# Maidam, the burial Construction Technology of the Ahoms 

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#### Abstract

The Ahoms, an offshoot of the Shan race ruled Assam for about 600 years and left behind a history their own. They were self depended and had a rich culture and traditions of their own. Among all the customs and tradition of the Ahoms, the burial tradition was very much important and interesting. The Ahoms used to bury their dead bodies by following some rituals and on the burial place a mound popularly known as Maidam was constructed by following their own technology. The dead body was kept in an earthen or masonry vault and covered with earth. A number of costly items and even the attendants of the deceased were buried with the dead believing that the king, queen or other members of the royal family or royal officers would use the objects in their life after death and the attendants would help them in their day to day life. The technology applied in the construction of maidam was their own. They were constructed in such a way that they have not lost their original shape or structure till today. The materials used in the construction of maidam were also produced locally. The cement preparing procedure was very much interesting. It was produced from some organic and herbal items. The masonry work was also very much advance from the technological point of view.


Keywords: Maidam, Ahom, Karal, brick, Vault

## Introduction:

Maidam, the burial mound of the Ahoms bears the example of technological expertness of the Ahoms who ruled Assam for a long period of about 600 hundred years. Ahoms, an offshoot of the Shan race had the custom of burying the body of the deceased and on that place a mound in the shape of hemisphere was erected by following their own technology and this hemispherical mound is called maidam. ${ }^{1}$ In fact, before the embracement of Hinduism the dead body of the Ahom king and other members of the royal family and even the royal officers were buried keeping with the dead body a number costly items believed to be required by the deceased in the next life. Due to the influence of Hinduism the custom of the cremation of the dead body of Ahoms was introduced and the ashes of the same was buried along with the required items by following the same customs. ${ }^{2}$ J.B.Tavernier writes, "Although the Assamese an idolaters, they do not burn the bodies of defunct, but bury them. They believe that after death they go to another world, where those who have lived well in this world lack
nothing, and enjoy all kinds of pleasure; while, on the contrary, those who have lived badly, and have taken the property of others, suffer much, principally hunger and thirst, and that, accordingly, it is prudent to bury something with them to serve them at need... When the body of a dead king is buried in his grave all his most precious possessions are also placed there, as a private idol of gold or silver which he worshipped during life, and all things which it is believed will be required by him in the other world."3 Regarding the maidam P. Sarma rightly says, "The Maidams are the burial mounds of the Ahoms. Outwardly they appear hemispherical in shape and their sizes vary from a modest mound to a hillock of twenty metres or so in height, depending upon the power, status and resources of the person buried. Inside a burial mound generally exists a vault wherein the moral remains of the dead is kept and a large mound indicates the existence of a more commodious vault underneath." ${ }^{4}$ Important to be noted here that generally the dead bodies were entombed at Charaideo, the first capital of the Ahoms $28 \mathrm{k} . \mathrm{m}$ to the east of Sivsagar town of Assam. But at this place only the kings and other members of the royal family were entombed. The maidams of Burhagohains, the Prime Ministers were constructed on the south bank of the river Dikhou and place for the maidams of Bargohains, the Ministers were allowed on the bank the river Dichang. Maidams have also been discovered in other places of Upper Assam. ${ }^{5}$

## Objective:

The main objective of the paper is to study the mound burial practices of the Ahoms and the technology followed by the Ahoms in the construction of the maidams. The study will only include the maidams of the kings and their family members and the ministers.

## Methodology:

The method used in the present study is descriptive and it is based on both primary and secondary sources. Field study has also been done to find out the technological aspects of maidam construction.

Important to be noted here that without excavating the maidams, the actual structure and the technology applied in constructing the maidams cannot be studied. So, the architectural and technological study has been done on the basis of the excavated Maidam No. 2 by the Archaeological Survey of India, Guwahati Circle in the year 2000-2002. ${ }^{6}$ Bhuban Ch. Hendique, an Ahom Historian of Assam also could have a look on the wooden vault of some maidams. The outside view and the architectural design of the maidams also helps in this study. A good number of maidams were also exposed by the pilferers and also due to the natural causes. This also provides us various informations regarding the technology of the maidams of the Ahoms. B.C.Henuque mentions that he along with some others got into a maidam on $11^{\text {th }}$ November, 1963 and found a brick vault inside measuring 14 feet in length in north-south direction and in the east-west direction it was 16 feet and the height of the vault was 20 feet. ${ }^{7}$

