

Early Historic Cultures of Orissa

Dr. Balaram Tripathy

The Early Historic cultures of Orissa, unlike other states, has not yet been considered in a holistic viewpoint, and hence an effort is made here to unravel certain noteworthy aspects pertaining to urbanisation and trade mechanism, including overseas acquaintances. Emphasis has been laid on issues like trade routes and expansion of Buddhist perception into the upland/hinterland Orissa, at least in material culture like pottery (Knobbed Ware). Classification of major centres in terms of function and production has been discussed here to have a clear understanding of hitherto unknown features in early Indian history in general and of Orissa in particular. Direct and indirect contacts of states/centres with each other have been analyzed and discussed. Archaeological objects such as pottery and supplementary antiquities as also the ecological aspects have been taken into consideration to infer the function of urban centres. Stress has been laid on explored and excavated major Early Historic sites in present day Orissa with having well-built fortification and moats, and their locational importance and connectivity to each other which have been interpreted by drawing several inferences and correlates from archaeology, literature, numismatic, ethno-history and ethnographic paradigms to portray the Early Historic cultures of Orissa. To ascertain trade connection, X-Ray Diffraction Analysis has been

conducted on some representative types of pottery found at the sites in hinterland Orissa.

Orissa, in ancient times known as Kalinga, was a far-flung cultural unity, spread over the vast regions encompassing territories from the Ganges to the Godavari and sometimes upto the Krishna river. The ancient texts such as *Bhagavati Sutra*, a Jaina text mentions the name of *Kalinga Janapada* in the 6th century B.C. Of course, in the *Anguttara Nikaya*, a Buddhist text, *Kalinga Janapada* doesn't find a place (as quoted in Rayachaudhury 1938). However, the recent archaeological explorations and excavations have revealed interesting data pertaining to urbanization and city formation during the Early Historic period in Orissa. If we will consider its chronology and stages of formation, we may conclude that throughout the early historic period, Orissa flourished under several names and under several rulers and organizations. Kalinga, as it was known, was very active in domestic as well as overseas trade associations, being located on the Bay of Bengal coast and being placed as a meeting point between north and south India.

Orissa, one of the provinces in the eastern coast, situated between 19° 28' N and 20° 41' N and between 82° 32' E and 87° 31' E, respectively. Topographically, it is divided into five parts, the central plains, the middle

mountainous country, the rolling uplands, the river valleys and the subdued plateau (Sinha 1971). The coastal plains of Orissa extended from Suvarnarekha in the north to the Rishikulya in the south and are regarded as the land of six deltas—the Suvarnarekha, the Burhabalang, the Vaitarani, the Brahmani, the Mahanadi and the Rishikulya. There are three parallel belts in the coastal plains - the salt tract, the arable tract and the submontane tract. The arable tract is a stretch of plains with endless stretch of rice fields. The middle country, covering about three-fourth of the area of Orissa, has deep and broad valleys, cut by the Vaitarani, the Brahmani, the Mahanadi, the Rishikulya, the Vamsadhara and the Nagavali rivers. The valleys are fertile and thickly populated. The rolling mountain, which vary from 153m to 305 m, are more in elevation than the plateaus and regarded as the product of continuous river action. They are situated in the Koel-Sonkh basin of the Upper Brahmani, the Ib, Sukhtel and the Tel of the Middle Mahanadi and the Sabari basins. The major valleys are associated with the Brahmani, the Mahanadi and the Vamsadhara rivers. The subdued plateaus (305-610m) have the peculiarities of peninsular table lands. They are almost flat. Such plateaus are seen in the Upper Vaitarani and Sabari basins of the Keonjhar and Koraput, respectively. Soil erosion is most common in this region.

Lithostratigraphically, the major portion of Orissa is covered by meta-sediments and granites of the Archean age followed by Cuddapah series, the latter being followed by the Gondwanas. The coastal part as also major river basins are covered by the Tertiary and recent alluvium (Wadia 1961). In addition to major rivers like the Mahanadi, the Brahmani, the Vaitarani, the Burhabalang, the Rishikulya and the Vamsadhara, the state is drained by numerous tributaries. The vegetation is of tropical deciduous type and the climate is characterized by hot summers, high humidity and

well-distributed rainfall. The average annual precipitation is about 1600 mm, which now a days reduced to a considerable volume due to several natural and man-made factors. The major rivers including some tributaries like the Tel are perennial and navigable throughout the year and entire Orissa has been characterized by the presence of numerous small rivers, rivulets and streams. Even up to the British period, all the major rivers were navigable throughout the year and most of the transportation system was based on water routes (Deloche 1990) but during recent years almost every river has received siltation process and the riverbeds have become shallow and literally defunct in terms of trade activity.

The Concept

The emergence of state and urbanization in Indian context may be regarded as an extension of the processes of the earlier period. Research and interpretation have been given by various scholars who term it as "Second Urbanization" or "Early Historic Urbanization" (Ghosh 1973; Sharma 1991, Makhan Lal 1984; Ray 1986; Erdosy 1988; Allchin 1989: 1-16; 1990: 163-173; 1995; Chakrabarti 1995; Champakalaxmi 1996). In a broad sense, in South Asia, the term "Early Historic" refers approximately to the period from 600 B.C. to 500 A.D. This period saw the emergence of cities and complex politics with the growth of Buddhism throughout the subcontinent (Heiztman 1984: 121-138; Erdosy 1988: 430; Kosambi 1989; Sarao 1990; Ray 1994, Chakrabarti 1995a; 1995b: 185-201; Morrison 1995: 203-221). However, the process of urbanization and city formation depends upon the geographical and ecological setting of a particular region.

By the middle of the 1st millennium B.C., the second urbanization in the region of the Gangetic valley grew up as a result of interaction of multiple factors that were prompted by the conditions of natural situations and previous

cultural developments. The process strengthened and enriched the growing divisions within society that came to be institutionalized as economic strata within a hierarchical society (Basa 2005: 69-83). As the divisions within the social organizations increased, existing institutional regions and other social entities came into function to alleviate the attendant stresses, which led to the growth of several small independent kingdoms within the regions of the Gangetic plain.

