragments. Even the first epigraphical reference after 5<sup>th</sup> century A.D. reveals that the reconstruction and renovation of the Kamakhya temple by Koch king *Naranarayana* and his brother *Sukladhvaj* alias *Chilarai* in 1565 A.D.

There are several examples of the temples on the site, which are remodelled and repaired by removing the damaged and irreparable portions and filling the cracks and interstices with brick and lime mortar (P. Sarma, 2007). The Kamakhya temple, *Chinnamasta* temple, and *Siddheswara* temple is rebuilt on the already existing stone *adhithana* (plinth). Along with the main Kamakhya temple, the *Dakishinakali* temple is also among those temples, where we have noticed such renovations. In the *Dakishinakali* temple, we have noticed that the northern wall of the temple is build using granite stone block, and the rest of the temple is built using brick and lime mortar.

It's during this phase that the *Nilachala* temple architecture famous for its bulbous polygonal dome originated. This particular style of temple building emerged during the Koch period and became the most popular style of temple architecture during the Ahom period (P. Sarma, 2007).

On the basis of the epigraphical records, an increment in the temple building activity was witnessed under the rule of Ahom kings. Many temples on the site were constructed under the patronage of Ahom kings. For instance, the *Kameswara* temple was built by the officer of the Ahom king, *Tarun Deka Barphukan* and *Siddheswara* temple was built by officer *Bijoy Tarun Duwara Barphukan* under the patronage of Ahom king *Siva Singha* in 1718 A.D. The *Amratakswara* temple and adjoining *Durga*

*kund* was built by the royal officer *Tarun Duwara Barphukan* under the patronage of Ahom king *Pramatta Singha* in 1744-1751 A.D. The *Kedareswara* temple was built by officer *Tarun Duwara Barphukan* under the patronage of Ahom king *Rajeswara Singha* in 1751-1769 A.D. One stone inscription found installed inside the *Natmandapa* of main Kamakhya temple describes that the *Utsava Mandir* attached to the main Kamakhya temple was constructed by the officer *Dasaratha Tarun Duwar* under the patronage of Ahom king *Rajeswar Singha* in 1751-1769 A.D. (Bhuyan & Nayak, 2010; Sarma and Borah, 2010). These temples are an excellent example of the Ahom architecture style on the site.

The sculptural art of this phase belongs to the late medieval Kamarupa school of art. In this phase, heavy emphasis is given to the incorporation of folk elements and regional art (Figure 77). This phase also followed the tradition of placement of the sculptures on the temple walls. However, the majority of the sculptures installed on the walls belong to the early medieval Kamarupa school of arts.

**V Phase:** The next phase of temple construction is dated to 18<sup>th</sup> to 21<sup>st</sup> century A.D. The current phase completes the 1500 years of the temple building history of the Kamakhya temple. The temple building activity on the site is still continuing, adding numbers to the existing temples on the site. During our fieldwork we noticed four new temples, *Ban Durga* temple, *Lalit Kanta* temple, *Jay Durga* temple, and *Shasankali* temple, are recently constructed in the already existing rich temple site of Kamakhya.

The temple renovation work is also continuously carried out by the present temple committee, as we noticed in the case of *Chinnamasta* temple and *Bhubaneswari* temple on the site. The *Chinnamasta* temple, an only example of the *Saptaratha* temple architecture at the site, was completely renovated using modern brick and cement mortar. Few new 21<sup>st</sup> century sculptures are also seen imitating the pervious sculpture art with a modern touch on the site (Figure 128).



Figure128. Example of the new sculptural panel loosely imitating the *asthadikpalas* sculpture installed outside in the wall of *garbhagriha* of the main Kamakhya temple.

### 5.1 Contribution of the Research

The major contribution of the present research is the identification of continuous habitation of the site from 5<sup>th</sup> century A.D. to the present, covering approximately 1516 years old habitation history of Kamakhya temple. Five different phases of temple building activity are recorded from the site. The other contribution is the formation of a database/ inventory of the art and architecture of the site, which can facilitate future research work on the Kamakhya. The database also helps us in understanding the context behind the assimilation of certain type of art on the site. For instance the identification of ‘*Dikapala*’ on the outer wall of the *garbhagriha* of main Kamakhya temple not only helps us in understanding the significance of the placement of the deity in a particular direction on the wall but also helps us in understanding the influence of the Northern and Central Indian art on the sculptural art of Kamakhya.

### 5.2 Limitation of the Research and Future Research

One of the major problems we have faced during the field survey of the present site was to document the sculptures installed inside the temple chamber. We only have permission to document the sculptures that are installed outside the temple walls, gateways and boundary wall. Being an active temple site, photography and recording instruments are strictly prohibited inside the temple chambers. Secondly, it was also very difficult to get any GPS network range inside the temple chambers, especially in those temples whose main chambers or *garbhagriha* (sanctum sanctorum) are

constructed below the ground level of the first chamber or *mandapa*. Therefore, while highlighting the concentration and density of the sculptures through GIS maps, we have omitted sculptures installed inside the temple chambers. Although we were able to record these sculptures in our documentation files and this does not affect the final quantification of the sculptural specimens found at the site.

The GIS and documentation database created during this survey will further facilitate future work on the site. GIS documentation indeed provides a stable ground for future research work. These databases can be used to understand the evolution of the sculptural art and architecture in the site. We can also use the database to analyse the movement of the specimens and cultural material across the site. For instance, during our recent visit to the site, we have noticed that few specimens moved from their earlier position. This can be used as a parameter to understand the changes in the present site. The current museum space where a higher concentration of sculptural and architectural fragments are displayed is soon to be moved to a new location. Here, only limited specimens will be displayed, and rest will be discarded or left on the previous space. Thus, the present study can be used as a reference base for understanding such changes.

## Bibliography

1. Achari, P. R. (2015). *Hindu Iconology: The Study of The Symbolism and Meaning of Icons*. Simha Publications.
2. Acharya, P. K. (1996). *Hindu Architecture in India and Abroad*. India: Munshiram Manoharlal Publishers Pvt. Ltd.
3. Abbott, S., & Foulston, L. (2009). *Hindu Goddesses: Religious Beliefs and Practices*. Oregon: Sussex Academic Press.
4. Agrawal, O. P. (1971). A Study of Indian Polychrome Wooden Sculpture. *Studies in Conservation, Vol. 16/ No. 2*, 56-68.
5. Agrawala, P. (1984). *Goddesses in Ancient India*. Abhinav Publication.
6. Ahmed, D. S. (2012). Evolution of Temple Architecture in Northern India- An Historical Process. *International Journal of Social Science Tomorrow, Vol. 1/No. 3*.
7. Ahmed, K. (1994). *The Art and Architecture of Assam*. Guwahati: Spectrum Publication.
8. Ahmad, S., Iqbal, Y., & Ghani, F. (2008). Phase and Microstructure of Brick-Clay Soil and Fired Clay-Bricks From Some Areas in Peshawar Pakistan. *J Pak Mater Soc*, 33-39.
9. Al, M. S., Ramli, Z., Abdul Rahman, N. H., & Samian, A. L. (2015). X-ray fluorescence and X-ray diffraction analysis of ancient bricks from the temple SEG-II (Ubur Lempeng), Batujaya, Indonesia. *Journal of Food, Agriculture & Environment 13 (2)*, 197-200.
10. Allan, J. (1936). *Catalogue of Coins in the British Museum, Ancient India*. London: British Museum.
11. Amazzone, L. (2010). *Goddess Durga and Sacred Female Power*. Hamilton Books.

12. Amorim, A. (2003). *Methodological Aspects of Architectural*. Brazil: Universidade Federal da Bahia.
13. Anon. (2011). *Kamakhya Devalaya*. New Delhi: Indira Gandhi National Centre for the Arts.
14. Ansari, Z., & Dhavalikar, M. (2006). Excavations at Ambari. In H. N. Dutta, *Ambari Archaeological Site An Interim Report* (p. 13). Guwahati: The Directorate of Archaeology Assam.
15. Anschuetz, K. F., Wilshusen, R. H., & Scheick, C. L. (2001). An Archaeology of Landscapes: Perspectives and. *Journal of Archaeological Research Vol 9 No. 2*, 157-203.
16. *Archaeological Resources Investigations: Permit policy*. (2010). Retrieved May 20, 2015, from Government of Saskatchewan:  
<http://www.pcs.gov.sk.ca/PermitPolicy>
17. Architectural Heritage: Inventory and Documentation Methods in Europe. (1992, July). *Cultural Heritage, No.28* (pp. 3-187). Nantes: Council of Europe Press. Retrieved May 20, 2015, from oregon.gov:  
[http://www.oregon.gov/oprd/HCD/ARCH/docs/state\\_of\\_oregon\\_archaeological\\_survey\\_and\\_reporting\\_standards.pdf](http://www.oregon.gov/oprd/HCD/ARCH/docs/state_of_oregon_archaeological_survey_and_reporting_standards.pdf)
18. Aston, M., & Rowley, T. (1974). *Landscape Archaeology: An Introduction to Fieldwork Techniques on Post-Roman Landscapes*. London: David & Charles.
19. Bakels, C. (1978). Four Linearbandkeramilk Settlements and Their Environment: A Paleoecological Study of Sittard, Elsloo and Hienheim. *Analecta Praehistorica Leidensia*, 11.
20. Balme, J., & Paterson (ed), A. (2006). *Archaeology in Practice: A Student Guide to Archaeological Analyses*. Blackwell Publishing.
21. Banerji, R. D. (1927). Kamakhya. In J. F. Blakiston (ed), *Annual Report of Archeological Survey of India 1924-25* (pp. 100-101). Calcutta: Calcutta Government of India: Central Publication Branch.

22. Barcelo, J., & Pallares, M. (1998). Beyond GIS: The Archaeology of Social Spaces. *Archeologia e Calcolatori*, 47-80.
23. Barker, P. (1993). *Techniques of Archaeological Excavation*. London: B. T. Batsford Ltd.
24. Barpujari, H. (2014). *The Comprehensive History of Assam Vol I*. Guwahati: Publication Board Assam.
25. Barrows, E. P. (1872). *Sacred Geography, and Antiquities*. New York: American Tract.
26. Barua, B. K. (1951). *A Cultural History of Assam*. Assam: K.K. Barooah.
27. Barua, K. (1933). *Early History of Kamarupa: From the Earliest Times to the End of the Sixteenth Century*. Shillong.
28. Batham, C., Rathore, A., & Tandon, S. (2018). Construction Techniques of Indian Temples. *International Journal of Research in Engineering, Science and Management Volume-1, Issue-10*, 420- 424.
29. Baumanova, M. (2016). Space Matters: A Reflection on Archaeological Theory and Method for Interpreting the Materiality of Space. *Interdisciplinaria archaeologica-Natural Sciences in Archaeology Vol VII No. 6*, 209-216.
30. Benard, E. A. (2010). *Chinnamasta: The Aweful Buddhist and Hindu Tantric Goddess*. Delhi: Motilal Banarsidass.
31. Bevan, A., & Conolly, J. (2004). GIS, Archaeological Survey, and Landscape Archaeology on the Island of Kythera, Greece. *Journal of Field Archaeology, Vol. 29, No. 1/2*, 123-138.
32. Bharne, V., & Krusche, K. (2014). *Rediscovering the Hindu Temple: The Sacred Architecture and Urbanism of India*. UK: Cambridge Scholars Publishing.
33. Bhat, G. K. (1987). 'Mother' in Vedic Literature (Brahmaṇas and Aranyakas). *Annals of the Bhandarkar Oriental Research Institute, Vol. 68, No. 1/4*, 471-489.

34. Bhattacharjee, A. (1978). Icons of Sakti and other Female Deities. In A. Bhattacharjee, *Icons and Sculptures of Early and Medieval Assam* (pp. 24-33). Delhi: Inter-India Publications.
35. Bhattasali, N. K. (1929). *Iconography Of Buddhist and Brahmanical Sculptures in the Dacca Museum*. Dacca: Rai S. N. Bhadra Bahadur.
36. Bhuyan, G. N., & Nayak, S. (2010). *Heritage of Kamakhya on the Nilachala Hill*. Guwahati: Vivekananda Kendra Institute of Culture.
37. Binford, L. R. (1978). *Nunamiut Ethnoarchaeology*. New York: Academic Press.
38. Binford, L. R. (1980). Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45(1), 4-20.
39. Binford, L., & O'Connell, J. (1984). An Alyawara Day: The Stone Quarry. *Journal of Anthropological Research*, 40(3), 406-432.
40. Blache, P. V. (1926). *Principles of Human Geography*. New York: H. Holt and Co.
41. Blurton, T. R. (1994). *Hindu Art*. London: British Museum Press.
42. Borah, B. K. (2010). Dasamahavidya or The Ten Incarnations of Devi. In G. N. Bhuyan, & S. Nayak (ed), *Heritage of Kamakhya on the Nilachala Hill* (pp. 29-33). Guwahati: Vivekananda Kendra Institute of Culture.
43. Borah, B. K. (2010). Fairs and Festivals. In G. N. Bhuyan, & S. Nayak (ed), *Heritage of Kamakhya on the Nilachala Hill* (pp. 58-72). Guwahati: Vivekananda Kendra Institute of Culture.
44. Borah, B. K. (2010). Kamakhya Episodes in Traditional History. In G. N. Bhuyan, & S. Nayak (ed), *Heritage of Kamakhya on the Nilachala Hill* (pp. 7-19). Guwahati: Vivekananda Kendra Institute of Culture.

45. Bowser, B. J. (2004). Toward an Archaeology of Place. *Journal of Archaeological Method and Theory*, Vol. 11, No. 1, *Recent Advances in the Archaeology of Place, Part 1*, 1-3.
46. Brighenti, F. (2001). *Sakti Cult in Orissa*. Orissa: D.K. Printworld.
47. Brown, C. M. (1990). *The Triumph of the Goddess: The Canonical Models and Theological Visions of the Devi-Bhagavata Purana*. New York: State University of New York Press.
48. Bruno, D., & Thomas, J. (2016). Landscape Archaeology: Introduction. In B. David, & J. Thomas, *Handbook of Landscape Archaeology* (pp. 27-43). New York: Routledge.
49. Butzer, K. W. (1977). Geo-Archaeology In Practice. *Reviews in Anthropology*, 125-131.
50. Butzer, K. W. (1982). *Archaeology As Human Ecology: Method And Theory For A Contextual Approach*. New York: Cambridge University Press.
51. Carmichael, D. L., Hubert, J., Reeves, B., & Schanche, A. (1994). *Sacred Sites, Sacred Places*. London: Routledge.
52. Castro, A. A. (2008). Archaeology of the Goddess: An Indian Paradox. In J. B. Bapat, & I. Mabbett, *The Iconic Female: Goddesses of India, Nepal and Tibet* (pp. 21-41). Australia: Monash Asia Institute Press.
53. Chakrabarti, D. (2001). The Archaeology of Hinduism. In T. Insoll, *Archaeology and World Religion* (p. 35). London: Routledge.
54. Chandra, R. L. (1994). Thin-Section Petrography in Studies of Cultural Materials. *The Journal of the American Institute for Conservation Volume 33*, pp. 115 to 129.
55. Chatterji, U. (1968). Shakta and Shakti. *Studies in Comparative Religion, Vol. 2, No.4.*, 1-10.

56. Choudhury, R. D. (1998). *Catalogue of Stone Sculptures Assam State Museum*. Guwahati: Directorate of Museums.
57. Choudhury, P. (2006). Archaeological Finds at Ambari with Particular Reference to Icons. In H. Dutta, *Ambari Archaeological Site An Interim Report* (p. 25). Guwahati: The Directorate of Archaeology Assam.
58. Choudhury, P. C. (1959). *The History of Civilisation of the People of Assam to the Twelfth Century A.D.* Assam: Dept. of Historical and Antiquarian Studies in Assam.
59. Chowdhury, V. (2011). Collecting Ganesha Images. In V. Chowdhury, *Ganadevata: Hundred Ganesha Icons from Vasant Chowdhury in the Collection of Indian Museum* (pp. 7-18). Kolkata: Indian Museum Kolkata.
60. Coburn, T. B. (1991). *Encountering the Goddess: A Translation of the Devi-mahatmya and a Study of Its Interpretation*. New York: State University of New York Press.
61. (2007). *Colorado Cultural Resource Survey Manual*. Denver: Office of Archaeology and Historic Preservation.
62. Cook, I., & Tolia-Kelly, D. P. (2010). Material Geographies. In D. Hicks, & M. C. Beaudry, *the oxford handbook of Material Culture Studies* (pp. 99-122). New York: Oxford University Press.
63. Cosgrove, D., & Daniels, S. (1988). *Then Iconography of Landscape: Essays On The Symbolic Representation, Design And Use of Past Environment*. New York: Cambridge University Press.
64. Coutts, P. J. (1970). Bivalve-growth patterning as a method for seasonal dating in archaeology. *Nature*, 226 (5248), 874.
65. Czepczynski, M. (2016). *Cultural Landscapes of Post-Socialist Cities: Representation of Powers and Needs*. New York: Routledge.
66. Das, D. V. (2011). The Sacred in Indian System of Architecture: A Case Example of Mayamatam. *Spandrel, Issue 3*, 6-14.

67. Daware, A. R. (2015). Orientation of Hindu Temples – India. *International Journal of Advanced Engineering, Management and Science. Special Issue-3*, 131-137.
68. Deka, M. (2013). Sculptures of Kamakhya Temple: An Aesthetic View. *International Journal of Scientific and Research Publications, Volume 3, Issue 10*.
69. Deka, P. J. (2004). *Nilacala Kamakhya: Her History and Tantra*. Guwahati: Pranav Jyoti Deka.
70. Devi, D. R., & Mishra, M. (2017). The Survey of Temple Tanks as a Reference for Conservation of Turtle Fauna in Kamarup District. *International Journal of Science, Environment and Technology, Vol. 6, No 2*, 1335-1342.
71. Dhar, O., & Nandargi, S. (2000). A Study of Floods in the Brahmaputra Basin in India. *International Journal of Climatology*, 771-781.
72. Dikshit, K. N. (1926). Kamakhya Hill. In J. Marshall (ed), *Annual Report of Archaeological Survey of India 1923-24* (p. 80). Calcutta: Calcutta Government of India: Central Publication Branch.
73. Dikshit, K. N. (1936). Images of the Kamakhya Hill, Assam. In C. L. Fabri (ed), *The Annual Report of Archaeological Survey of India 1930-34* (p. 128). Delhi: Delhi: Manager of Publications.
74. Doniger, W. (2009). *The Hindu: An Alternative History*. New York: The Penguin Press.
75. Duncan, J. S., & Duncan, N. G. (2010). The Aestheticization of the Politics of Landscape Preservation. *Annals of the Association of American Geographers Vol 91 No. 2*, 387-409.
76. Duran, G. Z. (n.d.). Documentation and Analysis of Cultural Heritage by Photogrammetric Methods and GIS: A Case Study.
77. Dutrow, B. L., & Clark, C. M. (n.d.). X-ray Powder Diffraction (XRD).

78. Dutta, P. C. (1990). Perspectives in Indian Archaeology with reference to North East India. *Proceeding of North East History Association* (pp. 1-10). Shillong: Singhania Printing Press.
79. Ebert, D. (2004). Applications of Archaeological GIS. *Canadian Journal of Archaeology, Vol. 28, No. 2*, 319-341.
80. Eck, D. L. (2012). *India: A Sacred Geography*. New York: Harmony.
81. Eliot, C. N. (1910). Hinduism in Assam. *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 1155-118.
82. Fallon, J. M., & Jaiswal, N. K. (2012). Sacred Space, Sacred Water: Exploring the Role of Water in India's Sacred Places. *Recreation and Society in Africa, Asia and Latin America 3 (1)*, 1-13.
83. Feinman, G. M. (2015). Settlement and Landscape Archaeology. *International Encyclopedia of the Social & Behavioral Sciences, 2nd edition, Vol 21*, Elsevier
84. Feldhaus, A. (2003). *Connected Places: Region, Pilgrimage, and Geographical Imagination in India*. New York: Palgrave Macmillan.
85. Feldhaus, A. (2003). Travelling Goddesses. In A. Feldhaus, *Connected Places: Region, Pilgrimage and Geographical Imagination in India*. (pp. 89-126). New York: Palgrave Macmillan.
86. Fleming, A. (2006). Post-processual Landscape Archaeology: a Critique. *Cambridge Archaeological Journal Vol 16 No. 3*, 267–80.
87. Fleming, B. J. (2009). Mapping Sacred Geography in Medieval India: The Case of the Twelve "Jyotirlingas". *International Journal of Hindu Studies 13 (1)*, 51-81.
88. Fletcher, R., & Winter, R. (2008). Prospects and Problems in Applying GIS to the Study of Chalcolithic Archaeology in Southern Israel. *Bulletin of the American Schools of Oriental Research, No. 352*, 1-28.
89. Fleure, H. J. (1927). *The Races of Mankind*. New York: Ernest Benn Ltd.

90. Fløistad, G. (2007). *Aesthetics and Philosophy of Art Vol. 9*. Netherlands: Springer.
91. Flood, G. D. (1996). *An Introduction to Hinduism*. Cambridge: Cambridge University Press.
92. Foard (1978). (1978). Systematic fieldwalking and the investigation of Saxon settlement in Northamptonshire. *World Archaeology* 9 (3), 357–374.
93. Fort, R., Buergo, M. A., Heras, M. G., & Calvo, C. V. (2006). Heritage, Weathering and Conservation, Two Volume Set.: *Proceedings of the International Heritage, Weathering and Conservation Conference*. Madrid: Taylor & Francis.
94. Fox, C. (1932). *The Personality of Britain: Its Influence on Inhabitant and Invader in Prehistoric and Early Historic*. Cardiff: National Museum of Wales.
95. Gamble, C. (1982). Interaction and Alliance in Palaeolithic Society. *Man* 17, 92-107.
96. Garnayak, D. B. (2007). Evolution of Temple Architecture in Orissa. *Orissa Review*, 55-59.
97. Ghosh, A. (1968). Explorations and excavations. *Indian Archaeology: A Review 1965-66*, 14.
98. Gkiasta, M. (2008). *The Historiography of Landscape Research on Crete*. Netherlands: Leiden University Press.
99. Gojda, M. (2010). Landscape Archaeology. In D. L. Hardesty, *Archaeology—Volume I* (pp. 198-226). United Kingdom: Eolls Publisher Co.
100. González-Ruibal, A. (2012). Archaeology and the Study of Material Culture: Synergies with Cultural Psychology. In J. Valsiner, *The Oxford Handbook of Culture and Psychology* (pp. 1-39). New York: Oxford University Press.
101. Gosden, C., & Head, L. (1994). Landscape — a usefully ambiguous concept. *Archaeology in Oceania*, 113-116.

102. Goswami, K. P. (1998). *Kamakhya Temple: Past and Present*. New Delhi: A.P.H Publishing Corporation.
103. Goswami, M., Gupta, I., & Jha, P. (2005). Sapta Matrikas in Indian Art and Their Significance in Indian Sculpture and Ethos: A Critical Study. *Anistoriton*, vol. 9, Section A051, 1-8.
104. Gould, R. A. (1968). Living Archaeology: The Ngatatjara of Western Australia. *Southwestern Journal of Anthropology*, 24(2), 101-122.
105. Gould, R. A. (1971). The Archaeologist as Ethnographer: A Case from the Western Desert of Australia. *World Archaeology* 3 (2), 143-177.
106. Grassby, R. (2005). Material Culture and Cultural History. *Journal of Interdisciplinary History* Vol 25, 591-603.
107. Greene, K. (2002). *Archaeology: An Introduction*. New York: Routledge.
108. Greenwood, P. H., & Elizabeth, J. T. (1976). Fish Remains from Upper Paleolithic Sites Near Idfu and. In F. Wendorf, R. Schild, & (eds), *Prehistory of the Nile Valley* (pp. 383-388). New York: Academic Press.
109. Grimmer, A. E. (1984). *A Glossary of Historic Masonry Deterioration Problems and Preservation Treatment*. Department of the Interior National Park Services Preservation Assistance Division.
110. Gupta, D. (2007). *Identification and Documentation of Built Heritage in India: Process for Identification and Documentation of Cultural Heritage*. New Delhi: INTACH.
111. Gupta, S., & Asthana, S. P. (2002). *Elements of Indian Art (Including Temple Architecture, Iconography & Iconometry)*. New Delhi: D. K. Printworld.
112. Harle, J. (1994). *The Art and Architecture of the Indian Subcontinent*. Yale University Press, New Haven and London.
113. Harrington, A. (2014, September ). *GIS and GPS: Technologies that work well together*. Retrieved June 24, 2015, from ESRI:

<http://proceedings.esri.com/library/userconf/proc00/professional/papers/PAP169/p169.htm>

114. Harshananda, S. (2001). *All About Hindu Temples*. Mylapore, Madras, India: Sri Ramakrishna Math.
115. Hatley, S. (2012). From Matr to Yogini: Continuity and Transformation in the South Asian Cults of the Mother Goddesses. In I. Keul, *Transformations and Transfer of Tantra in Asia and Beyond* (pp. 99–129 ). Berlin: Walter de Gruyter.
116. Hayden, B. (1979). *Palaeolithic Reflections: Lithic Technology and Ethnographic Excavation Among Australian Aborigines*. Canberra: Australia Institute of Aboriginal Studies.
117. Heilen, M. (2005). *An Archaeological Theory of Landscapes*. Arizona: UMI.
118. Heinsch, J. (1938). Principles of Prehistoric Sacred Geography. *Comptes Rendus du Congrès International de Géographie*, 90–108.
119. Hicks, D. (2010). The Material Cultural Turn: Event and Effect. In D. Hicks, & M. Beaudry, *The Oxford Handbook of Material Culture Studies*. (pp. 25-98). Oxford: Oxford University Press.
120. Hicks, D., & Beaudry, M. C. (2010). Introduction: Material Culture Studies: A Reactionary. In D. Hicks, & M. C. Beaudry, *The Oxford Handbook of Material Culture Studies* (pp. 1-21). New York: Oxford University Press.
121. Hicks, D., & Beaudry, M. C. (2010). *The oxford handbook of Material Culture Studies*. New York: Oxford University Press.
122. Higgs, E. S. (1975). *Palaeoeconomy* . London: Cambridge University Press.
123. Higgs, G. (1975). An Assessment of the Action Component Of Action Space. *Geographical Analysis*, 7(1), 35–50.
124. Hodder, I. (1978 ). *The Spatial Organisation of Culture*. London: Duckworth.
125. Hodder, I. (1982). *Symbolic and Structural Archaeology*. New York: Cambridge University Press.

126. Hodder, I. (1982). Theoretical Archaeology: A Reactionary View. In I. Hodder, *Symbolic and Structural Archaeology* (pp. 1-16). Cambridge: Cambridge University Press.
127. Hodder, I. (1986). *Reading the Past*. Cambridge: Cambridge University Press.
128. Hodder, I. (1990). *The Domestication of Europe*. Blackwell: Oxford.
129. Hodder, I. (2011). Human-thing Entanglement: Towards An Integrated Archaeological Perspective. *Journal of the Royal Anthropological Institute*, 154-177.
130. Horobik, H. (2007). Exploring the Reliability of Archaeological Site Survey through the GIS Based Analysis of Surface Artifact Distribution at Köröslad & acute. *Journal of Young Investigators: The Undergraduate Research Journal*, 1-8.
131. Horster, M. (2010). Religious Landscape and Sacred Ground: Relationships between Space and Cult in the Greek World. *Revue de l'histoire des religions*, 435-458.
132. Humolli, F. (2015). Cultural Landscapes in the Field on International Assessment (From the Theory till Touristic Usage - Kosovo Case). *The 4th International Multidisciplinary Conference on Integrating Science in New Global Challenges Volume 3* (pp. 206-209). Albania: EPICT Albania.
133. Ingold, T. (1993). The Temporality of the Landscape. *World Archaeology Vol 25 No. 2 Conceptions of Time and Ancient Society*, Routledge.
134. J., C. B., & L., S. L. (2008). *A Sloping Land: An Introduction to Archaeological Landscapes on the High Plains*. Colorado: University Press of Colorado.
135. Jackson, J. (1986). The Vernacular Landscape. In E. C. Penning-Rowsell, & D. Lowenthal, *Landscape Meanings and Values* (pp. 65-81). London: Allen and Unwin.

136. Jarrige, C. (2006). The figurines of the first farmers at The figurines of the first farmers at. *Pragdhara, No. 18*, (p. Mehrgarh and their offshoots Mehrgarh and their offshoot). Lucknow.
137. Jha, G. (1923). *The Chandogya Upanisad and Shree Shankaras Commentary* (IV ed.). Madras: V. C., Seshacharri.
138. Jochim, M. (1976). *Hunter-gatherer subsistence and settlement: A predictive model*. New York: Academic Press.
139. Johnsen, H., & Olsen, B. (1992). Hermeneutics and Archaeology: On the Philosophy of Contextual Archaeology. *American Antiquity, Vol. 57, No. 3*, 419-436.
140. Kak, S. (2005). Early Indian Architecture and Art. *Migration & Diffusion- An International Journal, Vol. 6/NO. 23*, 6-27.
141. Kakati, B. (1941). *Assamese: Its Formation and Development*. Guwahati: The Department of Historical and Antiquarian studies.
142. Kakati, B. (1989). *The Mother Goddess Kamakhya*. Guwahati : Publication Board Assam.
143. Kala, S. C. (1980). *Terracottas in the Allahabad Museum*. Abhinav Publications.
144. Keenan, W. J., & Arweck, E. (2006). Introduction: Material Varieties of Religious Expression. In W. Keenan, *Materializing Religion: Expression, Performance and Ritual* (p. 120). New York: Routledge.
145. Kinsley, D. R. (1988). *Hindu Goddesses: Visions of the Divine Feminine in the Hindu Religious Tradition with a New Preface*. California: University of California Press.
146. Kinsley, D. R. (1997). *Tantric Visions of the Divine Feminine: The Ten Mahavidyas*. London: University of California Press.

147. Kouli, D. (2012). *Art and Iconography of the Sculptures of Kamrup District of Assam (From the 5th Century A.D. to the 18th Century A.D.)*. Guwahati: Gauhati University.
148. Kramrisch, S. (1946). *The Hindu Temple Vol I*. Calcutta: University of Calcutta.
149. Kvamme, K. L. (1989). Geographic Information Systems in Regional Archaeological Research and Data Management. *Archaeological Method and Theory, Vol. 1*, 139-203.
150. Lahiri, N. (1996). Archaeological Landscapes and Textual Images: A Study of the Sacred Geography of Late Medieval Ballabgarh. *World Archaeology Vol. 28* (2), 244-264.
151. Lal, B. B. (1997). *The Earliest Civilization of South Asia*. Aryan Books International.
152. Lehman, F. K. (2003). Introduction: The Concept of “Sacred Geography”, Its Origin and Scope. In R. Lukens-Bull, *Sacred Places and Modern Landscapes: Sacred Geography and Social-religious Transformations in South and Southeast Asia* (pp. xv-xvii). Tempe: Arizona State University.
153. Letellier, R. (2007). *Recording, Documentation, and Information Management for the Conservation of Heritage Places: Guiding Principles*. Los Angeles: The Getty Conservation Institute.
154. Lock, G., & Molyneaux, B. L. (2006). *Confronting Scale in Archaeology: Issue of Theory and Practice*. USA: Springer.
155. Lokesh, C. (1977-1978). The Iconography of Uma and Mahesvara in Japanese Art. *Annals of the Bhandarkar Oriental Research Institute, Vol. 58/59*, 733-744.
156. Lounsbury, C. R. (2010). Architecture and cultural history. In D. Hicks, & M. C. Beaudry, *The Oxford Handbook of Material Culture Studies* (pp. 484-501). New York: Oxford University Press.
157. Marathe, R. (2012). XRD and SEM Analysis of Tapti River Sediment: A Case Study. *Archives of Applied Science Research*, 78-84.

