



A

PROJECT REPORT ON

**AN IMPORTANT MONUMENTS
OF KENDRAPARA DISTRICT AND
THEIR CONSERVATION
STATUS**

2019 - 2020

DEPARTMENT OF HISTORY

**PATTAMUNDAI COLLEGE
PATTAMUNDAI**

REPORT

A Project on: A Study on Important Monuments of Kendrapara District and Its Conservation status was undertaken by the +3rd Year History (Hons) Students under my Guidance about how to conserve carefully save and repair the architectural sites or objects in its original form. It is found from the Study that a true conservation would carry out conservation work at the edifices not only in keeping intact its Historical background, but would also make the best use of the material already available at the site and do nothing that could amount to Sacrilege of the edifices. The conservation and restoration of Monuments must have recourse to all the sciences and techniques which can contribute to the Study and safeguarding of the architectural Heritage.

It was observed that all the conservation works were monitored by the technical expert Committee followed by chemical treatments and preservation. But the conservation works are being undertaken by the State archaeology department for (Baladevjew temple, kendrapara, Chadramauli temple, Pattamundai, Jagannatha temple, Keradagarh, Rajnagar, Laxmibaraha jew temple, Aul and others.


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AN IMPORTANT MONUMENTS OF KENDRAPRA DISTRICT AND THEIR CONSERVATION

INTRODUCTION

The state of Orissa is rich in temple architecture. Hundreds of temples are found standing all over the state. These temples are fine pieces of Orissan art and architecture. These temples were built from the sixth century A.D. 6th Century.A.D to 15th century A.D. under the patronization of different dynasties. The present state of Orissa is located between 17°49'N and 22°34'N Latitude and 81°29'E to 89°29'E Longitude on the eastern coast of India. It occupies an area of 155707 sq. kms and is bounded by the Bay of Bengal in the east, Chhatisgarh in the west, Jharkhand, West Bengal in the north and Andhra Pradesh in the south.

The Anthromorphic conception of diety naturally called for some habitation and so a structural shrine came into being. It passes through various stages such as 1st a leafy bower, then a reed hut and afterwards a cella of wood and brick. Eventually it appears as a sanctum of stone, called the **garbhagriha**, square in plan. Its interior walls perfectly plain and without any other opening except the doorway. The inner darkness inside provides the requisite atmosphere of solemn mystery¹.

Some inscription provides valuable information regarding of Orissan temple art and architecture. The Hatighumpha inscription of Mahameghabahana Kharavela mentions that, he repaired "**SAVADEVAYATANA**" or house of Gods in his first regnal year. According to Bhadraka Inscription (3rd Century A.D), Goddess 'Parnadavati' was enshrined and worshipped in a temple. According to Asanpat inscription of Maharaja Satrubhanja (4th Century A.D), a shrine was built for the image of Nataraja and also the foreign pilgrims Hsuan Tsang (6th Century A.D) stated that "Several Deva temple in different parts of the State".

During long period of evolution, the Orissan temple architecture acquired certain distinct characterists. Amritesvar temple at Holal in Karnatak mention about the Kalingan style of temple architecture. According to the **Silpa** text the Orissan temple architecture is divided into three types such as

1. Rekha deula
2. Pidha deula
3. Khakhara deula

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The silpa text *Bhubana Pradipa* specifies 55 Rekha, 6 Bhadra (pidha) and 3 Khakhara temple².

Rekha Deula:-

The sikhara or the tower is the most important feature of the rekha deula. Originally the sanctum was a flat roofed square structure pierced by an elaborate doorway on one of its sides. The ground plan of the sanctum and *sikhara* is square. The *vimana* can be divided into four parts such as *pista*, *bada*, *gandi* and *mastaka* in vertical a regular way. The *pista* is not regular feature of Orissan temple architecture. The *bada* is the perpendicular wall of the *vimana*. It can be sub-divided into three parts *pabhaga*, *jangha* and *Baranda*. The *pabhaga* is the bottom portion of the *bada*. It consists of some set of mouldings such as *khura*, *kumba*, *pata*, *kani*, *vasanta* respectively. The portion above the *pabhaga* is called as *jangha*. In developed temples the *vandhana* divides the *jangha* portion into two such as *tala jangha* and *upper jangha*. The *bada* relieved with vertical projections called *rathas*. It depends upon the number of projections.

The design of *bada* became *triratha*, *pancharatha*, *sapta-ratha* or *navaratha* with the gradual process of evolution. The *gandi* rises straight up to a certain height and begins to curve near *bisama*. The *Gandi* has offset projection called *paga*. The *raha paga* is the most prominent one. The *kanika paga* is divided into several *bhumis* by miniature *amalakas* called *bhumi amalakas*. Each *bhumi* is further sub-divided into a number of horizontal mouldings called *bhumi-barandis*. The portion above the *gandi* is called *mastaka* or head-consists of *beki*, *amalakas*, *khapuri*, *kalasa* and *ayudha*³.

