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# Excavation at Asurgarh: An Early Historic Fortified Settlement in Odisha

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**Abstract:** The excavation in the year 2018-19 added a new dimension to the history and archaeology of Western Odisha in particular and that of Odisha in general. The metropolis settlement was one of the early urban centres in this part of the hinterland. The basic origin and growth of this city was its landscape potentiality, surrounded by semiprecious stone quarry and its connectivity to the ancient trade routes as corroborated with the excavated findings of imperial variety of silver punch mark coins.

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**Keywords:** Excavation, Asurgarh, Fort, Punch Marked Coin, Sealing, Cultural Sequence, Radiocarbon Dating

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## Introduction

The excavation of early historic site in Odisha began with the excavation at Sisupalgarh by B.B. Lal in 1948. Thereafter, many of the sites of similar nature have been excavated in the state which includes Asurgarh in Kalahandi by N. K Sahu in 1973 (Sahu 1982), Jaugarh a fortified settlement on the Rushikulya valley (Mitra, 1981 IAR), Manamunda (Mishra and Pradhan 1990), Khalkattapatna (Rout and Pattanayak 1993, Sinha 1992), the port site of Manikpatna (Pradhan 2000), Radhanagar (Mishra 2000, Patnaik 2012), Kharligarh (Garnayak 2002, 2012 & Pradhan 2004), Budhigarh (Mishra 2016) and few other sites have been carried out by scholars either in search of sites parallel to Harappan Civilization and beyond or to find out sites associated with Epics and Puranas. Whatever the purpose it does not matter but all these efforts brought out a scenario of existing rich early historic cultural phase in the state. It also proved existence of well-established early historic urban settlement in Odisha like the neighbouring states. These excavations revealed how material culture in the state gradually developed from incipient metallic period to full-fledged metallic cultural phase. The manufacture of goods for war and peace made out of Iron gave birth of urbanisation in the major and minor river valley of the state. The knowledge of iron metallurgy also had significant influence over the socio-economic life and towards the growth of fortified settlements in the state. Asurgarh is one of the sites which has its beginning in around 8<sup>th</sup> -9<sup>th</sup> century BCE and emerged as one of the early urban

fortified settlements in the region by the efforts of tribal and non-tribal inhabitant of the region.



Figure 1: Satellite Image of the Archaeological Site Asurgarh

## The Site and Its Environment

The Asurgarh fort in Kalahandi district of Odisha is located (20° 04' 54" N; 83° 21' 8" E, MSL- 226 m) on the right bank of the river Sandul, a tributary of the river Tel which in turn falls into the river Mahanadi (**Figures 1 and 2**). The site lies about 6 km west of Narla Road Railway Station and about 2 km north-east of Rupra Road Railway Station on the Raipur-Visakhapatnam Railway line. The fort is almost rectilinear in plan and covers an area of more than half square kilometre. It has massive earthen ramparts having 47m to 63m in width, 8m to 17m in height with four entrances, one in each direction and made of random rubble casing, *kankars* and earth with occasional brick facing at the entrances as evidence in the western gateway. It covers an area about 60 acres of land and surrounded by moat on its northern, eastern, southern sides and close to the western rampart the river Sandul flows towards northern direction and serve as natural moat on the western side of the fort.

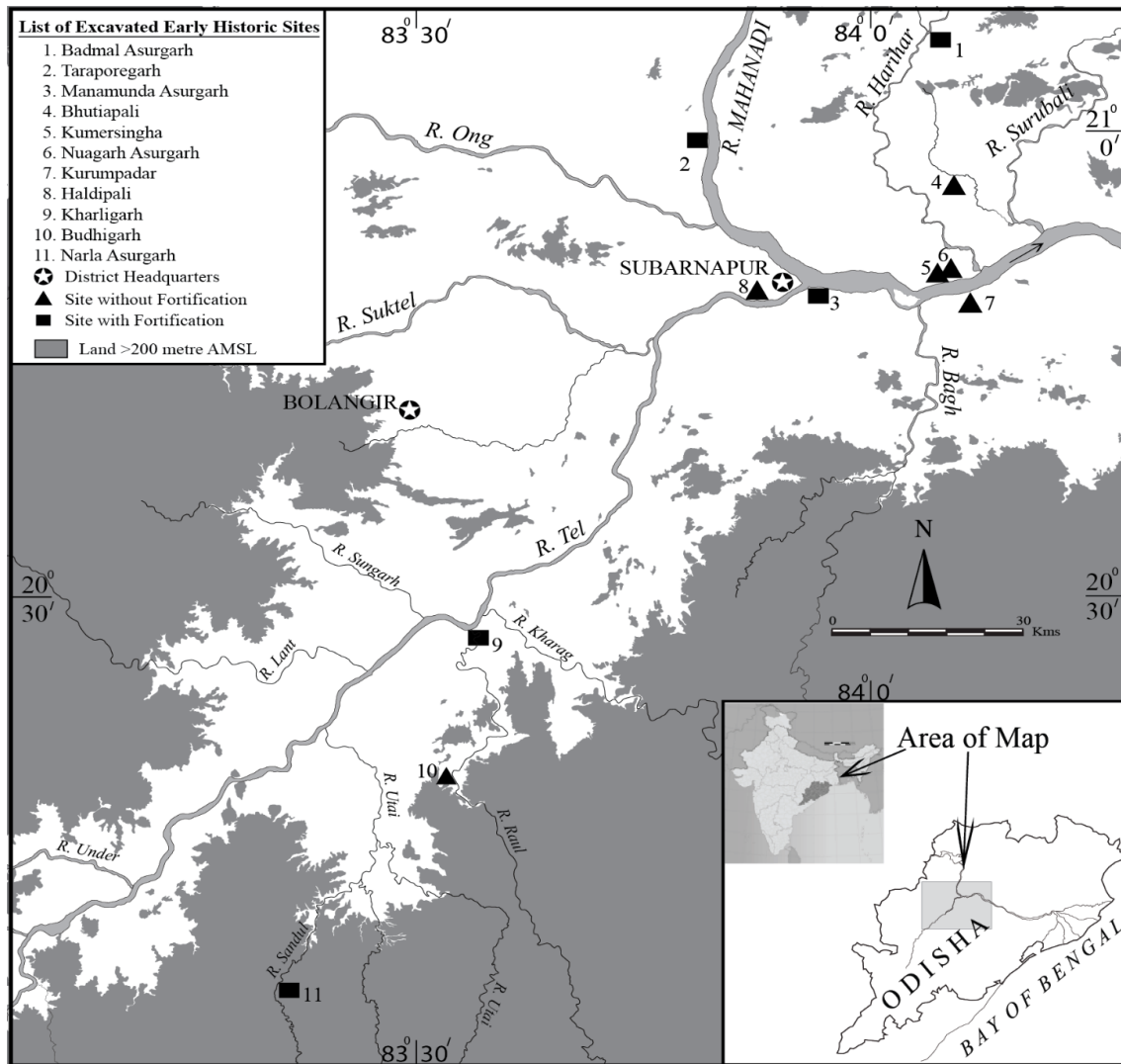


Figure 2: Excavated Early Historic Sites in the Study Area

The main fort has an outer fortification wall which is clearly traceable on the northern side and partially in the eastern and southern side which touches present village of Mandel, Bilat, Pujipadar and Lakhguda villages. The outer fortification wall served both as defence and for water harvesting purpose. It was built in such a way that the water from more than 5kms distance enter to the reservoir (Udaya Sagar) located in the eastern side of the fort which covers an area of 80.9374 hector. The strategic layout of the outer fortification wall shows the efficient of Water management system during the early historic period. Asurgarh is the only site in Odisha which shows such a high skilled of engineering of water management in comparison to contemporary sites.