The process of urban growth or the 'second urbanization' covered in its early phase the Ganga valley, Indo-Gangetic Divide, Northwest India, Bihar and Central India, some of the important early Indian cities included Taxila (Ghosh 1948), Hasthinapura (Lal 1955), Mathura (IAR 1973-74:31-2; 1974-75:48-50; 1975-76: 53-5), Ahichhatra (Gosh and Panigrahi 1946; IAR 1963-64), Kosambi (Sarao 1968), Srngaverapura (Lal 1993), Rajghat (Narain and Rao 1976), Vidisha (IAR 1963-64: 60-70; 1964-65:23-4; 1975-76: 30-31; 1976-77: 33-4) and Ujjain (IAR 1956-57: 20-8). Most of the early settlements, besides being enormous in size, are characterized by massive ramparts of brick and mud with elaborately laid out bastions, gateways and moats, evidence of craft specialization, coinage, and incipient polity known from ancient literature, features which elevate them to urban status. The phenomenon of early historic urban growth accelerated during the Mauryan period. This period witnessed the introduction of new political concepts in the form of Mauryan imperialism, in which Buddhism took a leading role. With a decentralized administration based on Kautilyan principles of polity (Rangarajan 1994), provinces flourished with immense prosperity in which both inland and overseas trade factors played a vital role. The expansion of trade network, both domestic and overseas, during this period had far reaching socio-economic impact (Sharma 1983; Begley 1986: 297-321; Lahiri

1992). This development gained further momentum in the post-Mauryan era (c. 200 B.C. to 300 A.D.), which is marked by changes in the social and economic fabric of the sub-continent. The same also happened to regions like the Mahanadi and the Brahmani deltas in Orissa as also in the Middle Mahanadi and Tel Valleys of Central/Western Orissa, where urban structure grew with all essential features. The extension and spread of Buddhism, trade network, development of social fabric had far-reaching implications and were accompanied by a definite system of coinage to promote an organized commercial set up. Besides, the concept of fort building also started due to the extensive trade patterns in precious and costly materials. The social strata also got changed and a very powerful class of businessman rose into power due to their resources and wealth. The Roman trade was an important contributing factor during this period. Recent evidences from the harbour complex of Manikapatana and Palur and Radhanagara have proved that ancient Orissa was well connected with the Roman world directly and indirectly which is evident from the finding of several Roman amphorae sherds, medallions, bullae and even Roman glass. The Roman trade particularly influenced the settlement of Tamil Nadu and other parts of South India, as also Orissa.

The Early Historic settlements at Sisupalgarh in Khurdha district (Lal 1949:62-105), Jaugada in Ganjam district (IAR 1956-57: 30-31), Radhanagara in Jajpur district (Mishra 2000: 507-549), Viratgarh and Kichakgarh in Mayurbhanj district (Mishra 1997), Narla-Aurgarh (Sahu 1982: 1-8), Budhigarh and Kharligarh (Mohanty and Mishra 2005: 97-124) in Kalahandi district, Manamunda-Asurgarh in Boudh district (IAR 1990: 80-85) have been studied and partially excavated also. One of the major reasons of the urban growth is the occupational specialization, including gem exploitation, iron smelting, craft (especially

terracotta) productions known from the recovery of various artifacts such as pottery, beads, metal items, especially iron, coins, etc., from the Early Historic sites which would imply that a suitable sphere had been created for trade and exchange in Orissa during the period under study.

The recovery of Northern Black Polished Ware, Rouletted Ware as also Amphorae fragments at port sites as well as at the site of Radhanagara indicate that Orissa was participating in the Bay of Bengal trade mechanism operated with South East Asia, China, West Asia and the Roman world (Behera 1977: 115-121; 1991: 1-15; 1993: 55-70; Nayak 1987; Panda 2000: 551-565; Sahu 1996: 95-109; Basa 1997: 730-741; Mishra 1997; for over all references please see "India and Indonesia", published by the Orissan Institute of Maritime and South East Asian Studies, 2006). The rich archaeological material, revealed from the archaeological excavations at port sites of Orissa such as Manikapatana and Palur, speaks that in the process of trade mechanism Orissa established cultural contacts with the Southeast Asian countries like Thailand, Indonesia, China, West Asia, East Africa, Sri Lanka, Maldives as also the Roman Empire and took active participation in the maritime activities of Early Historic Asia. The contacts of ancient Orissa or Kalinga with Sri Lanka or Ceylon are immense and deserve special attention. It is no exaggeration to say that Orissa was having a thriving trade and ideological connections with Sri Lanka during the Mauryan period, if not early.

The finding of imperial as also Kosala type of punch-marked coins (Tripathy 1986) further testifies that Orissa, during ancient times, played a vital role in the socio-political, religious as also the economic conditions of the Indian sub-continent.

From the archaeological evidences it is quite clear that Orissa was having a thriving trade

network with the Southeast Asian countries and could establish colonies in far off Indonesia, especially Bali (Phalgunadi 2006). Besides, there is ample evidence of exotic ceramic types in Orissan port sites like Manikapatana (Pradhan et al. 2000: 473-494) and Palur (Mohanty and Tripathy 1998: 69-98) and sporadic evidence of Chinese and Southeast Asian pottery as also some Roman specimen like Amphorae and Rouletted Ware found in the entire Orissan coast. The region of Orissa having vast deltaic plains and long coastline with rich mineral and forest produces, which are the most essential components of urbanization. Both internal and overseas trade routes were opened up, linking various urban centres of South and Southeast Asia.

Sisupalgarh

Sisupalgarh, an Early Historic fort located in the vicinity of Bhubaneswar city has been referred to in the historical records as Tosali (Sahu 1958). It was probably one of the provincial headquarters of Ashoka. Excavations at Sisupalgarh revealed an array of material remains which comprises ceramics such as Rouletted Ware, Northern Black Polished Ware (NBPW), Knobbed Ware and Red Slipped Ware, beads of semiprecious stones and terracotta (Lal 1949: 65-102). The discovery of a large number of irrigation tanks around the site speaks of the significance of this settlement (Allchin 1995). The site has been dated between 500 B.C. to 1st century A.D. on the basis of ceramic assemblage.