Pidha Deula:-

The second type of deula is of *pidha* type like *Jagamohana*. It is same like *rekha deula* upto its *bada* portion. The *gandi* consists of a number of tiers or *pidha*. The *pidhas* are arranged in diminishing order. The *mastaka* consists of *beki*, *ghanta* again *beki*, *amalaka*, *khapuri*, *kalasa* and *ayudha*.

The Khakhara Deula:-

The *khakhara* temple usually consists of oblong ground plan and semi cylindrical roof. The *khakhara deula* generally meant for sakti worship. The ground plan is generally oblong instead of square *garvagriha*. The sanctum can be divided into four divisions, like *rekha deula*. The *bada* has above its pabhaga mouldings, elegantly carved shallow pilasters in the *ratha* projection. The *gandi* consists of *pagas* such as *raha paga*, *anuratha paga*, *kanika paga* etc. Above the *gandi* portion there is the *mastaka* consists of *beki*, *amalaka*, *khapuri*, *kalasa* and *ayudha*.

The evolution period of the Orissan temple architecture cover a long span i.e. from 6th C.A.D. to 16th C.A.D. According to Vidya Dahejia, there are four phases of Orissa temple style, such as

1. Formative phase (6th to 9th C.A.D) Sailodbhaba & Bhauma-karas.
2. Mature phase (9th to 11th C.A.D) Somavamsi.
3. Climax phase (11th to 14th C.A.D) Gangas.
4. Decline phase (14th to 16th C.A.D) Gajapati.

The state of Orissa is a land full of temples. From the sixth century A.D. to the sixteenth century A.D. the temples were constructed uninterruptedly in different parts of the state. The Orissan temple architecture reached its culmination stage during the 13th century A.D. during the period of Ganga rule. During the Gajapati rule, it came to the decline phase due to Muslim invasion and other causes⁴.

Evolution and Development of Odishan Temple

Orissa has a rich heritage in the form of beautiful temples which are notable for their wealth of architectural and sculptural motifs and excellent workmanship of their carvings. They are the result of the generous royal patronage and skill of many unknown architects, sculptors and painters, who have produce these wonders. These temples dominate the surroundings both by

their size and location and were not only religious centers but also the centers of all civic and social life. The inscription of Orissa reveal several terms for the temple. Among the popular words used are; devayatanam, mandiram, bhabanam, graham, vesa, devakula, dhama etc. which was primarily a place for individual self-realisation, entering which the worshipper, as it were, "Sees the deity" and "Feels himself in the presence of God".

The state, Orissa provide the most logical beginning for a study of the Indo-Aryan style. The main group is concentrated in the town of Bhubaneswar where over hundred examples. But a few miles from this temple town are two of the largest and most important buildings in this locality, the temple of Jagannatha at Puri and the Sun temple at Konark. A part however from the central development, a considerable distance along the coast towards the south, as far away, as Ganjam there is a small group in this style at mukhalingam, which has no little significance. In other direction from Bhubaneswar, towards the north, an offshoot of the movement is to be found in a series of ruined shrines in the state of mayurbhanja, I ashered some few general character of Bengal and Bihar. The earliest of these may date 7th century A.D. and the largest and latest is 16th century A.D. so that for nearly nine hundred years Orissa has sustained architectural activity⁵.

The temple building practice of Orissa is very early period from the first c B.C. but the most probable existence of temple date goes back to the 7th C.A.D. i.e. is Satruganesvar group of temple and latest development temple is Sun temple at Konark. There are numbers of changes or development took place from 7th C.A.D. to 15th C.A.D. according to an eminent scholar Vidya Dahejia, development of Orissan temples are divided into four phase, i.e., the formative, the mature, the climax and the decline phase. All each phase has some distinguish certain features.

The temples of Orissa from the regional variations of the northern or Nagara style of architecture, even the earliest extant temples, i.e., the Satruganesvara group of temples are marked by sikhara which constitute the dominant feature of Nagara style. The sanctums are generally rekha deulas and few khakara deulas are associated with the Devi worship. Originally the rekha

deula was formed by the addition of a sikhara on the flat roof of a square structure.

The temple of the formative phase are characterized by short height, squares heavy set gandi, pabhaga of three mouldings, the bada of three divisions, the parsvadevata niches cutting through the pabhaga mouldings, a recessed kanthi separating the gandi from bada, three projections on the bada of which the central one is designs after *rekha deula* with the *vajramastaka* on the raha paga of gandi as the crowning element, the gandi is of Triratha plan, parsvadevata images made from separate blocks of stone, in some cases a rectangular pillared and flat roofed *mukhasala* computed⁵ directly against the front wall of the *vimana astagraha* panel above the door *lintel*, *Ganesa* and *Kartikeya* without mouse and cock respectively, variety of erotic sculptures, predominance of religious theme in the sculptures, predictions for story telling, and above all, shallow-carvings. For story, telling and above all shallow carvings the sculptures are very poorly treated. The figures look stocky and are placed in rigid postures. The treatment of the limbs is very awkward and ichnographically fitted into the body. To this group also belong the *Svarnajalesvara*, the *uttaresvara*, the *talesvara*, a half buried temple near the *Lingaraja* all are belonging to the latter part of the 7th Century A.D. and early years of the 8th Century A.D.