The main fort has four wide gates in four directions having guardian deities named as Ganga at the eastern gate, Kalapat at the western, Vaishnavi at the northern and Dokri at the southern gate. The presiding deity of the fort is Kalapat/Kalapahad. There used to be a large festival during every year *Nabaratri* and in every Tuesday of *Chaitra-Masa* (falls in the months of February and March). During the *Nabaratra Puja* and *Chaitra*



*Purnima* people sacrifice large number of cocks and goats. Within a radius of 30 km and beyond, the site is very popular for the deity Kalapat, throughout the year every Tuesday people gathered here to venerate. The demography structure of the area is that it is predominated by tribal people like- Gonds, Kandhs, Bhuinyas, Saoras, Kulta-Chasa (agricultural community) and Gauda (Pastoral community).

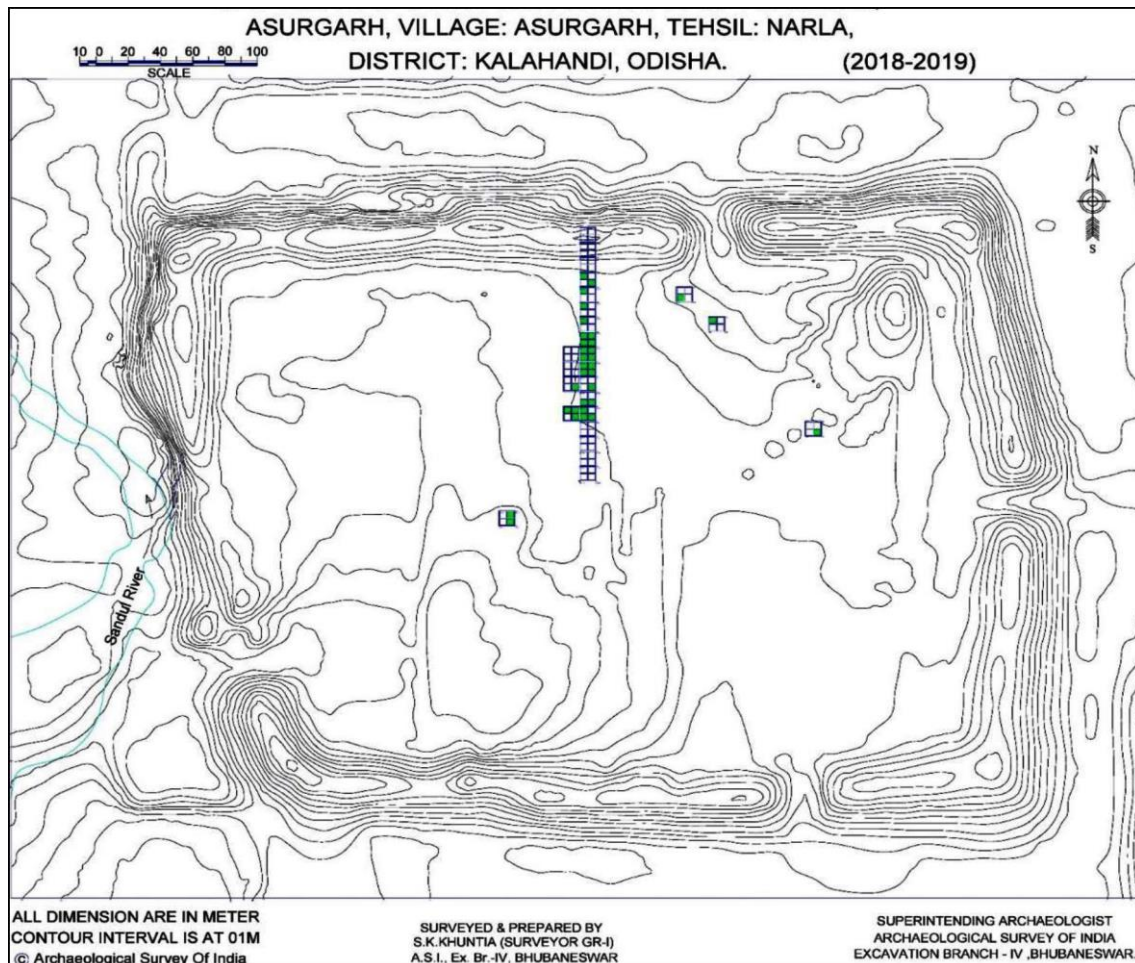


Figure 3: Contour and Layout of Trenches in Asurgarh

Locally the site is variously known as Asoka Gada and Asurgad (Asurgarh). Many believe that Asurgarh is a corrupt pronunciation of Asoka garh, named after the Mauryan King Asoka. Another version says that Asurgarh was the fort of Gosingha-Dutta the son of demon Mahisasura of epic time and the name come after him. According to the history and tradition the site was an important centre of the Atavika territory during time of Asoka for recruitment of the mighty Kalingan army and famous for its rich deposit of gemstones as mentioned in Kautilya's Arthasastra that Indravana/Indravananka was a land in this Atavika territory. The Rock Edict XIII of the Mauryan emperor Asoka dated to 3<sup>rd</sup> century BCE, refer the study area as Atavika rajya where both Brahman and Shravan inhabited. In 3<sup>rd</sup>-4<sup>th</sup> century CE the territory was known as Mahakantara and ruled by Vyagraraja whom Samudragupta defeated in his southern campaign (Sahu 1997).