According to Ahom Lexicon the word Maidam is consisted of 'Moi' and 'Dam' means 'mound of dead ${ }^{\prime}{ }^{8}$ On the other hand, according to Aimeykgeng Gohain Moi-Kao means skull and Maidam means the
place of the head of God. The Ahom kings were treated as God. So, the place where the head of the king was buried was called Moidam. ${ }^{9}$

In has already been mentioned that it was the tradition of the Ahoms to entomb the dead body of the king, queen and other members of the rayal family and even the royal officers by following some traditional customs. This maidams with an arch shaped roof and door constructed during the Ahom rule can be divided into two categories-
i) Temporary and
ii) Permanent

The inner chamber of the temporary maidams was made of wood and they were covered with earth to look like a hemisphere and the inner chamber of that of permanent maidams was made of bricks and stones and then they were also covered with earth. Surrounding the permanent maidams an octagonal brick rampart called garh was constructed with arched door in the west direction and at each corner of the rampart small designed pillar in the shape of a sarai, a traditional offering tray with stand was made. Between the brick rampart and base of the maidam a line of bricks was made called nakh. The earthen mound which covered the inner vault was again covered with a layer of bricks to keep the earth intact. It also definitely helped the maidams to be in its original shape till today. On the top of the moidam a four roofed brick made small open house looking like a dol (temple) called Chouchali was also constructed. ${ }^{10}$


Outside Elevation of a Maidam or Burial mound of the Ahoms


## Sectional Elevation of a Maidam or Burial of the Ahoms

Interesting is that a wooden ornamented box or coffin known as Rung-Dung was made for the dead body to be placed in the maidam. The Rung Dung was made of Uriam wood (Bischofia Javanica). ${ }^{11}$ A maidam was excavated on the bank of the river Dikhou in 1939 and after the removing of earth on it an ' L ' shaped wooden chamber could be discovered. A number of huge wooden beams and planks were used to construct this wooden chamber. Altogether 60 pieces of big posts of sal tree were found in the wooden chamber of that maidam. The Rung-Dang was placed in this wooden vault. ${ }^{12}$ Regarding the maidams which were exposed for various reasons P.Sarma says, "...the beams and planks used in them were not only abnormally large, but of high quality which could withstand effect of the soil for centuries. In case of a masonry vault, large stone slabs were used for the foundation as also for the portion of the chamber below the ground level, and block-stones and brick-masonry were used for the super-structure." ${ }^{13}$

It may be mentioned here that the permanent maidams having masonry vault inside have various parts namely Garva or Pit, Gamaidam or main body, Garh or Brick Rampart, Entrance or door and nakh about which mention has already been made. The grave of the maidam is the place where the dead body was kept. After placing the dead body in the pit various items like bed-stead with quilt, a mosquito net, a golden pillow, hengdang,the Royal sword, utensils made of gold and silver etc. were kept. It is also recorded that human beings were also buried alive with the dead body to help the deceased in the life after death. But this custom was abolished by the king Rudra Singha. ${ }^{14}$ After this the door of the brick vault was closed with stone and then the entire vault was covered with soil. The soil was placed on the vault in such a way that it should look like a hemispherical mound. Then a layer of bricks was made to remain the soil intact without hampering the original shape of the maidam. Then again soil was laid on the brick layer. It has been found that the soil on the maidam is very hard and the rain water cannot wash it easily. It shows that the soil should be mixed with lime and other materials.

One of the maidams scattered at Charaideo was excavated by the Archaeological Survey of India, Guwahati Circle in the year 2002-02 and after the completion of the excavation the ASI has described it in this way, "In 2000-02, ArchaeologicalSurvey of India, Guwahati Circle excavated the Maidam No.2. It retains all the three major characteristic features of a full-fledged Maidam. It has a hemispherical earthen mound enclosing a vault within and the whole structure is encircled by an octagonal boundary wall. The earthen mound was covered with three courses of bricks laid over stone pebbles. At the top of the mound, there is a circular brick-paved platform ( 3.06 m ). The structural features of the Maidam No. 2 are massive in dimension. It was made of burn bricks and plastered with lime-surki mortar... The arch-shaped door of the Maidam No. 2 was found on the western wall of the structure, which was originally sealed with bricks and random stone masonry. The plan of the structure is rectangular and measures $(5.35 \times 4.40) \mathrm{m}$ internally. The side walls are raised up to 2 m above the floor, over which the domical upper structure or roof is set. There is a rectangular platform in the centre of the chamber. Though robbed, scientific excavation of the chamber of Maidam no. 2 yielded several artfacts including the skeletal remains of the five individuals..." ${ }^{15}$