In the next phase the temple mark the further developments over the previous group, both at the architectural and sculptural levels. The most important development took place in the *mukhasala*⁷. The *mukhasala* is no more treated as separate entity and thus included in the original plan of the temple. Hence its joining with the *vimana* is more organic the level of parsvadevata niche is slightly raised for which it interrupts only the upper two mouldings of the pabhaga. The parsvadevata images are carved from the stones that form the wall surface. The temples of this phase are the *Markandeyesvara*, *Sisiresvara*, and *Vaital*, belonging to the later half of the 8th century A.D.

The *Muktesvara* temple begins another phase of Orissan temple evolution period. In the wider context the *Muktesvara* divides the temples of Orissa into two distinct groups. Because it mark the introduction of certain important innovation. In this phase the *mukhasala* becomes a *pidha deula* with the

crowning members. The joining between the Viman and Mukhasala is the most perfect. The number of pabhaga mouldings increases to five. There is the perfect adjustments between parsvadevata niches and the pabhaga mouldings for which the niches do not interrupt the moulding. The plan of both bada and gndi becomes pancharatha and for the first time the projections or pagas are properly articulated. The innovations include the Naga and Nagi columns, Navagraha panles; Decorative inter-laced Chaitya-arches on the gandi and the Bho-motif on the raha pagas. The sculptures are more matured and the limbs of the images are most effectively treated. The images are more refined and elegant⁹. The sculptures become vigorous. The nayikas appear on the temple walls is increasing number. In the field of iconography Ganesa is associated with mouse and Karttikeya with cock⁶.

The next phase development, the most peculiarity feature is introduction of Anga-Sikhara, which appear as off set protections on the gandi and the emphasis will be on the height of the temple. The elongation of the bada led to its division into two horizontal levels by a set of moulding called bandhana. The gandi becomes pancharatha in plan with pagas perfectly aligned with the bada. The sculptures are marked by refinement and maturity. The figures carved in alto relieveces are remarkable for their beauty and grace.

The next phase development of the temple adhere some features. The pagas are fully developed. The temple attains total perfection in respect of architecture and sculpture. The Lingaraja marks the culmination of the temple evolution. The temples situated in western districts of Orissa basically belong to the Orisan style.

This area highly influence by central India. The character occurred in the temples include the silhouette of the gandi, the star-shaped ground plan, balconied windows of the mukhasala, raised platforms and decorated pillars inside the mukhasala.

The last phase development took placed under patronized of the Gang and Gajapati dynasty. The main temples include The Jagannatha temple at Puri, the Sun temple at Konark and Somanatha temple at Budhapada, Annata vasudeva temple at Bhubabeswar etc⁷.

In this period the art and architecture witnessed remarkable growth, the temple architecture reached its zenith. In this phase they adhere the previous tradition and introduce some new outstanding features like the introduction of pista, the gandi becomes the saptaratha plan, introduction of natamandapa and bhogamandapa, subsidiary temples built in front of the parsvadevata images. Introduction of vahana stambas in front of the temple, iconographically the consort of dikpalas are arranged on upper jangha. The gandi has sworing hight. The sculptures are highly ornamentation. In this period the rahu appeared a half moon and ketu appears as holding swords and shields. The grahas like brihaspati and sukra are now appeared as bearded figures.

This period saw the matured temple like the Jagannatha temple, at Puri, the Ananta vasudeva temple at Bhubaneswar and many others and it reached its climax with the Sun temple at Konark. one of the notable example of this culminating, phase is the temple of Jagannath at Puri on appreciably large building, than the Lingaraja temple and the principal parts of it erected about a century later built on the same principal as the Lingaraja temple at Bhubaneswar and consisting of four edifices in one alignment it first comprised the deul and jagamohana in which condition it appears to have remained till the 13th and 14th centuries when the natamandira and the bhogamandapa were added. As now completed, the extreme length of these four buildings in a line is 310 feet with a width of 80 feet , while the tower is nearly 200 feet in height moreover as it stands it presents a singularly commanding appearance⁶.

The Konark is a kind of miracle a last kick as it were of a great Orissan art. The huge spire over the vimana has collapsed, it must have been tremendous. It is calculated that it stood almost 225 feet high presently we see as the Sun temple is actually its jagamohana, which stands beautifully land rich, in the form of a gigantic chariot of the Sun temple; with vast wheels, draw by seven horses, a few feet in front of the horses raises the Natamandira. presently roof less, but other wise in excellent conditions a hall for music and dancing covered with thousands of figures of dancing and music playing girls carved out of the stone on the parapets of the pyramidal roof of the jagamohana, or prayer roof rises huge free standing figures of celestial musician girls, playing drums and flutes

and cymbal and strings and accompanying the chariot of the Sun with their musician its daily course. These heavenly nymphs, one among the finest works of art ever produced in the history of Indian art.