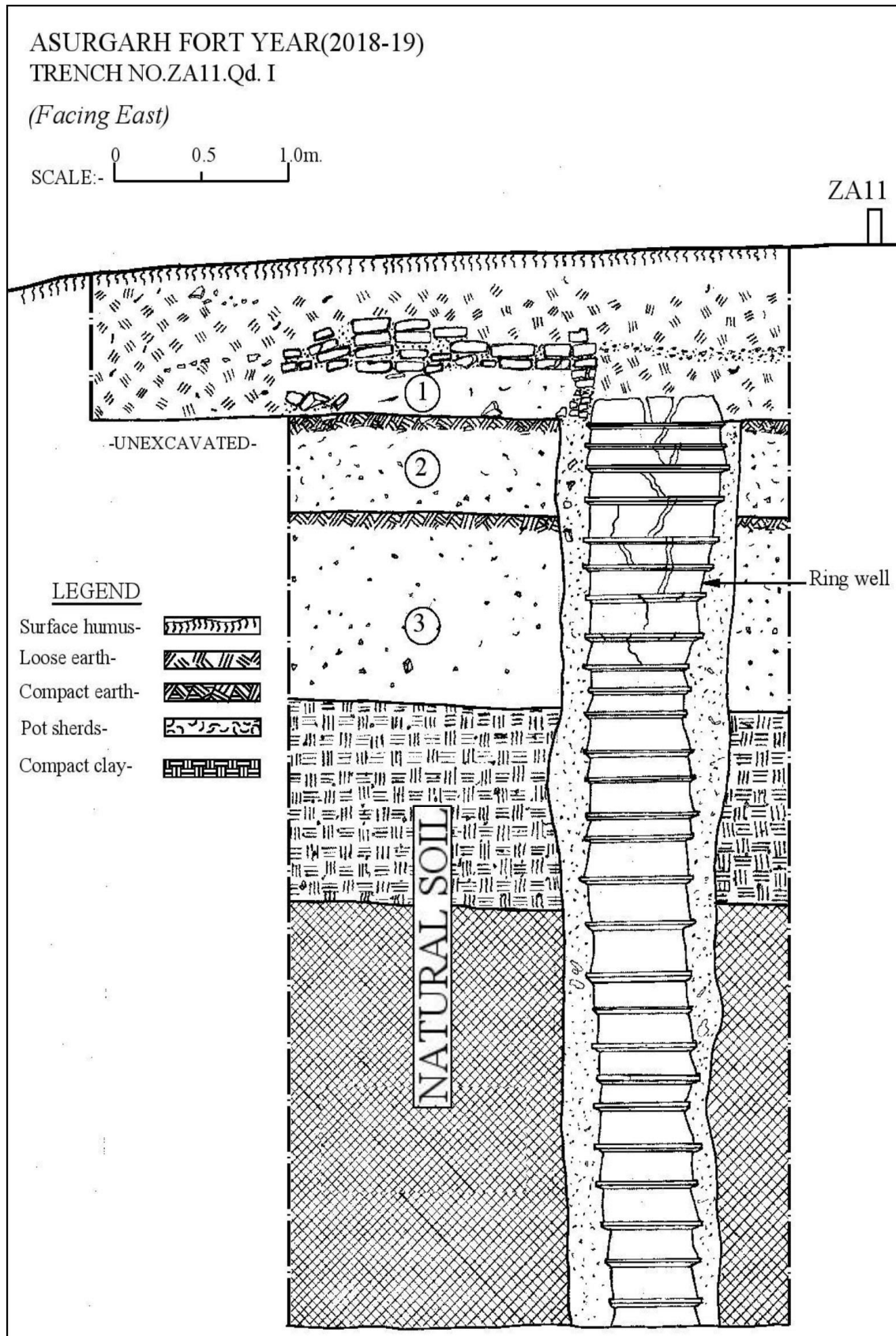


Figure 4: Section drawing of Excavated trench at Asurgarh



Figure 5: Beads of Semiprecious Stones

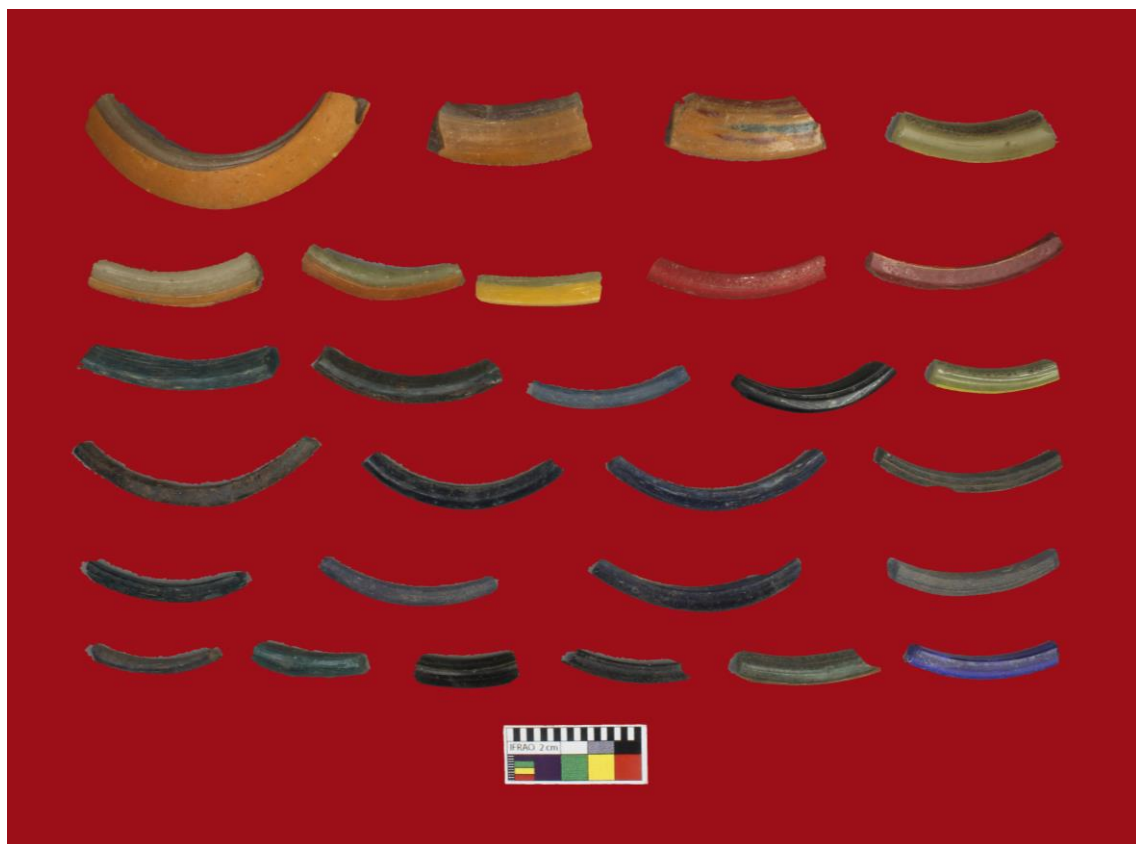


Figure 6: Glass Bangle Fragments

## Physical Feature of the Area

The landscape of the area sloping towards north-east and the water channels are flowing in the same direction to meet or merged with river Tel an important tributary of the Mahanadi. These two rivers are considered as the lifeline of culture and civilization of the region and responsible for amalgamation of material culture of west and east. The area is mostly undulating and the general elevation of the track is over 180 meters above the sea level, and the site under discussion is 226 mt MSL. The principal hill range of the area comes under the Eastern Ghats mountain strap.

The common plant species found in the area are of Sal- *Shorea robusta*; Karada- *Cleistanthus collinus* (Roxb.); Palasa- *Butea monosperma*; Piasala- *Pterocarpus marsupium*; Sisu- *Dalbergia sissoo* Roxb.; Bahada- *Terminalia bellerica*; Harida- *Terminalia chebula*; Mahula- *Madhuca indica*; Bamboo- *Bambusa arundinacea*; Neem- *Azadirachta indica*; Anwala/ Emblica- *Emblica officinalis*; Jamu- *Syzygium cumini*; Beal- *Aegle marmelos*; Khaira – *Acacia catechu* mill; Gohira- *Acacia leucophloea*; Asana/Sain- *Terminalia tomentosa* Dc.; Chara- *Buchananian lalanza*; Dhaura- *Anogeissus latifolia*; Kendu- *Diospyros melanoxylon*; Kusum- *Schleichera trijuga*; Kasi- *Bridelia retusa*; Kurum- *Adinacordifolia*; recently the locals started planting *Eucalyptus* tree in barren land and on the bank of the river Sandul.

The south-west monsoon brings much of its rain to this area. Some rain also comes from the north-east monsoon when it is withdrawing. The rainfall varies from a moderate to high. The livelihood of the locals is agrarian in nature based on paddy and cotton cultivation, and few on cattle herding but now a days there is continues migration of people to the urban area mainly for better economic condition, education and health care.