158. Merkevicus, A., Bezdicka, P., & Juskenas, R. (2007). XRD and SEM characterization of archaeological findings excavated in Lithuania. *CHEMIJA*, Vol. 18, 36–39.
159. Mishra, N. R. (2004). *Kamakhya- A Socio-Cultural Study*. New Delhi: D. K. Printworld Ltd.
160. Misra, V. N. (2001). Prehistoric human colonization of India. *Journal of Biosciences*, Volume 26, Issue 4, 491-531.
161. Mookerjee, A. (1999). *Kali: The Feminine Force*. London: Thames and Hudson.
162. Mosteller, J. (1988). The Study of Indian Iconometry in Historical Perspective. *Journal of the American Oriental Society*, Vol. 108, No. 1, 99-110.
163. Mukherjee, B. (2007). Sculpture. In H. Barpujari, *The Comprehensive History of Assam Vol. III* (pp. 351-67). Guwahati: Publication Board Assam.
164. Mukhopadhyaya, S. M. (2003). Sample Preparation for Microscopic and Spectroscopic Characterization of Solis Surfaces and Films. In S. Mitra, *Sample Preparation Techniques in Analytical Chemistry* (pp. 377-411). Ohio: John Wiley & Sons, Inc.
165. Mulvaney, D., & Golson, J. (1971). *Aboriginal Man and Environment in Australia*. Canberra: Australian National University Press.
166. Myres, J. L. (1953). *Geographical History in Greek Lands*. Oxford: Oxford: Clarendon Press.
167. Nagar, S. (1998). *Indian Gods and Goddesses: The early Deities from Chalcolithic to Beginning of Historical Period*. B.R. Publishing Corporation.
168. Neumann, E. (1963). *The Great Mother: An Analysis of The ArcheType*. New York: Princeton University Press.
169. Ota, S., & Deo, S. G. (2014). Investigation of Acheulian Localities TKD-I and TKD-II at Tikoda, District Raisen, Madhya Pradesh (2010-12). *Recent Advances in Acheulian Culture Studies in India*, 57-66.

170. Panda, S. (2005). Kirtimukha, Roaring Lion and Flying Vidyadharas in the Temple Art. *Orissa Review*, 97-104.
171. Pande, G. (1999). *The Dawn of Indian Civilization Upto 600 B.C.* PHISPC Centre for studies in civilization.
172. Pande, R. (2008). *Evolution and Development of Mother Goddess: An Appraisal.* Almora: Un-Published.
173. Patar, R. (2014). Temple Architecture of Ancient Assam: A Study Based on Epigraphic and Architectural Remains. *Indian Streams Research Journal*, 1-4.
174. Patar, R. (2014). The Sacred Shrine Kamkahya. *Golden Research Thoughts, Vol 3, Issue 11*, 1-5.
175. Patel, K. C. (1994). Women, Earth, and the Goddess: A Shakta-Hindu Interpretation of Embodied Religion. *Hypatia, Vol. 9, No. 4, Feminist Philosophy of Religion*, 69-87.
176. Patnaik, N. (2006). *Sacred Geography of Puri.* New Delhi: Kalpaz Publications.
177. Plumwood, V. (2006). The Concept of a Cultural Landscape: Nature, Culture and Agency in the Land. *Ethics and the Environment*, 115-150.
178. Possehl, G. L. (2002). *The Indus Civilization : A Contemporary perspective.* Altamira press.
179. Principles for the Recording of Monuments, Groups of Buildings and Sites. (1996). Sofia: ICOMOS.
180. Raezer, D., & Raezer, J. (2012). *Hindu Temples of South India.* New York: Approach Guides.
181. Raheijuddin, S. M., & Gohain, A. B. (2013). X-ray Diffraction and Fourier Transform Infrared Spectra of the bricks of the Kamakhya Temple. *Indian Journal of Pure & Applied Physics Vol 51*, 745-748.
182. Raith, M. M., Raase, P., & Reinhardt, J. (2011). *Guide to Thin- Section Microscopy.* The University of KwaZulu-Natal.

183. Rajani, M., & Kasturirangan, K. (2011, November 22-26). Satellite image and India's past. *Future of the past: a workshop organized under the aegis of {ICTS}*, pp. 1-10.
184. Rajani, M., & Rajawat, A. (2011). Potential of satellite based sensors for studying distribution of archaeological site along palaeo channels: Harappan sites a case study. *Journal of archaeological sciences*, 2010-2016.
185. Ramachandran, T. N. (1940). Kamakhya Hill. In R. B. Dikshit, *Annual Report of Archaeological Survey of India 1936-36* (pp. 60-61). Delhi: Delhi: Manager of Publications.
186. Rao, T. G. (1914). *Elements of Hindu iconography, Vol I Part II*. Madras: The Law Printing House.
187. Rapoport, A. (1992). On Cultural Landscape. *Traditional Dwellings and Settlements Review Vol. III No. 11*, 34-47.
188. Ravisankar, R., Chandrasekaran, A., & Kalaiarsi, S. (2011). Mineral analysis in beach rocks of Andaman Island, India by spectroscopic techniques. *Archives of Applied Science Research*, 77-84.
189. Reedy, C. L. (1994). Thin- Section Petrography in Studies of Cultural Materials. *JAIC 1994, Vol. 33, No. 2, Article 4*, 115-129.
190. Reeves-Smyth, T., & Hamond, F. (1983). *Landscape archaeology in Ireland*. Oxford: BAR.
191. Renfrew, C. (1983). Geography, Archaeology and Environment: I. Archaeology. *Geographical Journal*, 149(3), 316–323.
192. Renfrew, C., & Bahn, P. (2000). *Archaeology: Theories Methods and Practice*. London: Thames & Hudson.
193. Renfrew, C., & Bahn, P. (2005). *Archaeology- The Key Concept*. New York: Routledge.

194. Rennel, R. (2012). Landscape, Experience and GIS: Exploring the Potential for Methodological Dialogue. *Journal of Archaeological Method and Theory*, Vol. 19, No. 4, 510-525.
195. Riju Prasad Sarma etc. etc. Versus State of Assam & Ors, 3276-3278 OF 2013 (The Supreme Court of India July 7, 2015).
196. Rodning, C. (2010). Place, Landscape, and Environment: Anthropological Archaeology in 2009. *American Anthropologist*, 112(2), 180-190.
197. Rossignol, J., & Wandsnider, L. (1992). *Space, Time, and Archaeological Landscapes*. New York: Springer Science and Business Media.
198. Samad, A. (2010). *Emergence of Hinduism in Gandhara: An Analysis of Material Culture*. Berlin: Freie University of Berlin.
199. Saraswati, S. K. (2014). Iconography. In H. K. Barpujari, *The Comprehensive History Of Assam Vol I* (pp. 346-422). Guwahati: Publication Board Assam.
200. Sarma, P. (1981-82). Antiquity of the Kamakhya Temple on the Nilacala. *The Journal of the Assam Research Society*, 46-52.
201. Sarma, P. (2007). Architecture. In H. K. Barpujari, *The Comprehensive History of Assam* (pp. 315-50). Guwahati: Publication Board Assam.
202. Sarma, P. (2010). Sculptures on the Nilachala Hill. In G. N. Bhuyan, & S. (. Nayak, *Heritage of Kamakhya on the Nilachala Hill* (pp. 110-113). Guwahati: Vivekananda Kendra Institute of Culture.
203. Sarma, P. (2010). The Nilachala Hill. In G. N. Bhuyan, & S. Nayak (ed), *Heritage of Kamakhya on the Nilachala Hill* (pp. 1-6). Guwahati: Vivekananda Kendra Institute of Culture.
204. Sarma, P., & Borah, B. K. (2010). Facts from History. In G. N. Bhuyan, & S. Nayak (ed), *Heritage of Kamakhya* (pp. 20-28). Guwahati: Vivekananda Kendra Institute of Culture.

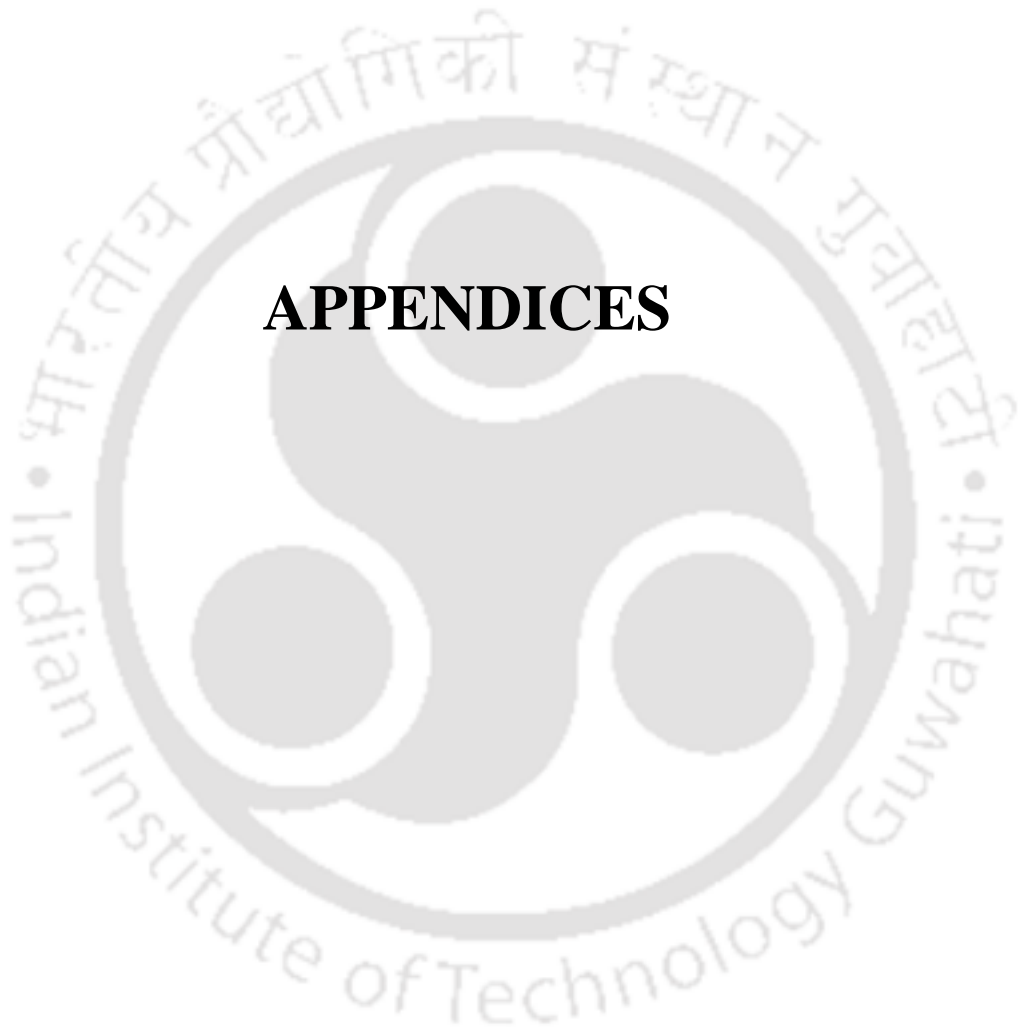
205. Sarma, P., & Borah, B. K. (2010). Historical Inscription of Nilachala Hill. In G. N. Bhuyan, & S. ( . Nayak, *Heritage of Kamakhya on the Nilachal Hill* (pp. 127-130). Guwahati: Vivekananda Kendra Institute of Culture.
206. Sarma, P., & Borah, B. K. (2010). Historical Inscriptions of Nilachala Hill. In G. Bhuyan, & S. Nayak, *Heritage of Kamakhya on the Nilachala Hill* (pp. 127-130). Guwahati: Vivekananda Kendra Institute of Centre.
207. Schiffer, M. B. (1972). Archaeological Context and Systemic Context. *American Antiquity*, Vol. 37, No. 2., 156-165.
208. Schiffer, M. B. (1987). *Formation Processes of the Archaeological Record*. Albuquerque: University of New Mexico Press.
209. Sengupta, G., & Chakrabarty, S. (n.d.). Gauhati Monuments: Rock Types and Sources. 25-40.
210. Sengupta, G., & Charaborty, S. (2017). Ancient Quarries in Guwahati, Assam. *The Bulletin*, 3-21.
211. Settar, S., & Korisettar, R. I. (2002). *Indian Archaeology in Retrospect Protohistory*. Indian Council Of Historical Research.
212. Shah, H. A. (1949). Vedic Gods - V- Rudra / Kali. *Annals of the Bhandarkar Oriental Research Institute*, Vol. 30, No. 1/2, 43-88.
213. Shankaranarayanan, S. (2002). *The Ten Great Cosmic Powers*. Chennai: Samata Books.
214. Sharma, S. (2007). *Celts, Flakes and Bifaces-The Garo Hills Story*. Oxford: BAR International Series.
215. Sharma, S. (2010). Art and Architecture. In G. Bhuyan, & S. Nayak, *Heritage of Kamakhya on the Nilachala Hill* (pp. 114-126). Guwahati: Vivekananda Kendra Institute of Culture.

216. Sharma, T. (1989). Excavations at Ambari (Its Problem and Prospects). *Proceedings of North-East India History Association, 10th Session* (pp. 21-24). Shillong: NEIHA.
217. Sharma, T., & Sengupta, G. (2014). A Note on Ambari Finds. In H. K. Barpujari, *The Comprehensive History of Assam Vol. I* (pp. 473-507). Guwahati: Publication Board Assam.
218. Shastri, B. (2005). The Mother Goddess Kamakhya. *ISHANI*.
219. Shaw, J. (UCL Institute of Archaeology). Landscape, water and religion in ancient India. *Archaeology International*, 43-48.
220. Shawcross, W. (1968). An Investigation of Prehistoric Diet and Economy on a Coastal Site at Galatea Bay. *Proceedings of the Prehistoric Society*, 33 (pp. 107–131). New Zealand: Cambridge University Press.
221. Shendge, M. J. (1995). The Primordality of Siva: Some New Linguistic Evidence. *Annals of the Bhandarkar Oriental Research Institute*, Vol. 76, No. 1/4, 119-128.
222. Shin, J.-E. (2010). Yoni, Yoginis and Mahavidyas: Feminine Divinities from Early Medieval Kamarupa to Medieval Koch Behar. *Studies in History*, 1–29.
223. Shukla, D. L. (1972). *A Study of Hindu Art and Architecture*. Varanasi, India: The Chowkhambha Sanskrit Series Office.
224. Sircar, D. (2014). Political History. In H. Barpujari, *The Comprehensive History of Assam* (pp. 94-171). Guwahati: Publication Board Assam.
225. Sircar, D. C. (2004). *The Sakta Pithas*. Delhi: Motilal Banarsidass Publishers Private Limited.
226. Skibo, J. M., & Schiffer, M. (2008). *People and Things: A Behavioral Approach to Material Culture*. New York: Springer.
227. Smiley, T. T. (1824). *Smiley, Thomas T, Sacred Geography, or, A Description of the Places mentioned in the Old and New Testaments: intended to promote a*

*knowledge of the Holy Scriptures: adapted to the use of Schools and private families.* Philadelphia: Clarke and Raser.

228. Smith, T. L. (2008). Renewing the Ancient: the Kasikhaṇḍa and Saiva. *Acta Orientalia Vilnensia* 8 (1), 83-108.
229. Snead, J. E. (2006). Trails of Tradition: Archaeology, Landscape, and Movement. *Landscapes of Movement*, (pp. 29-31). Pennsylvania.
230. Stanley, J. M. (1981). Exploration Archaeology: Searching for our Past. In J. Vernon (ed), *E T I: How to Build Gold & Treasure Detectors* (pp. 36-39). Rushcutters Bay: Murray/Modern Magazines. Retrieved November 18, 2014, from [http://www.geotech1.com/pages/geo/info/arch/arch\\_150.pdf](http://www.geotech1.com/pages/geo/info/arch/arch_150.pdf)
231. Stein, J. K. (2001). A Review of Site Formation Processes and Thier Relevance to Geoarchaeology. In P. Goldberg, V. T. Holliday, & C. R. Ferring, *Earth Science and Archaeology* (pp. 37-51). New York: Kluwer Academic / Plenum Publishers.
232. Stierlin, H. (1998). *Hindu India (From Khajuraho to the Temple city of Madurai)*. New York: Taschen.
233. Strang, V. (2008). Uncommon Ground: Landscape as Social Geography. In B. David, & J. Thomas, *Handbook of Landscape Archaeology* (pp. 51-59). New York: Routledge.
234. Subrahmanya Shastri, P. V., & Ramkrishna Bhat, V. M. (1946). *Brihat Samhita of Varaha Mihira*. Bangalore: V.B. Soobbiah and Sons,.
235. Swami Krishnananda. (1982). *The Chandogya Upanishad*. Rishikesh: The Divine Life Society.
236. Szonoky, Miklos, Gulyas, & Sandor. (2009). Textural Thin-Section Analysis of Bricks Deriving from Medieval Churches and Monasteries of the SE Great Hungarian Plains for Determining the origin of the Raw Materials. 52-63.
237. Thorley, A. (2016). Sacred Geography: a conceptual work in progress. *Spica: Postgraduate Journal for Cosmology in Culture Vol. IV No. 2*, 4-8.

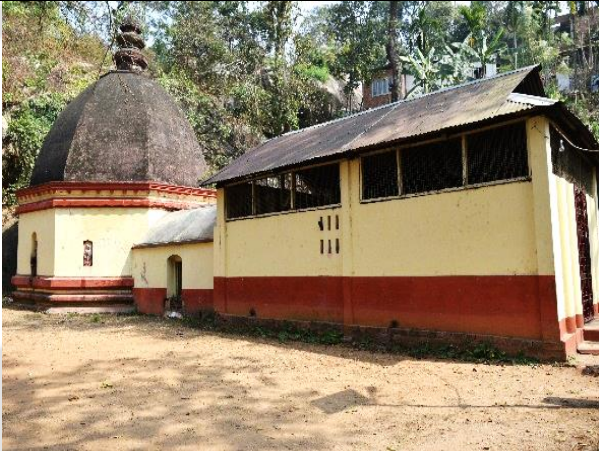
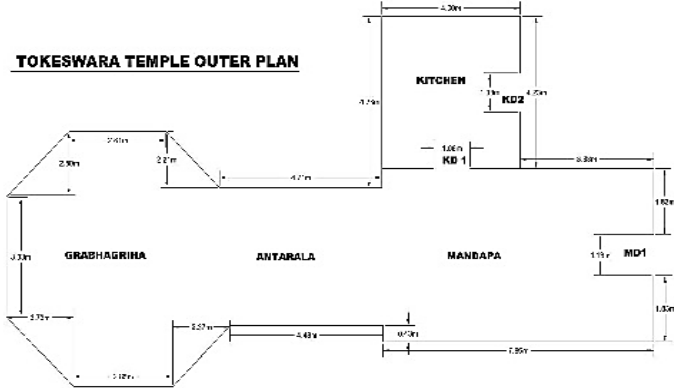

238. Tilley, C. (1994). *A phenomenology of Landscape Places, Paths and Monuments*. Oxford: BERG.
239. Tilley, C. (2004). *The Materiality of Stone: Exploration in Landscape Phenomenology*. New York: BERG.
240. Tokiko, O. (2009). A Study of the Documentation Process for Conservation of the Architectural Heritage Sites: Illustrated by Examples from Egypt and Belgium. *CIPA Symposium*, 11-15.
241. Ucko, P., & Layton, R. (2005). *The Archaeology and Anthropology of Landscape: Shaping your Landscape*. Taylor & Francis e-Library.
242. Urban, H. B. (2009). *The Power of Tantra: Religion, Sexuality and the Politics of South Asian Studies*. New York: I.B.Tauris.
243. Vanamali. (2008). *Shakti: Realm of the Divine Mother*. Vermont: Inner Traditions.
244. Wilkinson, T. J. (2001). Surface Collection Techniques in Field Archaeology: Theory and Practice. In D. R. Brothwell, & A. M. Pollard (ed), *Handbook of Archaeological Science* (pp. 529-541). Michigan: John Wiley & Sons.
245. Witcher, R. E. (1999). GIS and Landscapes of Perception. In M. Gillings, D. Mattingly, & V. J. Dalen, *Geographical Information Systems and Landscape Archaeology* (p. 1322). Oxbow: Oxford.






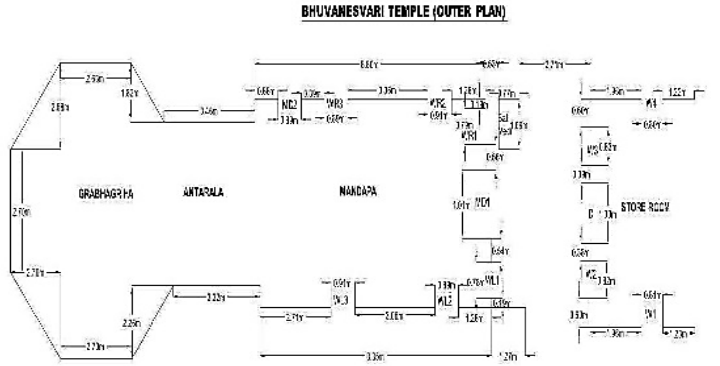

## **APPENDICES**

## Appendix A



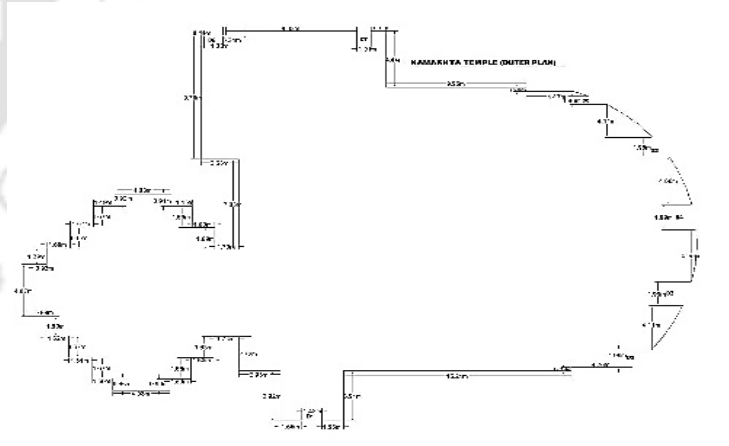
**Table 10. Temples in the Archaeological Site of Kamakhya Temple**

S. No	Temples	Abbreviation	Location	Picture	Auto CAD Architectural plan of Selected Temples
1	Amratakeshwara Temple/Tokeshwara Temple (1744-51 A.D.)	ATS	26°10'2.4"N 91°42'8.8" E		 <p style="text-align: center;"><b>TOKESWARA TEMPLE OUTER PLAN</b></p>
2	Bandurga Temple (21 <sup>st</sup> century)	BDT	26°09'44.1"N 91°42'15.9" E		Newly constructed (Doesn't follow the architecture norms of temple building)




3	Bagalamukhi Temple (21 <sup>st</sup> century)	BMT	26°09'57.9"N 91°42'36.3" E		Newly constructed over old cave temple (Doesn't follow the architecture norms of temple building)
4	Bhairavi Temple (21 <sup>st</sup> century)	BRT	26°09'57.0"N 91°42'18.1" E		 <p style="text-align: center;"><b>BHAIRABI TEMPLE OUTER PLAN</b></p>



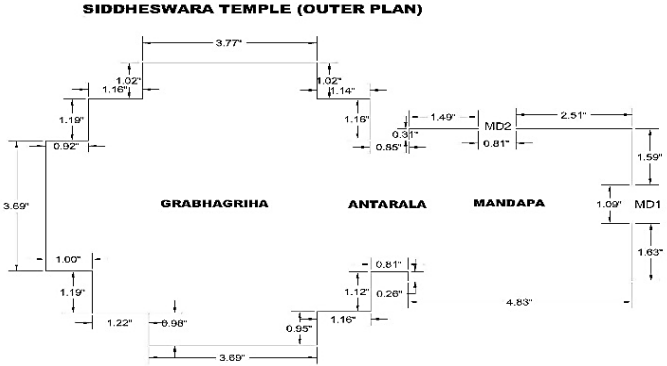
5	<p>Bhuvaneshvari Temple (15<sup>th</sup>-17<sup>th</sup> century A.D.)</p>	BHT	<p>26°10'2.5"N 91°42'38.7" E</p>		<p><b>BHUVANESVARI TEMPLE (OUTER PLAN)</b></p> 
6.	<p>Chinnamasta Temple (I Phase: 10<sup>th</sup> to 12<sup>th</sup> c A.D. II Phase: 15<sup>th</sup> to 17<sup>th</sup> c A.D. III Phase 21<sup>st</sup> century)</p>	CMT	<p>26°09'57.6"N 91°42'23.2" E</p>		Under construction


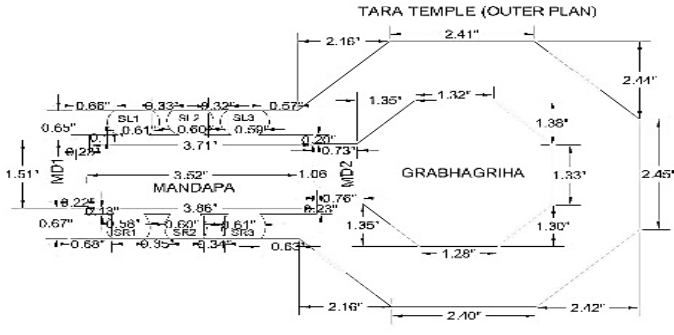
7.	Chiddeswari Cave Temple (unknown)	CCT	26°09'57.1"N 91°42'38.2" E		Newly constructed (Doesn't follow the architecture norms of temple building)
8.	Dakshinakali Temple (15 <sup>th</sup> to 17 <sup>th</sup> century A.D.)	DKT	26°09'58.4"N 91°42'22.7" E		 <p style="text-align: center;"><b>DAKSHINA KALI TEMPLE (OUTER PLAN)</b></p>

10.	Ganesh Temple (21 <sup>st</sup> century )	GT	26°09'54.5"N 91°42'49.7" E		Doesn't follow the architecture norms of temple building
11.	Jay Durga Temple (21 <sup>st</sup> century)	JDT	26°09'42.5"N 91°42'23.5" E		Newly constructed (Doesn't follow the architecture norms of temple building)
12	Kamakhya Temple (I Phase: 8 <sup>th</sup> -10 <sup>th</sup> c A.D. II Phase: 11 <sup>th</sup> -12 <sup>th</sup> c A.D. III Phase: 15 <sup>th</sup> c onwards)	KMT	26°09'59.9"N 91°42'19.7" E		

13	Kamaesvara Temple (1718 A.D.)	KST	26°09'57.5"N 91°42'23.6" E		
14	Kedareswara Temple (1751 A.D.)	KDT	26°09'57.1"N 91°42'25.3" E		Newly constructed (Doesn't follow the architecture norms of temple building)
15	Kotilinga Temple (Unknown)	KLT	26°10'5.2"N 91°42'26.2" E		Cave Temple


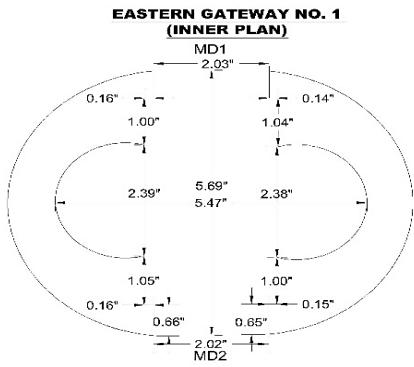
16	Lalit Kanta Temple (21 <sup>st</sup> century)	LKT	26°09'47.8"N 91°42'36.9" E		Newly constructed (Doesn't follow the architecture norms of temple building)
17	Mahakal Ganesh Temple (Temple= 17 <sup>th</sup> century A.D. Rock engravings= 8 <sup>th</sup> to 12 <sup>th</sup> c A.D.)	MGT	26°09'53.3"N 91°41'58.9" E		Newly constructed (Doesn't follow the architecture norms of temple building)
18	Namath Kali Temple (15 <sup>th</sup> -17 <sup>th</sup> c A.D.)	NKT	26°10'0.8"N 91°42'18.2" E		In Ruined Condition


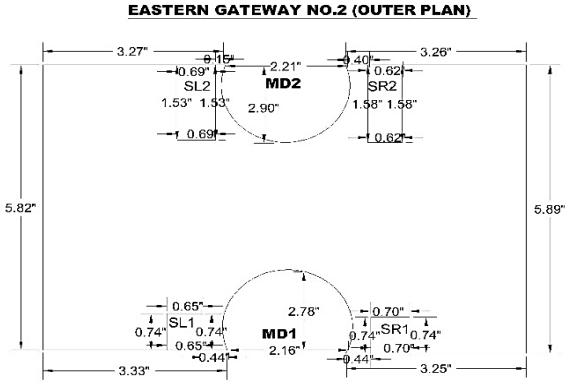

19	Shasankali Temple (21 <sup>st</sup> century)	SKT	26°09'55.9"N 91°42'30.2" E		Newly constructed (Doesn't follow the architecture norms of temple building)
20	Siddheswara Temple (1718 A.D.)	SDT	26°09'56.5"N 91°42'27.6" E		 <p style="text-align: center;"><b>SIDDHESWARA TEMPLE (OUTER PLAN)</b></p>

21	Tara Temple (15 <sup>th</sup> -17 <sup>th</sup> c A.D.)	TT	26°09'59.3"N 91°42'21.7" E		
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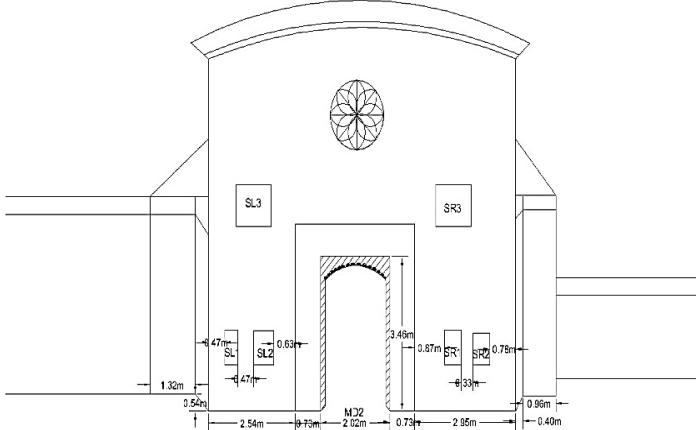