Jaugada

Jaugada was also a provincial capital of the imperial Mauryas right from the time of Chandragupta Maurya, as known from the Ashokan Edict, which refers to this region as Somapa. The site was excavated on a limited scale by the Archaeological Survey of India in 1956 under the direction of Late Smt. Debala Mitra (IAR 1956-57: 30-31). The excavation unearthed

a massive earthen rampart. The ceramic assemblage is characterized by Black and Red Ware (Period -I), Red Ware and Black Polished Ware (Period II). A variety of antiquities covering beads made of semiprecious stones, iron implements and terracotta objects were also found.

Radhanagara

Radhanagara is located in the midst of a cluster of hillocks, on the right bank of river Kelua, a tributary of the Brahmani river, about 85 km from Bhubaneswar, in the district of Jajpur. It is a fortified settlement, honeycomb in shape, measuring 1200 m on each of the sides. Recently, a small scale excavation by the Orissan Institute of Maritime and South East Asian Studies under Sri D.R. Pradhan has resulted in the finding of a large number of important archaeological materials. The site was examined before and several conclusions were drawn (Mishra 2000: 507-549; Prusty and Mohanty 1995: 123-127).

The fort is partially preserved now a day. Earth, brick and laterite blocks are traced in the construction of the rampart. Fortification of each side consists of three projections, two in the corners and one in the centre. The average height of the fortification is between 4 and 5 m and width 40 m (at projections). There are two gateways, one in the northern side, to the east of the central projection with 20 m width. The space covering an area of 500 sq m on the western horizon in the inner fortification, in an irregular orientation, marks the citadel or the nucleus area of the city. The citadel is associated with a large quantity of pottery with considerable types and forms, terracotta ring wells, ritual tanks, brick structures and a wide range of antiquities. The average brick size is 46 X 30.5X 9 cm³. About 7 m of habitational deposit can be noticed at the citadel area over the water-logging surface. The locality to the extreme south within the fortification has preserved a few isolated mounds with a small quantity of potsherds and

other habitational debris. The community of low social ranking probably inhabited this locality. Besides, habitational mounds are also noticed outside the fortification, indicating that a considerable part of urban population of Radhanagar lived outside the fortification walls.

Narla-Asurgarh

Asurgarh, as the name suggests, appears to be the most important Early Historic settlement in the hinterland Orissa, located near Rupra Railway Station, about 2 km from the Narla village. The fort, square in plan, each side measuring 1200 m, had four wide gates in four cardinal directions, and at each gate was installed one guardian deity. The river Sandul flows by the western side of the fort encircled by a moat on three sides which is fed by a huge tank still existing today. It has been interpreted that water was being brought through two sluice gates to fill up the moats. The entire ancient tank or lake area covers an area of 200 acres. It was designed in such a way that when the fort was surrounded by enemies, a secret sluice could be opened so that the whole area both inside and outside of the fort would be flooded with water and consequently the enemy would wash away. The central part of the fort would remain as an island if such a flood was created because this part of the fort was on an elevated land. Presumably, the palace was constructed at the centre of the fort.

The site was subjected for a limited excavation by the Department of History, Sambalpur University (Sahu 1982: 1-8), which revealed fascinating results. Although it was published in a regional journal, the importance of the site in terms of hinterland urbanization can not be ignored, as per the archaeological material.

The excavation at the site consisting of two small trenches, has revealed paved house floors, an array of ceramic types such as Black and Red Ware, Black Slipped Ware, Fine Grey Ware,

Red Slipped Ware, Northern Black Polished Ware, and most probably Rouletted Ware, iron implements of war and peace, beads made of semiprecious stones, punch-marked silver and copper coins, terracotta figurines, glass bangles, amulets and ornaments. A hoard of 539 silver coins, belonging to the 3rd century B.C. to the 5th century A.D. and collected by the King of Kalahandi furnished considerable cultural data. The first group of coins (69) are assignable to the pre-Mauryan period, the second group (272) to the Mauryan epoch and to the Guptas. The coins found at the site indicate that there was probably a mint at the site for fabrication of punch-marked coins. The similarity of some coins of the punch-marked coins of Asurgarh with those found at Bijnor and Paila near Koushambi, and the similarity in texture of fabric of some pottery types of Asurgarh with those at Ahicchatra further indicates that there was a brisk trade during the Mauryan period between Asurgarh and prosperous towns like Koushambi and Ahicchatra in North India as also with Sripura, Vidisha and Ujjain.

While narrating the historicity of the fort, Sahu (1982: 1-8) opines that Asurgarh bears a special importance as far as the Atavika people are concerned. These people find mention in the Ashokan Edicts and are considered to be constituted the fighting forces of Kalinga against Ashoka in his famous Kalinga war. The Atavika land comprised roughly the present districts of, Kalahandi, Bolangir and Boudh-Sonepur regions of Central and Western Orissa and Bastar in Madhya Pradesh. It was an important recruiting ground for the veteran army of Kalinga even as early as the time of the Mahabharata war. Asurgarh seems to be the capital city and the most important centre of Atavika territory and the excavation amply indicates that the area was not underdeveloped during the days of Ashoka and the people had a high standard of civilization

characterized by well-polished potteries of the Northern Black Polished fabric. No doubt, Asurgarh was an important political and commercial centre situated on the highway joining South Kosala and Mahakantara with Kalinga. In the 4th century A.D., the fort of Asurgarh appears to have belonged to king Vyaghraraja of Mahakantara whom Samudragupta claims to have defeated in course of his south Indian campaign. The excavation indicates that the fort area was deserted after 5th/6th century A.D. and as such, it may be said that Tusti was probably the last known ruler of Asurgarh.

The ceramic industry at the site comprises of dish, bowl and vessels. The dishes are in burnished Black Slipped Ware with inverted simple rim, thin wall, the vessels are in burnished Black Slipped Ware with complex externally projecting short beaked rim; in Red Slipped Ware with narrow mouth, concentric corrugation at the interior body and grey core. All types are of fine core.