## Archaeological Environment

Geographically the area falls on the cross roads between Madhya-Bharat and of Coastal Odisha and Andhra Pradesh. The exploration around the site revealed that the site is not an isolated phenomenon. The area was not unknown to the human being from prehistoric time as attested by the findings of microliths, ground tools, ring stone in and around the site. There are series of archaeological sites in the neighbourhood ranging from the prehistoric to the early historic periods. The numbers of historical sites are more and found scattered in a radius of 10 kms from the site. The important archaeological mounds are of Bhimkela, Pipalpadar, Mendel, Pujipadar, Lakhguda, Bilat and Deheli where ruins of brick structures, potteries, terracotta and beads of semi-precious stones and other antiquities are found.

Besides these, the copper plates found from Pipalpadar of Raja Nandaraj issued from Pravatatdvaraka dated to 4<sup>th</sup> century CE; and another from Tarabharamaraka which is identified as Belkhandi and also known as Rajpadar located in the confluence of the Tel and the Utei of king Sobhanadeva of Paravatdvarak dynasty dated to 6<sup>th</sup> century CE. Tustikara the son and successor Sobhanadeva later in around 5<sup>th</sup>-6<sup>th</sup> century shifted the capital city to Tarabharamaraka. Scholars like J.K Sahu and N.K. Sahu have believed



that the capital town Parvatadvaraka might be the ruin fort Asurgarh (Sahu 1997). If we corroborate the evidence recorded in copper plates then definitely Parvatadvarka was not other than Asurgarh and was a stronghold of the region till 4<sup>th</sup> century CE. These kings were devout worshipper of goddess Stambeswari, a tribal deity which indicated their tribal origin. The practice of worshiping Stambeswari is still persisting in the region as well as within the Asurgarh fort.

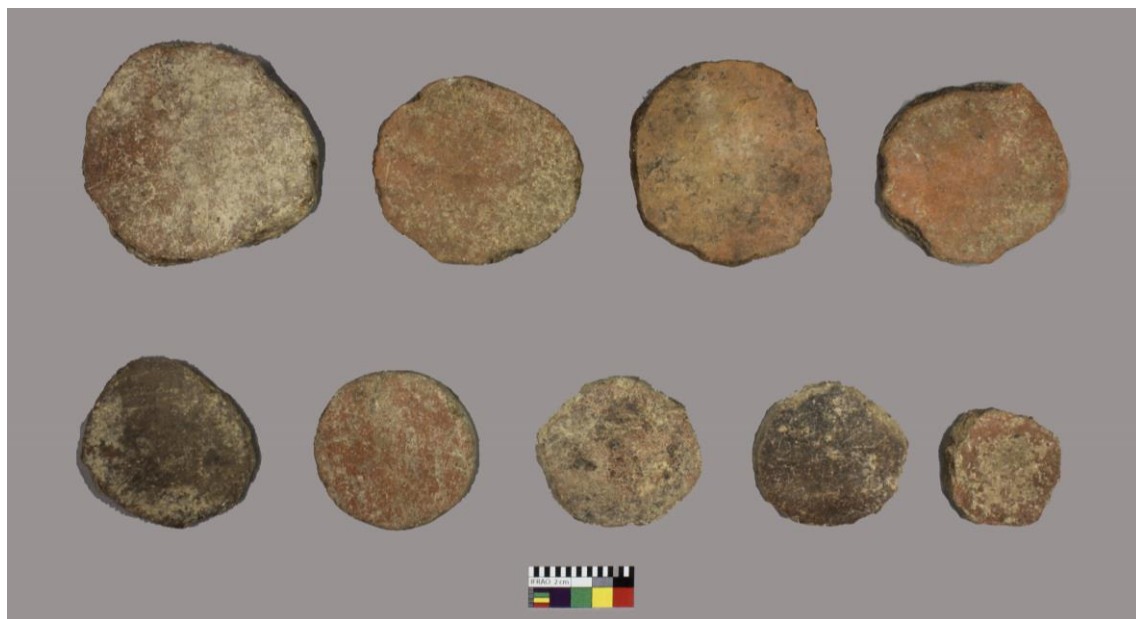


Figure 7: Pottery Discs



Figure 8: Stone Discs





Figure 9: Terracotta Figurines



Figure 10: Iron objects

### Previous Excavation

The excavation at Asurgarh was conducted by N.K. Sahu on behalf of P.G. Department of History, Sambalpur University in March 1973. The finding of the site was compared with the early historic site of Sisupalgarh (Lal 1948) located in Bhubaneswar the capital city of Odisha. Besides the report also provided a brief plan and layout of the fort i.e of gates in four cardinal directions, existence of two sluice gates to brought water from the lake to fill up the moat, presence of a 40 feet diameter circular brick temple remains dated to 4<sup>th</sup> century CE and dedicated to goddesses Stambeswari. The excavator dated the site to 3<sup>rd</sup> Century B.C.E to the 4<sup>th</sup> Century CE (Sahu 1982).

## **Present Excavation**

As per the license granted by the Director General, Archaeological Survey of India, New Delhi, vide letter F.No. 17011/46/2018-EE, dated 9<sup>th</sup> October 2018, the excavation Branch-IV, Bhubaneswar of the Archaeological Survey of India conducted excavation work at Asurgarh Fort in the field season 2018-19 under the direction of the author. The fort is declared as a Centrally Protected Monument/Site by Archaeological Survey of India vide notification No. SO-1953, dated 30.06.1981(P) and comes under the jurisdiction of Bhubaneswar Circle, Bhubaneswar, Odisha.

## **Aims and Objectives**

The site was selected for archaeological spadework during the field season 2018-19 with consideration of the result of the previous excavations as well as to achieve the following aims and objectives.

- To throw light on the Chrono-cultural sequence of the site, particularly to know whether there are any deposits beyond early historical period.
- To shed light on the settlement pattern and to compare its relationship with the major fortified settlements in Odisha as well as India.

## **Excavation and Stratigraphy**

With these objectives, the whole area within the fort has been divided into four sectors i.e. A, X, Y and Z. Since the entire area within the fort is under private ownership, 20 Trenches (of 10m x 10m) have been laid as per the availability of land in three different locations and archaeological spade work was conducted in 43 quadrants (**Figures 3 and 4**). Two Trenches ZG13 and ZJ11 were laid out near the northern gate, ZQ4 at the north eastern part of the site and rest of the trenches were laid out at the northern sector of the fort to know the cultural deposits and settlement pattern. The excavation revealed about 2m of cultural deposit having 3 to 2 habitation layers above natural soil while 3 cultural layers encountered in Qd. III of ZA7 & ZA10 and Qd. I of ZA11, 2 cultural layers are found in Qd. IV of ZG13 and Qd. III of ZQ4. The natural soil was found in Qd. III of Trenches ZA7, ZA10 and ZQ4; Qd. I of ZA11 and Qd. IV of ZG-13.

Layer (1) is light to dark greyish in colour, semi-compact to compact in hardness and silty-clayey in nature. It contains potsherds, stone pebbles, burnt clay lumps, terracotta tiles, brick bats, iron objects, beads of semiprecious stone, glass and lac bangles and a good number of pottery discs/hopscotches. The pottery types of this layer include red ware, red polished, black ware, rouletted ware, and few grey wares. The shapes include bowl, handi, miniature pots, and vase. All potsherds are wheel turned, well fired, medium to thin in fabric and fine to medium grained in texture.

Layer (2) is grey in colour, semi-compact in hardness and fine grained in texture. It contains potsherds, iron objects of both war and peace, bone pieces and few brick bats.

No structural evidence is found in this layer. The pottery of the layer comprises of red ware, black ware, red polished ware, black polished ware, black-and-red- ware and red polished ware. Painted and graffiti mark potsherds are noticed in this layer. The shapes of pottery include mostly vase, *handi*, basin, dish, both deep & shallow bowl and miniature pots. All are thin to medium in fabric and medium grained to fine grained in texture.