What is Conservation?

The word conservation means to carefully save or repair the archaeological sites or objects in its original form. The conservation is the action taken to reduce the further decay of the monuments or archaeological objects (Anuradha,V: 2001). It embraces all acts that prolong the life of our cultural and natural heritage, the object being to present to those who use and look at historic building with wonder, the artistic and human messages that such building conservation is established by legislation through listing scheduling building and ruins, through regular inspection and documentation and through town planning, preservation and conservation. A true conservation would therefore carryout conservation work at the edifices not only keeping intact its historical background, but would also make the best use of the material already available at the site and do nothing that could amount to sacrilege of the edifices⁹ (Arnott, M.H:1903).

The Ethics of conservation

There are certain parameter which must be seriously observed in conservation work.

- 1-The condition of the monuments before any intervention and all methods and material used during treatment must be fully documented.
- 2-historic evidence must not be destroyed, alter or removed.
- 3-Any intervention must be minimum. 4-any intervention must be governed by answering respect for the aesthetic historical and physical integrity of cultural property (Banerjee:1996).

Approach to Conservation

Imbued with a message from the past, the historic monuments of generation of people remain to the present day as living witness of their age-old traditions as concretized form of their creating genius and skill. People are

becoming more and more conscious of the unity of human values and therefore, regard ancient heritage monuments as a common heritage.

It is an essential that the principles and guiding the preservation and restoration of ancient buildings should be agreed us on and be laid down an international for applying the plain within framework of its own culture and traditions. For the first time the Athens chapter of 1931, contribution towards the development of an extensive International movement which assumed concrete from in national documents in the work of ICOM and UNESCO and the establishment of an international centre for the study of the preservation and restoration of the cultural property¹⁰ (Batra:1996).

The Venice Chapter

The Venice chapter is based on the basic principles of conservation of ancient monuments throughout the world and was formed at the meeting of historical experts in Venice 1964 and adopted by international council of monuments and sites in 1966. It is an historic documents by itself and an universal approach to conservation .The vision of the chapter discussed below (Batra:1996).

Definition

Article-1

The concept of historic monuments embraces not only the single architectural works but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or an historic events. The applies not only to great works of art but also to more modest works of the past which have acquired significance of passing time.

Article-2

The conservation and restoration of monuments must have recourse to all the sciences and techniques which can be contribute to the study and safeguarding of the architectural heritage¹¹ (Batra:1996).

Article-3

The intention in conserving and restoring monuments is to safeguard them no less as work of art them as historical evidence.

Types of Conservation

Preservation and conservation are an important part of archaeology. Through the conservation work an archaeologists can safeguard the archaeological objects and sites. In tradition there are two type of conservation one is structural and another is chemical conservation. The genesis of the structural conservation of monumental edifices in India could be traced from the stupas of the Buddha in Asokan period (3rdc.B.C). Whereas the chemical conservation is nothing but chemically preserving of the sculptures, i.e. preserving through using different chemicals¹²(Batra:1996).

Structural Conservation

The structural conservation is reconstruction repair, or renovation of earlier edifices. Barring some exceptions by and large the effort is to retain their original character. Edifices may be of religious in nature or otherwise is secular, it is necessity to maintain it properly and whenever the same is damaged or destroyed, it has to be repaired, renovated or even reconstructed for the regular use of all concerned. The modern concept of conservation or preservation of edifices or the monuments aims to retain their original personality or character¹³ (Ghose:1989).

History Structural Conservation Work

In 1639 the Britishers started the conservation work in their own style. In 1784 Sir William Jones set up the Royal Asiatic Society with its head quarter was at Calcutta. The main aims and objectives were to study, cultivate and preserved the antiquities, art, science and literature of Asia.

In 1810 the Bengal Code-xix, introduced 'first step' towards the preservation of ancient cultural heritage. According to enactments the government was vested with power to intervene, or to save any monuments. In 1861 new department was formed that is 'Archaeological Survey of India' by Alexander Cunningham. The main aim and objectives of department was the preservations and conservations of ancient monuments and archaeological sites in the country. In 1900 Sir John Marshall was appointed as the Director General of the Archaeological Survey of India to look after the preservation and conservation of the ancient cultural properties. In 1904 Sir John Marshal passed

"The Ancient Monuments Preservation Act-1904" in British parliament. The act exercise control over the traffic of antiquity protection of the archaeological sites other building of archaeological and historical important artistic value and their proper preservation¹⁴ (Behera:1993).

In 1922 Sir John Marshal brought out the conservation manual laying the principles for structural conservation work as under.

1. Hypothetical restorations were unwarranted, unless they were essential to the stability of the buildings.
2. Every original member of a building should be preserved intact and the demolition and reconstruction should be undertaken only if the structure could not be maintained.
3. In no case should the mythological or other scenes be re-carved.