It has already been found that bricks and stones were used in the construction of maidam. Besides these the other materials used in this construction were lime, molasses, resin, mica, fish, mustard oil, black gram, hemp etc. ${ }^{16}$ Various materials used in the maidams of Siva Singha, Rudra Singh and Gadadhar Singha are given below:

## Maidam Rudra Singha (1696-1714)

Fala Xil (Broken Stone)............. 7920 pieces
Lathia Sil (Long stone slabs)...... 580664 pieces
Good quality Brick..................... 2580314 pieces
Broken Brick.............................. 38290 pieces
Molasses.................................... 4854 Kalah
Maidam of Gadadhar Singha(1681-1696)
Molasses................................ 9287 Kalah
Matimah (Black Gram)........... 1110 Dhol
Xan or Hemp (a kind of plant having fibre)... 1047 Dhol
Xil Chun (Lime stone)............. 2600 Dhol
Samuk Xun (Shell Lime).........23,920 Dhol
Saka Xun(edible lime)............. 13600 Kalah
Fish........................................ 678 Dang
Dhuna (Resin)......................... 696 Ser
Lathia Sil (Long stone slabs)... 125000 pieces
Ita (Brick)............................... 1499500 pieces
Fish oil...................................... 59 Dang

## Maidam of Siva Singha (1714-1744)

Molasses.
6530 Kalah
Matimah (Black Gram)............. 653 Dhol
Xon (Hemp)............................. 653 Dhol
Xil Chun (Lime stone)............... 15340 Dhol
Samuk Xun (Shell Lime)............ 8040 Dhol
Lathia Sil (Long stone slabs)...... 72774 pieces
Pat xil (Flat medium size stone).. 900 pieces
Ita (Brick)............................... 1225460 pieces
(Kalah, Dhol, Dang and Ser were the units of measurement)
It should be mentioned here that the Ahoms prepared a kind of traditional cement called karal to be used in cementing bricks and stones. For the preparation of karal pits of various sizes were dug and according to their depth and size they were named like Gurkuria, Kuria, Derkuria, Dukuria, Khonwar etc. Various ingredients like molasses, shell lime, stone lime, chaka xun (edible lime), matimah or black gram (Phaesalus aurens), Xan (Hemp), barali fish (wallago attu), duck's eggs, glue of wood apples, bara chawal, a kind of glutinous rice, milk, brick power etc. were mixed in a systematic way to prepare karal. Glue of wood apple and milk were not used in regular manner. The ratio of black gram and hemp and that of shell lime and chaka xun were same. Molasses and shell lime were used to increase the adhesive power of karal and resin was used as burnish to keep the quality of the wall good and also to get a good smelling in the maidam. For making the karal sticky black gram and bara chaol were mixed. ${ }^{17}$

The description of the maidam of Purnananda Burhagohain by Serjeant C.Clayton who superintended its opening also shows the architectural design of that wooden maidam. The vault of the maidam was made of massive timber. The posts of which was of Nahar wood (Mesua Ferrea) and the planks were of Uriam wood (Bischofia Javanica). The coffin was found to be placed on a wooden platform of four legs called machang with cross-bar connecting each pair of legs. In the maidam ornaments like rings, silver toothpick, case, golden ear ornaments, various vessels, small gold vessel for keeping lime etc. were found. ${ }^{18}$

## Conclusion:

The maidam construction technology of the Ahoms shows that the Ahoms were very much advance in the field engineering. The wooden vault of the maidams was constructed in such a way that the heavy load of soil on it could not break its structure. The brick masonry vault was also constructed keeping in view the weight of the soil accumulated on it. The thickness of the wall of the masonry vault of the maidam was one metre and it shows that the Ahoms were very much aware of the permanency of the maidams. A wall of measuring one metre could easily bear the burden of a heavy load of soil. The technique of producing karal or cement for masonry work was very interesting and it also speaks of the organic and herbal knowledge of the Ahoms. They prepared the cement from various organic ingredients and its adhesive capacity is seen till present days. The
construction of arched door of the maidam also proves that the Ahoms were very much advance in the field of masonry technology.

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