Figure 11: Iron Nails



Figure 12: potter's dabber in Stone and Terracotta

The layer (3) is yellowish grey in colour and has other similar feature as layer (2) except contains. The pottery quantity decreases but the quality of red polished and black polished ware increased. An evidence of lime calcretes bond is noticed at the south-east corner of the quadrant III of ZA7 and a partially exposed mud platform noticed in trench no ZA11 quadrant I. It may be the earliest structural evidence of the Asurgarh people as noticed above the natural soil. The ceramic types of layer (3) are similar to layer (2) with an addition of tan red ware and the quantity decreases and the red polished ware and black polished ware have finer polish than before. All the potsherds



are medium to fine in fabric and fine-grained to medium grained in texture, wheel turned and fully oxidized one. The shapes noticed in the deposit are of bowl, *handi*, vase, dish and miniature pot.

The natural soil is yellowish in colour and compact in hardness. It is composed of calcrete noodles and clay. It is dug up to 50cm in ZA7 and bout 3mt in ZA11 to trace the continuity of terracotta ring well.



Figure 13: Gold Chain from the Excavation

Besides these, a small trench measuring (3m x 3m) was taken in between the inner and outer fortification wall at the northern side to know the nature of deposit. The trench was dug upto 1.30 m and natural soil starts from 0.90 m. It has two layers and the layer (1) is light grey in colour, semi-compact in hardness and contains potsherds, brick-bats, terracotta roof tile fragments, stone pebbles, etc. The ceramic type of layer comprises red polished and black polished ware. The shapes include bowl, *handi*, miniature pot and vase. No motifs are found in any potsherds. All potsherds are wheel turned, well fired, medium to thin in fabric and fine grained to medium grained in texture. The layer (2) is brownish grey in colour, compact in hardness, and contains potsherds and brick noodles. The layer has revealed potsherds of red polished, black polished and



Black-and-red ware and no shapes are determined as only body sherds were found. No structural remains found in this trench. The valuable antiquities retrieved are of ring-stone, silver punch-marked coin, copper coin/token; beads of agate, carnelian and jasper. It revealed similar nature of material culture as noticed in the upper level inside the fortification and also proved that the outer fortification rampart was built during the time of inner rampart and can be assigned to the 2<sup>nd</sup> century BCE to 1<sup>st</sup> century CE.

## Cultural Sequence

The landscape of Asurgarh attracted the iron using people to begins their settlement around 8<sup>th</sup> -9<sup>th</sup> century BCE. The excavation revealed three periods of human occupation without any hiatus. The cultural sequence of the site divided into three phases by studying the presence and absence of material remains retrieved from the excavation. The site has about 2 to 2.50 meter habitation deposit divided into three major period viz, Period I – Iron Age and Period II- Early Historic Period having two sub phases in it as Period - IIA (Pre-rampart phase), Period – IIB (Rampart phase) and Period III - Late Period (Decline of the settlement).

**Period I: Iron Age** (9<sup>th</sup> century BCE to 4<sup>th</sup> century BCE), identified by the presence of painted pottery, wattle and daub house, absence of sophisticated iron tools and implements. This period marks the beginning of human settlement in the site. The local inhabitant started to carve out a rural settlement in the landscape around 9<sup>th</sup> century BCE (888 BCE, 778 BCE AMS dates).

**Period II A: Early Historic/Pre-rampart phase** (3<sup>rd</sup> -4<sup>th</sup> century BCE to 2<sup>nd</sup> century BCE/ (340 BCE AMS date) having continuation of earlier cultural features except introduction of advance metrology on iron, expansion of settlement, evidence of craft specialization, development of iron metallurgy, evidence of lapidary work. This cultural phase was contemporary to Mauryan period.

**Period- II B: Early Historic/Rampart phase** (2<sup>nd</sup> century BCE to 1<sup>st</sup> century CE (147 BCE AMS date and rouletted ware) Beginning of Urbanisation, fortification, structural activities made of bricks and terracotta roof tiles, roads made of stone pebble, water management/ harvesting mechanism developed, evidence of external trade activities. This was the flourishing period in material culture and contemporary to Mahameghavahana/ Chedi who ruled over the Odisha in 2<sup>nd</sup> century BCE to 1 century CE as corroborated by the Hatigumpha inscription of King Kharevela and of Satavahana dynasties.

**Period III: Late Period/Decline of the settlement** (2<sup>nd</sup> century CE to 3<sup>rd</sup> -4<sup>th</sup> century CE) the stage of decline in every aspect of life, culture and environment and also in trade which can be started in early C. 2<sup>nd</sup> century CE to 3<sup>rd</sup> century CE. The available evidence shows that the settlement during Period III appeared to be obscure or gloomy. The site was abandoned for reasons not known. It may decline due to territorial expansion of neighbouring state like Satavahana and early Gupta dynasties or due to ecological changes.



Figure 14: Lion figurine in copper

Table 1: Radiocarbon Dates from Asurgarh

Sl. No.	Sample Name	Sample ID	Radiocarbon Age (BP)	Calibrated Ages (95.4% probability)	Mean Date in BCE	Cultural Period
1	ASGZA752	IUACD #19C2901	2117 $\pm$ 33	347-47 BCE	147 BCE	Early Historic/ Rampart phase
2	ASGZA1068	IUACD #19C2904	2136 $\pm$ 26	351 -57 BCE	181 BCE	Early Historic/ Rampart phase
3.	ASGZA7158	IUACD #19C2902	2289 $\pm$ 33	406-211 BCE	340 BCE	Early historic/ Pre-rampart phase
4	ASGZA10100	IUACD #19C2905	2747 $\pm$ 32	976- 817 BCE	888 BCE	Iron age
5	ASGXE395	IUACD #19C2906	2594 $\pm$ 32	830-592 BCE	778 BCE	Iron age

## Radiocarbon Dating

The charcoal samples have been collected from stratified layers by taking proper procedure and were dated by using AMS radiocarbon technique at IUAC in New Delhi (**Table 1**). Radiocarbon ages were calibrated using Oxcal software and median ages are utilized in this report. Besides these the relative dated objects found from the sites are Silver Punch marked coin of imperial variety, bricks and terracotta roof tiles of Sunga-Kushan types, and characteristic pottery called rouletted ware generally assigned to 1<sup>st</sup> century BCE -CE, black and red ware, red polished ware and painted and graffiti mark pottery. The whole cultural period of the site can be classified into three cultural phases within a time bracket from 9<sup>th</sup> century BCE to c. 2<sup>nd</sup> -3<sup>rd</sup> century CE.

## Antiquarian Remains

A total number of 417 antiquities have been retrieved from the archaeological excavation. Beads of coral, lapis lazuli, carnelian, glass, jasper, garnet, shell, agate, milky quartz, terracotta, kaolin, soft stone and circular discs made out of potsherds and stone are the richest collection among the antiquities. Apart these, fragmented terracotta animal figurines; sling balls of stone and terracotta; bangle fragments of lac, glass, copper and brass; terracotta *hukka*, disc, wheel, crucible, gamesman and ear-stud; finger ring of copper and iron; toe ring of copper and earring of silver; pendants of silver; arrowhead of bone, antler and iron; Iron objects like harpoon, spearhead, knife, chisel, cog wheel, nails, clamps etc (few iron objects are not rusted till date and few have evidence of ochre polish on them); pounder, saddle-quern and lead of stone; dabber both of stone and terracotta. A number of stone tools like celt, adze, microliths are also found from the surface within and outside of fortification.