Chemical Conservation

Chemical conservation means to clear the lichen, fungus and other elements from the sculptures or monuments. By using various chemicals. The chemical clearing and preservation are being attended to by the chemistry Branch of archaeological survey of India and other science laboratories. Before starting the chemical conservation work the conservator adhere to some technical steps, such as to seriously study and investigate the building material and ancient techniques including the preparation of pigments, study their reflection value and micro analysis, examination of glass potteries, ceramic materials, terracotta, fabrication techniques, analysis of metals, than metallurgy and metallographic, mortars and plasters etc.

The chemical conservation works are very essential to restore the originality and the posture of the material used in an ancient structure causing any damage to the structure⁴. It also helps to prevent further decay or deterioration of the monuments¹⁵ (Bisht, A.S., Bhatnagar, I.K & Singh, S.P: 2000).

Factors responsible for monuments Decay

Stone has been known as one of the most durable material since the ages. In ancient period mostly monuments and sculptures are made in stone. But the monuments and sculptures might start deterioration due to human negligence, which have wrecked havoc on ancient monuments and

treasures. The decay of monuments can be attributed several causes such as climatic causes, biological causes, botanical causes, natural disaster and man-made causes etc. moreover, the decay is also caused due to vandalism of man. The above causes are discussed in below¹⁶ (Feilden: 1982).

Climatic causes:

The climatic is one of the main factors of monuments decay or damage. In India the climatic conditions having extreme heat and cold. The resistance of building materials to extreme climatic agents decreases with their exposure and age. The climatic causes sub-divided into many such as Rain, Relative humidity, Temperature, Wind, Air Pollution, Alternate technology, Ground Water, Capillary action, Dust and soluble salt¹⁷ (Feilden: 1982).

Rain:

Rain is frequently occurred in India that result the ground water level has to be increased and decreased in periodically, that causes damage to the ancient building especially the huge complex, temples etc.

Relative Humidity

It is one of the factors for decay of monuments. The alternation of high and low humidity leads to a constant expanding and contracting of art object, which are hygroscopic in nature. The high humidity causes iron to rust and bronze disease, where as the low humidity has effects paintings, paper, leather etc. due to loss of moisture content or desiccation making them brittle, fragile and breakable with slight mishandling since it affect their flexibility.

Temperature

Both low and high temperature is indirectly destructive. High temperature would lower the humidity level and in low temperature continuous freezing of the moisture in hygroscopic objects and followed by melting of the frozen water would produce constraints due to changes of volume with the structure resulting into bursting and scaling of surfaces. The action of frost on standing monuments in this region would be damaged.

Ground Water

In the eastern Orissa the ground water level is generally high during the rainy season. The monuments and sites layering in this region are also affected due to this cause.

Capillary Action

The moisture in the soil affect every building as it is drawn up by capillary action to evaporate with the moisture come dissolved salts, sulphates, nitrites, chlorides, etc. which crystallize when the ground water evaporates, due to this crystallization many temple like *vaital* and etc.

Air Pollution

This factor has played an important role in decay of monuments. Industrial emissions, smoke from coal heating, exhaust gases from motor vehicles react with rain and humidity to form acidic compounds that cause lasting damage to stone and metal especially in the open air.

Soluble salt

Most of the monuments situated in the sea coast are subjected to more withering because of the saline air and action against the walls of the monuments, thereby penetrating into the core of the wall. The constant saline action weakens the stone or bricks.

Biological Cause

The biological cause includes the Birds, Insects and animals. Some insects and other pets are also responsible for destruction of wood work in a structure. These insects cause great amount of damage by weaking structural timbers. Birds are also sometimes causing of damage to monuments, wherein they make nests at some soft spots, sometimes by digging holes. Bat is indeed a nuisance at the monuments. Though they do not cause severe damage to the structures, but their very presence at a monument has a sickening effect.

Botanical Cause

The botanical cause includes Tree and plants, fungi, moulds and lichens are most important factor decaying monuments.

Tree and Plants

This is more danger to the structure. The birds bring the fruits of banyan or neem trees and select these tall isolated places for rest and for without disturbance. The seeds that left on the manure conditions. The roots penetrate into stone or brick masonry joints gain entry and as they grow, the

masonry cavities try to expand resulting in the structure cracks or parts of the some coming out of plumb level.

Important Temples in Kendrapara District.