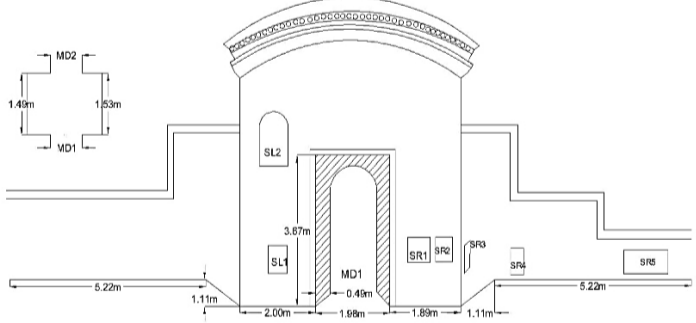
### Appendix B

Table 11. Gateways in the Archaeological Site of Kamakhya Temple

S. No	Gateway	Abbreviation	Location	Picture	Auto CAD Architectural plan of Selected Temples
1	Eastern Gateway No. 1	EG.1	26°09'54.3"N 91°42'57.7"E		

2	Eastern Gateway No. 2	EG.2	26°09'55.7"N 91°42'29.1"E		<p style="text-align: center;"><b>EASTERN GATEWAY NO.2 (OUTER PLAN)</b></p> 
3	Western Gateway	WG.1	26°09'54.3"N 91°42'1.34"E		(NO AutoCAD Plan)

4	Siddheswara Temple Gateway	SDTG	<p>26°09'56.43"N 91°42'26.57" E</p> <p>26°09'56.42"N 91°42'26.93" E</p>		<p><b>SIDDHESWARA TEMPLE GATEWAY (OUTER FACE)</b></p>  <p><b>SIDDHESWARA TEMPLE GATEWAY (INNER FACE)</b></p> 
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5.	Kamakhya Temple Northern Gateway	KMTNG	26° 9'58.52"N 91°42'20.50"E		<p style="text-align: center;"><b>KAMAKHYA TEMPLE MAIN GATEWAY (INNER FACE)</b></p> 
6.	Kamakhya Temple Western Gateway	KMTWG	26° 9'59.43"N 91°42'17.10"E		<p style="text-align: center;"><b>KAMAKHYA TEMPLE WESTERN GATEWAY (FRONT FACE)</b></p> 

## Appendix C

**Table 12. Temple Wise Sculptures Recorded in the Archaeological Site of Kamakhya**

<b>A. Temple Wise Types of Sculptures Recorded in the Archaeological Site of Kamakhya</b>						
Name of the Temples and Location Name	Rock-cut Sculptures	Sculptures on the Body of the Temples and Gateways	Sculpture Fragments	Total Sculptures		
Kamakhya Temple	1	172=151+21 ( <i>Bhogmandapa</i> )	6=5+ 1 ( <i>Bhogmandapa</i> )	179		
Rinmoksha Kund						
Shubhagaya Kund			4	4		
Bhuvanesvari Temple		2	2	4		
Kotilinga Temple	5	2	1	8		
Rama Kund						
Bogaladevi Temple	12=5+7 Inside the temple	2		14		
Chiddeswari Cave Temple						
Kedareswara Temple			6	6		
Siddheswara Temple	1	18	3	22		
Gaya Kund						

Ganesha Temple	1			1		
Eastern Pathway	11		2	13		
Eastern Gateway No. 2		4		4		
Shasankali Temple			2	2		
Ancient Eastern Pathway						
Eastern Gateway No. 1						
Kamaesvara Temple		7	6	13		
Chinnamasta Temple						
Dakshinakali Temple		6		6		
Tara Temple		6		6		
Dhumavati Temple						
Bhairavi Temple	1	2	4	7		
Kacha-Pukhuri Kund						
Amratakeshwara Temple/ Tokeswara Temple		7		7		
Durga Kund			1	1		

Ancient Western Pathway	8	6	24	38		
Western Gateway						
Mahakal Ganesh Temple	17		7	24		
Lalit Kanta Temple						
Jay Durga Temple						
Bandurga Temple						
Kamakhya Museum			67	67		
<b>Total</b>	<b>57</b>	<b>234</b>	<b>135</b>	<b>426</b>		

**B. Temple Wise Thematic Sculptures Recorded in the Archaeological Site of Kamakhya**

<b>Name of the Temple and Other Location</b>	<b>Religious Sculptures</b>	<b>Secular Sculptures</b>	<b>Sculptures Relief with Flora &amp; Fauna Motifs and Geometrical Designs</b>	<b>Miscellaneous Sculptures</b>	<b>Total Sculptures</b>	
Kamakhya Temple	65	29	59	4	157	
Rinmoksha Kund						
Shubhagaya Kund	2		2		4	

Bhuanesvari Temple	2			2	4	
Kotilinga Temple	4	1	1	2	8	
Rama Kund						
Bogaladevi Temple	5		2		7	
Chiddeswari Cave Temple						
Kedareswara Temple	4		1	1	6	
Siddheswara Temple	14	3	1	4	22	
Gaya Kund						
Eastern Pathway	5			1	6	
Eastern Gateway No. 2	2	2			4	
Shasankali Temple	1				1	
Ancient Eastern Pathway	9				9	
Eastern Gateway No. 1						
Ganesha Temple	1				1	
Kamaesvara Temple	3		5	4	12	
Chinnamasta Temple						

Dakshinakali Temple	3	1	2		6	
Tara Temple			3	3	6	
Dhumavati Temple						
Bhairavi Temple	3	1	3		7	
Kacha-Pukhuri Kund						
Amratakeswara Temple/ Tokeswara Temple	5		1	1	7	
Durga Kund	1				1	
Ancient Western Pathway	9		9	16	34	
Western Gateway			4		4	
Mahakal Ganesh Temple	9	4	2	9	24	
Lalit Kanta Temple						
Jay Durga Temple						
Bandurga Temple						
Kamakhya Museum	16	9	25	17	67	
<b>TOTAL</b>	<b>163</b>	<b>50</b>	<b>120</b>	<b>63</b>	<b>396</b>	

Sculpture Inside the Kamakhya Bhogmandapa and Bogala Temple (not Photographed)	12	14	0	3	29	
<b>TOTAL</b>	<b>175</b>	<b>64</b>	<b>120</b>	<b>67</b>	<b>426</b>	
<b>a. Temple Wise Types of Religious Sculptures Recorded in the Archaeological Site of Kamakhya</b>						
<b>Name of the Temple and other location</b>	<b>Ganesha Sculptures</b>	<b>Shaivite and Bhairava Sculptures</b>	<b>Shakta Sculptures</b>	<b>Vaishnavite Sculptures</b>	<b>Other Divine and Semi-Divine Sculptures</b>	<b>Total Sculptures</b>
Kamakhya Temple	4	11	7	10	33	65
Rinmoksha Kund						
Shubhagaya Kund					2	2
Bhuvanesvari Temple					2	2
Kotilinga Temple	4					4
Rama Kund						
Bogaladevi Temple	1	2	1		1	5
Chiddeswari Cave Temple						

Kedareswara Temple			3		1	4
Siddheswara Temple	2	8	1	1	2	14
Gaya Kund						
Eastern Pathway		1	1		3	5
Eastern Gateway No. 2					2	2
Shasankali Temple			1			1
Ancient Eastern Pathway	5	2		2		9
Ganesha Temple	1					1
Eastern Gateway No. 1						
Kamaesvara Temple		3				3
Chinnamasta Temple						
Dakshinakali Temple		1			2	3
Tara Temple						
Dhumavati Temple						
Bhairavi Temple		1	1		1	3
Kacha-Pukhuri Kund						



Amratakeswara Temple/ Tokeswara Temple		3	1		1	5
Durga Kund			1			1
Ancient Western Pathway	5		1	1	2	9
Western Gateway						
Mahakal Ganesh Temple	2	5		1	1	9
Lalit Kanta Temple						
Jay Durga Temple						
Bandurga Temple						
Kamakhya Museum		2	1	1	12	16
<b>TOTAL</b>	<b>24</b>	<b>39</b>	<b>19</b>	<b>16</b>	<b>65</b>	<b>163</b>
Inside the Kamakhya Bhogmadapa and Bogala Temple	<b>5</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>12</b>
<b>Total</b>	<b>29</b>	<b>40</b>	<b>22</b>	<b>18</b>	<b>66</b>	<b>175</b>




**Appendix D**




**Kamakhya Temple**




**Location: 26°09'59.9" N 91°42'19.7" E**




**1. Sculptures on the facade of the Kamakhya temple's Garbhagriha**




S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1		26° 9'58.82"N 91°42'19.26"E	Lord <i>Chaturbhuj Ganesha</i> . A four-handed <i>Ganesha</i> sculpture is standing on the flower pattern pedestal in a <i>Samabhanga/ Samapada-sthanaka</i> posture with its trunk curved on the left side touching a <i>Modaka</i> (sweet rice ball) placed on the left front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in its left backhand and an <i>Ankusa</i> (goad) in the right backhand. In its right front hand, the deity is depicted holding an <i>Akshamala</i> (rosary). Painted in red (orange) colour. Several coins are pasted on the sculpture by devotees. The sculpture is installed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	1m79	87.5	26	1m36
2.		26° 9'58.61"N 91°42'19.19"E	<i>Yakshini</i> sculpture is standing on a flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), The left hand is rested on the waist in <i>Kaṭi-hasta Mudra</i> , and the right-hand holds a fly-whisk ( <i>chamara</i> ),. Her eyes are wide open, and her nose tip is broken. There is a third eye on the forehead (?). The sculpture is installed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	1m79	54	31	1m66




3.		26° 9'58.78"N 91°42'19.25"E	<p>Lord <i>Nirruṭi (Dikpala)</i> The four-handed <i>Nirruṭi</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, such as earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). In the front right hand, the deity is holding a <i>Khadga</i> (sword) and on the backhand a <i>Kapala</i> (skull cup). The front left hand is rested on the waist in <i>Kaṭi-hasta Mudra</i> and the backhand holding a severed head. The sculpture is depicted with the third eye on the forehead, has a beard and thick moustache. The sculpture is installed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	91.5	54	1m 67
4.		26° 9'58.68"N 91°42'19.08"E	<p>Lord <i>Ishana (Dikpalas)</i>. A four-handed <i>Ishana</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kirita Mukata</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements) in backhands, such as <i>Trisula</i> (trident) in the right hand, and a <i>Khatvanga</i> (a bone club with a skull on the top) in the left hand. In <i>Hastamudra</i> (hand gesture) the deity is depicted with both <i>Kaṭi-hasta Mudra</i> and <i>Karana mudra</i> (in downward position). The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	98	53	1m73
5.		26° 9'58.78"N 91°42'19.34"E	<p>Lord <i>Kamadeva</i>. A two-handed <i>Kamadeva</i> sculpture is depicted standing on the flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kiritamukuta</i> (headgear). Two-handed deity is depicted holding a bow (<i>dhanusa</i>) in the right hand and an arrow (<i>bana</i>) in the left hand. The sculpture is placed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	93	54	1m 73




6.		<p>26° 9'58.73"N 91°42'19.19"E</p>	<p>Lord <i>Yama (Dikpala)</i>. A four-handed <i>Yama</i> sculpture is depicted standing on the flower pattern pedestal in <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, such as earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). The right hand is rested on the waist in <i>Kaṭi-hasta Mudra</i>, and the back right hand is holding a <i>Musala</i> (pestle). The front left hand is posing in a <i>Karana mudra</i> (in downward position) and in the back left hand is depicted holding a scripture (book). The sculpture is depicted with the third eye on the forehead. The sculpture is installed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	92	50	1m74
7.		<p>----- -----</p>	<p>Decorative bands. There are several horizontal bands in the <i>pabhaga</i> of the temple. Only the first two paga bands carry decorative motifs, and the others are simply plain bands. In the top band, there are several small figures of (male and female) both human and divine in nature. Some are sitting one leg down in <i>Maharajalila</i> posture, and some are depicted playing musical instruments (vina?). One four-handed figure is depicted sitting crossed leg in <i>Padamana asana</i>. Below this band, there is another band with decorative flower motifs. The panel is stylistically dated to 11th-12th c A.D.</p>	Granite	51	4 m 8	-	1m 92
8.		<p>26° 9'58.79"N 91°42'19.79"E</p>	<p>Lord <i>Agni (Dikpala)</i>. A four-handed <i>Agni</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted with the third eye on the forehead and a beard. The sculpture is depicted wearing different ornaments, such as earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). The left hand is rested on the waist in <i>Kaṭi-hasta Mudra</i>, and the back right hand is holding a <i>Sruva</i> (sacrificial spoon). The front right hand posing in a <i>Karana mudra</i> (in downward position) and the back left hand is depicted holding a <i>Sruka</i> (sacrificial spoon). The sculpture is installed on the south-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 78	93	54	1m 84




9		26° 9'58.91"N 91°42'19.80"E	<p>Lord <i>Ishana (Dikpala)</i>. A four-handed <i>Ishana</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kirita Mukata</i> (headgear). The deity is carrying different ayudhas (implements) in the backhands, a <i>Kapala</i> (skull cup) in the back left hand, and <i>Damuru</i> in the right hand. The left front hand is holding a <i>Sakti</i>. In <i>Hastamudra</i> (hand gesture) the deity is depicted with <i>Kaṭi-hasta Mudra</i>. The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the south-east corner of the temple and stylistically dated to 11th-12th c A.D.</p>	Granite	1m 78	93	54	1m 84
10		26° 9'58.82"N 91°42'20.05"E	<p>Lord <i>Ishana (Dikpala)</i>. A four-handed <i>Ishana</i> sculpture is depicted standing on a raised simple pedestal in a <i>tribhanga</i> posture. Below the pedestal, one row of <i>Kritimukha</i> can be seen. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kirita Mukata</i> (headgear). The deity is carrying different ayudhas (implements), such as <i>Trisula</i> (trident) in the back right hand, and a <i>Khatvanga</i> (a bone club with a skull on the top). The front left-hand holds a <i>kapala</i> (skull-cup) and his front right hand rested on his waist in <i>Kaṭi-hasta mudra</i>. The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the south-east corner of the temple. Beneath the sculpture on the paga, there is a depiction of <i>Kirti-mukha</i>. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 10	92	54	1m 79
11		26° 9'58.89"N 91°42'19.73"E	<p>Lord <i>Surya (Dikpala)</i>. A four-handed <i>Surya</i> sculpture is depicted standing on a plain pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kirita Mukata</i> (headgear). In <i>Hastamudra</i> (hand gesture), <i>Surya</i> sculpture front left hand is depicted in <i>Kaṭi-hasta Mudra</i> and right hand in <i>Jnana Mudra</i>. The sculptures of <i>Surya</i> are depicted with the third eye on its forehead. the sculpture is depicted holding lotus bud. The <i>Surya</i> sculpture is placed on the south-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 10	88	54	1m 80


12		26° 9'58.72"N 91°42'20.04"E	<p>Lord Ishana (<i>Dikpala</i>). A four-handed <i>Ishana</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kirita Mukata</i> (headgear). The deity is carrying different ayudhas (implements) in the backhands, such as <i>Trisula</i> (trident) in the left hand, and a <i>Khatvanga</i> (a bone club with a skull on the top) in the right hand, In <i>Hastamudra</i> (hand gesture) the deity is depicted with both <i>Kaṭi-hasta Mudra</i> and <i>Jnana Mudra</i>. The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the south-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 3	93	54	1m 88
13		26° 9'59.07"N 91°42'19.92"E	<p>Lord Kubera (<i>Dikpala</i>). A four-handed <i>Kubera</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, such as earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different ayudhas (implements). The right hand is rested on the waist in <i>Kaṭi-hasta Mudra</i>, and the back right-hand is holding a club. The front left hand is holding some round object, and in the back left hand, he is depicted holding a <i>Ratna-Patra</i> (jewel-pot). The sculpture is installed on the south-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 3	94	54	1m 85
14		----- ----	<p>Decorative bands. There are several horizontal bands in the <i>pabhaga</i> of the temple. Only the first two <i>paga</i> bands carry decorative motifs, and the others are simply plain bands. In the top band, there are several small female figures of both human and divine in nature. Some are sitting one leg down in <i>Maharajalila</i> posture, looking forward, and some are sitting side faced looking at the left side. Both figures are depicted holding a lotus bud with a long stem. Below this band, there is another band with decorative flower motifs. On the <i>raha</i> portion of <i>jangha</i>, there are several decorative vertical bands. The panel is stylistically dated to 11th-12th c A.D.</p>	Granite	54	4 m 7	-	1m 94

15		26° 9'59.60"N 91°42'20.43"E	Lord <i>Surya (Dikpala)</i> . A four-handed <i>Surya</i> sculpture is depicted standing on the flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukata</i> (headgear). The sculptures of <i>Surya</i> are depicted with the third eye on its forehead. The sculpture of <i>Surya</i> is depicted holding one full-blown lotus with a long stem, one in each hand. The <i>Surya</i> sculptures are placed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 5	95.5	54	1m 80
16		26° 9'59.83"N 91°42'19.97"E	Lord <i>Visnu</i> . A four-handed <i>Vishnu</i> sculpture is depicted standing on the flower pattern pedestal in <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kiritamukuta</i> (headgear). The left hand of the deity is depicted holding a <i>chakra</i> (wheel), and the right hand is holding a <i>Gada</i> (mace). The front hand of the deity is depicted in a <i>Karana mudra</i> (in downward position). The <i>Vishnu</i> sculpture is placed on the south-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 5	95	54	1m 80
17		26° 9'59.97"N 91°42'19.68"E	Lord <i>Indra</i> . The four-handed <i>Indra</i> sculpture is depicted standing on the plain pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), sacred thread ( <i>yajhopavita</i> ) and <i>Kiritamukuta</i> (headgear). The deity is carrying different ayudhas (implements). Both of the front hand is in <i>Karana mudra</i> (in downward position). In the back left hand is depicted holding a full-blown lotus with a long stem and in his back right-hand holds a <i>Vajra</i> (thunderbolt). The sculpture is installed on the north-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 6	95	54	1m 77

18		26° 9'59.50"N 91°42'19.93"E	Lord Surya ( <i>Dikpala</i> ). A four-handed <i>Surya</i> sculpture is depicted standing on a flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukata</i> (headgear). Both of the front hands are depicted in a <i>Karana mudra</i> (in downward position). The sculptures of <i>Surya</i> are depicted with the third eye on its forehead. The sculpture is depicted holding one lotus bud, one in each hand. The <i>Surya</i> sculpture is placed on the north-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 6	87	54	1m 78
19		26° 9'59.87"N 91°42'19.89"E	Lord <i>Ishana</i> ( <i>Dikpala</i> ). The four-handed <i>Ishana</i> sculpture is depicted standing on the flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), sacred thread ( <i>yajhopavita</i> ) and <i>Kirita Mukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements) in the backhands, such as <i>Danda</i> (club) in the left hand, and a <i>Khatvanga</i> (a bone club with a skull on the top) in the right hand. Both front hands are in <i>Karana mudra</i> (in downward position). The sculptures of <i>Ishana</i> is depicted with the third eye on the forehead. The <i>Ishana</i> sculpture is installed on the north-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 6	92	54	1m 78
20		26° 9'59.94"N 91°42'19.84"E	Lord Surya ( <i>Dikpala</i> ). A four-handed <i>Surya</i> sculpture is depicted standing on a flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukata</i> (headgear). Both of the front hands are depicted in a <i>Karana mudra</i> (in downward position). The sculptures of <i>Surya</i> are depicted with the third eye on its forehead. The sculpture is depicted holding one lotus bud, one in each hand. The <i>Surya</i> sculpture is placed on the north-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	2m 6	95	55	1m 77



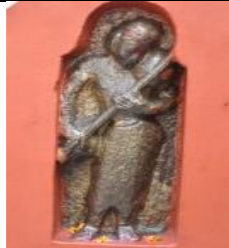


21		----- ----	<p>Decorative bands. There are several horizontal bands in the <i>pabhaga</i> of the temple. Only the first two paga bands carry decorative motifs, and the others are simply plain bands. In the top band, there are several small female figures of both human and divine in nature. Some are sitting one leg down in <i>Maharajalila</i> posture, looking forward, and some are sitting side faced looking at the left side. Some are mediating, and some are praying. Below this band, there is another band with decorative flower motifs. On the raha portion of jangha, there are several decorative vertical bands. The panel is stylistically dated to 11th-12th c A.D.</p>	Granite	50	4m 7.5	-	1m 80
22		26° 9'59.78"N 91°42'19.39"E	<p>Lord <i>Vayu</i> (<i>Dikpala</i>). A four-handed <i>Vayu</i> sculpture is depicted standing on the flower pattern pedestal in a <i>Samabhanga/ Samapada -sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). Both of the front hand is in <i>Karana mudra</i> (in downward position). In the back left hand is depicted holding a mace (<i>gada</i>) and the back right hand is holding a lotus bud. The sculpture is installed on the north-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 5	95	54	1m 63
23		26° 9'59.96"N 91°42'19.48"E	<p>Lord <i>Vishnu</i>. A four-handed <i>Vishnu</i> sculpture is depicted standing on the flower pattern pedestal in <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), girdle (<i>Katibandha</i>), bangles (<i>Kankana</i>), and <i>Kiritamukuta</i> (headgear). The left hand of the deity is depicted holding a <i>chakra</i> (wheel), and the right hand is holding a <i>Gada</i> (mace). The front hand of the deity is depicted in a <i>Karana mudra</i> (in downward position). The <i>Vishnu</i> sculpture is placed on the north-east corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m 5	95	54	1m 62

24		26° 9'59.90"N 91°42'19.45"E	<p>Lord <i>Varuna (Dikpala)</i>. A four-handed <i>Varuna</i> sculpture is depicted standing on the flower pattern pedestal in a <i>Samabhanga/ Samapada -sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), <i>girdle (Katibandha)</i>, bangles (<i>Kankana</i>), sacred thread (<i>yajhopavita</i>) and <i>Kiritamukuta</i> (headgear). The deity is carrying different <i>ayudhas</i> (implements). The front hands are in <i>Karana mudra</i> (in downward position). The back right hand is depicted holding a <i>Pasa</i> (noose), and in the back left-hand there is a lotus bud. The sculpture is installed on the north-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2m	93	54	1m 62
25		26° 9'59.61"N 91°42'19.74"E	<p>Lord <i>Kamadeva</i>. A two-handed <i>Kamadeva</i> sculpture is depicted standing in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), <i>girdle (Katibandha)</i>, bangles (<i>Kankana</i>), and <i>Kiritamukuta</i> (headgear). Two-handed deity is depicted holding a bow (<i>dhanusa</i>) in the right hand and an arrow (<i>bana</i>) in the left hand. The sculpture is installed on the north-west corner of the temple. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	2 m	95	54	1m 63
26		26° 9'59.53"N 91°42'19.63"E	<p><i>Yakshini</i> sculpture is standing on a flower pattern pedestal in a <i>Samabhanga/Samapada-sthanaka</i> posture. The face of the sculpture is deteriorated, and only parts of the nose and lips are visible. The sculpture is depicted wearing different ornaments, like earrings (<i>Kundala</i>), necklace (<i>Hara</i>), armlets (<i>Bajubandha</i>), <i>girdle (Katibandha)</i>, bangles (<i>Kankana</i>). The right-hand is rested on the waist in <i>Kati-hasta Mudra</i>, and the left-hand holds a fly-whisk (<i>chamara</i>), which is now broken. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	49	45	1m 65




27		<p>26° 9'59.52"N 91°42'19.65"E</p>	<p>Lord <i>Vinadhara Dakshinamurti Shiva</i>. A four-handed <i>Siva</i> is depicted in dancing posture and standing on a prostrate corpse (<i>apasmrapurusha</i>) depicted lying vertically on a lotus pedestal. His front two hands are carrying or playing <i>vina</i>. His back left-hand holds a <i>sruka</i> (sacrificial spoon), and his back right-hand holds some unidentifiable object. His face is deteriorated beyond the point of recognition. He is depicted wearing a <i>Katibandha</i> (girdle) and <i>vanamala</i> made of a skull. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 98	95	45	1m 61
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## 2. Sculpture on the Kamakhya temple's Antrala Outer Wall






S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1		26° 9'59.85"N 91°42'19.54"E	<i>Yakshini</i> . One small sculpture is installed inside a shelf on the anti-chamber wall attached to the northern wall. The sculpture is standing in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ). The right hand is placed straight, and the left-hand holds a fly-whisk ( <i>chamara</i> ). This sculpture This figure is hidden underneath the AC ventilation fan. Stylistically dated 11th-12th c A.D.	Granite	-----	-----	-----	-----
2		26° 9'59.96"N 91°42'19.00"E	Unknown sculpture. The sculpture is standing in a <i>Samabhanga/Samapada-sthanaka</i> posture. This sculpture is installed inside a shelf on the anti-chamber wall attached to the northern wall. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	47	21.5	6	53
3		26° 9'59.91"N 91°42'18.69"E	Goddess <i>Saraswati</i> (?). The sculpture depicted playing a musical instrument name <i>vina</i> . This sculpture is installed inside a shelf on the anti-chamber wall attached to the northern wall. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	54	22	8	73.5
4		26° 10'0.07"N 91°42'18.53"E	Female devotee. A woman is sitting in a praying position. This sculpture is installed inside a shelf on the northern wall. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D.	Basalt	51	39	8.5	-
5		-----	One decorative scroll motif is found on the southern boundary wall of <i>antarala</i> , depicts a seated man holding two branches of a creeper. Similar to the Gupta scrolls of <i>Bhumara</i> of 4 <sup>th</sup> -5 <sup>th</sup> c A.D. The sculpture is stylistically dated to 10th-12th c A.D.	Granite	49	2m	18	68



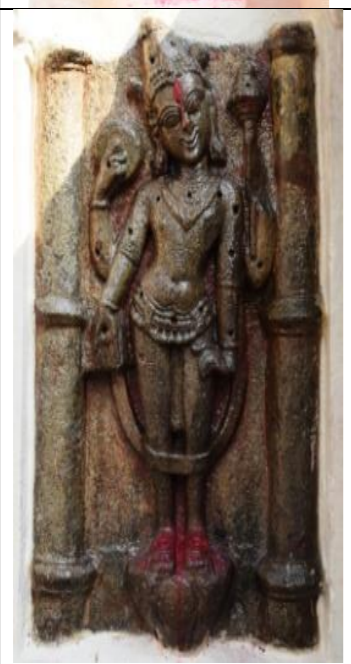
3. Sculptures on the Kamakhya temple's Mandapa Outer wall (*Bhogamandapa* and *Natmandapa*)



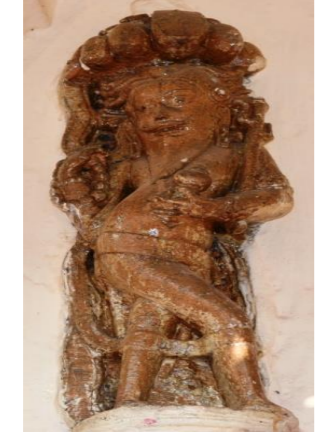
S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26° 10'0.21"N 91°42'18.78"E	Goddess <i>Lakshmi</i> . A four-handed sculpture is sitting looking downwards. Her front left hand is in <i>Varada mudra</i> , and her front right hand is in <i>vyakhyana mudra</i> . In two of her hands, the Goddess is seen carrying a lotus bud in the right hand and a purse in the left hand. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and a <i>Karanda Mukuta</i> (headgear). This sculpture is installed in the northern wall of <i>bhogamandapa</i> . An artificial glaze is applied to the sculpture. The sculpture is stylistically dated 11th-12th c A.D	Granite	37.5	33.5	5	-
2		-----	The flower pattern design. This is installed in the northern wall of <i>bhogamandapa</i> . An artificial glaze is applied on the sculptural panel. The panel is stylistically dated 11th-12th c A.D	Granite	18	73	-	58
3		26° 10'0.21"N 91°42'18.69"E	A sculptural panel depicting <i>avatar</i> of Lord <i>Vishnu</i> . Two forms of Lord <i>Vishnu</i> incarnation ( <i>avatars</i> ) is depicted on the stone block. The top one is <i>Narasimha</i> (half man and half lion) <i>avatar</i> of Lord <i>Vishnu</i> , and the lower one is <i>Kurma</i> (turtle) <i>avatar</i> . Both <i>avatars</i> are accompanied by two female figures on both sides of the block. There is another block of flower pattern design vertically installed on the right side of this block. This block carries a flower pattern design same as a previous designed block. This sculpture block is installed in the <i>bhogamandapa</i> northern wall. An artificial glaze is applied on both blocks. The sculptural panel is stylistically dated to 11th-12th c A.D.	Granite	40	43	6	1m 29




4		26° 10'0.21"N 91°42'18.69"E	Goddess <i>Saraswati</i> . The sculpture is standing in a <i>tribhanga</i> posture, playing <i>Vina</i> . The face of the sculpture is not clearly visible. The Goddess is depicted wearing different ornaments, such as <i>kiritamukuta</i> , <i>hara</i> (necklace) and <i>karnavali</i> (earrings). This sculpture is installed on the northern wall of <i>bhogamandapa</i> . An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	57.5	20.5	13.5	75
5		26° 10'0.05"N 91°42'18.56"E	Goddess <i>Lajja Guri</i> . The Goddess is depicted sitting in <i>Uttanapada</i> posture, where both of her legs are outstretched in birth, giving positions, exposing the genital of the Goddess. The deity depicted wearing different ornaments, like, headband, two necklaces ( <i>hara</i> ), loop earring ( <i>Karnavali</i> ), bangles in both of her hands and a thread ( <i>Yajnopavita?</i> ) across her chest. This sculpture is installed on the northern wall of <i>natmandapa</i> inside an arched wall shelf. The sculpture is stylistically dated to 10th-12th c A.D.	Granite	75	62.5	9	44
6		26° 10'0.03"N 91°42'18.40"E	Female Devotee. One female devotee sculpture is installed on the northern wall of <i>natmandapa</i> , inside an arched wall shelf. The figure is slightly bent with both of her hands joint together in a position of praying. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	86.5	54.5	12.5	44
7		26° 10'0.06"N 91°42'18.28"E	<i>Yakshini</i> . One small sculpture is installed on the northern wall of <i>natmandapa</i> inside an arched wall shelf. The sculpture is standing in a <i>tribhanga</i> posture with the left hand in <i>Kati-hasta mudra</i> . The left-hand holds a fly-whisk ( <i>chamara</i> ). The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armllets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ). An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	1m 84.5	61.5	16.5	46

8		-----	<i>Gaja-Vidala (Vidala or Vyala)</i> on the northern entrance door of <i>natmandapa</i> . This mythical animal is depicted eating a raw fish while holding another fish in his hands. This animal has a stylized body of a lion with wings and the head of some other animal with an elephant trunk. The sculpture is stylistically dated to 14 <sup>th</sup> -15 <sup>th</sup> c A.D	Granite	-	-	-	-
9		26° 9'59.94"N 91°42'18.39"E	Lord <i>Agni (Dikpala)</i> . A four-handed <i>Agni</i> sculpture is installed on the northern wall of <i>Natmandapa</i> inside an arched wall shelf. The sculpture is depicted standing in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted with the third eye on the forehead. The sculpture is depicted wearing different ornaments, such as earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), sacred thread ( <i>yajhopavita</i> ) and <i>Kiritamukuta</i> (headgear). The deity is carrying different ayudhas (implements). The front left hand is depicted in <i>Jnana Mudra</i> , and the right hand is in <i>Varada Mudra</i> . The back right hand is holding a <i>Sruva</i> (sacrificial spoon) and back left hand holding a lotus bud. The sculpture is stylistically dated to 11 <sup>th</sup> -12 <sup>th</sup> c A.D.	Granite	74.5	54.5	12.5	45
10		26° 9'59.97"N 91°42'18.28"E	Two dancing female figures installed on the northern wall of <i>natmandapa</i> inside an arched shelf. One of the female figures is depicted dancing, and the other small figure is depicted playing the drum. There is a pillar between these figurines. Both figures are well ornamented and stylized. An artificial glaze is applied to the sculpture. The sculptural panel is stylistically dated to 11 <sup>th</sup> -12 <sup>th</sup> c A.D.	Granite	67.5	48.5	9	1m 81
11		26° 9'59.97"N 91°42'18.28"E	Female devotee. One female sculpture is installed on the northern wall of <i>natmandapa</i> inside an arched wall shelf. Side faced figure holding some object in her hand. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14 <sup>th</sup> -15 <sup>th</sup> c A.D	Granite	99.5	48.5	14.5	45