Besides these, the most important findings of the site were imperial variety punch-marked coins and tokens made of a mixed material of silver and copper, a tiny figurine of lion made of copper, a gold chain, terracotta sealings. Out of these artefacts few have significant role for reconstructing the history and culture of the site ((**Figures 5 to 14**).

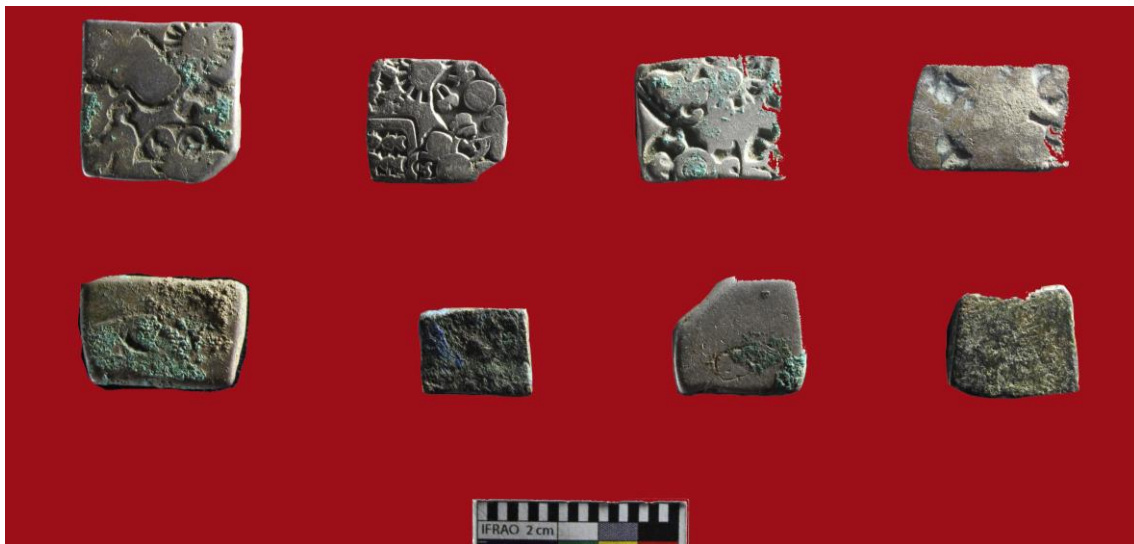


Figure 15: Silver Punch marked coins

## Coin

The finding of coins gives important information about the site, its history, chronology and its contact with outside. The findings of Punch marked coin (silver, copper) have immense value which indirectly through light on the trade activity. For the first time Asurgarh come to light after the findings of a hoard of 539 Silver Punch marked coins by P.K. Deo in 1958. The coins hoard has been classified into three groups i.e. Pre-Mauryan 69 nos, Mauryan 272, Post Mauryan 198 nos (Deo 1966). The trial excavation by N.K Sahu in 1973 retrieved 75 nos of coin belongs to the above-mentioned category and kept no doubt about the potentiality of the site and its trade contact with the other

states. The present excavation yielded 26 nos of punch mark coin out of which 16 are of silver coin and 10 nos are of copper coin or token (**Figure 15**). The punch-mark coins retrieved from the site have similarity with the coins of Bijnor and Palia near Kausambi in the north India (Deo 1966, Sahu 1982). The identified motifs arrayed in the coins are of sun, bull, fish, tree in railing etc.



Figure 16: Terracotta Sealings



Figure 17: Unique shaped brick structure



## Sealings

The present excavation brought to light three sealings among which two are identical having symbols of trident flanked by triangle ( $\Delta\Psi\Delta$ ), whereas the third one depicting symbols of ploughshare, bull, and one obliterated motif (**Figure 16**). Both the sealings are devoid of script and made of clay and of sun dried as well as baked on the fire. These are not inscribed but the depiction of trident with triangle and the other with ploughshare and bull represent Brahmanical affinity.

The symbol of ploughshare is one of the evidences signify intensive agricultural practice, it is also the symbol of strength and associated with lord Balarama also known as Haladhara (*Langala/* plough). He is the only deity who used farm equipment as weapon. The evidence of Balarama holding plough depicted on Indo-Greek coins dated to 2<sup>nd</sup> century BCE (coin of Agathocles of Bactria 190-180 BCE). The finding of the sealing in layer (1) within a house complex definitely has immense value and can be dated to 1<sup>st</sup> century BCE- 2<sup>nd</sup> Century CE.

The depiction of symbols of trident flanked by triangle may represent tree within hill/ or can be represent Stambeswari the local deity worshiped in the form of wooden pillar. The copper plate charters of Tustikara dated to 6<sup>th</sup> century CE mention that he was a great devotee of goddess Stambheswari and his capital city was Parvatadwarak. N. K. Sahu assumed that the circular brick structure retrieved during excavation dated to 4<sup>th</sup> century CE and dedicated to goddess Stambeswari (Sahu 1973). The present practice of worshiping the wooden pool as a symbolical form of Stambeswari by both tribal and non-tribal locals is very popular. The trident depicted in the sealing may be representation the stamba (pillar) and the trident flanked to it as hill (*Parvata*), then this site may be identified with the capital city of Parvatadwaraka.

At present the presiding deities of fort at four entrances named as Ganga in the eastern gate, Kalapat in the western gate, Vaishnavi in the northern gate and Dokri in the southern gate. Such practice was in vogue since long as mentioned by N. K. Sahu in 1973. The four presiding deities and their affinities show the religious tolerance of both non-tribal and tribal people. If it was a practice since the establishment of fort then it shows religious synthesis of that time.

The site face continuous threat from divergent mentality of people in search of Silver Punch mark coins and gems stone. Always there is a craze among the locals, scholars and preliterate archaeologist about the silver punch marked coins of Asurgarh till date.

## Structural Remains

The excavations at Asurgarh fort unearthed remains of brick and mud structures. Among them two are fully exposed while other structures are partially exposed due to paucity of time. However, the fully exposed structures are very interesting in nature and shape. All the brick structures exposed during the excavation are confined to the upper phase of habitational level.



Figure 18: Terracotta roof tile fragments



Figure 19: Stone pebble paved street along with the brick structure

There is a unique *Axe (Parasu)* shaped structure traced in the trenches of YA5, YA6, ZA6 and ZA5 (**Figure 17**). The structure made of brunt bricks of different sizes (38cm x 20cm x 7cm and 44cm x 29cm x 7cm, in length, width and thickness respectively) and has maximum four courses of bricks in the wall. It was built in English-bond technique with mud mortar and has a 1.50 m wide entrance at the North-East direction. The orientation of the structure is North-East to South-West. It measures 15.60 m in length, 9.70 m in width and 0.30 m in height respectively. There are number of post holes with diameters of 10cm to 14cm over the wall which make us presumed that the super structure was mad of perishable materials particularly of wood and the finding of large quantity of terracotta roof tiles made clear that the roof was covered with Terracotta tiles. Apart these, the findings of crystal quartz and garnet raw materials in large quantity along with semi-finished and finished beads in two separate locations within the structures proves that the structure was used as bead workshop or ware house before the site was abandoned. All the three sealings are retrieved from this structure and raise the potentiality of it.