Kendrapara district Carved out of the erstwhile Cuttack district, and it was formed on 01.04.1993 vide notification No. DRC-44/93-14218 dated 27.03.1993 of Govt. of Odisha. Kendrapara district lies in N 20°20'37" Latitude and E 86°14'10" Longitude. The District occupied an area of 2,644 sq km. The district is surrounded by Bhadrak in North, Jagatasinghpur in South, cuttack in west and on the east surrounded by Bay of Bengal. The district is rich in cultural and archaeological heritage. According to the tradition Kendrapara has got many names from its origin. It is known as 'Tulasi kshetra', 'Gupta kshetra', 'Brahma kshetra' and 'Kendrapali'. The mythological texts, puranas. And Epics mentions that, the district owes its name from the death of one mythical demon 'Kandarasura' who was killed by Lord Baladev, the elder brother of Lord Jagannath. After that he married his daughter Tulasi and settled here, since then the place is known as 'Kendrapara' as well as 'Tulasikshetra'. The presiding deity, Lord Baladev Jew is being worshipped in a temple at Kendrapara. Kendrapara played very significant role in trade hub since ancient Kalinga. The district witnessed to build a large numbers of monuments like temple, forts and monasteries or Buddhist stupas. The monuments time frame goes back to 10th century C.E to 17th/18th Century C.E. ¹⁸ (Bose:1982). There are numerous conservation work have done in the temples of the district. The works were of minor nature. All the conservation works were monitored by the technical expert committee. The structural conservation was followed by chemical treatments and preservation. But the conservation works are being undertaken in the following enlisted temples by the State Archaeology (Brown, P:1959).

List of Important Temples in Kendrapara District

Name of the Temple	Location	Date & Builder Name	Condition	Conservation/Preservation Status
Baladeva Jew Temple	Ichhapur Kendrapara	18 th Century C.E- Maratha Raghuji Bhonsle	Good	Good State of preservation and Chemical Conservation applied
Bana Bihari Jew Temple	Pentha Rajnagar	20 th Century C.E. Bhanja King, Kanika	Good	No Conservation work yet to be done
Basudeva Jew Temple	Ichhapur Kendrapara	18 th Century C.E Maratha Ruler	Good	No Conservation work yet to be done
Chandramauli Temple	Chandanagar Rajnagar	19 th Century C.E Kanika King	Good	Good state of preservation
Dadhibabana Temple	Derabish	19 th Century C.E Zamidar of Aul	Good	Good state of preservation Chemical Conservation Needs
Garbhesvara Siva Temple	Santhapur Kusiapala	20 th Century C.E	good	Good state of preservation Chemical Conservation Needs
Golekhabihari Temple	Korua	19 th Century C.E Zamidar of Aul	Good	Good state of preservation Chemical Conservation Needs

Harisankaresvara Siva Temple	Kuanrpur Derabish	13 th Century C.E Zamidar of Aul	Good	Good state of preservation Chemical Conservation Needs
Jagannath Temple	Keradagarh Rajnagar	19 th Century C.E Bhanja King of Knika	Good	Good state of preservation Chemical Conservation Needs
Laxmi Barah Temple	Aul	18 th Century C.E king of Aul	Good	Good state of preservation Chemical Conservation Needs
Malikesvara Siva Temple	Adhanga Malikesvarapur	9 th -10 th Century C.E Somavmsi king	Good	Good state of preservation Chemical Conservation Needs

Baladeva Jew Temple

Baladeva Jew Temple at Ichhapur is located about 2 kms South-west of Kendrapara town. Architecturally, the temple consists of square plan pidha vimana or deula, pidha Jagamohana and Garuda Mandap. It is often considered as one of the impoverished examples of the Kalingan style of temple architecture. The presiding deities are lord Jagannath, Balabhadra and Subhadra. The temple can be dated back to 18th century C.E. According to the tradition, the temple was built by Maratha king Raghuji Bhonsle of Nagpur. The monument is in good state of preservation. A meager chemical conservation work was applied by the Endowment Department, Govt. of Odisha. Recently the Govt. of Odisha sanctioned Rs 8.5 Cores for the conservation, preservation and development of the temple¹⁹ (Brown:1959).

Bana Bihari Jew Temple

Bana Bihari Jew Temple at Pentha is located on the coast of Bay of Bengal

and is about 12 kms East to Rajnagar town. Architecturally the temple consists of a rectangular viman which stands on a high platform with a flat roof. The temple was built by one of the Bhanja kings of Kanika. The presiding deity is Lord Jagannath. On the basis of architectural design, it can be dated back to 20th century C.E. No conservation or preservation work is yet to be done by agencies. It is covered with wild vegetation.

Basudeva Jew Temple

Basudeva Jew Temple is situated along the compound wall of Baladeva Jew temple, Kendrapara. Architecturally the temple is square planned and the pidha viman stands on a high platform. The temple was constructed during the Maratha rule in 18th century C.E. The presiding deity is the four armed Vishnu idol. The temple was renovated by the Endowment Department, Govt. of Odisha²⁰.

Chandramauli Temple

Chandramauli Temple at Chandananagar is located 12 kms East to Pattamundai town. The temple consists of a square planned pidha viman, jagamohan and a rectangular pillared mandap which stands on a high platform. The Mandap consists of a flat roof supported by a number of pillars. The temple has seven projections with five-fold division of bada. It was built by the Bhanja king of Kanika. The presiding deity of the temple is Lord Siva. It is in a good state of preservation and needs chemical conservation²¹.