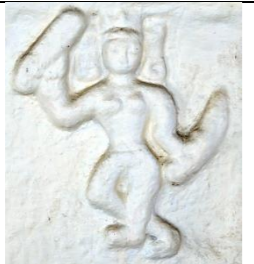
12		26° 10'0.11"N 91°42'18.41"E	Singer. A man figure is sitting in a raised platform looking toward his left. The right hand is rose toward the chest, and the other hand is pointed toward the direction he is looking at. He is wearing a conical headgear with a big round earring. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	66	49	6.5	1m 80
13		26° 10'0.11"N 91°42'18.41"E	Unknown. A man figure wearing a conical headgear is installed on the northern wall of <i>natmandapa</i> inside an arched wall shelf. This figure holding a bow and arrow in the right and left hand, respectively. The sculpture is looking at the left side. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	98	50.5	17	44
14		-----	<i>Gaja-Vidala (Vidala or Vyala)</i> on the north-west entrance door of <i>natmandapa</i> . This mythical animal is depicted eating a raw fish while holding another fish in his hands. This animal has a stylized body of a lion with wings and the head of some other animal with an elephant trunk. The sculpture is stylistically dated to 14th-15th c A.D	Granite	-	-	-	-
15		26° 10'0.21"N 91°42'18.18"E	A Divine sculpture. A bearded male deity is installed on the north-west side of the <i>natmandapa</i> inside an arched shelf. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and a flower pattern headgear. In the right hand, the sculpture is depicted holding an axe ( <i>parasu</i> ) and in the left hand holding a whisk ( <i>camara?</i> ). There is a flower petals umbrella above his head. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	73	44	8	83
16		26° 10'0.21"N 91°42'18.18"E	<i>Gaja-Simha</i> sculpture is installed on the north-west side of the <i>natmandapa</i> inside an arched shelf. In this sculpture form, a lion ( <i>Simha</i> ) is depicted riding or standing on the back of an elephant ( <i>Gaja</i> ). The stylized lion is depicted holding his own tail. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	1m 1	56	12	44

17		26° 10'0.27"N 91°42'18.19"E	<i>Varaha Avatar</i> of Lord <i>Vishnu</i> . The sculpture is standing in a <i>tribhanga</i> posture and installed on the western side wall of the <i>natmandapa</i> inside an arched shelf. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), <i>girdle</i> ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Karanda Mukuta</i> . In the right hand, the sculpture is holding a round object (some kind of fruit?), and the left-hand lay down straight. There is a flower petals umbrella above the head. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	69	30	7.5	1m 84
18		26° 10'0.27"N 91°42'18.19"E	<i>Rama Avatar</i> of Lord <i>Vishnu</i> . The sculpture is standing in a <i>tribhanga</i> posture and installed on the western side of the <i>natmandapa</i> inside an arched shelf. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), <i>girdle</i> ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukuta</i> . In the right hand, the sculpture is depicted holding a bow, and the left hand is holding an arrow. There is a flower petals umbrella above the head. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	92.5	33	12	43
19		26° 10'0.18"N 91°42'18.09"E	Lord <i>Vishnu</i> . A four-handed <i>Vishnu</i> sculpture is depicted standing on the flower pattern pedestal in <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), <i>girdle</i> ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kiritamukuta</i> (headgear). The right hand of the deity is depicted holding a <i>chakra</i> (wheel), and the left hand is holding a <i>Gada</i> (mace). The front right hand of the deity is depicted in a <i>Varada mudra</i> and the left front hand in <i>Kati-hasta mudra</i> . The sculpture is installed on the western side of the <i>natmandapa</i> inside an arched shelf. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	1m 68	88	9.5	41.5






20		-----	<p><i>Gaja-Vidala (Vidala or Vyala)</i> on the western entrance door of Natmandapa. This mythical animal is installed on both sides of the wall of every entrance door of <i>natmandapa</i>. This mythical animal is depicted eating a raw fish while holding another fish in his hands. This animal has a stylized body of a lion with wings and the head of some other animal with an elephant trunk. Stylistically dated 14th-15th c A.D.</p>	Granite	-	-	-	-
21		26° 9'59.84"N 91°42'17.93"E	<p><i>Bhairava (Lord Shiva)</i>. This eight-handed <i>Bhairava</i> sculpture is depicted standing on a prostrate corpse (<i>pretasana</i>) in <i>samapada-sthanaka</i> posture. The deity is depicted holding different <i>ayudhas</i> (implements). Some of the <i>ayudhas</i> are unclear, but the visible <i>ayudhas</i> are, <i>Kapala</i>, <i>Vajra</i>, <i>Trisula</i>, etc. In his front left hand, he is depicting holding a skull cup (<i>kapala</i>) and his two other front hands holding a garland of severed heads (<i>mundamala</i>). His upper right-hand holds a bone club with a skull on the top (<i>khatvanga</i>) and his middle right hand holding a thunderbolt (<i>vajra</i>). His upper and lower left hands are carrying some object. His middle left hands carrying a bone club with a skull on the top (<i>khatvanga</i>). The deity is wearing different ornaments, such as <i>Karnavali</i> (big loop earring), <i>Katibandha</i> (griddle) made of a skull, and <i>Kirita Mukata</i> (headgear), bangles (<i>Kankana</i>), necklace (<i>Hara</i>) and <i>Yajnopavita</i>. An artificial glaze is applied to the sculpture. This sculpture is installed on the west side of the <i>natmandapa</i> inside an arched shelf. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	1m 94	1m 1	18	45
22		26° 9'59.81"N 91°42'17.55"E	<p>Divine sculpture. A male deity with a moustache is installed on the southern side of the <i>natmandapa</i> inside an arched shelf. The sculpture is standing tilted to his right with one foot crossed to another. In the left hand, the sculpture is depicted holding a staff (<i>danda</i>) and a conch. In the right-hand holds a rosary (<i>Japa-Mala</i>). There is a flower petals umbrella above the head. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.</p>	Granite	71	36	9.5	1m 86






23		26° 9'59.81"N 91°42'17.55"E	Divine sculpture. One male figure standing tilted to his right side is installed on the southern side of the <i>natmandapa</i> inside an arched shelf. The left hand is depicted holding a shaft ( <i>Danda</i> ), and the right-hand lay down straight. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kiritamukuta</i> (headgear). An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	88	61	17	55
24		26° 9'59.81"N 91°42'17.55"E	Divine sculpture. A male deity with a <i>Kiritamukuta</i> is installed on the southern side of the <i>natmandapa</i> inside an arched shelf. The figure is wearing different ornaments and standing in a <i>tribhanga</i> posture. The left hand is holding a skull cup ( <i>kapala</i> ), and the right hand is holding a <i>Khatvanga</i> (a bone club with a skull on the top). There is a flower petals umbrella above the head. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	68.5	33	9	1m 83
25		-----	<i>Gaja-Vidala</i> ( <i>Vidala</i> or <i>Vyala</i> ) on the west- south entrance door of <i>natmandapa</i> . This mythical animal is depicted eating a raw fish while holding another fish in his hands. This animal has a stylized body of a lion with wings and the head of some other animal with an elephant trunk. Stylistically dated 14th-15th c A.D.	Granite	-----	-----	-----	-----






#### 4. Sculptures inside the *Balighar* wall in the Kamakhya temple





S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26°9'59.45"N 91°42'17.96"E	A stylized lion. This lion figure is installed on one of the pillars inside the <i>balighar</i> . An artificial glaze is applied to the sculpture block. The sculpture is stylistically dated to 14th-15th c A.D.	Granite	44.5	50	11.5	-----
2.		26°9'59.49"N 91°42'18.14"E	Lord <i>Surya (Dikpala)</i> . A four-handed <i>Surya</i> sculpture is depicted standing in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukata</i> (headgear). The sculpture of <i>Surya</i> is depicted holding one full-blown lotus with a long stem, one in each hand. The <i>Surya</i> sculptures are installed on the northern wall of <i>Balighar</i> . An artificial glaze is applied to the sculpture. His both legs are missing. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	1m 21	49	-----	-----
3.		26°9'59.91"N 91°42'17.26"E	Unknown. Two individual sculptures are installed side by side in one of the pillars inside the <i>balighar</i> . The left sculpture of a female figure which is standing tilted to the right side. One small human figure is visible clutching to her left thigh. The sculpture right hand is broken, and the left hand is holding some object. She is wearing different ornaments. On the right side of her, there is another sculpture of a bearded male. The male figure is sitting on the knees in a praying position and holding a sword (?) with his hands. The sculpture is wearing a big round earring. An artificial glaze is applied to both of the sculpture. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	78	52 (F) 31 (M)	-----	53
4.		26° 9'59.58"N 91°42'17.5"E	Unknown. A female figure standing with one leg crossed can be seen in the southern wall of the <i>balighar</i> . The right hand is holding a sword, and the left hand is holding a shield. The figure is depicted with headgear and big round earrings. Painted white. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	46.6	45	-----	89.5






**5. Sculptures on the entrance door of the Kamakhya temple  
(Eastern and Western Gateway)**


S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26° 9'58.52"N 91°42'20.50"E	Unknown. A male figure with a conical headgear is installed on the front wall of the eastern gateway of the Kamakhya temple. This figure is installed inside a square wall shelf, standing in a round platform with one foot apart from other. The sculpture is depicted wearing different ornaments. The left hand is holding a rosary ( <i>Japa-Mala</i> ) and the right hand, he holds a shaft. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	95	34	22	20.5
2.		26° 9'58.51"N 91°42'20.57"E	<i>Simha</i> (lion) sculpture installed inside a square wall shelf on the eastern gateway of the Kamakhya temple. One of the front paws is moving up towards his mouth. The lion is faced in the south direction. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	95.5	1m 9	22	20.5
3.		26° 9'58.47"N 91°42'20.68"E	<i>Gaja-Simha</i> sculpture is installed on the eastern gateway of Kamakhya temple inside a square shelf. In this sculpture form, a lion ( <i>Simha</i> ) is depicted riding or standing on the back of an elephant ( <i>Gaja</i> ). The stylized lion is depicted holding his own tail. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	1m 3	45	21	-----
4.		26° 9'58.75"N 91°42'20.93"E	<i>Simha</i> (lion) sculpture installed inside a square wall shelf on the eastern gateway of the Kamakhya temple. One of the front paws is moving up towards his mouth. The lion is faced towards the north direction. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	1m 5.5	96	23	-----
5.		-----	<i>Yakshini</i> . One small sculpture is installed inside a shelf on the eastern gateway of the Kamakhya temple. The sculpture is standing in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ) and <i>Kirita mukuta</i> . The left hand is rested on her thigh	Granite	-----	-----	-----	-----

			in a <i>Kaṭi-hasta Mudra</i> , and the right-hand holds a fly-whisk ( <i>chamara</i> ). An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.					
6.		26° 9'58.91"N 91°42'20.20"E	Unknown. A male figure is depicted reading something. This figure is installed inside a square shelf on the eastern wall of Kamakhya temple. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	70.5	49	17	36
7.		26° 9'58.81"N 91°42'20.12"E	A sculptural panel depicting Lord <i>Vishnu Avatar</i> . On the top part, there is a depiction of a four-handed <i>Matsya avatar</i> of Lord <i>Vishnu</i> accompanied by two female figures on both sides. The centre figure is standing inside a niche formed by two pilasters. The female figure is also standing in their separate niches. In the lower part, there is a depiction of a <i>Rama avatar</i> of Lord <i>Vishnu</i> , holding a bow and arrow inside a niche formed by two pilasters. The deity is accompanied by two female figures on both sides. These female figures are also standing inside their respective niches. The central figure is standing one leg crossed and wears a conical headgear with other ornaments. This sculpture panel is hidden beneath the security check booth. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	77.5	49.5	23	36
8.		----- -	<i>Yakshini</i> . One small sculpture is installed inside a shelf on the eastern gateway of the Kamakhya temple. The sculpture is standing in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ) and <i>Kirita mukuta</i> . The left hand is rested on her thigh in a <i>Kaṭi-hasta Mudra</i> , and the right-hand holds a fly-whisk ( <i>chamara</i> ). An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	-----	-----	-----	-----
9.		26° 9'58.84"N 91°42'19.99"E	<i>Gaja-Simha</i> sculpture is installed inside a square shelf on the eastern gateway of the Kamakhya temple. In this sculpture form, a lion ( <i>Simha</i> ) is depicted riding or standing on the back of an elephant ( <i>Gaja</i> ). The stylized lion is depicted holding his own tail. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 14th-15th c A.D	Granite	77.5	38	23	19
10.		26° 9'58.86"N 91°42'20.35"E	An archer. One male figure wearing a conical headgear is depicted sitting in a squatting posture, ready to shoot an arrow. This figure is installed inside a square shelf on the eastern	Granite	77	59	24	23

			gateway of the Kamakhya temple. An artificial glaze is applied to the sculpture. The sculpture is stylistically dated to 11th-12th c A.D.						
11.		26° 9'59.43"N 91°42'17.10"E	A secular sculptural panel. The sculpture of breastfeeding women is installed inside a square shelf in the western gateway of the Kamakhya temple. The women are looking at her child while breastfeeding him/her. Her left hand is wrapped around her child, and her right hand is touching her breast in order to move it toward the mouth of her child. The child is lying on her lap, clutching her breast. One of the feet of the child is raised up toward her chin. The sculpture is stylistically dated to 12th-13th c A.D	Granite	61	59	13	1m 6	
12.		26° 9'59.42"N 91°42'17.10"E	A Devotee. A man sitting crossed legs with both hands joint together in the position of praying. This sculpture is installed inside a square shelf on the western gateway of the Kamakhya temple. The entire sculpture is painted in a bright orange colour. The sculpture is stylistically dated to 15th c A.D onwards	Granite	61	44.5	7	1m 17	
13.		26° 9'59.50"N 91°42'17.10"E	A peacock figure is installed inside an arched shelf on the western gateway of the Kamakhya temple. The entire figure is painted in a bright orange colour, which is now faded to red colour. The sculpture is stylistically dated to 15th c A.D onwards	Granite	67	20.5	7	21	
14.		26° 9'59.57"N 91°42'17.08"E	A soldier. A standing male figure holding a sword and armour in the right and left hands, respectively. This figure is installed inside a square platform on the western gateway of the Kamakhya temple. The entire figure is painted in bright orange, which is now faded to red colour. The sculpture is stylistically dated to 15th c A.D onwards.	Granite	65	33.5	9	11.5	
15.		26° 9'59.50"N 91°42'17.07"E	A secular sculptural panel. This panel depicted a man setting holding a fan in the right hand and a female pouring some drink to the glass. The female figure is sitting on the knees, holding a long neck jug ( <i>Surai</i> ) and looking at the pouring jug. The head of the man figure is rested on the left shoulders, and the left hand is pressed to the ground. The entire figure is painted in bright orange, which is now faded to red colour. The sculptural panel is stylistically dated to 15th c A.D onwards	Granite	57	1m 17.5	14.5	20	

16.		26° 9'59.12"N 91°42'17.03"E	A secular sculptural panel. The sculpture of a breastfeeding woman is installed inside a square shelf in the western gateway of the Kamakhya temple. The women are looking at her child while breastfeeding him/her. Her left hand is wrapped around her child, and her right hand is touching her breast in order to move it toward the mouth of her child. The child is lying on her lap, clutching her breast. One of the feet of the child is raised up toward her chin. The sculpture is deteriorated beyond the point of recognition. The sculpture is stylistically dated to 12th-13th c A.D.	Granite	67	50.5	9	80
17.		26° 9'59.25"N 91°42'16.98"E	A broken sculpture block. This sculpture block is located at the western gate of the Kamakhya temple. Due to the present state of the sculpture, only a few features can be understood like, the sculpture was a four-handed figure, in which two is survived holding a <i>Gada</i> (mace) in the right upper hand. The sculpture is depicted standing in a <i>Samabhanga/Samapada-sthanaka</i> posture. The sculpture is depicted wearing different ornaments, such as earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), sacred thread ( <i>yajhopavita</i> ) and <i>Kiritamukuta</i> (headgear).	Granite	1m 8	66	9.5	----- -
18.		26° 9'59.25"N 91°42'16.98"E	Horse Rider. A small sculpture fragment is installed on the boundary wall of the Kamakhya temple near the western gateway. The sculpture is stylistically dated to 14th-15th c A.D.	Granite	-----	----- -	-----	----- -
19.		-----	A female devotee. One female devotee sculpture is installed inside a square shelf on the western gateway of the Kamakhya temple. The figure is slightly bent with both of her hands joint together in a position of praying. The sculpture is stylistically dated to 15th c A.D. onwards.	Granite	-----	----- -	-----	----- -

20.		26° 9'59.5"N 91°42'16.8"E	Goddess <i>Tara</i> . The sculpture is installed on the backside of the Kamakhya temple western gateway. The Goddess is depicted sitting in <i>Ardhaparyanika</i> , also known as <i>Maharajalila</i> posture. Two ribbons, one on each side, can be seen flaking behind the Goddess's head. She is wearing different ornaments, such as earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and headbands. She is also depicted wearing <i>Yajnopavita</i> (sacred thread) across her chest. Here, the Goddess is seen wearing a <i>Karanda Mukuta</i> (headgear) with a decorated headband. The right hand of the Goddess is placed near her chest like she is singing a song, while her left hand is placed on her knee. The figure is weathered. The sculpture is stylistically dated to 11th-12th c A.D.	Granite	-----	-----	-----	-----
21.		26° 9'59.47"N 91°42'16.78"E	<i>Nirruiti/ Bhairava</i> (?). One sculptural fragment is placed outside the western gateway of the Kamakhya temple. The sculpture is eroded and coloured with vermilion, making it difficult to understand any features. One sword in the back right hand and a severed head in the front left hand are visible. Nothing else is clear	Granite	37	36	24.5	----- -
22.		26° 9'59.30"N 91°42'16.48"E	Lord <i>Chaturbhuj Ganesh</i> . The four-handed <i>Ganesh</i> sculpture is sitting on his vahana <i>Mushka</i> (rat) in a <i>Maharajalila asana/ Ardhaparyanka asana</i> with the trunk curved on the right side touching a <i>Modaka</i> (sweet rice ball) placed on the right front hand. The sculpture is eroded, making it difficult to understand the attributes of the sculpture. The deity is depicted holding a <i>sruka</i> (sacrificial spoon) in the right backhand and an <i>Akshamala</i> (rosary) in the left front hand. The sculpture is stylistically dated to 12 <sup>th</sup> -14 <sup>th</sup> c A.D	Granite	89	43	-----	----- -
23.		26° 9'59.47"N 91°42'16.76"E	A sage. A sculpture of a sage is installed on the outer wall of the western gateway of the Kamakhya temple. The sculpture depicted a sage sitting with one hand raised upward, and the other hand rested on the knees. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards.	Granite	58	37	-----	----- -
24.		26° 9'59.6"N 91°42'15.33"E	A sculptural panel. A sculptural panel depicted a scene where an old lady can be seen standing with the help of a cane looking towards two figures in front of her. One of the figure is sitting while the other figure is looking towards the sitting figure with one of the hands placed on the shoulder of the sitting figure. The sculpture is stylistically dated to 15 <sup>th</sup> c A.D. onwards	Granite	-----	-----	-----	-----

25.		26° 9'59.3"N 91°42'16.6"E	Broken Fragment of <i>Amalaka</i> and <i>Kalasha</i> . The fragment was a part of curvilinear stone <i>shikhara</i> . The structural fragment is stylistically dated to 10th-11th c A.D.	Granite	1m 27	-----	1m 16 (d)	-----
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**6. Sculptures inside the *Bhogmandapa* of Kamakhya temple  
(Photography and recording not allowed)**

S. No	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.	Male devotee. A sculpture of a devotee sitting in a chair with a slightly bent head and both of the hand in <i>namaskar</i> mudra is installed on the wall of <i>bhogmandapa</i> inside the Kamakhya temple.	Granite	78	37	8.5	96
2.	Goddess <i>Saraswati</i> . A female sculpture standing is playing a <i>Vina</i> . The sculpture is depicted with different ornaments, including a big flower earring ( <i>Karnavali</i> ). In facial expression, the sculpture is depicted smiling.	Granite	88	43	10	39
3.	Unknown. A four-handed sculpture is installed on the <i>bhogmandapa</i> wall. The sculpture is wearing different ornaments like big loop earring and necklace. In the right front hand, the sculpture is depicted holding a <i>kapala</i> (skull cup) and on the left hand is holding a <i>kamandalu</i> (water pot). Both of the backhands are raised upward in some hand gesture. The sculpture left leg is slightly raised upward. The sculpture is depicted with slightly open mouth.	Granite	86	43.5	4	29
4.	Devotee. A sculpture depicted slightly bent, and both of the hand is in <i>namaskar mudra</i> while holding something in between. A draper can be seen in the sculpture.	Granite	78	41	7	14.5
5.	Unknown. A sculpture is depicted standing slightly bent, and one of the hand is touching the chin. Wearing a cap.	Granite	79	44	5.5	38
6.	Unknown. A bald, bearded man sculpture is installed on the wall. The sculpture is sitting on the knees with both of the hand is in <i>Namaskar mudra</i> . The sculpture is depicted with big loop earrings.	Granite	65	34	9	80
7.	Unknown. A small male sculpture is installed on the wall. The sculpture is standing in a plain pedestal and wearing a square headdress. The right hand is placed on the waist, and the left hand is raised upward holding a spear (?).	Granite	43	41	-----	78
8.	<i>Naga Kanya</i> . A woman with a lower body of a serpent is installed on the wall. The sculpture is depicted wearing differ ornaments, including big flower pattern earring ( <i>Karanawali</i> ) and <i>bajubandh</i> and bangles. Both of the hand is in <i>namaskar mudra</i> .	Granite	56	27.5	8	56
9.	Lord <i>Shiva</i> . A small sculpture of Lord <i>Shiva</i> is installed on the wall. The sculpture is depicted standing in a plain pedestal and wearing a <i>kritimukuta</i> . In the left, the sculpture is depicted with <i>damru</i> and in the right hand a trident. The figure is eroded, and there is no facial feature remains on the sculpture.	Granite	35	41	2.5	1m 27
10.	Devotee. A broken male sculpture of a devotee is installed on the wall wearing a draper around the chest. Both hands are depicted	Granite	88	34.5	7.5	60

	in <i>namaskar</i> posture. Half face and both feet are broken.					
11.	Devotee. A man sitting on the knees and both of the hands are joint together in praying. The sculpture is depicted wearing a square shape headdress. Wearing a draper.	Granite	63	53	5	62
12.	Unknown. An old man sculpture is installed on the wall. The sculpture is depicted sitting on a chair and reading something. The sculpture is depicted with wrinkles on the face.	Granite	56.5	38.5	11	64.5
13.	Unknown. A bearded man sculpture in a sitting posture is installed on the wall.	Granite	80	53	15	30
14.	A mother and a child. A sculpture depicting a mother holding a child is installed on the wall. The child is depicted holding the mother earring, and the mother is depicted looking at the child. The sculpture is standing in a pedestal and wearing a sari.	Granite	81	42	10	32.5
15.	Unknown. A sculpture depicted a man sitting crossed legs with right hand reaching to his chin in a thinking posture. The sculpture is depicted with big loop earring.	Granite	58	36	9	56
16.	Unknown. A sculpture of a female standing and covering her face with a sari is installed on the wall. The right hand is holding the corner of the sari close to the face, and the left hand is placed straight to the left side.	Granite	92.5	30	11	26
17.	Unknown. A female sculpture standing in a <i>tribhanga</i> posture with the right hand on the thigh and left hand is holding something.	Granite	88	27	19	27
18.	Unknown. A female sculpture standing and holding something.	Granite	81	54.5	10	35.5
19.	An archer. One male figure is depicted sitting in a squatting posture, ready to shoot an arrow looking downward in the opposite direction of the arrow.	Granite	78	43	11	37
20.	Devotee. A totally eroded sculpture depicted in a praying posture with both of the hand in <i>namaskar</i> posture.	Granite	59.5	23	6	28
21.	Unknown. A bearded man depicted standing and holding a shaft. The left leg is depicted crossed behind the right leg.	Granite	60.5	30	7	1 m 1
22.	A small four-handed sculpture is carved on a stone block placed in the corner of the <i>bhogmandapa</i> .	Granite	1m 46	1m	61	----- -



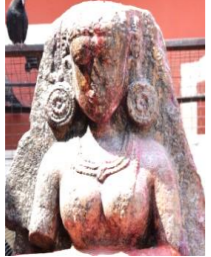

### 7. Sculptures inside the Natmandapa of Kamakhya temple







S. No	Photograph	Name & Attributes	Material	Height (mm)	Width (mm)	Base height (mm)
1.		Goddess Saraswati. The Goddess depicted in <i>tribhanga</i> posture, carrying/ playing a <i>vina</i> on her hand. Goddess depicted wearing different ornaments, such as <i>hara</i> (necklace) and <i>karnavali</i> (earrings). The sculpture is painted in red colour.	Granite	1m 43	66.5	84.5
2.		Goddess <i>Mahisasuramardini</i> . the Goddess is depicted with ten hands carrying different <i>Ayudhas</i> (implements) like <i>Katari</i> (knife), <i>Dhanusa</i> and <i>Bana</i> (bow and arrow), <i>Khadga</i> (sword) etc. the deity is depicted in attacking position and killing demon <i>Mahisasura</i> . Goddess is depicted with big loop earning known as <i>Karnavali</i> and <i>kritmukuta</i> . The sculpture is painted in red colour.	Granite	1m 25	61	77
3.		Bhairava. This eight-handed <i>Bhairava</i> sculpture is depicted standing in a <i>samapada-sthanaka</i> posture. The deity is depicted holding different <i>ayudhas</i> (implements). Some of the <i>ayudhas</i> are unclear, but the visible <i>ayudhas</i> are, <i>Kapala</i> , <i>Vajra</i> , <i>cakra</i> , etc. In his front left hand, he is depicting holding a skull cup ( <i>kapala</i> ). His upper right-hand holds a bone club with a skull on the top ( <i>khatvanga</i> ) and his middle right hand holding a thunderbolt ( <i>vajra</i> ). His upper and lower left hands are carrying some object. His middle left hands carrying a bone club with a skull on the top ( <i>khatvanga</i> ). The deity is wearing different ornaments, such as <i>Karnavali</i> (big loop earring), <i>Katibandha</i> (griddle) made of a skull, and <i>Kirita Mukata</i> (headgear), bangles ( <i>Kankana</i> ), necklace ( <i>Hara</i> ) and <i>Yajnopavita</i> .	Granite	1m 31	57	1m 31
4.		Lord Sadasiva. The ten-handed deity is depicted holding different <i>ayudhas</i> (implements), in which only a <i>Dhaunsa</i> (bow) and a <i>khadga</i> (sword) is clearly seen on the sculptures. Rest is very unclear. The Three head of the deity is adorned with <i>jatamukuta</i> . The deities left hand is in <i>varadamudra</i> , and the right hand is in <i>abhayamudra</i> . The deity is in standing posture with one leg slightly raised from the ground. The sculpture is painted in red colour.	Granite	2m 21	94	63.5
5.		Lord <i>Shiva</i> . The two-handed deity is depicted standing and holding a <i>trishula</i> (trident) in the right hand and a bone club with a skull on the top ( <i>khatvanga</i> ) in the left hand. The deity is depicted wearing different ornaments including a <i>Kritimukuta</i> . The head is slightly tilted looking downwards. The sculpture is painted in red colour.	Granite	1m 53	79	1m 3
6.		Unknown. A standing male sculpture is installed on the wall. The sculpture is depicted with different ornaments, including a square-shaped headdress and big loop earrings. The right hand is raised to he chest, and left hand is placed straight on the left side. The sculpture is painted in red colour.	Granite	1m 41	52	1m 9
7.		Archer. One male sculpture slightly bent is installed on the wall. The sculpture is holding a bow in the right hand and an arrow in the left hand. The sculpture is depicted with open long hair and wearing big loop earrings. The sculpture is painted in red colour.	Granite	1m 71	72	74







8.		Devotee. A male devotee sculpture is installed on the wall. The sculpture is depicted wearing different ornaments, including a <i>kritamukuta</i> with both hands joint together in namaskar <i>mudra</i> . The sculpture is painted in red colour.	Granite	1m 38	51.2	81.5
9.		Stone Inscription 1759 A.D. The inscription mentions the construction of Utsava-mandir attached to the Kamakhya temple by officer <i>Dasarataha Tarun Duwara</i> under the patronage of Ahom king <i>Rajeswar Singha</i> .	Granite	41	32	1m 60.5
10.		Copperplate inscription 1782 A.D. The inscription mention about the offering of 1 lakh sacrifices to the Kamakhya temple conducted by <i>Haranath Barphukan</i> under the order of Ahom king <i>Gaurinath Singha</i> .	Copper	30	46	56.6










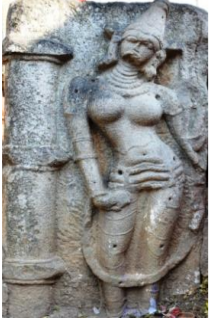





8. Others sculptures and artefacts remain found inside the premises of Kamakhya temple

S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26° 9'59.72"N 91°42'19.65"E	Female <i>Bharvahak Gandharva</i> . A sculpture of <i>Bharvahak Gandharva</i> is installed inside a square shelf on the inner boundary wall of the main temple at the north side. The figure is facing south standing with her right foot knee touching the ground. Both of the hand are raised upward holding the ceiling and depicted wearing different ornaments such as big flower pattern earrings, bangles, necklace and a waistband. Hair is tied in a nice bun and adorns with flowers.	Granite	1m 9	49	18	1m 28
2.		26° 9'59.42"N 91°42'19.43"E	Male <i>Bharvahak Gandharva</i> . A sculpture of <i>Bharvahak Gandharva</i> is installed inside a square shelf on the inner boundary wall of the main temple at the north side. The figure is facing south standing with her right foot knee touching the ground. Both of the hand is raised upward holding the ceiling and depicted wearing different ornaments such as big flower pattern earrings, bangles, necklace.	Granite	95	43.5	23	1m 77
3.		26° 9'59.66"N 91°42'19.56"E	Nymphs. Female bust block. The female bust is (broken) installed on the right side of the stairways. The stairway is located outside the main temple body on the northern side courtyard. The figure is east facing. She is wearing different ornaments like earrings with flower pattern and necklaces. The figure is broken from the waist down. Some part of her face is also broken.	Granite	66	55	37	----- --
4.		26° 9'59.66"N 91°42'19.56"E	Female bust block. The female bust is (broken) installed on the right side of the stairway wall. The stairway is located outside the main temple body on the northern side courtyard. The figure is facing west. The figure is wearing different ornaments like big earrings with a flower pattern and a few necklaces. The figure is broken from the waist down. Her face is broken beyond the point of recognition.	Granite	68	54	40	----- --