Kharligarh

The Early Historic site of Kharligarh is situated in Tentulikhunti block in Bolangir on the boarder of Kalahandi district, at the confluence of the Rahul and the Tel rivers in a densely forested environment. Two more streams, the Khadang and the Singda, flow on both the sides of the Rahul river at about a distance of 5 km to meet the Tel river off Kharligarh. This area is occupied by a number of primitive tribal groups such as the Gonds, Bhuyans, Khonds and Saoras. The ruin of this fortified city lies in loose lateritic soil, in an extensive area stretching from the Tel to the Rahul river. The fort is almost square on plan, circumscribed in the north, east and south by the rivers acting as natural defense and the west by an excavated moat connecting both the rivers. The rampart consists of burnt bricks of size (40 X 25 X 12 cm³). The central part of the fort contains a shrine in ruined form, probably the

presiding goddess of the fort. Although the northern rampart is greatly denuded by the river exposing the terrace and the basement, the river-worn stone gravels topped by brick wall of about 15 ft. wide, the major part of the fort lies intact. The site has revealed brick structures, a large variety of pottery, iron objects of war and peace, beads of various stones, axes, querns, choppers, microlithic artifacts, smoking pipes, metal bangles, earrings, copper Kushana coins, etc. However, the site needs to be thoroughly plotted and excavated in a horizontal manner. The ceramic assemblage of the site include dish in Burnished Black Slipped Ware with slight concave wall, inverted simple rim, flat base, well-fired and of fine fabric, basin in Black Slipped Ware with internally projecting triangular rim, salt glazed and of medium fabric; the bowls in Black and Red Ware with inverted simple rim, thin wall, well-fired and fine in fabric and finally Red Ware with disc base and of course fabric (Mohanty and Mishra 2005: 97-124).

Budhigarh

The site of Budhigarh lies 500 m to the east of Madanpur Upper Primary School. It is an extensive mound with a height of 3 m and covers an area of 1000 X 500 m in north south direction. It is situated on the banks of the Puruna Nala, meaning old channel, which could be an artificially dug out moat and the Rahul river which ultimately joins the Tel river. Most part of the mound has remained intact, except the middle portion where a path has been made by the villagers. The artefactual evidence from the site indicates that the site was occupied from the Early Historic to the late medieval period. The site has revealed a wide spectrum of ceramics, beads, coins, bricks, terracotta objects, iron implements, idol of Durga and Ganesh and a large quantity of faunal remains and human skeletons. The bricks from the site measure 45 X 30 X 8 cm³.

The ceramic assemblage of the site consists of dishes, bowls, miniature bowls, vessels, basins, dish-on-stands and lids. The dishes are of Burnished Black Slipped Ware with slightly inverted, simple rim, convex body and of fine fabric, the Burnished Black Slipped Ware with slightly inverted beaked rim, appears to be slightly salt glazed and of medium fabric. The bowls are in Dull Ware with external projecting simple, thin wall, traces of slip found on the outer surface and of fine fabric; in Red Ware with externally projecting short-beaked rim and medium fabric. Besides, a miniature bowl in Black Slipped Ware with externally projecting, triangular rim and of medium fabric, has been found. Globular vessel (handi) in Burnished Black Slipped Ware with externally projecting short-beaked rim, narrow mouth, thin wall and of fine fabric, and vessels in Black Slipped Ware glazing at the surface are the prominent vessel types at the site. The other ceramic types are large basins in Red Ware with inverted simple rim and appliqué design on the neck, dish-on-stand in Black and Red Ware, lid in Grey Ware, bowls of Northern Black Polished Ware and Knobbed Ware (Mohanty and Mishra 2005: 97-124).

Manamunda-Asurgarh

Manamunda-Asurgarh is about 49 km to the northwest of the Boudh district headquarters located in the central part of Orissa. The Early Historic fort is located on the right bank of the river Mahanadi, a little away from the confluence of the river with the Tel. It is represented by at least six habitational mounds that have formed in a linear fashion. The site was surveyed and interpreted before Indian independence (Benerjee 1920: 64-86). The site spreads over an area of 1.5 km north-south and 0.5 km east-west. A defense wall made of burnt bricks, and partly disturbed by the river Mahanadi, is visible along the right bank. In fact, the present day settlement of Manamunda is located just on the ancient

settlement and hence its extent could not be traced. The site was subjected for a limited excavation by the Sambalpur University in 1982 (Behera 1982: 16-22) and in 1990 (IAR 1990: 80-85).

In the initial excavation two small trenches were dug vertically in addition to exposing two brick structures as well as two brick pillars around the periphery of the site. Besides, the excavation also yielded the skeleton of a child, Northern Black Polished Ware, Black Slipped Ware, Red Slipped Ware, Fine Grey Ware and Red Ware with a Grey Core resembling the potteries of Chandraketugarh region. The antiquities of the site included iron objects of war and peace, domestic objects, beads of semiprecious stone and terracotta and other minor specimens of daily use.

In the second phase of the excavation conducted in 1990, two mounds were dug up to the virgin soil. The excavation revealed cultural material from 3rd/4th centuries B.C. to the 3rd century A.D. From the trenches a variety of pottery specimen were collected which resembles with the findings of the earlier excavation. A punch-marked coin bearing five symbols; reverse-one central symbol i.e., four taurines with a central dot assigns the coin to 2nd century B.C. (Pradhan 1995: 26-28).

Further intensive and extensive archaeological work was carried out at and around the site to understand it in a holistic perspective. Several theoretical paradigms were implied to understand the exact function of the site. Interpretations were made after a careful observation of the landscape as also the cultural material found from surface exploration as also from section scrapping. A detailed study revealed that the site was protected in the north by a massive defense wall running parallel to the banks of the Mahanadi to check the flood activity of the river. The site was bounded by the Tel river and Mehrni (a small stream with reasonable depth and

width) on the west and the east respectively. A moat ran along the southern periphery of the site; joining the Tel and the Mehrni. It is partially visible now in the form of a huge depression and the length of the moat is roughly 3 km and the width is 2.5 m. From the surface as also from, the section scrapping a number of ceramic types were collected and a scientific analysis was conducted on the pottery as also on faunal material. The archaeological material found from the site is very significant as it revealed the existence of coastal Orissa pottery as also potteries of the Middle Ganga Valley and Chandraketugarh-Tamluk region which was proved by X-Ray Diffraction analysis of ceramic types (Tripathy 2002b). The faunal assemblage of the site has also been dated (Fluorine/Phosphate Analysis) and analyzed (Tripathy and Joglekar 1997-98: 117-119).