Dadhibabana Temple

Dadhibabana Temple at Derabish is located on the right side of Chandol town which is about 10 kms from Kendrapara town. Architecturally the temple consists of a square planned pidha viman, jaga mohana and a flat roofed frontal mandap. On the basis of its architectural design, it can be dated back to 19th century C.E. The temple is built by a local zamindar of Aul. The presiding deity is Lord Jagannath. The temple is covered with vegetation and plats. No conservation initiative has been yet taken by the govt²².

Garbhesvara Siva Temple

Garbhesvara Siva Temple at Santhapur in Kendrapara district is located on the left bank of the river Godabari and is two kms north of NH-5-A running from Daitari to Paradeep road. The temple consists of a square plan pidha viman with a rectangular pidha mandap. It is pancharatha on plan and panchangabada on projection. The temple is built in 20th century C.E. and the presiding deity is Lord Siva in the form of a circular Yonipitha but the Lingam is missing. Two beautiful sculptures preserved inside the temple are the four armed Ganesh and Lord Buddha²³.

Golekhabihari Temple

Golekhabihari Temple at Korua is situated on the left bank of river Chitrotpala. This is a unique temple in Kendrapara district. Architecturally it consists of a rectangular plan pidha viman with twelve mastakas, which acts as the super structure of the temple. The temple was built in 19th century C.E. and the presiding deities are the twin idols of Goddess Radha and Lord Krishna over a high pedestal. The temple is well preserved and conserved.

Harisankaresvara Siva Temple

Harisankaresvara Siva Temple at Kuanrpur is about 1 km from Derabish town. The temple consists of a square plan pidha viman and jagamohana. It is pancharatha on plan and panchangabada in elevation. The beautiful sculptures like the four armed Ganesh, four armed Kartikeya and Parvati are housed in the parsvadebata niches. On the basis of the sculptural representation the temple can be dated back to 13th century C.E. It was again reconstructed by a zamindar of Aul and the Endowment Department, Govt. of Odisha in 19th century C.E. and 2006 respectively²⁴.

Jagannath Temple

Jagannath Temple at Kraradagarh is about 9 kms north to Rajanagar town. Architecturally the temple consists of a square plan pidha viman, rectangular pidha jagamohan and a frontal mandap. The temple has seven

projections with five-fold division of the bada. The temple was built during the reign of Bhanja king of Kanika. The presiding deity is lord Jagannath, placed on a high platform. The temple comes under the administration of Endowment Department, Govt. of Odisha²⁵.

Malikesvara Siva Temple

Malikesvara Siva Temple at Adhanga –Malikesvarapur is about 4 kms north to Chandol town. Architecturally the temple consists of a square plan rekha viman and pidha viman facing towards east. The temple is made up of triratha plan and panchangabada on elevation. The temple was built during the reign of Somavamsi rule and it has been reconstructed in 19th century C.E. It was renovated by the ASI of State in 2006. The presiding deity is Lord Siva in the form of a circular yonipitha²⁶.

Conclusion

Monuments and archaeological sites have not yet been closer to the hearts of people. It has yet been closer to the hearts of people. It has no conspicuous impact on the life of common people. This lack of interest in our heritage by the people may ruin our monuments in course of time. Modern education has made young generation more and more ambitious, target oriented and money centered. The value of life has become subordinate to the value of material gains. The existing activities in generating awareness about monuments\ sites among people has not fully succeeded and people show very little interest in our cultural heritage²⁷.

In the present context A.S.I is giving more importance to the conservation and preservation of excavated remains and free standing monuments but other agencies like state Archaeology Department and N.G.Os are giving more importance to conserve the standing monuments only²⁸ (Chauley, G.C:2004).

In case of conservation of free standing monuments particularly temples, the problem of structural conservation, chemical preservation and horticultural operation along with encroachment problem arise at various places. But conservation of archaeological sites and temples differ due to their location in different geographical region along with surrounding micro\macro environment

which is due to use of various materials viz. stone, brick, lime, iron cramps, wood etc²⁹.

Therefore, each monument and site should be examined and treated individually. Hence, all the concerned organizations should review problems of conservation from time to time in term of conservation methods, techniques, use of materials and Preservatives³⁰.

Unfortunately at present half hearted conservation and restoration work of historical buildings and monuments has hampered the very purpose. The P.W.D approach towards the conservation of structural monuments is spreading in an uncontrolled way. The ignorance or insufficient knowledge about the latest scientific approach and methods useful for scientific conservation is the real threat to cultural heritage. In order to overcome these blunders, the agencies must frame sound and fool proof principles and policed, which will govern the system for maintaining aesthetic values of our heritage and at the same time preserving the monuments³¹ (Dikhit, P.K:2007).

There are many monuments of national importance which are still under the protection by the State. They require to be protected by A.S.I, for the better development, likewise, there are few important monuments and un-excavated sites which are still unprotected and required to be protected either by State Archaeology or by Archaeological Survey of India.