5.		26° 9'59.6"N 91°42'19.49"E	Female bust block. The female bust is (broken) installed on the right side of the stairways. The stairway is located outside the main temple body on the northern side courtyard. The figure is facing east. She is wearing different ornaments like big earrings with a flower pattern and necklaces. The figure is broken from the waist down. Her left hand is raised upward and her right hand held at chest level in some hand mudra.	Granite	66	55	34	----- --
6.		26° 9'59.6"N 91°42'19.49"E	Female bust block. The female bust is (broken) installed on the right side of the stairways. The stairway is located outside the main temple body on the northern side courtyard. The figure is facing west. She is wearing different ornaments like big earrings with a flower pattern and necklaces. The figure is broken from the waist down. Her right hand is raised upward and her left hand held at chest level in some hand mudra.	Granite	66	55	34	----- --
7.		26° 9'59.56"N 91°42'19.62"E	Bull ( <i>Nandi</i> ) in a sitting posture. One small bull sculpture is installed on the left side of the stairways. This stairway is located on the northern side of the temple. The stairway is leading toward the courtyard near the <i>subhagya kund</i> . The face of the bull is broken. The bull is sitting facing south.	Granite	38	54	25	-
8.		26° 9'59.4"N 91°42'19.4"E	Lion (?) one small Tibetan lion is installed inside a square crevice on the inner boundary wall of the temple near the stairway. This stairway is located on the northern side of the temple leading to the courtyard near the <i>subhagya kund</i> . The lion is standing facing west.	Granite	-----	-----	-----	----- --
9.		26° 9'59.58"N 91°42'19.27"E	Divine Sculpture (Lord Indra?). The bearded four hands sculpture is installed on the northern courtyard of the Kamakhya temple. He is riding on an elephant. The figure is wearing a turban. His front two hands are in Anjali mudra. In his back left hand, he holds a gavel and his back right hand he holds some object.	Granite	1m 70	97	38	-
10.		26° 9'59.95"N 91°42'18.87"E	<i>Tripura Bhairavi</i> . The sculpture is carved on the porphyritic granite rock face in the northern courtyard of Kamakhya temple. The sculpture is placed inside a small shrine. The shrine is decorated with large numbers of bells. The sculpture is weathered, beyond the point of recognition, and smeared with vermilion all over the sculpture. We can see some of the features of the sculpture, such as the Goddess is sitting in a <i>Dhyana asana</i> over a <i>pretasana</i> (prostrate corpse), wearing a <i>mundamala</i> (Garland made of severed humans head), in one of her hand she is holding a <i>Pustaka</i> (book), and <i>kapala</i> (skull cup) on the other. There is one	Porphyritic Granite	-----	-----	-----	----- --







			unknown male figure carved beside her.					
11.			Unknown. Four female figures are sculpted on the southern boundary wall of the temple. All female figures are standing facing north with hands in <i>Anjali mudra</i> . All figures are depicted with long hairs and wearing a drapery.	Stone	47	61	45	----- ---
12.		26° 9'58.99"N 91°42'18.29"E	<i>Sithaladevi</i> Temple. A small shrine is made outside on the right side of the main Kamakhya temple. The Goddess sculpture is placed inside an open wall brick structure. The sculpture is covered with cloth and painted red colour.	-----	--	-----	-----	----- --
13.		26° 9'58.92"N 91°42'18.55"E	Unknown. A male figure is sculpted in the wall of the pilgrim shelter. This shelter is located on the southern courtyard of the temple. The male figure is standing on a raised platform inside a niche and wearing different ornaments with a conical headgear. In the right hand, a spear can be seen, and the left hand are rested on the waist in a <i>Kaṭi-hasta Mudra</i> . An artificial glaze is applied to the sculpture.	Stone	53	53	6	----- ---
14.		26° 9'58.92"N 91°42'18.55"E	Lord <i>Shiva</i> . A male figure is sculpted in the wall of the pilgrim shelter. This shelter is located on the southern courtyard of the temple. The male figure is standing on the raised platform inside a niche and wearing different ornaments with a conical headgear. In the left hand, a spear can be seen and on the right hand, some object (unclear). An artificial glaze is applied to the sculpture.	Granite	53	45	4.5	----- --
15.		26° 9'59.24"N 91°42'18.64"E	Inscription. This inscription is carved on a stone block. This block is installed inside the pilgrim shelter on the southern courtyard of the temple. The subject matter and the script of the inscription are unclear. An artificial glaze is applied on the stone block.	Granite	-----	-----	-----	----- -
16.		26° 9'58.70"N 91°42'18.63"E	Unknown. A female figure sculpted on a stone block. This stone block is placed inside the pilgrim shelter on the southern courtyard of the temple. the figure is standing on a flower pattern pedestal in a <i>tribhanga</i> posture and wearing flower pattern earrings. The right hand is held at the chest level in <i>Jnana mudra</i> . A small human head wearing flower pattern earrings can be visible on the top of this figure. An artificial glaze is applied to the sculpture.	Granite	61.5 12	60 36	13 15	----- - ----- -








17.		26° 9'58.71"N 91°42'18.90"E	Unknown. A man sculpture is installed inside the pilgrim shelter on the southern courtyard of the temple. He is sitting on a square block chair playing some musical instrument or reading scripture. His entire face is broken beyond the point of recognition. A scared thread is visible on the chest running from the left shoulder to waist. An artificial glaze is applied to the sculpture.	Granite	62	57	18	----- -
18.		26° 9'58.64"N 91°42'18.98"E	Goddess <i>Tara</i> . A female figure is installed inside the pilgrim shelter on the southern courtyard of the temple. She is sitting crossed legs on a broken flower pattern pedestal. The face, hands and her legs are deteriorated or broken. A hint of ornamentation is visible in the sculpture. An artificial glaze is applied to the sculpture.	Granite	62.5	48	18	----- -
19.		26° 9'58.92"N 91°42'20.16"E	Decorative panel. This horizontal decorative panel is installed on the steps of Lord <i>Vishnu</i> temple inside the Kamakhya temple premises.	Granite	32	1m 48	----- -	44
20.		26° 9'58.92"N 91°42'20.16"E	Two decorative panels. The flower creeper design is sculpted on the horizontal stone block. This block is installed on the steps of Lord <i>Vishnu</i> temple inside the Kamakhya temple premises.	Granite	32 30	48.5 1m 42	-----	30
21.		26° 9'58.9"N 91°42'20.2"E	Sculpture relief panel. This relief is installed on the steps of Lord <i>Vishnu</i> temple inside the Kamakhya temple premises. Different figures of male and female are sculpted on the horizontal stone panel. Some figures are shown sitting, and some are standing. One bearded figure is depicted sitting in a yogic posture.	Granite	21	63	-----	42
22.		26° 9'58.9"N 91°42'20.2"E	Sculptural relief panel. This relief is installed inside a square shelf on the wall of Lord <i>Vishnu</i> temple. In this relief, two elephants are depicted fighting with each other while their riders are sitting on them. Both elephants are controlled by <i>mahout</i> while their riders are sitting on the elephant with crossed arms.	Granite	21	66	-----	40
23.		26° 9'58.9"N 91°42'20.2"E	Sculpture relief panel. This relief is installed on the steps of Lord <i>Vishnu</i> temple inside the Kamakhya temple premises. The female figures are sculpted on a horizontal stone block in a different dancing pose.	Granite	17.5	69	-----	35

24.		26° 9'59.87"N 91°42'20.41"E	Unknown. This sculpture block is found on the stairs of <i>Subhagya Kunda</i> in the Kamakhya temple. The figure is standing in a <i>tribhanga</i> posture with the right hand on the thigh ( <i>Kaṭi-hasta Mudra</i> ). The face is broken with the left hand is also broken. An alteration on the figure with cement is visible. The sculpture is depicted wearing different ornaments with one conical headgear.	Granite	1m 40.5	80	48	----- --
25.		26° 10'0.09"N 91°42'20.53"E	Structure fragment. This structure fragment is found on the stairs of <i>Subhagya kund</i> in Kamakhya temple.	Granite				
26.		26° 10'0.29"N 91°42'20.56"E	Decorative stone block. This fragment is found on the stairs of <i>Subhagya kund</i> in Kamakhya temple. Some decorative design is sculpted on the stone block.	Granite				
27.		26° 10'0.30"N 91°42'20.98"E	Lord <i>Vashu</i> . A male deity with an animal head (bull?) is found on the stairs of <i>Shubhagaya kund</i> in Kamakhya temple. The four-handed figure is standing in a <i>tribhanga</i> posture on a flower pattern pedestal. The left front hand is rested on the thigh in <i>Kaṭi-hasta mudra</i> , and the right front hand is in <i>varada</i> mudra (gesture of generosity). On his, both backhands hold a lotus bud. The figure is wearing deferent ornaments with a conical headgear. The figure is standing inside a pillared pedestal.	Granite	1m 54	87	44	----- -
28.		26° 9'59.09"N 91°42'16.96"E	Unknown. A small sculpture of a female deity is placed inside an arched shelf outside the western gateway of the Kamakhya temple. the sculpture is painted red and decorated with garlands. The sculpture is standing in a <i>tribhanga</i> posture and wearing ornaments. Features of the sculpture are not visible.	Granite	58	39	30	----- -
29.		26° 9'58.62"N 91°42'18.45"E	Lord <i>Surya (Dikpala)</i> . A broken sculpture of four-handed <i>Surya</i> sculpture is depicted standing on a flower pattern pedestal in a <i>tribhanga</i> posture. The sculpture is depicted wearing different ornaments, like earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and <i>Kirita Mukata</i> (headgear). In <i>Hastamudra</i> (hand gesture), <i>Surya</i> sculpture front left hand is depicted in <i>Kaṭi-hasta Mudra</i> and right hand in holding some object. The sculptures of <i>Surya</i> are depicted with the third eye on its forehead. the sculpture is depicted holding a lotus bud on the upper right hand, and the upper left is broken. The <i>Surya</i> sculpture is found on the western pathway near the Kamakhya temple.	Granite	37	36	24.5	-----

### 9. Bhairavi Temple






LOCATION: 26°09'57.0"N 91°42'18.1" E

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1.	 	<p>26°09'57.0"N 91°42'18.1" E (Main temple)</p> <p><i>Kacha-Pukhuri Kund</i> 26°09'56.7"N 91°42'18.1" E</p>	<p>The <i>Bhairavi</i> temple is south facing temple. The temple structure is quite new. There is two <i>mandapa</i> in the temple. The <i>garbhagriha</i> of the temple is more than 3 meters below the floor level of the other chamber and can be reached through stairways. Here, the Goddess <i>Bhairavi</i> is worship in a <i>pitha</i> form (aniconic). There is a pond on the southern side of the temple, which is known as <i>Kacha pukhuri</i> (Tortoises pond). Numerous structural remains of old stone temples are laying around the ponds. Indicating the presence of a stone temple.</p>	Brick	864.9 (area m*m)  1567.5 (area m*m)	-----	-----
2.		<p>26°09'57.3"N 91°42'17.6" E</p>	<p>Female devotee. A female sculpture is installed inside the arched shelf on the left side of the entrance gateway of the <i>Bhairavi</i> temple. The sculpture is standing with both hand joint together in an <i>Anjali</i> or <i>Namasakara mudra</i>. Depicted with different ornaments. Legs of the sculpture are broken and painted in red colour. The sculpture is covered with a form of patina.</p>	Granite	1m 7	88	17
3.		<p>26°09'57.2"N 91°42'17.5" E</p>	<p>Tibetan Lion. One Tibetan lion sculpture is installed inside the arched shelf on the right side of the entrance gateway of the <i>Bhairavi</i> temple. The sculpture is covered with a form of patina. The lion is looking at his left side.</p>	Granite	98	74	18
4.		<p>26°09'56.9"N 91°42'18.1" E</p>	<p><i>Bharvahak Gandharva</i>. This was a part of stone temple architecture. The block is laying inside the temple premises. One <i>Bharvahak Gandharva</i> figure is carved on the front face of this stone block. The <i>Gandharva</i> is depicted sitting with wide open legs, and both of the hands are raised upwards holding the roof over the head. There are four small square-shaped dowel marks on the block, indicating that this was a broken part of some structure.</p>	Granite	33.5  60.5	43  49.5	11  32
5.		<p>26°09'56.4"N 91°42'18.0" E</p>	<p>Structure block. This sculpture block is fixed on the ground, just next to the sculpture block. This is currently working as a <i>Bali-vedi</i>. There are two other same types of structure block placed next to each other and serving the same purpose.</p>	Granite	-----	-----	-----



6.		26°09'56.6"N 91°42'18.1" E	Structure block. This structure block is fixed on the ground, on the front of the previous structure block. This is currently working as a <i>Bali-vedi</i> .	Granite	-----	-----	-----
7.		26°09'56.6"N 91°42'17.9" E	Structure block. This structure block is fixed on the ground, on the front of the other two structure block. This is currently working as a <i>Bali-vedi</i> .	Granite	-----	-----	-----
8.		26°09'56.3"N 91°42'18.5" E	Structure fragments. There are numerous structure fragments laying around the <i>Kacha Pukhuri</i> . The evidence of large numbers of structure fragments indicates the existence of a stone temple.	Granite	-----	-----	-----
9.		26°09'57.8"N 91°42'18.4" E	Bhairava. The four-handed sculpture of <i>Bhairava</i> is depicted with a moustache in <i>pratyalidha</i> posture standing on a prostrate corpse. The deity is depicted carrying different <i>ayudhas</i> (implements). In his front right hand, he is holding a <i>trisula</i> (trident), and on the backhand a <i>Khatavanga</i> (a bone club with a skull on the top). In his left front hand, he is holding a <i>vajra</i> (thunderbolt) and back left hand holding an <i>ankusa</i> (goad). The deity is wearing different ornaments, such as <i>mundamala</i> (garland of a skull), fan-shaped headdress and <i>Karnavali</i> (big loop earrings), <i>Katibandha</i> (griddle) made of a skull, bangles ( <i>Kankana</i> ), necklace ( <i>Hara</i> ) and <i>Yajnopavita</i> .	Porphyritic Granite	1m.3	80	12.5
10.		26°09'57.7"N 91°42'18.2" E	Goddess <i>Tara</i> . One fragment of Goddess <i>Tara</i> is found at the backside of the <i>Bhairavi</i> temple. Goddess <i>Tara</i> is depicted as a beautiful young woman sitting in <i>Ardhaparyanika</i> , also known as <i>Maharajalila</i> posture. Two ribbons, one on each side, can be seen flaking behind the Goddess's head. She is wearing different ornaments, such as earrings ( <i>Kundala</i> ), necklace ( <i>Hara</i> ), armlets ( <i>Bajubandha</i> ), girdle ( <i>Katibandha</i> ), bangles ( <i>Kankana</i> ), and headbands. The Goddess is depicted with beautiful earring with flying <i>vidyadhara</i> on the centre. She is also depicted wearing <i>Yajnopavita</i> (sacred thread) across her chest. (dated to 10 <sup>th</sup> – 12 <sup>th</sup> c A.D.)	Granite	73.5	58	19.5
11.		26°09'57.5"N 91°42'18.2" E	Structural Fragment	Granite	56	37	29.5
12.		26°09'57.5"N 91°42'18.2" E	Structural Fragment with flower pattern motifs.	Granite	33	38	17.5

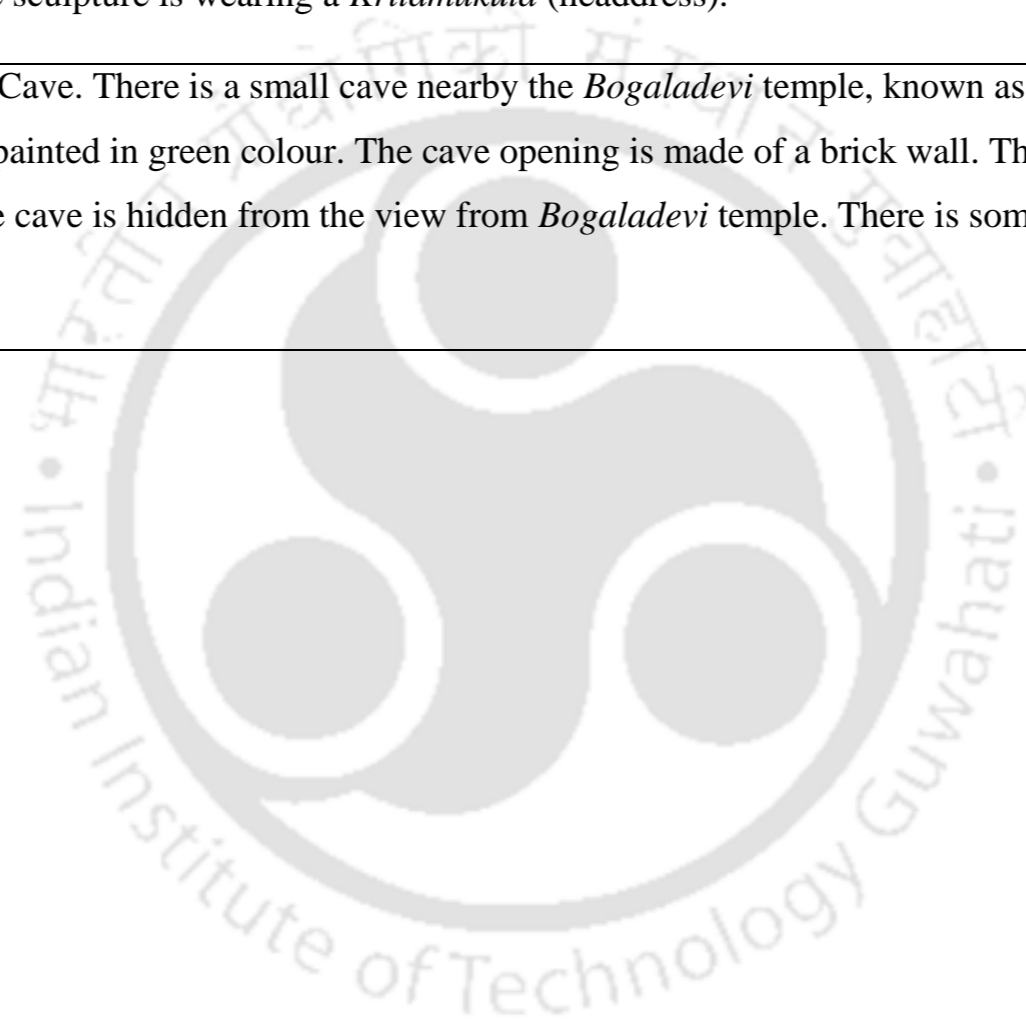
### 10. Bogaladevi Temple

LOCATION: 26°09'57.9"N 91°42'36.3" E

S. No	Photo	Location	Names & Attributes	Material
1		<p>26°09'57.9"N 91°42'36.3" E</p> <p>(Main Temple)</p> <p>26°09'57.1"N 91°42'37.0" E</p> <p>(Meditation hall and lotus)</p>	<p>Bogaladevi temple. The temple is newly constructed over an old structure with two <i>mandapa</i>. The first <i>mandapa</i> is a big hall consisting of small sculptures of <i>Dasamahavidaya</i> Goddess. Then next to this big mandapa there is a small mandapa. The left wall of both mandapa is a mountain wall, where water is coming through the cracks. One stairway is attached to this mandapa which goes toward the <i>Garbhagriha</i>, which is a small cave. There are many sculptures carved on the mountain face near the stairways toward the mandapa. There is an open terrace <i>Havana</i> room (Homa/ ritual place), above the <i>Garbhagriha</i>. Next to the <i>Garbhagriha</i>, one separate room is for <i>Bali</i> (sacrifice). There is another separate hall for meditational purpose. In this room, the full bloom lotus (ceiling fragment) is worshipped as a <i>Siva linga</i>, with a broken <i>Nandi</i> sculpture. The lotus is covered with a circular brick wall.</p>	Brick and Stone
2		<p>26°09'58.3"N 91°42'37.8" E</p>	<p>Goddess <i>Lakshmi</i>. A four-handed Goddess <i>Lakshmi</i> sculpture is carved on the mountain wall. Painted in red (orange) colour, so it's difficult to analyse any features clearly. The upper left hand of the deity is holding a lotus bud, and right-hand <i>ayudhas</i> is unclear. Both front hands are rested on the knees. The deity is sitting in <i>padmasana</i>. The deity is wearing a headdress (?).</p>	Porphyritic Granite
3		<p>26°09'58.3"N 91°42'37.3" E</p>	<p>Four-handed <i>Ganesha</i> (Chaturbhuj Ganesha). One rock-cut sculpture of Lord <i>Ganesha</i> is carved along with the Goddess <i>Lakshmi</i> sculpture. Again the figure is painted in red (orange) colour, making it impossible to analyse any features. The upper left hand of the deity is holding a lotus bud, and right-hand <i>ayudhas</i> is unclear. Lord <i>Ganesha</i> is sitting in <i>Maharajalilia</i> posture.</p>	Porphyritic Granite
4	<p>Photography is not allowed inside the temple</p>	<p>26°09'59.5"N 91°42'39.2" E</p>	<p>Lord <i>Ganesha</i>. One small Lord <i>Ganesha</i> sculpture is carved inside the small cave in the temple. This small cave acts as a functional <i>garbhagriha</i> of the temple.</p>	Porphyritic Granite
5		<p>26°09'57.8"N 91°42'37.6" E</p>	<p>Bali vedi. A separate room is made for sacrificial purposes.</p>	Porphyritic Granite
6		<p>26°09'57.9"N 91°42'38.0" E</p>	<p>Unknown. There is two human sculpture carved on the mountain surface, which are sitting in a flower petals platform. While below them, there is a small human figure kneeling down in the position of praying. There is also a depiction of a whale-like</p>	Porphyritic Granite






			creature with sea tide. This is most probably the image of Lord <i>Vishnu</i> and Goddess <i>Lakshmi</i> (?), sitting on the lotus bed in the sea.	
7	Photography is not allowed inside the temple	26°09'58.1"N 91°42'37.5" E	Four-handed <i>Ganesha</i> ( <i>Chaturbhuj Ganesha</i> ). Three Lord <i>Ganesha</i> is carved side by side on the mountain face near the stairs toward the <i>mandapa</i> . The Lord <i>Ganesha</i> is painted in orange colour, making difficult to analyses any features. The Lord <i>Ganesha</i> is carved on the right side of the other two <i>Ganesha</i> . The Lord <i>Ganesha</i> faces toward west.	Porphyritic Granite
8	Photography is not allowed inside the temple	26°09'57.9"N 91°42'37.2" E	Four-handed <i>Ganesha</i> ( <i>Chaturbhuj Ganesha</i> ). The Lord <i>Ganesha</i> is carved in the middle of the two other identical <i>Ganesha</i> sculpture. The Lord <i>Ganesha</i> is carved on the mountain face near the stairway towards the <i>mandapa</i> and faced west direction. The Lord <i>Ganesha</i> sculpture is painted in orange colour, making difficult to analyses any features.	Porphyritic Granite
9	Photography is not allowed inside the temple	26°09'57.0"N 91°42'36.8" E	Four-handed <i>Ganesha</i> ( <i>Chaturbhuj Ganesha</i> ). The <i>Ganesha</i> sculpture is carved in the left side of the two other identical <i>Ganesha</i> sculpture. The Lord <i>Ganesha</i> sculpture is carved on the mountain wall near the stairway towards the <i>mandapa</i> and faces west direction. The <i>Ganesha</i> is painted in orange colour, making difficult to analyses any features.	Porphyritic Granite
10	Photography is not allowed inside the temple	26°09'58.4"N 91°42'37.3" E	Lord <i>Krishna</i> . The image of Lord <i>Krishna</i> with two female attended is carved on the mountain face near the stairway leading toward the <i>mandapa</i> . Lord <i>Krishna</i> is standing in a <i>Tribhanga</i> posture with one leg bent in front of the other with a flute raised to his lips. The two female attended, one in both sides is smaller in size in comparison to the <i>Krishna</i> figure. Both female sculptures are looking towards Lord <i>Krishna</i> .	Porphyritic Granite
11	Photography is not allowed inside the temple	26°09'57.8"N 91°42'37.6" E	Lord <i>Krishna</i> . The sculpture of Lord <i>Krishna</i> with two female attended is carved on the mountain face inside the <i>mandapa</i> . Lord <i>Krishna</i> is standing in a <i>Tribhanga</i> posture with one leg bent in front of the other with a flute raised to his lips. The two female attended, one in both sides is smaller in size in comparison to the Lord <i>Krishna</i> sculpture. Both female sculptures are looking towards Lord <i>Krishna</i> .	Porphyritic Granite
12	Photography is not allowed inside the temple	26°09'58.5"N 91°42'38.4" E	Four-handed <i>Ganesha</i> ( <i>Chaturbhuj Ganesha</i> ). A small Lord <i>Ganesha</i> sculpture is carved on the mountain face inside the <i>mandapa</i> . Lord <i>Ganesha</i> is sitting in <i>Maharajalilia</i> posture.	Porphyritic Granite



13		26°09'58.5"N 91°42'37.3" E	<p>Rock-cut sculpture. Two sculptures are carved side by side on the mountain face. The sculpture is eroded beyond the point of identification. The first sculpture (left) is most probably a female figure (?), with her right hand raised toward the chest and the left hand is hanging on the right side holding some objects. The sculpture is carved inside a is self. Next to this sculpture, on the right side, there is a <i>Sadasiva</i> sculpture carved inside a semi-oval shelf. The sculpture is sitting in <i>Padamaasana</i> posture with visible three heads, and ten hands, five on each side. The front two hands are in <i>Anjali</i> or <i>Namaskara Mudra</i> (Posture), while the next set of hands are placed calmly on the lap. The next three sets of hands holding some ayudhas (implements), which is not clear. The sculpture is wearing a <i>Kritamukuta</i> (headdress).</p>	Porphyritic Granite
14		26°09'57.1"N 91°42'38.3" E	<p><i>Chiddeswari</i> Cave. There is a small cave nearby the <i>Bogaladevi</i> temple, known as <i>Chiddeswari</i> cave or <i>Chid-Villas-Cave</i>. The cave floor is painted in green colour. The cave opening is made of a brick wall. There are some <i>mantras</i> written on the wall of this cave. The cave is hidden from the view from <i>Bogaladevi</i> temple. There is some writing on the rock face in the Assamese language.</p>	Porphyritic Granite and Brick



### 11. Dakshinakali Temple







Location: 26°09'58.4"N 91°42'22.7" E






S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1		26°9'57.9"N 91°42'22.8"E	On the right side of the front gate of the <i>Daksinakali</i> temple, one lion sculpture is installed inside a square shelf. The sculpture is painted in red colour. (15 <sup>th</sup> century onward)	Granite	42.5	65	20.5 (base height)
2		26°9'57.9"N 91°42'22.8"E	Unknown. A broken female figure is installed inside a square shelf on the right side of the front gate on the boundary wall. This female figure is seen wearing different ornaments with her left hand in <i>Karana mudra</i> . The sculpture is wearing a head ornament. The sculpture is broken from the waist down, and the right hand is also broken from the elbow. (15 <sup>th</sup> century A.D. onwards)	Stone	86.5	86.5	39 (base height)
3.		26°9'57.9"N 91°42'22.8"E	On the left side of the front gate on the boundary wall, one lion sculpture is installed inside a square shelf. (15 <sup>th</sup> c A.D. onwards)	Stone	87.5	86	79.5 (base height)
4.		26°9'57.9"N 91°42'22.7"E	Lord <i>Shiva</i> . A sculpture of Lord <i>Shiva</i> is installed inside an arched shelf on the left side of the front gate on the boundary wall. The sculpture is wearing different ornaments with his left hand raised to his chest in <i>Jnana mudra</i> . The sculpture is wearing headgear, and on his right hand holding a trident ( <i>trishula</i> ). The sculpture is broken from the waist down, and the right hand is also broken.	Stone	1m 45	61.5	97.5 (base height)
5.		1.Right side figure 26°9'58.0"N 91°42'22.6"E 2.left side figure 26°9'57.9"N 91°42'22.7"E	There are two sculptures installed on the outer wall of the <i>antarala</i> inside an arched shelf. One on the right-hand side sculpture is depicted carrying a massive stone block in the head with both of his hand joint in an <i>Anjali mudra</i> . A tail can be seen in the sculpture indicating this is a sculpture of Lord Hanuman (?). The left-hand side sculpture is a tall male figure sculpture standing straight in <i>Samapada –Sthanaka</i> posture with both of his hand joint in an <i>Anjali mudra</i> . Both of the sculptures are smeared with vermilion making it difficult to establish the identity of these figures. (15 <sup>th</sup> c A.D. onwards)	Granite	1m 86m 1m 91	73 72	58.5 (base height) 54 (base height)

							
6.		26°9'58.9"N 91°42'22.8"E	Lord <i>Ganesha</i> shrine. On the backside of the main temple, there is another shrine dedicated to Lord <i>Ganesha</i> . In this small shrine, Lord <i>Ganesha</i> is worship in the pitha form. The shrine has a CI sheet roof with white tiles walls.	Brick and CI	-----	1.5 m	1m 37.5

















## 12. Sculptures and Sculptural Fragments Found on the Eastern Pathway








S. No	Photo	Location	Names & Attributes	Material
1.		26°09'53.23"N 91°42'44.29" E	Unknown. One four-handed sculpture is found carved on the stone boulder on the ancient eastern pathway. The sculpture is badly deteriorated, and no features are clear. Two lotus bud can be seen on the backhands of the sculpture. The sculpture is carved inside an arched shelf. The sculpture is painted in red colour.	Porphyritic Granite
2.		26°09'53.64"N 91°42'47.25" E	Lord <i>Ganesha</i> . The rock-cut sculpture is carved on a stone boulder on the ancient eastern pathway. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is sitting in <i>Maharajalila asana</i> with his trunk curved on the left side touching a <i>Modaka</i> (sweet rice ball) placed on his left front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the right backhand and an <i>Ankusa</i> (goad) in the left backhand. The sculpture is also eroded and painted in red colour. The sculpture is carved inside an arched shelf.	Porphyritic Granite
3.		26°09'54.23"N 91°42'48.34" E	Unknown. One two-handed rock-cut sculpture is found carved on the stone boulder on the ancient eastern pathway. The sculpture is depicted sitting in <i>padmasana</i> with both of the hands are rested on the knees in <i>dhyana asana</i> . The sculpture is carved inside an arched shelf and painted in red colour.	Porphyritic Granite
4.		26°09'54.27"N 91°42'48.59" E	Lord <i>Vishnu</i> . Two rock-cut sculpture of four-handed Lord <i>Vishnu</i> is carved the stone boulder on the ancient eastern pathway. Both of the sculptures share similar attributes and also badly deteriorated. The sculpture is depicted sitting in a <i>padmasana</i> with both hands are rested on the knees in <i>dhyana asana</i> . The left backhand is holding an <i>ankusa</i> and a lotus bud in the right backhand. The sculpture is depicted with a <i>kritimukuta</i> and two-loop earring ( <i>karnawali</i> ). Both of the sculptures are carved inside an arched shelf and painted in red colour.	Porphyritic Granite
5.		26°09'54.20"N 91°42'49.04" E	Lord <i>Ganesha</i> . The rock-cut sculpture is carved on a stone boulder on the ancient eastern pathway. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is sitting in <i>Maharajalila asana</i> with his trunk curved on the right side. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the left backhand and an <i>Ankusa</i> (goad) in the right backhand. The sculpture is also eroded and painted in red colour. The sculpture is carved inside an arched shelf.	Porphyritic Granite
6.		26°09'54.04"N 91°42'48.21" E	Lord <i>Ganesha</i> . The rock-cut sculpture is carved on a stone boulder inside a small temple situated on the ancient eastern pathway. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is sitting in <i>Maharajalila asana</i> with his trunk curved on the left side. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the left backhand and a <i>danda</i>	Porphyritic Granite