Urbanization in Hinterland Orissa

Certain traits of Childean urban revolution in particular evidence of brick structures trade and crafty specialization, characterize the centres of coastal Orissa. In the absence of written record and evidence for political hegemony, the background of urbanization process in the hinterland Orissa remains unclear. However, the sites of Viratagarh and Kichakgarh in Mauyurbhanj (Mishra 1997), Asurgarh in Kalahandi district (Sahu 1982: 1-8), and Manamunda-Asurgarh in Boudh district (IAR 1990; Tripathy 2002) may be regarded as urban centres, in a broad sense of the term. The site of Narla-Asurgarh with its extensive planning, fortification and evidence of hydraulic system is a fine example of an urban centre in hinterland Orissa. An equally significant find from the site is that of a hoard of 539 punch-marked coins of Imperial variety, which illuminates the importance of this site during the Mauryan and post-Mauryan periods. Another urban centre in western Orissa is Manamunda-Asurgarh, located at the confluence of the rivers Mahanadi and Tel. The

site is fortified and covers an area of 1.5 km in length and 0.5 km. in breadth and consists of at least six habitational mounds. This site also yielded a hoard of punch-marked coins. The excavations at the site also yielded a punch-marked coin from the stratified context (Pradhan 1995: 26-28). There are extensive Early Historic settlements in northern Orissa and also, for example, the site of Viratgarh, which yielded evidence of punch-marked and Puri Kushana coins. If the Mahavamsa, the great Singhalese chronicle is to be believed, there existed many urban centres in the valley of the Mahanadi in the early centuries of the Christian era.

A question that came to mind in this context is what is the role and status of the urban centres of hinterland Orissa which appear to have not been under the direct control of any imperial administration. This region has not been referred to in any Edict or literary texts as a Mauryan administrative unit except the evidence of Knobbed Ware which is often related to Buddhist cosmology. There is a reference in the Allahabad Pillar Inscription to Vyaghraraja of Mahakantara. A folk story refers to this region as the land of Gosimha Daitya, a demon. Interestingly, two important urban centres Manamunda-Asurgarh and Narla-Asurgarh are attached with the words Asur and Garh, meaning "Fort of Demons". A probable connotation of this word would be 'the city of the uncivilized' or 'the city of the savages' which can be comparable with the Atavika people mentioned in the Ashokan Edicts. By implication, it would appear that these centres were under the hegemony of tribal chieftains, and hence the name.

The archaeological evidences suggest that central and western Orissa was looked upon as a 'resource zone' by the coastal centres. There were both river and land routes that connected these two regions. The process of urbanization in this part seems to have received stimulus from

the trade relations of the region with coastal Orissa (Tripathy 2002b).

Central and Western Orissa as Resource Zone

The region of hinterland Orissa covers wide tracts of dense deciduous forest ranges (northern most fringes of the Eastern Ghats) which supports a wide range of flora and fauna (Basu et al. 1995: 367-369). Besides, the region is also quite rich in mineral deposits, especially gemstones which were exploited by the Early Historic urban population with support from local gem exploiters in a very traditional method which even continues today (Tripathy 2000: 60-67; 2002b). Central and Western parts of Orissa, mainly Bolangir, Boudh, Kalahandi and Sambalpur districts have been identified as a gem belt containing emerald, ruby, sapphire, aquamarine, heliodor, cryshoberyle, including Alexandrite, tourmaline, zircon, topaz, moonstone, amethyst, smoky quartz and garnet of different varieties which are associated with the iron ore deposits of the Eastern Ghats. It is interesting to note that many of the tribal/ethnic deities (especially goddesses) of Central and Western Orissa have been named after the gemstones. For example, Panneswari (Goddess of Emerald), Manikeswari (Goddess of Ruby), Khambeswari (Goddess of Cryshoberyle), Sambaleswari (Goddess of Resources). These deity names suggest some kind of symbolism pertaining to the gemstone resources of Central and Western Orissa. The gem deposits and the quality, which fascinated the ancient Roman world have been referred to in the famous Geographia of Ptolemy of the 1st century A.D. (Majumdar 1927), which mentions about the diamond mines at Sambalaka (identified with modern Sambalpur in Western Orissa) and also the river Manada (identified with river Mahanadi) as rich in gem resources. The Arthasashtra of Kautilya of c. 4th century B.C. (Kangle 1965) mentions the area as Indravana

(identified with Mahanadi-Tel-Indravati basins) being rich in mineral and gemstone deposits and also river Telavaha (identified with river Tel). The Arthasashtra describes river Tel as Telavaha (Rangarajan 1994), and the description of this small river along with several other major perennial rivers of India is significant and also implies its role in trade mechanism as also navigation. The Astadhyayi of Panini (Agrawalla 1963: 61, 440) describes the place *Taitilakadru* (identified with present day Titlagarh) as a trade centre. The Sanskrit term Kadru meaning a tawny coloured material which may be identified with cryshoberyle and is abundant in the region. The Serivannija Jataka (Cowel 1955) mentions that Bodhisattva as a merchant in pots and pans crossed river Telavaha for business. This speaks that river Tel was navigated and several big and urban centres were located in the Tel-Mahanadi river valleys in Central and Western Orissa. The rich gem resources of Central and Western Orissa have also been corroborated by the accounts of the British travelers and Merchants-cum-Officers. Thomas Motte, a British diamond merchant, mentions the gem deposit of the region and the quality of diamonds available at Sambalpur. He also describes the trade activity, the use of boats in river Mahanadi and its tributaries, as also its fortified settlements (Acharya 1955: 44-50). James Rennel (1763) in his "Memoirs of a Map of Hindoostan" mentions Central and Western Orissa as rich in diamond mines while Hunter (1873) not only mentions important trading centres but also describes the trade along the Mahanadi and use of boats (both small and big) for cargo. More recently, the work of the Orissa Mining Corporation and Geology, Orissa has resulted in the discovery of at least 28 gem belts. The region of Central and Western Orissa yielded kimberlitic pipes containing indicator of mineral grain of pyrope garnet and chromite which are positive diamond indicators (Das 1997: 18). Moreover, the region is rich in iron ore deposits