Heritage awareness may lead to self awareness. Awareness about art, culture, and environment is essential for expansion of life, peace, progress and self-realization. Conservation of cultural heritage must be approached in a comprehensive manner and no aspect should be treated in isolation or ignored. Systematic conservation can improve the quality of life of the monuments or archaeological antiquities.

coastal district with many rivers crisscrossing the district. The district is located in the delta region of major river systems like the Mahanadi, the Brahmani, and the Baitarani and thus the District has the deposits of sediments which consist of alluvial soil. Kendrapara district also contributes a significant role to development of art and architecture in Odisha. The origin of its art and architecture can be traced back to 5th century C.E. to 20th century C.E. The most important monuments are Baladeva Jew Temple, Banabihari Jew temple, Basudeva Jew temple, Chandramauli Sive temple, Dadhibabana temple, Garbhevara Siva temple, Golakabihari temple, Jagannatha temple, Malikesvara siva temple, Laxmi Baraha Jew temple and Srungaresvara temple. Out of these temples some are sound and some are in dilapidated condition and very less conservation work done by various agencies like Archaeological Survey of India and Department of State archaeology and local agency. This paper will focus on to prepare a data sheet of monuments of Kendrapara district, conservation work and its present status.

Keywords: Monuments of Kendrapara District, and Conservation Status.

References

1. M.M.Ganguly, *Orissa and Her Remains*, Calcutta, 1912, p.273
2. L.S.S.O Malley, *Bengle district gazetteers*, Balesore, 1907, vol.vii, pp.10-11.
3. A.N.Parida, *Early Temples of Orissa*, New Delhi, 1999. pp.30-35.
4. K.C.Panidgrahci, *Archaeological Remains at Bhubaneswar*, Calcutta, 1961, p.3
5. J.Fergusson, *History of Indian & Eastern architecture*, London, 1876, p.23.
6. P.Brown, *Indian Architecture*, chapter xxi, Bombay, 1959, pp.101-109.
7. *Ibid.*
8. *Ibid.*
9. R.L.Mitra, *The Antiquities of Orissa*, vol-2, Calcutta, pp.34-40.
10. M.M.Ganuly, *Op.Cit.* p.175
11. R.D.Banerji, *History of Orissa*, Vol-2, Calcutta, 1930-31, pp-333-83
12. N.K.Bose, *Cannos of Orissan Architecture*, Calcutta, p-50.
13. P.Brown, *Indian Architecture*, chapter xxi, Bombay, 1959, pp.101-109.
14. A. Goswami, *Designs from Orissan Temple*, Calcutta, 1950.
15. K.S.Saraswati, *Temple of Orissa*, OHRJ, Vol.I , PP.233-253.
16. D.Mitra, *Bhubaneswar*, published by A.S.I, 1958, p.45.
17. K.C.Panigrahi, *Archaeological Remains at Bhubabeswar*, Calcutta, 1974.
18. A.N.Parida, *Op.Cit.*
19. K.S.Behera, *Temples of Orissa*, Bhubaneswar, 1993, pp.23.
20. T.E. Donaldson, *Hindu Temple Art of Orissa*, vol-I, II & III.
21. D.R.Das, *Kosalesvara Temple at Baidyanatha*, New Delhi, 1982, pp.297-307.
22. Allchin, B., Allchin, F.R & Thapar, B.K., 1989 (Eds), *Conservation of the Indian Heritage*, New Delhi: Cosmo Publications, pp.43-47.
23. Anuradha,V.Kumar. 2001, *Conservation of Building Stones*, New Delhi, p.67.
24. Arnott, M.H. 1903, *Report With Photograph of Repairs Executed to some of the PrincipleTemples of Bhubaneswar Between1980 and 1903*, London, pp.123-125.

25. Banerjee, J.N. , *Development of Hindu Iconography*, New Delhi, p.78.
26. Batra, N.L. 1996, *Heritage Conservation (preservation And restoration of Monuments)*, New Delhi, pp.4-16.
27. Ghose, A. 1989, *Conservation and restoration of Cultural Heritage*, Delhi, pp.54-56.
28. Behera, K.S. 1993, (Eds) *Temples of Orissa*, Bhubaneswar, p. 32.
29. Bisht, A.S., Bhatnagar, I.K& Singh, S.P., 2000 ,(Eds) *Conservation of Cultural Property in India*, Delhi, p.124.
30. Feilden, B. 1982, *Cause of Decay in Material and Structures; Conservation of Historical Building*, London, pp. 243-238.
31. Chauley, G.C. 2004, *Monumental Heritage of Orissa (art, Architecture, culture & conservation)*, Delhi, pp.167-169.
32. Dikhit, P.K. 2007, *Monuments of Orissa and their Conservation*, Unpublished Ph.D, Thesis, Utkal University, Bhubaneswar, pp.245-256.

TITLE OF THE PROJECT – AN IMPORTANT MONUMENTS OF KENDRAPARA
DISTRICT & ITS CONSERVATION

DEPARTMENT OF HISTORY

+3 3RD ARTS (HISTORY HONOURS) SESSION -2019-2020

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