			(shaft) in the right backhand. The sculpture is also eroded and painted in red colour. The sculpture carved inside an arched shelf.	
7.		26°09'53.51"N 91°42'47.42" E	Lord Ganesha. The sculpture is found carved on a stone boulder inside a small temple, situated on the ancient eastern pathway. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is sitting in <i>Maharajalila asana</i> with his trunk curved on the right side. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the right backhand and an <i>Ankusa</i> (goad) in the left backhand. In the right front hand. The sculpture is also eroded and painted in red colour. The sculpture is carved inside an arched shelf.	Porphyritic Granite
8.		26°09'53.23"N 91°42'44.29" E	Unknown. A two-handed rock-cut sculpture is found carved on a stone boulder on the ancient eastern pathway. The stone boulder is painted in white colour, and the sculpture is painted in red colour. The sculpture is depicted holding a <i>katari</i> (knife) in the right hand and some object in the left hand. The sculpture is eroded, making it difficult to understand any attributes. There is a halo ( <i>prabhaamandal</i> ) can be seen behind the head of the sculpture. Both of the legs are spread wide.	Porphyritic Granite
9.		26°09'54.31"N 91°42'50.17" E	Three rock-cut sculpture is found carved on a stone boulder near the <i>Ganesha</i> temple. All the sculptures are eroded and painted in red colour. The first sculpture in the left is ten-handed Goddess <i>Mahishasura Mardini Durga</i> , carrying different <i>ayudhas</i> . The central rock-cut sculpture is highly eroded that no attributes are clear. The third in the right side is of <i>Uma Maheswari</i> sculpture sitting in <i>maharajalila</i> posture looking at each other. Each sculpture is carved inside an arched shelf.	Porphyritic Granite
10.		26°09'54.5"N 91°42'49.7" E	<i>Darpul Ganesha</i> temple. The brick temple is constructed adjoining the cliff of the mountain and situated on the ancient eastern pathway. The temple has one chamber where a rock-cut image of Lord <i>Ganesha</i> is worshipped. The sculpture is eroded and painted in red colour. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is carved on a stone boulder inside the temple. The deity is depicted sitting in <i>Maharajalila asana</i> . The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the right backhand and an <i>Ankusa</i> (goad) in the left backhand.	Brick  Porphyritic Granite
11.			Lord <i>Chaturbhuj Ganesha</i> . The four-handed <i>Ganesha</i> sculpture block is found on the ancient eastern pathway near the eastern gateway 2. The sculpture is standing in a <i>Samabhanga/ Samapada-sthanaka</i> posture with its trunk curved on the left side, touching a <i>Modaka</i> (sweet rice ball) placed on the left front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in its left backhand and an <i>Ankusa</i> (goad) in the right backhand. In its right front hand, the deity is depicted holding an <i>Akshamala</i> (rosary). Painted in red colour.	Granite

### 13. Sculpture and Sculptural Fragments Found on the Western Pathway

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1.		26°09'59.6"N 91°42'15.3" E	Unknown. Two bearded men are sitting in a <i>uttanapada</i> posture facing in the opposite direction. The sculpture block is found on the western pathway near the <i>Dhumavati</i> temple	Granite	73	81	27
2.		-----	Unknown. Two stone fragment is found inside a house. Both are painted with vermilion. The sculpture block depicted a man in a yogic posture. The other is the fragment of a pillar with some standing figure carved on each side.	Granite	-----	-----	-----
3.		-----	Unknown. A sculpture fragment is found on the way to <i>Amrakeswara</i> temple. the sculpture is covered with a white cloth	Granite	-----	-----	-----
4.		-----	A sculpture fragment was found near the stairs on the western pathway. only head of the sculpture remains.	Basalt			
5.		-----	A sculpture fragment was found near the stairs on the western pathway. A bust of a male is installed inside a square block made of brick. The sculpture is broken from the bust, and both hands are also broken. The sculpture is depicted with different ornaments, including a <i>kritimukuta</i> , two big flower pattern earrings and a necklace.	Basalt			
6.		-----	Unknown. A broken sculpture block was found near the stairs on the western pathway. The sculpture panel depicted a dancing scene. The head of the female figure is broken.	Basalt			
7.		26°09'55.9"N 91°42'15.4" E	Unknown. Two broken four handed female sculpture is found inside an enclosed area with many other sculptural and structural fragments. Both of the sculpture share similar attributes, except the sculpture on the right side wearing a flower pattern earring, while the left sculpture is wearing tow big loop earrings. The sculpture is depicted with different ornaments, including a stylized headdress, necklace and	Granite	47 47	33 51	19 22

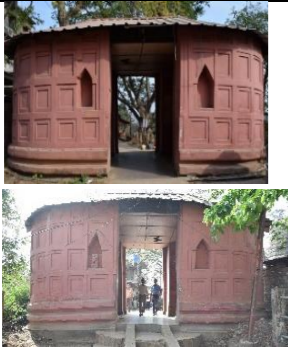

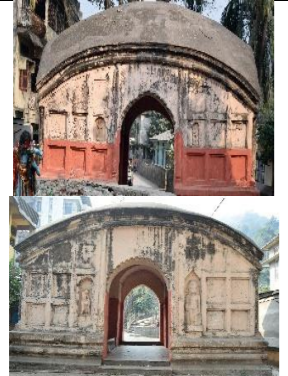


			earrings. The sculpture all hands are broken; only some indication two <i>ayudhas</i> are visible on each side of the sculpture.				
8.		26°09'55.9"N 91°42'15.4" E	The structural fragment is found inside an enclosed area with many other sculptural and structural fragments. The pillar with some flower motif is carved on a stone block.	Granite	37	21	13.5
9.		26°09'55.9"N 91°42'15.4" E	One sculpture is found inside an enclosed area with many other sculptural and structural fragments. The sculpture is installed on the wall. There is two standing figure carved on both sides of the stone block.	Granite	38	24	7
10.		26°09'55.9"N 91°42'15.4" E	One sculpture is found inside an enclosed area with many other sculptural and structural fragments. The fragment is installed on the wall. Only the head of the sculpture remains, and the rest is broken. The sculpture is depicted wearing two big loop earrings.	Granite	-----	-----	-----
11.		26°09'55.9"N 91°42'15.4" E	One sculpture is found inside an enclosed area with many other sculptural and structural fragments. The fragment is installed on the wall. There is a figure holding a musical instrument inside a square roof type structure. The fragment is deteriorated, and nothing is clear.	Granite	23	84	26
12.		26°09'55.9"N 91°42'15.4" E	One sculpture block is found inside an enclosed area with many other sculptural and structural fragments. The fragment is deteriorated beyond the point of recognition.	Granite	89	73	35
13.		26°09'55.9"N 91°42'15.4" E	One structural fragment with human figures carved on it is found inside an enclosed area with many other sculptural and structural fragments. Both of the figures are in standing position, and the front figure is depicted holding a spear while the other figure both hands are broken.	Granite	26	53	32
14.		26°09'55.9"N 91°42'15.4" E	One sculptural depicted two standing figure carved on the two sides of the stone block. The block is found inside an enclosed area with many other sculptural and structural fragments. The stone block is deteriorated, and no feature is clearly visible. Some ornaments and headgear are remains can be seen carved on the sculptures.	Granite	59	38	33






15.		26°09'55.9"N 91°42'15.4" E	One structural fragment with different floral and faunal motif carved on it is found inside an enclosed area with many other sculptural and structural fragments. In the faunal motifs, the figure of a deer and a lion can be seen carved inside a circle made of creepers. Above this, a row of <i>kritimukha</i> can be seen carved on the stone block. Rows of pearls are sprouting from the mouth of the <i>kritimukha</i> . Each <i>kritimukha</i> figure is separated by triangle-shaped motifs.	Granite	60	90	14
16.		26°09'55.9"N 91°42'15.4" E	One sculptural panel depicting two elephants is installed on the wall inside an enclosed area with many other sculptural and structural fragments. The stone block is broken and deteriorated.	Granite	23	53	6
17.		26°09'55.90"N 91°42'15.25" E	One structural fragment of Amalaka is found on the western pathway near the enclosed area where other stone fragments are placed. The Amalaka is installed outside of a house and used as a step.	Granite	20	89	49
18.		26°09'55.9"N 91°42'15.1" E	Lord <i>Ganesha</i> . The rock-cut sculpture is carved on a stone boulder inside an enclosed area. The figure is deteriorated beyond the point of recognition. Only through the presence of a trunk, one can identify the figure to be of Lord <i>Ganesha</i> . Rest feature is not clear, and the sculpture is painted with vermilion.	Porphyritic Granite	-----	-----	-----
19.		26°09'55.9"N 91°42'15.1" E	Unknown. The rock-cut sculpture is carved on a stone boulder inside an enclosed area. The figure was standing and deteriorated beyond the point of recognition. The sculpture is carved on the same stone boulder where the <i>Ganesha</i> image is carved. The figure is smeared with vermilion.	Porphyritic Granite	-----	-----	-----
20.		26°09'55.6"N 91°42'13.9" E	Lord <i>Ganesha</i> . Two rock-cut <i>Chaturbhuja Ganesha</i> (four-handed) figure is carved on the stone boulder inside an enclosed area. The left <i>Ganesha</i> sculpture is smaller than the right <i>Ganesha</i> sculpture but shares the same attributes. Both figures are deteriorated beyond the point of recognition. Only through the presence of a trunk, one can identify the figure to be of Lord <i>Ganesha</i> . Rest features are not clear, and the sculpture is painted with vermilion. Some steps are also carved on the same boulder.	Porphyritic Granite	-----	-----	-----
21.		26°09'56.3"N 91°42'5.9" E	Unknown. Two four-handed female deities sitting in <i>padmasana</i> is carved on the same boulder where the two <i>Ganesha</i> figures are carved inside an enclosed area. Both figures are deteriorated beyond the point of recognition. Some features are visible through which one can identify these sculpture of a female deity. Both of the sculptures are painted with vermilion.	Porphyritic Granite	-----	-----	-----

22.		26°09'55.88"N 91°42'4.97" E	<p>Lord <i>Ganesha</i>. The rock-cut <i>Chaturbhuj Ganesha</i> (four-handed) figure is carved on the mountain wall on the ancient western pathway, near the western gateway. The sculpture is depicted sitting in <i>Maharajalila</i> posture with both front hands rested on the knees and left backhand holding an axe (<i>parasu</i>), and right backhand is holding a hammer (<i>mudgara</i>). One headdress can be seen on the head of the sculpture. The sculpture is deteriorated and painted in red colour, making it difficult to identify any features.</p>	Porphyritic Granite	1m 7	91	32
23.		26°09'55.01"N 91°42'2.19" E	<p>The rock-cut miniature temple was carved on the same mountain wall on the ancient western pathway, where the <i>Ganesha</i> sculpture was carved. The miniature temple is sculpted following the norms of Northern India <i>Nagara</i> temple architecture with curvilinear <i>sikhara</i> topped with <i>amalaka</i> and <i>kalasha</i>.</p>	Porphyritic Granite	1m 40	69	10










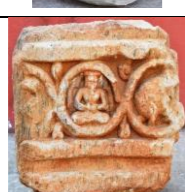


#### 14. Sculpture Installed on the Wall of Eastern and Western Gateway















S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26°09'54.3"N 91°42'57.7" E	Eastern Gateway 1. The gate is located near the <i>Siddheswara</i> temple on the site. There is no sculpture found installed on the gateway, but four arched shelves are found two, in each side of the gateway.	Brick	-----	-----	-----	-----
2.		26°09'55.33"N 91°42'55.07" E	A stone block is found on the ancient eastern pathway near the eastern gateway 2. In the stone block, two flying <i>Gandharva</i> is carved with remains of a <i>kritimukha</i> can be seen on the top of the flying <i>Gandharva</i> . The block is fixed with cement on the side of the road. The flying <i>Gandharva</i> can be seen holding a sword in the right hand and a shield in a left hand. Both figures are carved facing opposite inside a circle. The circle is placed inside an arched stone block. There is another stone block attached to the arched devoid of any motifs.	Granite	71 52	1m 17 48	76 30.5	----- -----
3.		26°09'55.7"N 91°42'29.1" E	Eastern Gateway 2. The gateway is located on the end of the ancient pathway. There is four sculpture, one in each side and two in each face is installed on the wall of the gateway.	Brick	-----	-----	-----	-----
4.		26°09'54.75"N 91°42'56.07" E	Unknown. A male sculpture is installed on the right side of the gateway. The sculpture is standing with the right leg slightly raised. The left hand is raised upward toward the chest, and the right hand is broken. The sculpture is depicted with different ornaments, including a square headdress. The sculpture is painted in white colour and standing in a plain pedestal inside an arched shelf.	Granite	73.5	70	-----	1m 38
5.		26°09'54.32"N 91°42'56.18" E	Unknown ( <i>Radha</i> and <i>Krishna</i> ). One sculpture panel depicted a male sculpture holding the chin of female sculpture is installed on the left side of the gateway. The sculpture is depicted with different ornaments, including a <i>kritimukuta</i> . The sculpture is eroded, and the facial feature is	Granite	74	64	-----	1m 47












			not clear. the sculpture is standing in <i>tribhanga</i> posture in a plain pedestal inside an arched shelf. The sculpture is painted in white colour.						
6.		26°09'54.55"N 91°42'57.24" E	Lord <i>Balabhadra</i> . The sculpture is installed on the right side of the gateway other faces. The sculpture depicted killing <i>Mustika</i> wrestler of king <i>Kamsa</i> by twisting his neck. The sculpture is depicted wearing a square headdress. The sculpture is installed inside an arched shelf and painted in white colour.	Granite	1m 58	61.5	-----	1m 29	
7.		26°09'56.21"N 91°42'26.62" E	Unknown. The sculpture is standing in a <i>sthanaka</i> posture is installed on the left side of the gateway other faces. The sculpture is depicted with different ornaments, including a square headdress, necklace, big loop earrings ( <i>karnavali</i> ) and bangles. The sculpture right hand is in <i>varada mudra</i> and the left hand in place on the thigh in <i>katihasta mudra</i> . The sculpture is painted in white colour and standing in a plain pedestal.	Granite	1m 52.5	68.5	-----	1m 13.5	
8.		26°09'54.3"N 91°42'1.34" E	Western Gateway. The western gateway is situated on the ancient western pathway.	Granite	-----	-----	-----	-----	
9.		26°09'54.3"N 91°42'1.34" E	A stylized lion. The sculpture is installed on the back face of the gateway on the right side. One full-blown flower pattern can be seen in front of the sculpture. The Tibetan lion style can be seen in the treatment of the sculpture.	Granite	69	1m 97	-----	46	
10.		26°09'54.3"N 91°42'1.34" E	A stylized lion. The sculpture is installed on the back face of the gateway on the left side. Two full-blown flower pattern can be seen one in each side of the sculpture. The Tibetan lion style can be seen in the treatment of the sculpture.	Granite	82	1m 67	-----	57	
11.		26°09'54.3"N 91°42'1.34" E	A stylized lion. The sculpture is installed on the front face of the gateway on the left side. Two full-blown flower pattern can be seen one in each side of the sculpture. The Tibetan lion style can be seen on the treatment of the sculpture	Granite	1m 27	1m 83	-----	1m 9	
12.		26°09'56.30"N 91°42'27.03" E	A stylized lion. The sculpture is installed on the front face of the gateway on the right side. One full-blown flower pattern can be seen in front of the sculpture. The Tibetan lion style can be seen in the treatment of the sculpture.	Granite	1m 15	2m 26	-----	1m 11	














**15. Kamakhya Temple Museum**  
(Location: 26°10'1.7"N 91°42'18.1" E)







S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1		26°10'1.2"N 91°42'17.3"E	Unknown. One headless sculpture with broken hands and legs. Wearing a loincloth with a long knot at the centre of the waist	Fine Granite	53	32	20
2		26°10'1.3"N 91°42'17.7"E	Lord <i>Shiva</i> . The sculpture is broken, and the face is also deteriorated. There is the only indentation of <i>Kapala</i> is left and a trident. Beneath the sculpture, there is another piece of structural block displayed at the same place.	Fine Granite	38 20.5	30 60	19 29
3.		26°10'1.2"N 91°42'17.7"E	<i>Naga Kanya</i> . Two female figures with serpent body standing in a position of praying or offering gratitude ( <i>Anjali/ Namaskara Mudra</i> ). Left female figure face is deteriorated beyond the point to be recognition.	Fine Granite	65	61	16
4.		26°10'1.4"N 91°42'17.9"E	Architecture fragment. Flower pattern carved on a stone block	Fine Granite	36	25	20
5.		26°10'1.4"N 91°42'17.5"E	Structure Fragments. Key Holes are visible	Fine Granite	24.5	68.5	25.5
6.		26°10'1.2"N 91°42'17.7"E	Goddess <i>Tara</i> . A female figure is sitting crossed legs. Wearing different ornaments. The face is deteriorated, and both hands are also broken.	Granite	72	55	33
7.		26°10'1.4"N 91°42'17.8"E	Unknown. Male figure carved on the stone block. Wearing earrings and a headdress.	Fine Granite	52.5	45	39.5
8.		26°10'1.5"N 91°42'17.6"E	Structural fragments with some design.	Fine Granite	25	33	26
9.		26°10'1.4"N 91°42'17.8"E	Architectural fragments with flower motif carved on it.	Granite	94	40	32
10		26°10'1.5"N 91°42'17.6"E	Architecture fragment with three circles carved on the block. On the centre circle, there is a human figure in a meditation posture. On the right side of the circle, there is an animal figure (elephant?). The left side circle is broken	Fine Granite	45	50	20















11		26°10'1.8"N 91°42'17.9"E	Soldier. A human figure with sword and armour	Granite	90	40	29.5
12		26°10'1.6"N 91°42'17.7"E	Structural fragments. In semi-circle shape with some design on it.	Fine Granite	22	64.5	36
13		26°10'1.6"N 91°42'17.6"E	An unknown female figure is sitting in a <i>padmasana</i> . Head is broken.	Stone	53	52	35
14		26°10'1.6"N 91°42'17.6"E	Unknown sculpture in deteriorated condition. Headless sculpture with broken legs and hand. A waistband is slightly visible.	Fine Granite	56	35	17
15		26°10'2.1"N 91°42'17.5"E	Sculptural block. Only the head remains rest is broken. Moustache in the figure is visible.	Fine Granite	32	82	20
16		26°10'1.9"N 91°42'17.7"E	Unknown. Sculptural block. Only the head remains rest is broken. In deteriorated condition.	Fine Granite	33	57	22
17		26°10'2.0"N 91°42'17.6"E	Unknown. Male Figure wearing a loincloth with a centre knot. Headless sculpture with broken legs. Wearing different ornaments.	Granite	61	46	21
18		26°10'2.0"N 91°42'17.7"E	Structural fragments	Granite	78	20	20
19		26°10'2.0"N 91°42'17.8"E	Two structural fragments displayed at the same place.	Granite Fine Granite	35 21	42 48	35 30
20		26°10'2.1"N 91°42'17.7"E	Architectural fragment with a Tibetan lion carved under a circle.	Fine Granite	47	30	36
21		26°10'2.0"N 91°42'17.7"E	Structural Fragments	Granite	36.5	68	36
22		26°10'2.0"N 91°42'17.9"E	Yaksini. One Female sculpture is placed above the structural fragment. The headless female sculpture with broken legs, wearing different ornaments.	Stone	50 21	30 37	18 35
23		26°10'2.1"N 91°42'17.5"E	Structural Fragments	Stone	24	57	28
24		26°10'2.1"N 91°42'18.0"E	Unknown. The figure is highly deteriorated beyond the point of reorganisation. Few ornaments are visible.	Stone	50	22	15












25		26°10'2.2"N 91°42'17.8"E	Unknown. A bearded man sitting crossed legs is carved on a stone block	Granite	45	65	31
26		26°10'2.2"N 91°42'17.9"E	Two architecture fragments are displayed at the same place. One with the flower design and other is lotus shape, most probably the part of <i>Amalaka</i> in a <i>shikhara</i> .	Granite Fine Granite	44 30	50 57	16 26
27		26°10'2.1"N 91°42'17.8"E	Three structure pieces are displayed at the same place. In the middle one, there are multiple faces carved on the stone block.	Granite Sandstone Granite	20 20 22	37 46 39	15 41.5 24
28		26°10'2.2"N 91°42'17.9"E	Structure fragment	Fine Granite	22	35	23
29		26°10'2.2"N 91°42'17.9"E	Architecture fragment with some animals is carved inside the circles.	Granite	50	39	16
30		26°10'1.4"N 91°42'17.8"E	Female Devotee. The head of the sculpture is slightly bent downwards, holding a bag (?) in her hand. Wearing ornaments such as a head-dress and earrings.	Fine Granite	85	42	23
31		26°10'1.2"N 91°42'17.7"E	Structural fragment. <i>Urushringa</i> fragment part of <i>shikhara</i> . Carved in two sides of the stone block.	Granite	82	56	45
32		26°10'1.4"N 91°42'17.5"E	Architecture fragment with flower design.	Fine Granite	56	38	34
33		26°10'1.4"N 91°42'17.6"E	Structure fragments	sandstone	16	58	47
34		26°10'1.7"N 91°42'17.7"E	Lord <i>Shiva</i> . The sculpture of Lord <i>Shiva</i> is broken with the only trident, and a <i>kapala</i> (skull cap) is visible. Standing in a <i>tribhanga</i> posture, wearing different ornaments. The face and legs are broken.	Granite	56	35.5	37
35		26°10'1.5"N 91°42'17.8"E	Structural fragment. <i>Kalasha</i> and <i>Amalaka</i>	sandstone	47	78	27
36		26°10'1.6"N 91°42'17.8"E	Structural fragment.	Granite	42	53	15
37		26°10'1.6"N 91°42'17.6"E	<i>Narasimha</i> (half lion and half man) <i>avatar</i> of Lord <i>Vishnu</i> killing king <i>Hiranyakashipu</i> is carved on the stone block. On the left side of the main deity, there is another figure with an animal head. Most probably the <i>Sharabha avatar</i> of Lord <i>Shiva</i> .	Fine Granite	29.5	48	23
38		26°10'1.7"N 91°42'17.7"E	Structural fragments. <i>Amalaka</i> and <i>Kalasha</i> .	Sandstone	39	70	36










39		26°10'1.9"N 91°42'17.6"E	Structural fragment. Flowers design is carved in a horizontal panel.	Sandstone	23	72	30
40		26°10'1.8"N 91°42'17.7"E	Unknown. A male figure in deteriorated condition. Headless figure with broken hands and legs.	Fine Granite	53	35	24
41		26°10'1.9"N 91°42'17.8"E	Structural Fragments. Some carved motif is visible	Granite	51	54	34
42		26°10'1.9"N 91°42'17.7"E	Unknown. Four-handed sculpture. Only three hands are visible here. The first two hands are broken from the wrist, and the third left hand is holding a lotus bud (?). The sculpture is broken from the waist down. Wearing different ornaments.	Granite	44	32	25
43		26°10'2.0"N 91°42'17.8"E	Two structural fragments.	Fine Granite	14 14	52 64	36 57
44		26°10'2.0"N 91°42'17.8"E	One architectural fragment and two structural fragments. In the architectural stone block, one archer figure is carved inside a circle. Right to this circle, one another broken circle is visible. Two structural stone block are displayed below of this architectural stone block.	Fine Granite	18 16.5 19	53.5 92.5 13.5	52 63 12
45		26°10'2.2"N 91°42'18.1"E	Architecture fragment. A face is carved on the stone block. Third eye (?) is visible in the forehead of the face. There is an imprint of two hands (now broken) are visible on both sides. Ornaments like a headband, flower motif earring is visible.	Granite	30	89	42
46		26°10'2.1"N 91°42'18"E	Structural Fragments.	Fine Granite	28.5	86	61
47		26°10'2.2"N 91°42'18.1"E	Architecture fragments. Round in shape. Two figures are carved on the two sides of the fragment. The left side male figure holding a flower bud (?) from one hand and the other hand is resting on the waist. The right side female figure is standing with one hand in <i>Jana Mundra</i> . Both figures are wearing different ornaments and standing on the pedestal.	Granite	64	32	39
48		26°10'2.1"N 91°42'17.9"E	<i>Makra</i> . Animal figure with decorative features with the hint of Tibetan animal art style. There is a hole inside the figure. Below this figure, there is another structural fragment displayed.	Sandstone Granite	34 43	45 72	29 27
49		26°10'2.2"N 91°42'17.8"E	<i>Gaja-Simha</i> carved on the stone block.	Granite	45	24	17

50		26°10'2.2"N 91°42'17.6"E	<i>Makra</i> . Some animal head. Similar to the Tibetan lion art style.	Granite	50	73	51
51		26°10'1.5"N 91°42'17.7"E	<i>Yaksini</i> . One female figure holding a <i>Chauri</i> (fly-whisk) standing on a lotus pedestal in <i>tribhanga</i> posture.	Granite	65	38	34
52		26°10'1.3"N 91°42'17.6"E	Structural fragments. Pillar portion with some design carved on it.	Fine Granite	59	44	23
53		26°10'1.5"N 91°42'17.6"E	Two Structural fragments.	Fine Granite	15 23.5	50 51	42 40.5
54		26°10'1.4"N 91°42'17.6"E	Structural fragment. Full bloom lotus is carved on a stone block. Must be a part of the ceiling.	Granite	21	65	62
55		26°10'1.4"N 91°42'17.8"E	Unknown. Bearded man wearing a loop earring. Lower portion and both hands from elbow are broken. Below the bearded man, one structural fragment is displayed in the same place.	Granite Sandstone	42.5 20	40 55	18 36
56		26°10'1.5"N 91°42'17.8"E	Structural fragment with some design carved on it.	Granite	42	71	29
57		26°10'1.6"N 91°42'17.7"E	Structural fragment.	Fine Granite	47	62	29
58		26°10'1.7"N 91°42'18.0"E	Architectural fragment. An unknown male figure is carved on the stone block. The man figure is wearing earrings and carved in a seating position. Holding something like a stick (?)	Fine Granite	23	33	35
59		26°10'1.7"N 91°42'17.8"E	Unknown. One human head with wide eyes carved on the stone block. The stone block is broken from the left side. Below this stone block, one another piece of an architectural fragment is displayed. The <i>shikhara</i> is carved on the stone block.	Fine Granite	29.5 35	38 63	20 32
60		26°10'1.8"N 91°42'17.7"E	Architectural fragment. Two human heads are carved on the stone block in the opposite direction. One figure in the left is carved with a moustache and curly hair. The other figure in the right (Female?) is carved with both hand raised upward, touching the head.	Sandstone	36	72	31
61		26°10'1.9"N 91°42'17.8"E	Structural fragment.	Sandstone	35.5	53	37
62		26°10'1.8"N 91°42'17.8"E	Structural fragment. Few lotus petals are shown carved on the stone block rest part is broken.	Fine Granite	50	62	22

63		26°10'1.7"N 91°42'18.0"E	Architectural fragment. Different motifs are carved on this stone block. Kritimukha can be seen on the top of the ring-shaped motif. Inside the ring motif, there is a human (deity) figure wearing a head-dress is carved. There is another piece of the structural fragment with scroll motif is displayed in the same place.	Fine Granite	26 32	26 27	20 38
64		26°10'2.0"N 91°42'17.9"E	Structural fragment. Round in shape and dowel hole mark can be seen on the block.	Granite	15	54	50
65		26°10'1.9"N 91°42'17.7"E	Unknown. A male figure is wearing different ornaments. The right hand is in <i>Jnana Mudra</i> , and the left hand is holding a small bag (?) like object.	Sandstone	1m14	46	25
66		26°10'2.1"N 91°42'17.9"E	Flying <i>Vidhyadhara</i> carved on a horizontal block. Only the faces and two hands are visible. Both figures are wearing different ornaments and holding a lotus bud in one hand and a conch (?) on others.	Sandstone	26	1m2	60
67		26°10'2.1"N 91°42'17.8"E	Structural fragment.	Granite	29	80	50
68		26°10'2.2"N 91°42'18.0"E	One Tibetan style lion and one structural block are displayed at the same place.	Granite Fine Granite	51 35	48 49.5	22.5 43
69		26°10'1.3"N 91°42'17.6"E	Unknown. A breaded man sculpture with broken legs and hands. His left hand rested on his chest, holding a rosary.	Fine Granite	93	49	25
70		26°10'1.4"N 91°42'17.7"E	Architectural fragment. Multiple steps are carved on both sides of the block.	Sandstone	43	64	30.5
71		26°10'1.4"N 91°42'17.7"E	Unknown. A face is carved on this fragment. This face has a vertical pillar-shaped body.	Granite	75	20	31
72		26°10'1.9"N 91°42'18.2"E	Unknown. One four-hand deity is carved on the front face of the square stone block. The deity is wearing different ornaments. The front hands are broken while the backhands shown holding different weapons.	Sandstone	32	42	27
73		26°10'2.0"N 91°42'18.1"E	Wooden doors. These doors were once used in the <i>mandapa</i> and <i>antarala</i> .	Wood	2m27	90	-
74		26°10'2.1"N 91°42'18.0"E	Female devotee. A female figure in gratitude or praying posture.	Granite	91.5	38.5	23





75		26°10'2.2"N 91°42'18.2"E	Structural fragment. The upper one is oval-shaped, and the lower one is octagonal shaped fragments. The below fragment was the pillar base.	Granite	30 29	- -	1m18 (C) 48 (C)
76		26°10'1.5"N 91°42'18.4"E	Architecture fragment.	Sandstone	52	51	24
77		26°10'2.0"N 91°42'18.1"E	Two structure fragment. The round-shaped fragment has a hole at the centre. Below the round-shaped fragment, there is another structure fragment displayed at the same place.	Granite Sandstone	28 20	- 44	32 (D) 20
78		26°10'1.6"N 91°42'18.2"E	Two Structural fragments. The <i>amalaka</i> fragment is displayed below the round-shaped structure fragment.	Granite	46.5 22	- -	1m12 (C) 1m85 (R)
79		26°10'1.7"N 91°42'18.4"E	Two structural fragments. The pillar fragment is displayed above the other structural fragment.	Fine Granite	53.5 11.5	28.5 33.5	- 29
80		26°10'1.5"N 91°42'18.4"E	Structural fragment.	Fine Granite	55	54	40.5
81			Structural fragments. Different pieces of structural fragments are assembled in a square platform and used as a pot for plants.	Granite			
82		26°10'1.7"N 91°42'18.9"E	Structural fragment (pillar base). The fragment is fixed on the ground and used as a flowerpot.	Granite	36	-	69 (C)
83		26°10'1.8"N 91°42'18.6"E	Two structural fragments. The top one is the base of a pillar (?) displayed as a flower pot. The below one is a pillar fragment.	Basalt Granite	18 65	- -	65 (D) 1m49.5 (R)
84		26°10'1.7"N 91°42'18.6"E	Structural fragment. Some flower pattern design is visible on the fragment.	Granite	30	33	36
85		26°10'2.1"N 91°42'18.6"E	Two structural fragments.	Granite	30 34	39.5 47	41 29
86		26°10'2.3"N 91°42'18.4"E	Two structural fragments.	Granite	45 45	24 60	21 31.5
87		26°10'2.2"N 91°42'18.4"E	Structural fragment.	Granite	29	83	32
88		26°10'2.2"N 91°42'18.5"E	Structural fragment.	Sandstone	23	65	31