The other structure seems to be a large hall, rectangular in shape and having one room at one end. Due to paucity of time the structure was not fully exposed. The exposed remains of the structure measures 15.60 m in length and 15.90m in width and 0.42 m to 0.55 m in thickness respectively. The structure has maximum eleven courses of bricks with a height of 0.88 m built in English-bond technique with mud mortar. Two different types of wedge-shaped bricks have been noticed in the curved alignment of the wall measures, 43x27x07cm and 27x21x07cm in length, width, and thickness respectively. Besides, two circular brick platform with a diameter of 1m and 0.9 m respectively are noticed within the enclosure wall probably used for upholding the wooden post which further bear the super structure. Traces of burning wooden post and a mud wall are also noticed along with the two circular brick platform. The wall thickness varies from 40cm to 55cm. The rectangular room noticed at the one end of the exposed structure measures 6.10m x 4.45m in length and width respectively. A stone pebbles paved road along with *kankar* was also noticed along with the one arm of the structure which is very interesting in nature running from north-west to south-east. A gold chain and a miniature a lion figurine made of copper have been retrieved from this complex.

## Kitchen Complex

Apart from these, wattle and daub kitchen room is partially exposed in Qd. II and III of ZA10 closed to the main structure. This is identified as kitchen because of the associated objects lying inside the room i.e. pestle and saddle quern *in situ* position along with large quantity of potsherds. The exposed room measures 2.34 m x 1.16 m in length and width respectively. The wall has a thick coat of mud plaster with white wash and has uneven width. The exposed wall in the Qd. II measures 12 cm in width and 05cm in height. Similarly, in Qd.III the wall measures 03 cm in width and 07cm in height. Evidence of a burnt wooden post is also noticed at the middle of the wall in Qd. II of ZA10 with a diameter of 16cm.



Figure 20: Graffiti and Painted potsherds

## Bricks

The excavation exposed different size of bricks used in structures. The bricks used during this period are of L 44 cm to 27 x W 30cm to 20cm x with a uniform thickness of 7 cm. The bricks are made of fine to coarse clay which is locally available, mixed with straw, paddy-husk and sand and were kiln burnt. In some cases, a noteworthy feature in these bricks is noticed that they bear on one side a design executed before firing by moving fingers in roughly / strait or diagonal fashion may be for sticking purpose. Such types of finger impression bricks are also noticed in different archaeological sites belonging to early historic period. The chronology of these bricks as documented have been ascribed between the 2<sup>nd</sup> cent. BCE to the 4<sup>th</sup> Cent. CE. Some archaeologist prefers to call these bricks as Sunga-Kushana bricks. In Gujrat they are known as Kshatrapa bricks. In Odishan context most of the contemporary sites revealed similar types of brick.



## Terracotta Roof Tiles

The site has yielded good number of terracotta roof tiles. The evidence of tiles in and around the structures suggests that these houses were roofed with tiles and the provision of perforation in the tiles suggest that they were fitted with iron nail and clamps. The tiles are made of fine to coarse fabric clay mixed with straw, husk and brick red in colour. The tiles are convex on plan, rectangular in shape. The upper surfaces of the tiles are provided with shallow channels which were meant for easy flow of rain water. They are made of mould as well as hand (mould for shape / and channels by fingertip as in some cases the channels are irregular on plan (**Figure 18**). Sometime these are used as ramping material for floor with brick bats. Perhaps the broken tiles were reused in flooring.

## Terracotta Ring Well

During the excavation in Qd.I of ZA11 has revealed a terracotta ring well at the corner of a partially exposed brick wall. The ring well was noticed below 80cm from the surface level, just below the structural level. The terracotta rings has 70cm to 80cm in diameter and 12 to 15cm in height. A total number of 18 rings have been exposed and due to lack of time it was left un-dug from the depth of 3.75 m. Basically similar type of terracotta ring well noticed in the early historical context to the medieval period.

## Street

A street was revealed during the excavation in trench no ZA9/10 which runs from north-west to south-east orientation along with a brick structure. The street paved with river pebbles and *kankar* was sealed by layer (1) and rest over the layer (2) at a depth of 75cm below surface (**Figure 19**). This evidence indicates that the Asurgarh city had a developed settlement plan. The stone pavement road exposed in the excavated area suggested that similar pattern road may have existed all over the buried fortified settlement. The excavation unearthed all the brick structures in the upper level of habitation. Most of the structure suffered due to human vandalism and intensive agricultural practices in the site. Some bricks are deliberately taken away by the public to fulfil their own needs. Evidence of ghost wall was also traced in many trenches. Most of the year preliterate people practices unauthorised digging in the night at different locality at the site in search of golden Handi and treasures. The excavation revealed two structural phases, the structures of upper level seems to be rebuilt over the earlier existing structures or may be repaired after damage due to natural calamity like cyclone or external invasion. The mismatch of brick size indicates reuse or repairing of brick structures in the later period. The finger impressed bricks of Sunga-Kushan period were reused in the later period as evidence from the broken pieces used in the wall.

## Pottery Assemblage

The pottery assemblage basically noticed during this excavation are of Red Ware (plain/decorated), Red Polished Ware (plain/decorated), Red slipped ware (plain/

decorated), Black-and-red Ware, Black slipped Ware, Black polished ware and rare specimens of Rouletted Ware. Red and red polished ware became the predominant variety where as black, black and red ware, black burnished ware, black polished wares are less in comparisons. The shapes include mostly vase and *handi* followed by both deep & shallow bowl, tiny pots, dish and storage jars.

All the potteries are wheel turned and fully oxidized one, thin to medium in fabric and texture except the storage jar which is thick in fabric and medium grained in texture. The motifs executed in the pottery included thin incised parallel lines, appliqué design and narrow ridges at the outer surface of the body and few have graffiti marks and white and ochre colour paintings on pottery retrieved in course of the excavation.

### **Decorated Potsherds**

The present excavation for the first time brings to light the evidence of painted pottery. In trench no XE3/Qd III-layer (2) at a depth of 63-95 cm white painted (vertical strokes) pottery on red slipped ware and ochre colour horizontal bands on the outer surface of a dull red ware, graffiti marks on the black slipped ware and few on black and red ware (trident, non-geometric pattern, arrow mark, linear vertical strokes, Brahmi Ma (ॐ) as well as few incised decorated sherds on black and red ware, red colour horizontal bands on black slipped ware have been noticed (**Figure 20**).

In ZG13/Qd IV- layer 2 at a depth of 85-105 cm yielded both graffiti mark and white painted pottery. In the same quadrant at a depth of 70-80 cm a silvery grey colour painting in the entire neck portion has been yielded. In ZA10/Qd IV in layer 1, at a depth of 43-60 cm a rouletted pottery noticed on a fine variety black slipped ware, in the layer (2) and (3) in the same trench revealed both graffiti mark and painted pottery (black band on a red slipped ware and white bands on black ware). Likewise, in trench no ZA7 in layer 3 at a depth of 169-183 graffiti mark noticed in black slipped ware.

### **Features of Asurgarh**

- Fortified settlement (defenses, metropolises): (the site is satisfied the concept of *Durga* according to the *Artha sastra* of Kautilya).
- Strategically located in the river valley as well as on the major trade routes which were served as lifeline of communication from hinterland and the coastal plain.
- The basic beginning and growth of this city was its landscape potentiality, rich in semiprecious stone quarry.
- Trade contributed towards intrusion of foreign objects in the material culture of these sites (Rouletted ware, semiprecious stone, coral, Gold, Imperial variety of Punch mark coin, agate bowl).
- Monumental architecture (Large sized bricks had been extensively used for construction and stone pebbles for road and rampart).