which were exploited in plenty and transported to the coastal Orissan urban/trading centres. The Manikapatana-Palur Harbour Complex yielded iron ores, slags as also finished implements which suggests local manufacturing activity. But the important forts and trading centres of coastal Orissa such as Radhanagara, Sisupalgarh etc. are devoid of iron smelting activity. Almost all the Early Historic sites of Central and Western Orissa have yielded iron smelting activity which signifies that iron along with gemstones, was a principal commodity to be transported to the coastal/delta part of Orissa. Both land and river routes were preferred to carry the materials and had linkages with each other in terms of trade and its mechanism which has been substantiated with the current ethnographic parallels (Tripathy 2000: 60-67; 2002). Besides gem and iron, forest produces such as medicinal herbs, bamboo, and timber were also transported from this part of Orissa to the coastal Orissan centres. The trade relations of coastal Orissa with its hinterland have also been corroborated by archaeological evidences (Tripathy 1996-97: 41-54; 2000: 60-67; 2002a: 397-416; 2002b; 2005: 169-179; Tripathy and Joglekar 1997-98: 117-119). The ceramic evidence is significant in studying trade or exchange and routes by which goods were distributed which serves as an indicator of the interregional and intra-regional trade relations (Anderson 1984: 20-21). The small-scale excavations conducted at the site of Narla-Asurgarh and Manamunda-Asurgarh and the trial trench at Marjakud have revealed several types of pottery which have striking similarity with the pottery found at sites like Sisupalgarh, Radhanagar, Manikapatana, Palur, etc., indicating the fact that such material were transported to the Central and Western Orissan centres as a result of trade and communication. Potteries like Knobbed Ware, Black Slipped Ware, Red Slipped Ware, Red Ware with a Grey Core, Fine Grey Ware, Black and Red Ware, as the X-Ray Diffraction Analysis

of ceramic types show, were transported from coastal part of Orissa to the hinterland (Tripathy 2002b).

Coastal Overseas Interaction

The archaeological remains unearthed by excavations at various sites of Orissa, especially the coastal belt throw valuable light on its overseas contact. The excavations of Tamralipti, Khalkattapatna and Manikpatna have not only established these sites as contemporary international trading ports but also bear testimony of the maritime glory of ancient Orissa. The commercial and cultural contact of Orissa with far off countries has been irrevocably proved through these excavations. The discovery of Roman gold coins, Roman Rouletted ware, Chinese pottery, West Asian pottery similar to the findings at the sites of Hataab (Pramanik 2004: 133-140) in Gujarat and Elephanta Island (Tripathi 2004: 116-123) in Maharashtra are enough to justify foreign trade in ancient Orissa. The excavations at Sisupalgarh in particular, Jaugada, Manmunda and Asurgarh in general testify to the fact that by the time of the Mauryas Orissa had a well developed civilization and a number of trade centers were located throughout ancient Orissa. The excavations have brought to light a class of pottery known as Knobbed Ware (Plate 1) from these places the likes of which have been found from different places of South-east Asia. These places along with a host of others in Mayurbhanj and Dhenkanal districts have been established as urban trade centers. The excavations at Sisupalgarh has brought to light Rouletted Ware, clay bullae resembling Silenus's head imitated from those of Roman coins, a unique gold medallion showing Kushana type of standing king and a Brahmi legend of 3rd century A.D. on the obverse and a Roman head with a Roman legend on the reverse. The Roman coins have also been discovered from Bamanghati area of Mayurbhanj district (Basa and Behera 2000: 566-600).

Kalingans were a sea-faring nation from early times and they had taken part in inland as well as overseas trade. Its unique and strategic geographical location between North and South-India and her favourable position on the shore of Bay of Bengal, provided an excellent opportunity for its inhabitants for maritime trade. Being a coastal State, on the east, vast span of Bay of Bengal opening into Indian Ocean, connected on the South-East with the Pacific Ocean and the Arabian Sea on the west. The entire hinterland has net of several big and small rivers. All the big rivers discharge into the Bay of Bengal. The meandering coast line along with environmental conditions have imbedded an inborn instinct in the local population to swim, which in due course made them a sea-faring people. This spirit is reflected in literature, sculpture and archaeological evidences.

It is evident from literary (both secular and religious), epigraphic, sculptural (Plate 1) and archaeological sources that in ancient and medieval times, the sailors of ancient Orissa reached South- East Asian countries, particularly Sri Lanka, Java, Sumatra, Bali, Borneo, Malaya Peninsula, Burma and China, Arabia, Greece and even some West African countries as known from literary, archaeological, numismatic sources and foreign Travelers Accounts (Ardika, et al. 1997: 193-195; For general reference see Kalinga and Indonesia published by the Orissan Institute of Maritime and South East Asian Studies, 2006). The articles for maritime trade were diamond, pearls, muslins of the finest quality, silk and textiles, conch shells, indigo, corn, elephants and varieties of spices. In fact, it is said, Orissa's military strength, which shook the powerful Mauryan emperor Asoka, was sustained by its high returns from overseas trade. One of the main reasons of Asoka's Kalinga War was to gain control over important coastal ports like Tamralipta, Palora, Dosarin, Kannagara, Dantapur, Pithunda and Manikapatana, which were strategically very

important and were all located in ancient Orissa. The Magadhan traders knew very well that Orissan Sea-coast was the Indian gateways for overseas expansions to the outside world. The unique geographical position of Orissa, as the meeting ground between north and south with Blue Ocean by its site gave excellent opportunity for transoceanic commerce and also further attracted the Magadhan Emperor. The sailors of Orissa, in spite of various hazards, crossed the ocean and reached distant lands for overseas trade (Arunachalam n.d.).

The Buddhist as well as Jaina text, Puranas, Greek writings, Chinese records, Chinese travelers Fa-hian and Hieun- Tsang's accounts, Arab writer's accounts and several inscriptions refers to the Orissa's sea-borne trade with outside world. Kalidasa in his 'Raghuvamsa' (Nandargikar 1948) says the king of Kalinga was not only the lord of Mahendra Mountain but also the lord of Mohodadhi (Ocean). According to Aryamanjusrimulakalpa (Sastri 1920-25), a Buddhist text (8th century A.D.), the Bay of Bengal was called Kalinga Sea and the islands in the Bay of Bengal were known as "Kalingadresu." The Roman author Pliny (1st century A.D.), was aware of the proximity of Kalinga to the sea and its military strength. He says "the tribes called Calingae were nearest to the sea. The royal city of Calingae is called Parthalis. Over their king 60,000 foot-soldiers, 10,000 horsemen, 700 elephants kept watch and ward in precinct of war" (As quoted by Behera n.d.).