89		26°10'2.3"N 91°42'18.4"E	Four structural fragments. The top one is a broken round-shaped fragment. Below of it is a pillar shape fragment with flower design carved on it. Then there are other two structural fragments. In one of the fragment, some animal figure is carved. The last fragment is the broken piece of <i>amalaka</i> .	Granite	35 19 26 23	54 (D) 1m12 46 58	15 48 49 54
90		26°10'2.4"N 91°42'18.4"E	Structural fragment. Some human figures are carved on this stone block.	Granite	37	52	51
91		26°10'2.1"N 91°42'18.1"E	Two structural fragments. The top one is a pillar fragment. Below the pillar fragment, there is another black stone fragment displayed, which is half broken. The fragment has some block design engraved on it.	Fine Granite Basalt	62 22	77	31 (D) -
92		26°10'1.9"N 91°42'18.1"E	Two architectural fragments. The top one has a <i>Kalasha</i> motif carved on the stone block. Below this fragment, there is another structural fragment.	Fine Granite	59 22	49 44	30 27
93		26°10'2.0"N 91°42'18.1"E	Two structural fragments are displayed in the same place.	Sandstone	28 46	34 49	14 15.5
94		26°10'2.2"N 91°42'18.3"E	Architecture fragment. Flowers design is carved on the stone block.	Clay tiles	46	34	16
95		26°10'2.2"N 91°42'18.3"E	Female Devotee. A female figure is slightly bent and holding one of the corners of her cloth to cover the face	Fine Granite	90.5	43.5	24
96		26°10'2.2"N 91°42'18.4"E	Two structural fragments are displayed in the same place.	Granite Sandstone	47 27	23 10 (R)	23 23
97		26°10'2.3"N 91°42'18.2"E	Two fragments. The top one is a nude male figure, whose head is broken. The figure is holding a broken sword from his left hand and a human head in his right hand. The figure is depicted wearing different ornaments. Below this fragment, another structural fragment is displayed (pillar base?).	Granite	44 63	19 53	11.5 23
98		26°10'2.2"N 91°42'18.1"E	Two fragments. The top one is pillar-shaped carved on the stone block. Below this fragment, one flower petals pattern fragment is displayed ( <i>amalaka?</i> ).	Fine Granite	53 25.5	31 49	17.5 24
99		26°10'2.3"N 91°42'18.2"E	Soldier with a sword and armour. Both legs are broken.	Fine Granite	87	42	30



100		26°10'2.0"N 91°42'18.2"E	Two fragments. The top one is the sculpture fragment, which is now broken. Only the feet of some deity is visible in the stone block. Some animals (bull?) figures are also visible in the block. Below this fragment, there is another structural fragment displaced. This fragment is round in shape	Granite Fine Granite	34 24	62	32 37 (D)
101		26°10'2.1"N 91°42'17.9"E	Two structural fragments are displayed in the same place.	Sandstone	41 26.5	33 37	36 46
102		26°10'2.0"N 91°42'18.1"E	Two structural fragments are displayed in the same place. The top one is the pillar fragment, and the below one is some structural fragment with some design pattern.	Fine Granite	67 15	95 (C) 46	29.5 31.5
103		26°10'2.2"N 91°42'18.1"E	Lord <i>Kubera</i> . The broken sculpture of Lord <i>Kubera</i> is only identifiable due to the presence of a mongoose ( <i>Vahana</i> of Lord <i>Kubera</i> ) and several <i>Ratna-Patra</i> (jewel-pot) beneath the asana on the Lord. The right hand is in <i>Varada Mudra</i> (granting boons). There are another two structural fragments displayed below the <i>Kubera</i> sculpture.	Stone	47 14 16	35 48 51	13 18 21
104		26°10'2.1"N 91°42'18.2"E	Architectural fragments. Two Tibetan lions are carved on the stone block. Below this fragment, there is another round structural fragment of the pillar base in the display.	Fine Granite	62 14	23 -	18 40 (D)
105		26°10'2.1"N 91°42'18.3"E	Structural fragment. Pillar base	Fine Granite	33	55	45
106		26°10'2.4"N 91°42'18.3"E	Two Structural fragments are displayed in the same place.	Sandstone Fine Granite	32 20	35 56	33 27
107		26°10'2.2"N 91°42'18.2"E	Two Structural fragments are displayed next to each other.	Fine Granite	26 23	37 41	29 29
108		26°10'2.2"N 91°42'18.2"E	Structural fragment.	Fine Granite	44	22	14

### 16. Kamaeswara Temple

LOCATION: 26°09'57.5"N 91°42'23.6" E

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1	 	<p>26°09'57.5"N 91°42'23.6" E (Main Temple)</p> <p>26°09'57.7"N 91°42'23.66" E (Mandapa)</p> <p>26°09'57.67"N 91°42'23.99" E (Antral)</p> <p>26°09'57.75"N 91°42'24.34" E (Garbhagriha)</p>	<p><i>Kamaeswara</i> temple. This temple consists of three chambers, the <i>Garbhagriha</i>, the <i>Antarala</i>, and the <i>Mandapa</i>. The <i>garbhagriha</i> is square in shape, <i>antarala</i> is rectangular, and the <i>mandapa</i> is apsidal. The temple is the west-facing temple. There is a square-shaped pond or <i>Kund</i> at the centre of the <i>garbhagriha</i>, which function as a <i>pitha</i>. There is a small water-filled pond at the left corner of the <i>garbhagriha</i>, which is most probably the water source for the pond at the centre. Here, in the temple, the Lord <i>Kameswar</i> is worship in an aniconic form. The <i>garbhagriha</i> outer wall has <i>Char-Chala</i> roof, with the four flying lion motifs at every four corners. The <i>mandapa</i> has an apsidal end and ridged roof of the <i>Ranghar</i> type Ahom style. A <i>Makara</i> sculpture is installed on the roof of <i>mandapa</i>.</p>	Brick	-----	445.49 (area)	-----	-----
2		-----	<p>Entrance gate. This entrance gate opens at the temple premises, shared by <i>Kameswara</i> and <i>Chinnamasta</i> temple.</p>	Brick	-----	-	-----	-----
3		-----	<p>Broken Fragments. This fragment is placed inside an arched shelf in the <i>Mandapa</i>. The fragment is placed in the left side wall of the <i>mandapa</i>. On the right side of the fragment, there is a headless (broken) female figure. The female figure is standing in a <i>tribhanga</i> posture holding something in between both of her hands. The figure is wearing different ornaments. the base of the fragment is a pedestal with some figures carved on it. The fragment is smeared with vermilion and decorated with garlands. Nothing is clear due to the colour and the deterioration of the fragments.</p>	Stone	86 2m1 (height of shelf)	85	25	-----





4.		-----	Sculpture remains. This fragment is highly deteriorated beyond the point of recognition. This sculpture remains placed inside an arched shelf in the <i>mandapa</i> wall. The level of deterioration is so high that no features are clear. The left hand of the sculpture is raised toward the chest, while the right hand is raised on the side of the body in some posture. On the basis of posture, it is suggested that the figure is most probably singing something. The figure is sitting in a <i>sukhasana</i> pose.	Stone	25.5	22	20.5	92 (distance from floor)
5.		26°09'57.8"N 91°42'23.4" E	Sculpture Fragment. One broken female sculpture is placed outside the <i>mandapa</i> in a tree. Sculpture's both hands and head is broken. The sculpture is sitting in a <i>sukhasana</i> pose. The figure is also eroding. Few ornaments like a necklace and a waistband are visible. The pedestal of the sculpture is also decorated with some design.	Stone	29.5	30	18	2m31 (distance from temple)
6.		26°09'57.85"N 91°42'23.45" E	Unknown sculpture fragment. On the left side of the temple near the <i>mandapa</i> , there is another piece of sculpture fragment placed. The fragment left hand is in <i>jnana mudra</i> , and the right hand is rested on the waist in <i>kaṭi-hasta mudra</i> . The fragment is fixed with cement on the floor. The figure is quite similar to the sculpture outside the <i>garbhagriha</i> of the Kamakhya temple. The sculpture is wearing a conical headgear with different types of ornaments. The fragment of broken from thigh down.	Stone	1m11	63	26.5	3m85 (Distance from temple <i>mandapa</i> )
7.		26°09'57.75"N 91°42'23.35" E	Structural Fragment. One structure fragment is placed outside near the above deity sculpture. This fragment lies on the left side of <i>mandapa</i> , near the boundary wall.	Stone	1m19.5	46	31.5	3m98 (Distance from temple)
8.		26°09'57.8"N 91°42'23.4" E	<i>Siva linga</i> . Two <i>Shiva lingas</i> are placed in the tree outside the <i>mandapa</i> with the broken female sculpture. These <i>Siva Lingas</i> are smeared with vermillion. The same type of <i>Sivalinga</i> is installed inside the two small brick temples near the entrance gateway. On the basis of the <i>Shiva linga</i> base, it is suggested that they might be a part of a stone temple	Stone	67	31	-----	2m31 (distance from the temple)
9.		26°09'57.9"N 91°42'23.4" E	Structure remains. Two structure remains are placed outside, near the boundary wall.	Stone	1m32 1m38.5	31.5 56.5	28.5 32	5m 2 (distance from temple)







10.		26°09'57.8"N 91°42'23.3" E	<p><i>Shiva</i> temple. One small <i>Shiva</i> temple is constructed on the right side of the entrance gate of the temple premises. This temple has one chamber, which houses a <i>Shiva linga</i>. This newly build Brick temple is constructed on a stone foundation, which is most probably a part of some old stone temple. The roof of this small temple is constructed on the basis of <i>Char-Chala</i> (four eaves) Bengali temple architecture.</p>	Brick	-----	----- -	-----	-----
11.		26°09'57.6"N 91°42'23.3" E	<p><i>Shiva</i> temple. The same type of <i>Shiva</i> temple is constructed on the left side of the entrance gate of the temple premises. This temple has one chamber, which houses a <i>Shiva linga</i>. The roof of this small temple is constructed on the basis of <i>Char-Chala</i> (four eaves) Bengali temple architecture.</p>	Brick	-----	----- -	-----	-----




### 17. Kedareswara Temple

Location- 26°09'57.1"N 91°42'25.3" E

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1.		26°09'57.1"N 91°42'25.3" E	<i>Kedareswara</i> temple is a small temple dedicated to Lord <i>Shiva</i> . Here Lord <i>Kedareswara</i> (one of the forms of Lord <i>Shiva</i> ) is worshipped in the form of <i>Linga</i> . This temple has a very small octagonal chamber attach to a small rectangular <i>antral</i> . The temple is relatively newly built, but some old fragments of structures and sculptures are displayed in the compound of the temple.	Brick	-----	-----	-----
2.		26°9'57.4" N 91°42'25.6" E	Goddess <i>Chamunda</i> ( <i>CLI</i> ). This Sculpture block is displayed on the left side of the main temple. There are two sets of fragments displayed in close proximity. The first one is the sculpture block, and the second is the structure block. The structure block looks like a base fragment of a pillar. The sculpture, on the other hand, is carved on the flat stone block. Goddess <i>Chamunda</i> is depicted sitting on a prostrate corpse ( <i>pretasana/savasana</i> ) in <i>Maharajalila</i> posture over a double petal lotus. Her hair is neatly tied up in a <i>Jatamukuta</i> with two snake heads spreading out from each side. She has a skeleton-like body with three sunken eyes and an open mouth with fangs. The four-handed Goddess is wearing <i>Kundala</i> (earrings) and snakes as ornaments. In her left hands, she is carrying a <i>katari</i> (sharp knife) and a <i>kapala</i> (skull cup). On her right hand, she is holding a sword and a severed head. On the pedestal of this stone block, numerous <i>Bhutas</i> (ghosts) can be seen. On the top of the stone panel or <i>silapatta</i> , a <i>Kritimukha</i> and two flying <i>Vidyadharas</i> , holding flower creepers in their hands can be seen above the head of the fiery Goddess.	Granite	1m16m m	63mm	23mm
3.		26°9'57.4" N 91°42'25.8" E	Unknown. A headless sculpture is displayed on the left side of the main temple compound. Two hands figure standing slightly tilted in a <i>Kati-hasta Mudra</i> , with his/her right hand rested on the thigh and left hand holding some object. The block is broken.	Granite	1m 25mm	45.5 mm	15mm
4.		26°9'57.4" N 91°42'25.8" E	Flying <i>Vidhyadhara</i> . This sculpture block fragment is found on the left side of the temple compound with other sculptures fragments. In this block, two faces are visible with two sets of hands raised parallel to the face. Only their heads are sculpted on the block without their body. These two figures wearing ornaments like necklace and headdress, nothing else is clear due to the heavy application of the vermilion on the stone.	Granite	25 mm	40 mm	21mm






5.		26°9'57.4" N 91°42'25.6" E	Unknown. This structure fragment is displayed alongside the other fragments on the left side of the temple compound. On the right side of this fragment, one seated female figure is visible. This four-handed female figure sitting crossed legs with two of her front hands are in some mudra. The backhands are holding some object which is not clear. The size and the presence of the figurine on the stone block suggested that it was a part of the temple door jamb.	Granite	20.5 mm	18mm	40 mm
6.		26°9'57.4" N 91°42'25.6" E	Structure fragment. This fragment is also rested on the left side of the temple compound.	Granite	-----	-----	-----
7.		26° 9'57.3" N 91°42'25.6" E	Goddess <i>Chamunda</i> (CR1). This Sculpture block is displayed on the right side of the main temple compound. There are two sets of fragments displayed in close proximity. The first one is the sculpture block, and the second is the structure block. The structure block looks like a fragment of a pillar base. The sculpture, on the other hand, is carved on the flat stone block with great detail. This sculpture is identical to the CL1 sculpture. The fundamental difference between these two sculptures is in the preparation of the panel or silapatta, and the base of this figure is blank and broken. In this sculpture Goddess, <i>Chamunda</i> is depicted sitting on a prostrate corpse ( <i>pretasana/savasana</i> ) in <i>Maharajalila</i> posture over a double petal lotus. Her hair is neatly tied up in a <i>Jatamukuta</i> with two snake heads spreading out from each side. She has a skeleton-like body with three sunken eyes and an open mouth with fangs. The four-handed Goddess is wearing <i>Kundala</i> (earrings) and snakes as ornaments. In her left hands, she is carrying a <i>katari</i> (sharp knife) and a <i>kapala</i> (skull cup). On her right hand, she is holding a <i>trisula</i> (trident) and a severed head.	Granite	1m 2mm	62.5 mm	18.5 mm
8.		26°9'57.2" N 91°42'25.5" E	Unknown. Five headed snakes sculpted on a stone block is displayed on the right side of the temple compound. Beneath this fragment, there is another structure fragment.	Granite	33 mm	74 mm	35mm
9.		26°9'57.2" N 91°42'25.5" E	Structural fragment lays on the right side of the temple compound. On the backside of the Goddess <i>Chamunda</i> sculpture, one structural fragment is rested. From its size and length, it is suggested that this was a fragment of stairways.	Granite	31 mm	72 mm	35mm
10.		26°9'57.5" N 91°42'25.5" E	Pillar fragments. One broken pillar fragment is placed outside of the temple entrance gate. This pillar is placed on the left side of the entrance gate. On top of the pillar fragment, there are sequences of decorative <i>Kirti-mukha</i> . The pillar is further decorated with a band of creepers which is visible at the end of the fragment.	Granite	1m 10 mm	40 mm	48 mm (circumference)







11.		26°9'57.4" N 91°42'25.2" E	Pillar fragment. One broken pillar fragment is placed outside of the temple entrance gate. This pillar is placed on the right side of the entrance gate. On top of the pillar fragment, there are sequences of decorative Kirti-mukha. The pillar is further decorated with a band of creepers which is visible at the end of the fragment.	Granite	1m 10mm	47mm	46.5 mm (circumference)
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### 18. Kotilinga Temple

LOCATION: 26°10'5.2"N 91°42'26.2" E

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1.		26°10'0.57"N 91°42'25.61" E	Unknown. A broken male sculpture is installed inside a rectangular shelf on the wall of a house, in the route toward the <i>Kotilinga</i> temple. This male figure sculpted wearing different ornaments with his right hand raised upon his chest in some mudra, and his left hand rested on the waist. The male figure has a moustache, and his eyes are wide open. The figure is painted in green colour and also the legs are broken.	Granite	72.5	30	22.5
2		26°10'0.56"N 91°42'25.66" E	Unknown. Some structure fragment is installed inside the square self on the wall of a house, in the route toward the <i>Kotilinga</i> temple. The structure fragment is most probably is the piece of <i>adhisthana</i> of a stone temple. The fragment is painted green.	Granite	27	47	17
3		26°10'0.53"N 91°42'25.63" E	Unknown. A sculpture block is installed inside a square self in the wall of the house, on the route toward the <i>Kotilinga</i> temple. Here the unknown deity is sitting with left hand raised holding some weapon, and right hand holding a sword. The entire sculpture is eroded beyond the point of recognition. The deity is wearing a headdress with some other ornaments. The traces of two pillars, one in each side can be seen in the block. The entire block is painted green.	Granite	43.5	33.5	6
5		-----	Unknown. A sculpture or structural block is found near the temple premises. This stone block has a carved figure of a human in a dancing posture. Nothing is clear from this stone block, due to the condition it is laying on the ground.	Granite	-----	-----	-----
5		26°10'5.2"N 91°42'26.2" E (temple premises) 26°10'4.5"N 91°42'26.1" E	<i>Kotilinga</i> temple is a cave temple. There are two caves in the temple premises. In the main cave, the Shiva is worshipped in linga form, while the goddess Parvati is worshipped in a pitha form. The cave also has a metal Nagaraj sculpture. The cave opens on the other side, which follows with stairs.	Porphyritic Granite	196.954 (elevation)	-----	-----








		(main cave) 26°10'5.0"N 91°42'26.0" E (exit cave)					
6		26°10'4.4"N 91°42'25.3" E (cave opening) 26°10'5.0"N 91°42'26.1" E (narrow face)	The second cave in the temple premises is a small cave, known as Ganesha cave. The Ganesha figure is carved on the stone wall of the cave opening. The five steps in the cave lead toward the small underground water-filled crevices. Which is consider sacred. The exit is a narrow passage in the cave.	Porphyritic Granite	-----	-----	-----
7		26°10'4.7"N 91°42'26.7" E	<i>Rama Kund</i> . A square stepped pound is constructed near the temple for ritualistic purposes.	Granite	27.9112 (Area)	21.152 (Perimeter)	-----
8		26°10'5.4"N 91°42'26.6" E	Structural fragment. Outside the temple, there is one structure fragment laying in the tree. The fragment is smeared with vermilion. The fragment is most probably the piece of <i>Amalaka</i> broken from the stone temple.	Granite	12	44	-----
9		26°10'4.9"N 91°42'26.2" E	One seated bull figure is carved on the mountain wall in the temple. The bull figure is smeared with vermilion. The figure is carved next to the narrow passage wall of the Ganesha cave.	Porphyritic Granite	44	46.5	-----
10		26°10'5.0"N 91°42'26.1" E	Structural fragment. One broken <i>amalaka</i> piece is placed just outside the Ganesha cave. The <i>amalaka</i> fragment is painted in orange colour and decorated with garlands. One side of the <i>amalaka</i> is broken.	Granite	16	78	40













11		<p>26°10'5.1"N 91°42'26.5" E</p>	<p>Lord <i>Ganesha</i>. The <i>Chaturbhuj</i> Ganesha (four-handed) figure is carved on the mountain wall on the opening face of the <i>Ganesha</i> cave. The <i>Ganesha</i> figure is painted in dark orange colour, with some artificial eyes pasted on the carved eyes of the figure. Due to the colour pasted on the carved figure, it is very difficult to identify any features.</p>	Porphyritic Granite	64.5	55	-----
12		<p>From left to right 26°10'4.9"N 91°42'26.0" E (small Ganesha) 26°10'5.0"N 91°42'26.0" E (middle Ganesha) 26°10'5.0"N 91°42'26.0" E</p>	<p>Lord <i>Ganesha</i>. Three <i>Chaturbhuj</i> Ganesha (four-handed) figure are carved in the mountain wall just opposite to the opening of the <i>Ganesha</i> cave. Iconographical all <i>Ganesha</i> has the same attributes, except the size of the <i>Ganesha</i>. The third one is relatively smaller in size in comparison to the other two. All the <i>Ganesha</i> are painted in dark orange colour, so it's very difficult to see any attributes clearly. The <i>Ganesha</i> holds an axe or a goad in one upper arm and a pasha (noose) in the other upper arm. The left front hand is in <i>varada mudra</i> (gesture of generosity), while the right hands hold a pot filled the sweets (?). The artificial eyes were pasted on the carved eyes of the <i>Ganesha</i>.</p>	Porphyritic Granite	81 1m 22 1m18	47 97 99	----- ----- -----











### 19. Mahakal Ganesha Temple



Location: 26°09'53.6"N 91°41'59.2" E

#### Sculptures displayed in the courtyard of the *Mahakal Ganesha* temple

S. No	Photo	Location	Name & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)
1.		26°09'53.6"N 91°41'58.2"E	<i>Mahakal Ganesha</i> temple. The brick temple is constructed adjoining the cliff of the mountain. The temple has one chamber where a rock-cut image of Lord <i>Ganesha</i> is worshipped.	Brick	609.4436 (area=m*m)	-----	-----
2.		26°09'53.64"N 91°41'58.85"E	Lord <i>Ganesha</i> . The rock-cut <i>Chaturbhuj Ganesha</i> (four-handed) figure is carved on the stone boulder inside the <i>Mahakal Ganesha</i> temple. The sculpture is depicted sitting in <i>Maharajalila</i> posture with his trunk curved on the left side, touching a <i>Modaka</i> (sweet rice ball) placed on his left front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in the left backhand and an <i>Ankusa</i> (goad) in the right backhand. The sculpture is painted in red colour.	Porphyritic Granite	-----	-----	-----
3.		26°09'53.26"N 91°41'58.92"E	Nymphs or <i>Apsara</i> sculpture. The sculpture is carved on the granite stone block, and it is the broken part of the temple structure most probably installed on the ceiling of the temple. The face of the sculpture is badly eroded, but the beauty of the sculpture is still intact. the sculpture is curved inside a full-blown lotus, either flying or dancing. The figure is carved under decorative circles. Three layers of the circle are visible such as the outer rim circle, the middle flower petal circle and the small circle in which the figure is carved. The figure is eroded, and nothing else is clear.	Granite	1m 56	1m 35	27
4.		26°09'53.63"N 91°41'59.22"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	34	63	42
5.		26°09'52.97"N 91°41'58.97"E	Structural fragment. The base of the <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. Only the residue of a stone disk with a flower petals design remains, and the other parts of the <i>amalaka</i> are missing.	Granite	21	51	35
6.		26°09'52.87"N 91°41'58.82"E	Sculpture relief block. A stone relief block is displayed in the courtyard of the <i>Mahakal Ganesha</i> temple. In this relief, two female figures are sculpted inside a pillar niche. The sculptures are highly deteriorated, and the object between these two figurines is also missing or broken. There is another figure sculpted on the left side of the block, which is deteriorated beyond the point of recognition.	Granite	22.5	46	42.5
7.		26°09'52.98"N 91°41'58.71"E	Structural fragment. One broken <i>amalaka</i> is on display in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing	Granite	32.5	52	85

8.		26°09'53.04"N 91°41'58.62"E	Structural fragment. One broken <i>amalaka</i> is on display in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	32	68	66
9.		26°09'53.10"N 91°41'58.86"E	Structural fragment. One broken <i>amalaka</i> is on display in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing	Granite	32.5	64	54
10.		26°09'53.12"N 91°41'58.79"E	Structural fragment. The base of the <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. Only the residue of a stone disk with flower petals design remains, and the other parts of the <i>amalaka</i> are missing.	Granite	18.5	70	48
11.		26°09'53.17"N 91°41'58.86"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	33	40	58
12.		26°09'53.22"N 91°41'58.86"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	31	76	45
13.		26°09'53.29"N 91°41'58.85"E	Structural fragment. Pillar base	Granite	32.5	1m 8	73
14.		26°09'53.27"N 91°41'58.86"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	33	45	53
15.		26°09'53.11"N 91°41'58.88"E	Sculpture relief block. A stone relief is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. In this stone block, two individual human figures are sculpted. The one from the left is depicted riding a horse, and one on the right is depicted dancing. The right figurine is deteriorated, and many features of this figurine are broken or missing. Both figurines are separated by a pillar.	Granite	33	58	19
16.		26°09'53.32"N 91°41'58.89"E	Structure fragment.	Granite	37	43	32
17.		26°09'53.32"N 91°41'58.71"E	Structural fragment. One broken <i>amalaka</i> is on display in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of <i>amalaka</i> is also missing.	Granite	33	61	48
18.		26°09'53.40"N 91°41'58.88"E	Sculpture relief block. This relief block is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. In this relief, two female figurines are depicted in different postures. The one from the left side is depicted as an archer, and the one from the right side is depicted in some yoga posture. Both figurines are separated by a pillar.	Granite	31	58	27.5
19.		26°09'53.43"N 91°41'58.88"E	Structure fragment.	Granite	42	90	28

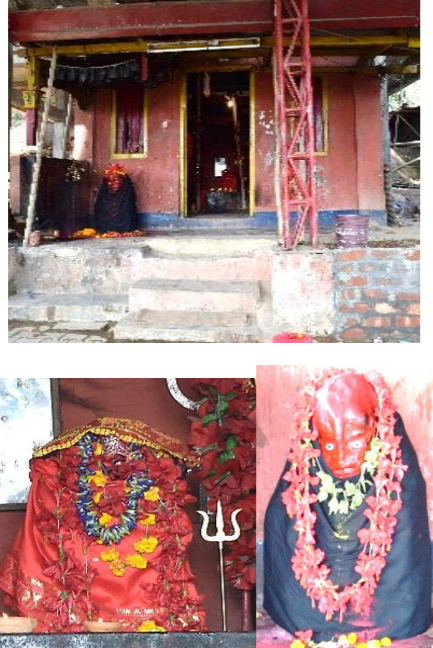





20.		26°09'53.35"N 91°41'58.82"E	Structural fragment with decorative engravings. This stone block is displayed in the courtyard of <i>Mahakal Ganesha</i> temple.	Granite	40	76	11
21.		26°09'53.55"N 91°41'58.86"E	One broken head of a wild boar (Tibetan style?). This sculpture is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. Only the head with a broken snout is displayed, and the rest of the body is missing or broken. The boar tusks are visible with two broad eyes. One beads chain is also visible in the neck of the wild boar.	Granite	42.5	54	30
22.		26°09'53.50"N 91°41'58.93"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of the <i>amalaka</i> is also missing.	Granite	37	62	48
23.		26°09'53.65"N 91°41'58.99"E	Structural fragment. One broken <i>amalaka</i> is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The <i>kalasha</i> on the top of <i>amalaka</i> is also missing.	Granite	32	64	47
24.		26°09'53.54"N 91°41'58.91"E	Sculpture relief block. This relief block is displayed in the courtyard of <i>Mahakal Ganesha</i> temple. The block is broken from the left side. Two elephants with their respective riders and <i>mahout</i> are sculpted in the stone block. The rider and the <i>mahout</i> of the left side elephant are broken. Both elephants are separated by a pillar, but their tusks are touching with each other. The rider and the <i>mahout</i> of the right side elephant are depicted enjoying the ride.	Granite	34	69	22
25.		26°09'53.43"N 91°41'59.04"E	Three rock-cut miniature temples are found carved on the mountain cliff in the <i>Mahakal Ganesha</i> temple. These miniature temples are sculpted following the norms of Northern India <i>nagara</i> temple architecture style. The first two temples from the left side have a small sculpted chamber adorned with a <i>Shiva linga</i> . The last or the third temple has no carved chamber.	Porphyritic Granite	-----	-----	-----
26.		26°09'53.49"N 91°41'59.09"E	One rock-cut <i>Siva linga</i> is found carved on the mountain cliff in the <i>Mahakal Ganesha</i> temple.	Porphyritic Granite	-----	-----	-----
27.		26°09'53.67"N 91°41'59.22"E	The four hands rock-cut <i>Ganesha</i> sculpture. This sculpture is found sculpted on the mountain cliff in the <i>Mahakal Ganesha</i> temple. The <i>Ganesha</i> is sitting in a <i>lalitasana</i> posture. His front two hands are rested on the knees. The back left-hand holds a full bloom lotus, and the back right-hand holds an axe. The sculpture is painted red with vermilion.	Porphyritic Granite	-----	-----	-----
28.		26°09'53.67"N 91°41'59.37"E	Five rock-cut <i>Shiva linga</i> . These <i>Shiva lingas</i> are carved on the mountain cliff of <i>Mahakal Ganesha</i> temple. There is a total of five <i>Shiva linga</i> sculpted on the face of the cliff. The centre one is larger than the rest of the <i>linga</i> .	Porphyritic Granite	-----	-----	-----
29.		26°09'53.69"N 91°41'59.38"E	Three rock-cut miniature temples are found sculpted on the mountain cliff in the <i>Mahakal Ganesha</i> temple. These miniature temples are sculpted following the Northern India <i>nagara</i> temple architecture style. Every temple has a small sculpted chamber consisting of no images or idols.	Porphyritic Granite	-----	-----	-----

30.		26°09'53.49"N 91°41'59.42"E	One rock-cut miniature temple is carved on the mountain cliff in the <i>Mahakal Ganesha</i> temple. This miniature temple is sculpted following the Northern India <i>nagara</i> temple architecture style. The chamber of the temple is adorned with a <i>Shiva linga</i> .	Porphyritic Granite	-----	-----	-----
31.		26°09'53.28"N 91°41'59.03"E	Two rock-cut miniature temples are found carved on the mountain cliff in the <i>Mahakal Ganesha</i> temple. These miniature temples are sculpted following the norms of the Northern India <i>nagara</i> temple architecture style. Every temple has a small sculpted chamber. The right side temple chamber adorns with a <i>Shiva linga</i> , and the left side temple chamber adorns with an idol of some four hands deity standing on a flower pattern pedestal. These temples are larger than the rest of the miniature temples sculpted on the face of this cliff.	Porphyritic Granite	-----	-----	-----