- Technological advancement in metallurgy (high quality of iron objects still have not rusted, use of ochre colour coat in the iron object, manufacturing glass bangle, stone beads), architecture (circular structure, terracotta ring well), irrigation (water harvesting, collecting water from 5 square km area by erecting earthen bonds to fill water in the Lake presently known as Udayasagar).
- Ceramics of black and red ware, red slipped ware and red polished ware are the hallmarks in the ceramic industries.
- Beads of semiprecious stone i.e., carnelian, dark green agate, banded agate, quartz, green jasper, red jasper, yellow crystal, crystal, aquamarine, barrel, amethyst, garnet, coral etc. (site is located near the semiprecious and precious stone quarry centers) Glass objects (bangles, beads).
- The site was abandoned and deserted after 2<sup>nd</sup>-3<sup>rd</sup> century CE as evidenced from archaeological contexts.
- Double fortified settlement with Citadel and lower town concept with moat in between.
- The rampart is made of mud and casing with stone pebbles.

## Conclusion

The present season excavation added a new dimension to the history and archaeology of Western Odisha in particular and that of Odisha in general. The metropolis settlement was one of the early urban centres in this part of the hinterland. The basic origin and growth of this city was its landscape potentiality, surrounded by semiprecious stone quarry which seems to be the back bone of the site as evidence from the findings of bulk of garnets stone and quartz crystal and also its connectivity to the ancient trade routes as corroborated with the excavated findings of imperial variety of silver punch mark coins. The terracotta seals, monumental architecture, stone paved roads, well planned fortified settlement suggest it was a royal establishment having proper administration and social hierarchy. It was also an important establishment in the region at per Sisupalgarh in eastern Odisha and similar sites in north and central India.

The settlement has its beginning from 9<sup>th</sup> century BCE and continued till 2<sup>nd</sup> -3<sup>rd</sup> century CE as evidence from the present excavation. Also, it has been observed that the period 200BCE to 100 CE marked the progress and richness in the material culture. This is the period which shows the first urbanisation in this land, and such type of revolution never seen in the history of Odisha before and after. It can be safely said that, Odisha is not away or aware of the development of the rest part of the country, when the North India witness the development of second urbanization Odisha enjoyed its first urbanization.

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## References

- Allchin, F.R. 1955, *The Archaeology of early Historic South Asia*. In F.R.Allchin (ed.), *The archaeology of Early Historic South Asia- The Emergence of City and State*, 3-9, Cambridge: Cambridge University Press.
- Altekar, A.S. & Mishra. 1959, *Report on Kumrahar Excavation 1951-55*, Patna: K.P. Jayaswal Research Institute.
- Bajpai, K.D. 1960-65, *Excavation at Eran*, Sagar: Sagar University.
- Banerji, K.D. 1955, *Report on the Excavation at Nasik and Jorwe*, (ed.) by H.D. Sankalia and S.B. Deo, 1950-51, Poona: Deccan College. pp. 121-132.
- Behera, P. K., S. Hussain and P. Goyal. 2019. Iron age in the middle Mahanadi valley of Odisha, India, Recent Perspectives, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 7. pp.95-134.
- Behera, P.K., D. K. Rai, K. Dutta, G. V. R. Prasad, T. R. Routray, and R. K. Choudhury. 2007. Radiocarbon dates from middle Mahanadi valley, Odisha, *Man and Environment*, XXXII (2), pp. 41-46.
- Behera, S.C. 1982, *Manamunda: Interim Excavation Report*. Jyotivihar: Sambalpur University.
- Deo, P. K. 1966. Forgotten Forts of Kalahandi (Part-I) Asurgarh Fort and a Hoard of Punch marked coins, *Orissa Historical Research Journal*. XIV-3 & 4.
- Dikshit, K. N. and A. Ghosh. 1940-41, *The Excavation at Ahicchatra*. New Delhi: Archaeological Survey of India.
- Garnayak, D.B. 2002, *Kharligarh: An Early Historic Fort in Tel Valley, Odisha*, Unpublished M.Phil. Thesis. Sambalpur: Sambalpur University.
- Gaur, R.C. 1983. *Excavations at Atranjikhhera: Early Civilization of the Upper Ganga Basin*. Delhi: Motilal Banarsidass.
- Ghosh, A. 1989, *An Encyclopedia of Indian Archaeology*, Vol.II, New Delhi: Archaeological Survey of India.
- Indian archaeology: A Review 1951-52 to 1989-90*. New Delhi: Archaeological Survey of India.



- Lal, B.B. 1954-55, Excavation at Hastinapur and other exploration in the upper Ganga and Sutlej Basin, *Ancient India*-10 and 11: 5-131.
- Lal, B. B. 1949, Sisupalgarh 1948: Early Historic Fort in Eastern India, *Ancient India*-5, pp. 62-105.
- Mishra, B. 2016, Preliminary Archaeological investigation on Budhigarh, Odisha, *History Today* 17: 21-28.
- Mishra, C. R. and S. Pradhan. 1990, 'Manamunda' Excavation 1990: Preliminary Report, Jyotivihar: Sambalpur University.
- Mishra, J. 2000, Radhanagar: Early historic Buddhism, Urban Structure and Trade. In K. K. Basa and P. Mohanty (ed.), *Archaeology of Odisha*: 507-557.
- Mishra, P.K. 1997, *Comprehensive History and Culture of Odisha*, Vol. I, New Delhi, Kaveri Books.
- Mohapatra, R.P. 1986, *Archaeology in Odisha (Site and Monuments)* 2<sup>nd</sup> Vols. Delhi: B.R. Publishing Corporation.
- Narain, A.K. and T. N. Roy 1968, *Excavation at Rajghat*. Varanasi: Banaras Hindu University.
- Pradhan, S. 2001, *Excavation at Nuagarh 199-2001: A Preliminary Report*. Jyotivihar: Sambalpur University.
- Pradhan, S. 2011, A Preliminary report on Narisho Excavation, *Souvenir*, Kakatpur: Mangala College.
- Ray, P.K. 1975, *Prachi Valley* (Archaeological Survey Report), Bhubaneswar: Odisha State Archaeology.
- Sahu, J.K. 1997, *Historical Geography of Odisha*, New Delhi: Decent Books.
- Sahu, N.K. 1982, Asurgarh. *Interim Excavation Reports*. S.C. Behera (ed.). Jyotivihar: Sambalpur University. pp. 1-7.
- Singh, H.N. 1982, *History and Archaeology of Black-and Red ware*. Delhi: Sundeep Prakashan.
- Singh, P. 1994. "Excavation at Narhan". Varanasi: Banaras Hindu University.
- Sinha, B.K. 1992, Khalkattapatna: A small port in cost of Odisha. In B. U. Nayak and N. C. Ghosh (ed.) *New trends in Indian art and Archaeology* (2 Vol.), Delhi: Aditya Prakashan. pp. 423-28.
- Sinha, B.P. and S. R.Roy. 1969, "Vaisali Excavation", 1958-62. Patna: Directorate of Archaeology and Museums Bihar.
- Sinha, K.K. 1967, "Excavation at Sravasti", Varanasi: Banaras Hindu University.
- Wheeler, R.E.M. 1946, Arikamedu: An Indo-Roman trading station on the coast of India. *Ancient India* No.2, pp. 17-124.
- Yule, P., 2006. *Early Historic Sites in Orissa*, New Delhi: Pragun Publication.