India texts dated from the 3rd century BC onwards mention several places in Southeast Asia. For instance, the Arthasashtra of Kautilya (c. 300 BC), it is mentioned that the Brahmin Sanka sailed from Varanasi to Suvarnabhumi (Sarkar 1983: 303). Sarkar (1983:296) suggests that Suvarnabhumi was located somewhere in Lower Burma, but other authors consider it refers more generally to Southeast Asia as a whole.

The Maha Nidessa from about the middle of the 3rd century B.C. refers to 24 places, among which are Java and Suvarnabhumi. The Ramayana of Valmiki, which is usually dated between the 4th century BC and the 2nd century A.D. describes the island of Java (Javadvipa) with its seven kingdom, and the island of Sumatra (Suvarnarupyadvipa) (Coedes 1975, Wolters 1967). The Manynnuakalpa, dated to c. 800 A.D., is the only text to mention specifically the island of Bali. This text also refers to Java (Sarkar 1983:308).

Given the notion that Indian traders had already reached Indonesian archipelago by the beginning of the 1st century AD, the question then arises of what sorts of commodities were traded. On the basis of the archaeological evidence, it is presumed that Indian pottery; beads and perhaps textiles were traded into Indonesian archipelago and other regions in Southeast Asia. In terms of exports the Ramayana text refers to grahu wood and sandalwood from western Indonesia (Wolters 1967:65-66). The Raghuvansa of Kalidasa, who is believed to have been alive in AD 400, mentions cloves (Lavanga) from a place called 'dvpantara' (Wolters 1967: 66) argue that the term dvpantara referred to Indonesian archipelago. Sandalwood and cloves were also mentioned in the Periplus (Schoff 1912: 286). Species, aromatics, woods and tin from Southeast Asia, especially Indonesia have been attracted Indian traders (Ray 1989: 47-48). These products were also highly required by the West during Roman period in the beginning of our century.

Ancient Ports of Orissa

In ancient times almost all the trade centres (ports) are said to have been located in the coastal areas controlled by the Kalinga people.

The Greek classical text "The Periplus of the Erythraean sea (1st century A.D.) by an anonymous author mentions several ports and

coastal towns such as Broach, Uzane (Ujjain), Sopara, Kalyana, Muziris, Mosalia (Muslipatna), Dosarene (Costal Orissa) etc. Periplus further says "Dosarene" was famous for ivory". Ptolemy's Geography (2nd century A.D.) mentions several ports in the coastal Orissa like Kambyson near Hoogly, Manda, Munde or Mandu river mouth (possibly mouth of Mahanadi), Kannagara (near Konark), Kati Kardama (near Cuttack) and Palura (Poloura of Ptolemy). He says Palura as a major port of eastern India for sea-voyages to South-East-Asian countries/Islands. It was the point of departure (apheterion) for ships bound for Khryse (South-East Asian). The Periplus Tex Exo Thalasses compiled by Marcian of Haraklea (between 250-500 A.D.) also agrees with the point of departure (apheterion) as Palura. According to Ceylonese chronicles Datha-Dhatu-Vamsa, Dipavamsa, Chullavamsa and Buddhist text Mahagobinda Sutta, Kurudhama Jataka and Mahavastu refer to Kalinga's Capital as "Dantapura" a port town, from where the "Tooth relic" was transferred to Ceylone. Chinese Pilgrims Fa-Hein (Fig. 14) and Hieun-Tsang who visited Odra in 639 A.D. mentions a famous port "Che-li-ta-lo" near the shore of the Ocean (Waters 1988).

Explorations of ancient, medieval and late port towns in coastal Orissa were taken up and number of ports, including Kalingapatanam, Barua, Sonapur, Mantridih, Ganja, Kantiagarh, Palur, Prayagi, Manikpatna, Sanapatna, Badapatna, Arakhkuda, Banjiapatna, Boitkud, Astranga, Harishpur, Marichpur, Chandbali, Narendrapur, Dhamra, Chudamani, Balasore, Talchua, mouth of Survarnarekha (old Pipili), Shah Bandar, Kansabansa, Panchubisa, Chandipur, Kasaphala, Kirtania, Talsari and Tamluk are identified. Kalingapatnam, the mouth of river Vamsadhara was, once upon a time, the capital of Kalinga. It's maritime link has already

been established and the Archaeological Survey of India has excavated a site near Kalingapatanam and could unearthed the materials of 3rd century B.C. Barua Bandar on the mouth of Mahendra Tanaya river has been described by, various authors and even in the "Gangavamsanucharitam" of 18th century. It was also a famous port directly linked with Puri. It is also clear that the ports of India, during the Early Historic period were connected with each other.

Chilka as Natural Harbour

Chilika Lake was considered to be a natural harbour and thousand of ships are flouting on it. The Bramhanda Purana (10th century A.D.) mentioned the maritime activities of Chilika Lake where thousand of ships were floating for trade to Java, Malaya, Singhala & China and other island countries. Extensive and intensive explorations in the lake area has resulted in the discovery of a number of port sites which were very much active during the Early Historic period as evident from the archaeological material found on them (Mohanty and Tripathy 1998: 69-98).

Maritime Contacts of Orissa with Foreign Lands

The sailors of Kalinga reached South-East Asia in very early times but unlike Tamil texts of Sangam period, they have not left any records of their trading voyages. It is to be mentioned here that the Tamil Text "Silapaddikaram, Manimekhalai, Nakkirar, Mullaipattu" and others provide mines of information of the sea-trade between West and South India. In the absence of any direct evidences to Orissa we will have to depend upon the scattered reference of foreign countries. The available evidences indicate, from the beginning of Christian area, monks, merchants and adventures continued to visit South-East Asia and generally they voyaged from the Orissan port sites.

Manikapatana

Manikpatna is approached via Puri and Panasapada by road. It is situated on the left bank of a channel on Chilika (locally known as Tanda) which connects with sea near Arakhkuda. The site was excavated in a limited scale by the Orissan Institute of Maritime and South East Asian Studies which proved Manikapatana to be one of the most active and flourishing port establishment on the east coast of India.