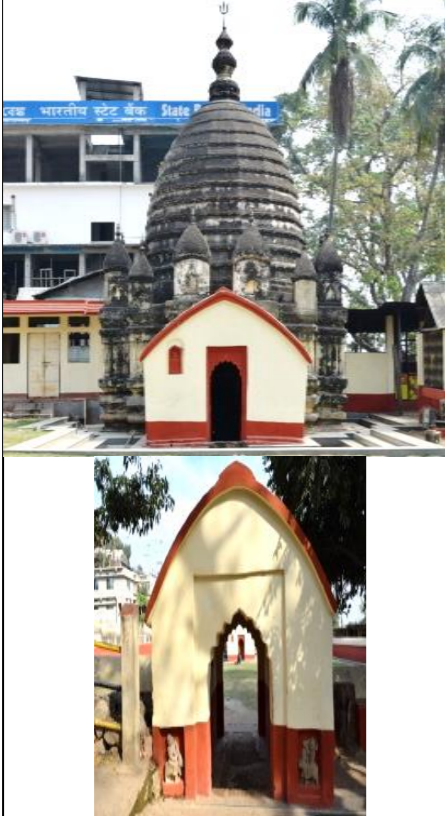


## 20. Shasankali Temple




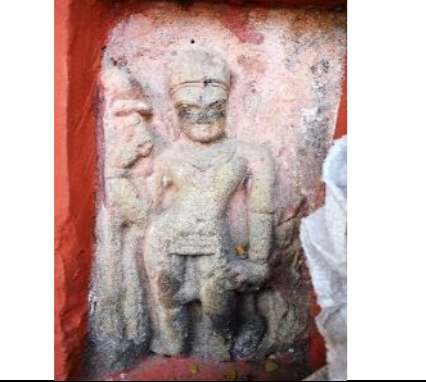


**LOCATION: 26°09'55.9"N 91°42'30.2" E**





S. No	Photo	Location	Names & Attributes	Material
1		<p>26°9'55.9"N 91°42'30.2" E</p> <p>26°9'55.4"N 91°42'30.0" E</p> <p>(Godeess <i>Kali</i> Idol outside the temple)</p>	<p><i>Shasankali</i> temple. This small brick temple is situated on the route between the <i>Bogaladevi</i> temple and eastern gateway. In this temple, the Goddess <i>Kali</i> is worshipped in the iconic form. The idol of Goddess <i>Kali</i> is covered with red cloth. Only a part of her face is visible, which show the idol is black in colour. This temple has only one room, which is used as both <i>Garbhagriha</i> and <i>Mandapa</i>. There is another idol of Goddess <i>Kali</i>, placed just outside in the corner of the temple gate. This idol of the Goddess <i>Kali</i> is painted in red colour and covered with black cloth.</p>	Brick
2		<p>26°9'55.4"N 91°42'30.4" E</p>	<p>Structural Fragments. There are several structure fragments laying outside the temple. The structural fragment was a broken fragment of a pillar. The fragment is smeared with vermilion. This fragment was used a <i>Bali Vedi</i>, and now it is decorated with flowers and vermilion. The fragment is placed outside on the right side of the temple compound.</p>	Granite
3		<p>26°9'55.5"N 91°42'29.8" E</p>	<p>Structural fragment. The fragment is half-buried in the mud. The fragment is laying outside on the left side of the temple compound.</p>	Granite
4		<p>26°9'55.7"N 91°42'30.0" E</p>	<p>Structural fragment. The fragment is placed vertically with the help of bricks. This fragment has some decorative design. It is situated outside on the right side of the temple compound.</p>	Granite
5		<p>26°9'55.7"N 91°42'30.4" E</p>	<p>Structural Fragments. the structural fragment was a broken fragment of a pillar. This fragment is placed outside on the right side of the temple compound.</p>	Granite
6		<p>26°9'55.5"N 91°42'30.2" E</p>	<p>Structural fragment. The fragment is placed outside on the right side of the temple compound with other fragments.</p>	Granite








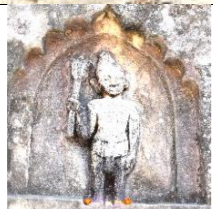
## 21. Siddheswara Temple




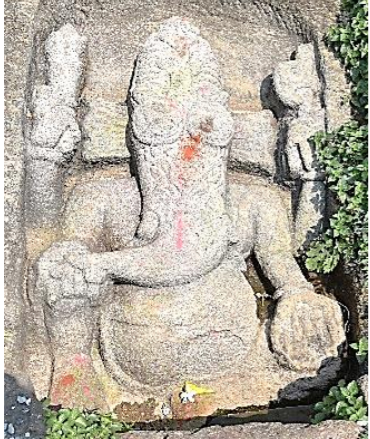
**LOCATION: 26°09'56.5"N 91°42'27.6" E**

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Thickness (mm)	Base height (mm)
1.		26°09'56.5"N 91°42'27.6" E	<p><i>Siddheswara</i> temple. This temple has three-chamber, one is small <i>mandapa</i> then <i>antarala</i> and <i>garbhagriha</i>. Inside the <i>garbhagriha</i>, the Lord <i>Siddheswara</i> is worshipped in the form of small water-filled <i>kund</i> (pond). The <i>kund</i> is located at the centre of the cella. The <i>garbhagriha</i> of the temple is octagonal in shape, and the <i>antarala</i> and the <i>mandapa</i> are <i>rectangular</i> in shape. The <i>garbhagriha</i> is more than two and a half meters below the floor level of the other chambers. The <i>garbhagriha</i> is approximately 12 sq. m in size and devotees can reach inside with the help of stone steps. According to the stone inscription found inside the temple mention the temple was constructed under the patronage of Ahom king <i>Siva Singha</i> by his officer <i>Bijoy Tarun Duwara Barphukan</i> in 1718 A.D.</p>	Brick	2215.55 (Area)	-----	-----	-----
2.		26°09'57.0"N 91°42'27.8" E	<p><i>Gaya Kund</i>. The pond is located some 5 m 98 mm from the temple.</p>	Brick	236.48 (Area)			
3.		26°09'56.1"N 91°42'26.4" E	<p>Lord <i>Shiva</i>. A sculptural block depicting Lord <i>Shiva</i> is installed on the right side of the outer boundary wall of the temple. The sculpture is eroded and broken from knees. The sculpture is depicted with different ornaments. The left hand is raised toward the chest and holding some object. The right hand is holding a <i>trishula</i> (trident).</p>	Granite	86	65	-----	-----

4.		26°09'56.18"N 91°42'26.38" E	Unknown. A women sculpture sitting on an animal (?) in a <i>Maharajalila asana</i> is installed on the right side of the gateway outer face of the temple. The sculpture is depicted with different ornaments, including big loop earrings ( <i>karanawali</i> ), necklace and bangles. The sculpture is depicted holding some object in the left hand, and the right hand is rested on the waist. The sculpture is painted in white colour.	Granite	69	43.5	-----	-----
5.		26°09'56.43"N 91°42'26.38" E	Lord <i>Shiva</i> and <i>Nandi</i> . A small sculpture is installed on the right side of the gateway outer wall of the temple. The sculpture is depicted sitting on a bull ( <i>Nandi</i> ) holding a damru in the right hand and a trisula (trident) in the left hand. A bell can be seen tide up in the neck of the bull. A sculpture is wearing a headdress <i>kritimukuta</i> .	Granite	67	47	-----	
6.		26°09'56.43"N 91°42'26.57" E	Lord <i>Shiva</i> and <i>Nandi</i> . A small sculpture is installed on the left side of the gateway outer face of the gateway of the temple. The sculpture is depicted sitting on a bull ( <i>Nandi</i> ) holding something in the left hand. A bell can be seen tide up in the neck of the bull. A sculpture is wearing a headdress <i>kritimukuta</i> .	Granite	74.5	53	-----	-----
7.		26°09'56.21"N 91°42'26.62" E	<i>Yakshi</i> . A sculpture of <i>Yakshi</i> standing in a <i>tribhanga</i> posture is installed on the left side of the inner boundary wall of the temple. The sculpture is depicted with different ornaments, including a headdress <i>Kiritamukuta</i> , necklace and bangles. The sculpture is depicted holding a fly whisk ( <i>chauri</i> ) in the left hand, and the right hand is rested on the thigh in <i>katihasta mudra</i> . The sculpture is painted in white colour.	Granite	85.5	51	-----	-----
8.		26°09'56.44"N 91°42'26.77" E	Female devotee. A female devotee slightly tilted to the left side and looking downward is installed on the right side of the inner boundary wall of the temple. The head is covered with cloth and holding a book in the right hand, and left hand is broken most probably holding the corner of the cloth covering the head.	Granite	56	38.5	-----	-----
9.		26°09'56.45"N 91°42'26.83" E	Sage, A sculpture of a bearded sage in standing posture is installed on the right side of the inner boundary wall of the temple. The right hand is raised toward the chest and holding a rosary ( <i>Japa mala</i> ). The left hand is rested in the waist.	Granite	1m 17	43	-----	-----








			The sculpture is depicted with a big loop earring ( <i>Karanavali</i> )						
10.		26°09'56.26"N 91°42'26.73" E	Sage. A sculpture of a bearded sage in standing posture is installed on the left side of the inner boundary wall of the temple. Both of the hand is in <i>Namaskara mudra</i> . The sculpture is wearing a big loop earring ( <i>Karanavali</i> )	Granite	1m 10	43.5	-----	-----	
11.		26°09'56.42"N 91°42'26.93" E	Unknown. A small male sculpture standing in a tribhanga posture and holding a <i>Sula</i> (spear) in the left hand and the right hand is raised upward to the chest in <i>jnana mudra</i> . The sculpture is depicted with different ornaments including a <i>kritimukuta</i> and <i>karnavali</i> (big loop earrings), <i>yagyopavita</i> (sacred thread) and necklace. The sculpture is installed on the right side of the gateway inner of the gateway wall of the temple.	Granite	62.5	29.5	-----	-----	
12.		26°09'56.30"N 91°42'27.03" E	Unknown. A small male sculpture is standing in a tribhanga posture and holding a bow in the left hand and arrow in the right hand. The sculpture is depicted with different ornaments including a <i>kritimukuta</i> and <i>karnavali</i> (big loop earrings), <i>yagyopavita</i> (sacred thread) and necklace. The sculpture is installed on the left side of the gateway inner face of the gateway wall of the temple.	Granite	63	31	-----	-----	
13.		26°09'56.05"N 91°42'27.61" E	<i>Mahisasuramardini</i> . A broken fragment of Goddess <i>Mahisasuramardini</i> is found on the step of the havan ghar inside the temple compound. Due to weathering attributes of the sculpture is difficult to understand. The Goddess is depicted with various hands carrying different <i>Ayudhas</i> (implements) like <i>Katari</i> (knife), <i>Dhanusa</i> and <i>Bana</i> (bow and arrow), <i>Khadga</i> (sword) etc. the deity is depicted in attacking position and killing <i>Mahisasura</i> . Goddess is depicted with big loop earning known as <i>Karnavali</i> . Two flying ribbons can be seen flaking on the backing side of the head. The sculpture is broken from knees down with broken hands.	Granite	55	58	9	-----	



14.		26°09'56.96"N 91°42'27.64" E	Ardhanareeswara Shiva sculpture is recorded from the compound of the temple. The four-handed deity is depicted sitting in <i>Dhyana asana</i> . The right side of the sculpture depicted Goddess <i>Parvati</i> and left side Lord <i>Shiva</i> . The front hands are rested on the knee, and the other two hands are carrying different <i>ayudhas</i> (implements), but are broken, making it difficult to identify the <i>ayudhas</i> . The deity is depicted wearing various ornaments, like, big loop earring ( <i>Karnavali</i> ), bangles ( <i>Kankana</i> ), necklace ( <i>Hara</i> ) and <i>Yajnopavita</i> .	Granite	42	51.5	12	-----
15.		26°09'56.96"N 91°42'27.64" E	Unknown. A small broken head of a bearded male sculpture is installed on the step of <i>Havan Ghar</i> inside the premises of the temple.	Granite	17	16	11	-----
16.		26°09'56.05"N 91°42'27.61" E	Unknown. A small broken head of a female sculpture is installed in the step of <i>Havan Ghar</i> inside the compound of the temple.	Granite	14.5	13.5	9	-----
17.		26°09'55.8"N 91°42'27.5" E	Flying <i>Gandharva</i> . A broken sculptural fragment depicting a flying <i>Gandharva</i> holding a sword is installed in the step of <i>Havan Ghar</i> inside the compound of the temple.	Granite	15.5	15	15.5	-----
18.		26°09'55.8"N 91°42'27.5" E	Unknown. An elephant can be seen over women. This small sculpture panel is installed on the steps of <i>Havan ghar</i> near the temple.	Granite	13	17.5	-----	-----
19.		26°09'55.08"N 91°42'27.61" E	Fragment of <i>Amalaka</i> . The fragment of <i>Amalaka</i> is placed inside the <i>havan ghar</i> near the main temple.	Granite	53.5	49.5	31.5	-----
20.		26°09'56.07"N 91°42'27.88" E	Lord <i>Shiva</i> . A small sculpture of Lord <i>Shiva</i> in standing posture is installed on the right side outer wall of the <i>garbhagriha</i> of the temple. the sculpture is depicted holding a <i>damru</i> in the left hand and a <i>Trishul</i> (trident) in the right hand. A <i>Kritimukuta</i> can be seen on the head of the sculpture. The sculpture is installed inside an arched shelf.	Granite	84	71	-----	1m 58
21.		26°09'56.37"N 91°42'27.80" E	Lord <i>Shiva</i> . A small sculpture of Lord <i>Shiva</i> in standing posture is installed on the east side outer wall of the <i>garbhagriha</i> of the temple. the sculpture is depicted holding a <i>trisula</i> (trident) in the left hand, and the right hand is placed	Granite	88	68	-----	1m 54

			straight to the body. A <i>Kritimukuta</i> can be seen on the head of the sculpture. The sculpture is installed inside an arched shelf.						
22.		26°09'56.33"N 91°42'28.20" E	<i>Catturbhuja Ganesha</i> . The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is installed on the left side outer wall of the <i>garbhagriha</i> of the temple. The deity is depicted sitting on his <i>Vahana</i> (mount) <i>Musaka</i> (rat). The <i>Ganesha</i> is depicted sitting in <i>Maharajalila</i> asana with the trunk curved on the left side touching a <i>Modaka</i> (sweet rice ball) placed on the left front hand. The deity is depicted holding a <i>sruka</i> (sacrificial spoon) in his right backhand and an <i>Ankusa</i> (goad) in his left backhand. In his right front hand, the deity is depicted holding an <i>Akshamala</i> (rosary). The sculpture is painted in red colour. The sculpture is installed inside an arched shelf.	Granite	81	73	-----	1m 64	
23.		26°09'56.13"N 91°42'28.32" E	A structural fragment with carved <i>Kritimukha</i> is found inside the compound of the temple.	Granite	37	46.5	25.5	-----	
24.		26°09'56.38"N 91°42'27.50" E	Unknown. The sculpture is installed on the outer wall of the <i>mandapa</i> of the temple. The sculpture is eroded, and no features are clear. The sculpture is painted red.	Granite	62	34.5	-----	1m 74.5	
25.		26°09'57.22"N 91°42'27.75" E	<i>Catturbhuja Ganesha</i> . The <i>Ganesha</i> sculpture fragment found in the courtyard of the temple has coin-shaped big eyes. The four-handed ( <i>catturbhuja</i> ) <i>Ganesha</i> sculpture is sitting in <i>Maharajalila asana</i> with his trunk curved on his right side, touching a <i>Modaka</i> (sweet rice ball) placed on his right front hand. The deity is wearing a <i>Kiritamukuta</i> . The deity is depicted holding a <i>Parasu</i> (battel-axe) in his left backhand and an <i>Ankusa</i> (goad) in his right backhand. In his left front hand, the deity is depicted holding an <i>Akshamala</i> (rosary).	Granite	-----	-----	-----	-----	

## 22. Tara Temple

LOCATION: 26° 09' 59.3" N 91° 42' 21.7" E

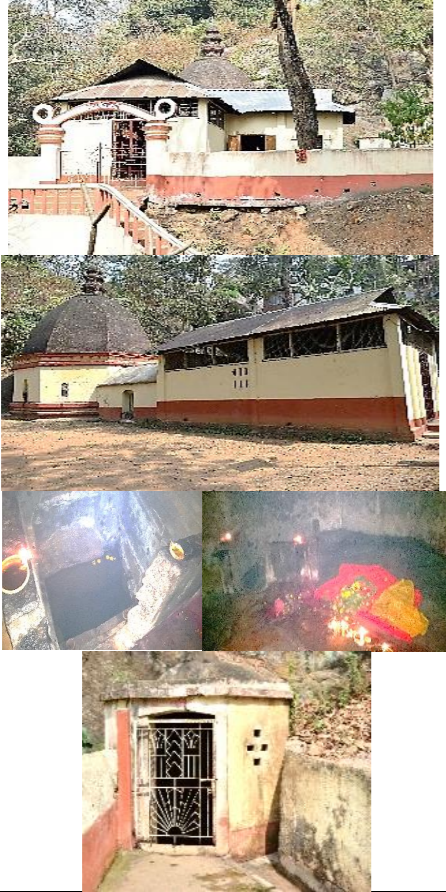

S. No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)
1		26°09'59.3"N 91°42'21.7" E	<i>Tara</i> temple. The temple has two chambers. One small <i>mandapa</i> and then <i>garbhagriha</i> . There is a small gap between <i>mandapa</i> and <i>garbhagriha</i> , which can be an <i>antarala</i> . The <i>Mandapa</i> is rectangular in shape and <i>garbhagriha</i> is octagonal. In the <i>garbhagriha</i> , the deity <i>Tara</i> is worshipped in an iconic form. Bronze statue of deity <i>Tara</i> is installed inside the <i>garbhagriha</i> .	Brick	-----	-----
2		26°09'58.4"N 91°42'21.4" E	Entrance gateway. This is one of the gateways leading to the temple. There are one roaring lions on each side of the gateway. The gateway is decorated with flower and creepers. There is a total of twenty stairs which leads toward the main temple compound.	Brick	-----	-----
3		26°09'58.4"N 91°42'21.4" E	Two Tibetan style lion. This piece of sculpture block is installed on one of the stairs of <i>Tara</i> temple. There is one vessel between the two lions. Both lions are standing facing toward the vase.	Stone	27mm	81mm
4.		26°09'58.7"N 91°42'21.2" E	Sculpture block. This block is installed on the left side of the brick boundary wall near the gateway. The man in this block is depicted in a seating posture with his right hand raised toward his head. The left hand is folded in his lap. The man seating in a crossed leg position. The block is painted in red colour.	Stone	33mm	36.5
5.		26°09'58.8"N 91°42'21.4" E	Sculpture block. This block is installed on the right side of the brick boundary wall near the stairway. The man in this block is depicted in a seating posture with one of his right hand raised near his head. The left hand is folded in his lap. The man seating in a crossed leg position. The block is eroded, making it difficult to identify different attributes.	Stone	51mm	33mm
6.		26°09'58.9"N 91°42'21.4" E	Sculpture block. This block is installed on the left side of the brick boundary wall near the stairway. The man in this block is depicted in a seating posture with one of his right hand raised toward his head. The left hand is folded in his lap. The man seating in a crossed leg position. The block is highly eroded, making it difficult to identify different attributes.	Stone	33mm	42mm
7.		26°09'58.8"N 91°42'21.4" E	Structure fragment. In the stairway toward the temple compound, one structure fragment is installed as a stair. The fragment is adorned with the creepers design.	Stone	-----	-----







8.		-----	Two Tibetan style lion. This piece of sculpture block is installed on the stairs of the Garbhagriha. There is one vessel between the two lions. Both lions are standing facing toward the vase.	Stone	26.5	1m
9.		-----	Bali Vedi. 51 mm (Distance from temple gate TD)	-----	93 (Length)	79.5




**23. Amrakeswara Temple/ Tokeswara Temple**

**LOCATION: 26°09'56.5"N 91°42'27.6" E**

S No	Photo	Location	Names & Attributes	Material	Height (mm)	Width (mm)	Base height (mm)
1.		26°10'2.4"N 91°42'8.8" E	<p><i>Amrakeswara temple/ Tokeswara temple.</i> This temple has three-chamber, one is <i>mandapa</i> then <i>antral</i> and <i>garbhagriha</i>. The <i>garbhagriha</i> is octagonal in shape, <i>Antral</i> in rectangular shape and <i>Mandapa</i> is square in shape. There is small <i>kund</i> (pond) inside the <i>grabhagriha</i>, and the deity is worshipped as a <i>pitha</i> (aniconic) form. There is small kund outside the temple for daily uses of the temple.</p>	Brick	533.52 (Area)	----- -	-----
		26°10'2.48"N 91°42'9.73" E  26°10'2.1"N 91°42'7.7" E	<p>The stone inscriptions found inside the <i>Amrakeswara</i> temple and near the <i>Durgasarobar</i>, mentions that the temple and a water tank known as <i>Durga kund</i> or <i>Durgasarobar</i> was constructed under the patronage of Ahom king <i>Pramatta Singha</i> by his officer <i>Tarun Duwara Barphukan</i> in 1744-1751 A.D. using brick masonry</p>	Granite	74 755.80 (area of <i>Durga Kund</i> )	45	83

	26°10'2.21"N 91°42'10.0" E	Goddess <i>Mahisasuramardini</i> . The sculpture is installed on the outer wall of the temple <i>garbhagriha</i> . The sculpture is highly eroded, and due to this, the attributes of the sculpture are difficult to understand. The Goddess is depicted with various hands carrying different <i>Ayudhas</i> (implements) like <i>Katari</i> (knife), <i>Dhanusa</i> and <i>Bana</i> (bow and arrow), <i>Khadga</i> (sword) etc. the deity is depicted in attacking position and killing <i>Mahisasura</i> . Goddess is depicted with big loop earring known as <i>Karnavali</i> .	Granite	1m 2.5	61	1m 11
	26°10'2.1"N 91°42'10.25" E	Unknown. A full eroded sculpture is installed outside the temple <i>garbhagriha</i> wall.	Granite	46	26	1m 8
	26°10'1.86"N 91°42'10.24" E	<i>Bhairava</i> . One <i>bhairava</i> sculpture is installed on the outer wall of the <i>garbhagriha</i> of the temple. the sculpture is depicted in standing posture wearing a <i>mundmala</i> (skull garland) and holding a <i>trishula</i> (trident) on the right hand. The left hand is raised upward and broken from the wrist. Both of the legs are broken from knees. One flower pattern umbrella can be seen above the head of the sculpture.	Granite	57	22	72
	26°10'2.36"N 91°42'9.48" E	<i>Ardhanareeswara</i> . The sculpture is installed on the outer wall of the <i>garbhagriha</i> and fully eroded. The four-handed deity is depicted sitting in <i>Dhyana asana</i> . The right side of the sculpture depicted Goddess <i>Parvati</i> and left side Lord <i>Shiva</i> . The front hands are rested on the knee, and the other two hands are carrying different <i>ayudhas</i> (implements), but are broken, making it difficult to identify the <i>ayudhas</i> . The deity is depicted wearing various ornaments, like, big loop earring ( <i>Karnavali</i> ), bangles ( <i>Kankana</i> ), necklace ( <i>Hara</i> ) and <i>Yajnopavita</i> . one bull and lion are depicted sitting beneath the feet of the deity.	Granite	1m 2	48	1m 30.5
	26°10'1.89"N 91°42'9.34" E	<i>Yakshini</i> . The sculpture is installed on the outer wall of the <i>garbhagriha</i> . The sculpture is completely eroded, and many features are difficult to identify. The sculpture is standing in a plain pedestal in <i>tribhanga</i> posture holding a <i>Chauri</i> (fly-whisk).	Granite	77	28	1m 38
	26°10'2.40"N 91°42'9.54" E	The flower motif is carved on the outer wall of the <i>garbhagriha</i> .	Brick	26	25.5	1m 10

	<p>26°10'2.48"N 91°42'9.73" E</p>	<p><i>Nataraja</i>. One sculpture block depicted <i>Shiva</i> in <i>Nataraja</i> (dancing Shiva) form found installed on the outer wall of <i>antral</i>. Three different dancing posture of Lord <i>Shiva</i> can be seen carved on this stone block. The centre and right side <i>Shiva</i> is in dancing posture and the left side <i>Shiva</i> is depicted playing the drums.</p>	<p>Granite</p>	<p>20</p>	<p>1 m</p>	<p>31.5</p>
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### Publications

1. Sharma, S., Tamta, P., (2015), ***“Understanding Patterns: Festivals of Arunachal Pradesh”*** in: ***Traditional Festivals: Appreciating their Sociological and Philosophical Dimensions*** in *Quest*, published by *the Journal of the Vivekananda Kendra Institute of Culture (VKIC)*, Guwahati, India (ISSN: 0976-0040).
2. Tamta, P., Sharma S., ***“Understanding the Pattern and Distribution of Sculptural and Architectural Remains in the Archaeological Site of Kamakhya”*** in *the Journal of Archaeological Research in Asia* (ISSN: 2352-2267), published by *Elsevier* (under communication).
3. Tamta, P., Sharma S., ***“The Kamakhya Peetha: Understanding the Significance of Water Bodies in the Formation of a Religious Landscape”*** in *Landscape Journal*, (ISSN: 0277-2426), published by *The University of Wisconsin Press* (under communication).
4. Tamta, P., Sharma S., ***“The Stylistic Treatment of Goddess Chamunda Sculpture in the Kamakhya Sculptural Art”*** in: ***“Archaeology of Northeast India: Retrospect and Prospect (Book Chapter; Ed. Volume)”***, published by *the Department of History and Archaeology, NEHU Tura campus* (in press).
5. Singh, P., Tamta, P., Sharma, S., (2017), ***“Exploring The Bamuni Hill Remains: An Archaeometric Study of the Remains of Pottery”*** in: ***“50 Years after Daojali-Hading: Emerging Perspectives in the Archaeology of Northeast India”*** by Chauley, Milan and Hazarika, Manjil, Research Indian Press, New Delhi (in press).

## Conferences

### 1. Paper Presented in National Conferences

1. Poster Presentation entitled “*Understanding Surface Level Artifacts Distribution in the Kamakhya Temple Complex Using GIS*” in the “*Workshop on Advanced Remote Sensing & GIS: Methods and Applications*” organized by *The Department of Civil Engineering, IIT Guwahati*, 1 October 2016.
2. Presented a poster titled “*GIS Documentation of the Kamakhya Temple Complex*” and Departmental Winner in Best Poster Category Competition in Research Conclave’17 organized by Student’s Academic Board, IIT Guwahati, 16<sup>th</sup> to 19<sup>th</sup> March 2017.
3. Presented a paper titled “*Iconographic Study of Goddess Chamunda in the Kamakhya Sculpture Art*” in the three days National Seminar on “*Archaeology, History, Art, Museums and Folklores of the North-East India*” organized by Indian Archaeological Society, New Delhi in collaboration with Rajiv Gandhi University, Arunachal Pradesh and National Museum Institute, New Delhi in Arunachal Pradesh, 20<sup>th</sup> to 22<sup>nd</sup> April 2017.
4. Presented a paper titled “*Comparative Study of Headgears in the Kamakhya Sculptural Art*” in the three days National Seminar on “*Art of Eastern India and Art of Masks: In Social, Cultural and Religious Contexts*” organized by *The Indian Art History Congress* in Guwahati, 22<sup>nd</sup> to 24<sup>th</sup> December 2017.
5. Presented a paper titled “*Sculptural Art of the Kamakhya Temple- A Study based on the Documentation conducted on the Kamakhya Temple complex during 2015-16*” in the Research Conclave’18 organized by *Student’s Academic Board, IIT Guwahati*, from 08<sup>th</sup> to 11<sup>th</sup> March 2018.
6. Presented a paper titled “*The Stylistic Treatment of Sculptures in the Kamakhya Sculptural Art*” under the session “*Art and Architecture*” in the National Seminar, *Archaeology of Northeast India: Retrospect and Prospect*. Organized by *The Department of History and Archaeology, NEHU Tura campus*. Held in Tura, India from 26<sup>th</sup> August to 28<sup>th</sup> August 2019.

## 2. Paper Presented in International Conference

1. Presented a paper titled ***“Politics of Landscape Representation and Kamakhya”*** under the session ***“SYM-030b: The Interpretation and Presentation of Archaeological and Cultural Heritage Sites: Evolving Horizons”*** in the Annual SHA 2018 Conference on ***“Historical and Underwater Archaeology”*** organized by ***the Society of Historical Archaeology***, held in ***New Orleans, Louisiana, USA*** from January 3<sup>rd</sup> to 6<sup>th</sup> January 2018.
2. Presented a paper titled ***“Goddess Chamunda in the Kamakhya Sculpture Art”*** in the ***6<sup>th</sup> International Congress of Society of South Asian Archaeology (SOSAA)*** organized by ***Indian Museum, Kolkata*** in collaboration with ***Society of South Asian Archaeology, Pune and The All India Digamber Jain Heritage Preservation Organization, New Delhi***. Held in ***Kolkata, India*** from 16<sup>th</sup> March to 18<sup>th</sup> March 2018.
3. Presented a paper titled ***“The Kamakhya Peetha: Understanding the Significance of Water Bodies in the Formation of a Religious Landscape”*** under the session ***“24F Landscape and Belief”*** in the ***5th Landscape Archaeology Conference- LAC2018*** biennial conference organized by ***the Newcastle University’s McCord Centre for Landscape*** and co-ordinated by ***the International Association of Landscape Archaeology (IALA)***. Held in ***Armstrong Building, Newcastle University, United Kingdom (UK)*** from September 17-September 20, 2018.
4. Presented a paper titled ***“Understanding Surface Level Artefacts Distribution in the Archaeological Site of Kamakhya Using GIS”*** under the session ***“Analytical Strategies and Cognitive Resonant”*** in the ***21<sup>st</sup> Indo-Pacific Prehistory Association (IPPA)*** organized by ***IPPA Congress*** and co-ordinated by ***Vietnam academy of social sciences, Institute of Archaeology, Hanoi, Vietnam***. Held in ***Hue, Vietnam***, 23<sup>rd</sup> September to 28<sup>th</sup> September 2018.

### Workshops

1. Attended Regional Workshop on ***“Experimental Lithic Knapping & Microwear Studies”*** jointly organized by The Department of History & Archaeology, Nagaland University, and ICHR, New Delhi held from 15<sup>th</sup> -22<sup>nd</sup> March 2014.

2. Attended ICSSR sponsored ten-day ***“Research Methodology Programme for Ph.D. Students in Social Sciences (RM 2016)”***, 14-23 March 2016.
3. Participated in the three-day National Workshop on ***“Temple Architecture and Iconography: In Sthapati’s Perspective”*** from 9<sup>th</sup>-11<sup>th</sup> October 2017, by Sri K. Dakshinamoorthy Sthapati (Chennai) and Sri K.P. Umapathy Acharya and his team (Kumbakonam, Tamil Nadu), in the University of Mysore, Mysuru, Karnataka.
4. Organized a training programme on ***“The uses of GPS in preparation of contour and its use in GIS”*** for the Staffs of Archaeological Survey of India (ASI), Guwahati Circle, Assam on 15<sup>th</sup> September 2016, at IIT Guwahati.