The excavation revealed cultural deposits of two periods Period-I and period-II. The deposits of period-I yielded two Neolithic celts, two shreds of Rouletted Ware (Plate 2), fragments of Amphora (Plate 3), two Puri-Kushana copper coins, a sherd with Khorostri script with legend "Dasatradeva" and "Khida", stamping design on pottery, sprinklers, spouts, Kaolin pottery, terracotta miniature figurines of bird, horse, terracotta smoking pipes, game pieces, areca-nut beads, lamps with human figure and Black and Red Ware, Northern Black Polished Ware, Red Polished Ware, Black Slipped Ware, Knobbed Ware, etc. This period can be dated from 3rd century B.C. up to 6th century A.D. with the end of the Period-I the site was probably abandoned and a long time gap is marked by the sand deposit of two meters and was again functional during the 9th/10th centuries A.D. till the British period.

The discovery of Rouletted Ware and Amphora pieces of Mediterranean origin speak of trade link with far-off Rome. The discovery of Khoroshti inscription with legend is first of its kind in whole of Orissa. Archaeological excavation in Sembiran in North-Eastern Bali has also yielded Rouletted Ware, shreds with Khorostri character and hundreds of glass beads. Scientific Analysis (X-Ray Diffraction) of Rouletted Ware from Sembiran (Bali), Arikamedu (India) and Anuradhapura (Ceylon) are very similar and Rouletted Ware found in Kobak Kendal and Cibutak in North-West Java. Rouletted Ware of

Manikpatna is also similar to the Rouletted Ware of the above places. The discovery of Roman amphorae at Manikpatna leads to support the view that probably the Romans had direct trade contact with ancient Kalinga/Utkala (Gogte 2000: 681-689). The finding of numerous iron nails used especially in ships and boats as also hundreds of ring-wells clearly suggest that Manikapatana was an international terminal for repairing ships as also to fill drinking water. The site also revealed a number of antiquities in terracotta, stone and glass. Mention may be made of smoking pipes and arecanut shaped beads. Several brick and stone structures were also exposed during the excavation. The site also revealed a wide array of pottery from foreign countries including Moulded Ware, Stamped Ware, Chinese Celadon and Porcelain Wares, Egg-White and Chocolate Glazed Arabian Ware, Brown Glazed Burmese Pottery, etc. (Tripathy 2006: Personal Observation)

Early Historic Buddhist Establishments

It is quite clear from the available sources like archaeological, literary (especially Buddhist texts) and epigraphical records that Orissa came under the sway of Buddhism long before the Kalinga War took place. Several Buddhist establishments have recently been brought to light and some of them have been excavated too. Mention may be made of Lailitagiri, Ratnagiri, Udayagiri, Langudi, Kayama, Vajragiri, Deuli, Tarapur etc., which no doubt suggest a flourishing Buddhist pantheon in Orissa. This has also been corroborated by several literary texts. Besides, the archaeological materials like pottery on which lotus symbols have been depicted are of Buddhist in nature. A few sites have been described in the text.

Lalitagiri

Lalitagiri is an important Buddhist station, which was excavated on a small scale by the

Archaeological Survey of India (IAR 1988-89: 65-66; 1989-90: 77-80; Chauley 1996: 216-220). The stupa at this site dates back to 3rd century B.C. and the site is considered to be the earliest Buddhist settlement in Orissa. Lalitagiri has also revealed four monastic complexes. The ceramics from the site comprise of Red Polished Ware belonging to the Kushana period, Grey Ware, Coarse Black and Red Ware and Red Slipped Ware. Among the pottery shapes are sprinklers, votive lamps, bowls, dishes, basins, handis vases and spouts. A large number of antiquities in the form of terracotta objects, stamped or inscribed pottery, sculptures of Buddhist divinities, life scenes of Buddha, images of Buddha, Terracotta seals, a large number of votive stupas, silver slags and circular gold rings were also found at the site.

Langudi

Langudi, another important Early Historic Buddhist centre, has been dated to the 3rd century B.C. on the basis of sculptures (Hinayana period) as also by the finding of golden Glazed NBP. A series of rock-cut stupas of Early Historic period together with a number of Early Medieval Buddhist shrines (Prusty and Mohanty 1995: 325-327). Recent Excavation at Langudi by the Orissan Institute of Maritime and South East Asian Studies has corroborated Langudi hill as Puspagiri Mahavihara with that of Hieun Tsang's Pu-sie-po-ki-li. The excavation revealed a fragmented stone Brahmi inscription, Golden Glazed Northern Black Polished Ware (D.R. Pradhan-Personal Communication), and a number of minor antiquities. Most of the antiquities are affiliated to Buddhism.

Problems and Prospects

Early Historic major sites like Radhanagara, Sisupalgarh, Jaugada, Narla-Asurgarh and Manamaunda-Asurgarh were excavated in a limited scale and hundreds of Early Historic sites have been brought to light, but unfortunately none

of them have been excavated horizontally which creates a lot of problem while interpreting the data (Tripathy 2002b). For example, Sisupalgarh which was excavated as early as 1948 (Lal 1949: 65-102) and later on by R.K. Mohanty and Monica L. Smith (Mohanty and Smith 2006:27-32) also in a limited scale. Similarly the site of Radhanagara, identified as Tosali Nagara/Dantapua, the capital city of ancient Kalinga (Mohanty and Prusty 1995; Mishra 2000; Author's personal observation on the basis of the analysis of archaeological material found from the site and its neighbourhood) has also been excavated by the Orissan Institute of Maritime and South East Asian Studies in a limited scale. However, the archaeological material from this limited excavated area has very significant results (Pradhan 2006, Author's personal observation 2006). In fact, the ancient fort of Radhanagara (only honeycomb shaped fort in entire Orissa) has to be studied in a holistic perspective by combining all hillocks surrounding the site from where traces of early Buddhism has been obtained. In all probability, the ancient site of Radhanagara was the capital city of Kalinga which faced the ravages of Kalinga War in 261 B.C. by the Mauryan army under Ashoka. The material found from the excavation conducted at some of these hillocks has yielded several war materials such as different types of arrowheads, spearheads, swords, etc., as also an array of Ganga valley pottery including the Northern Black Polished Ware, Roman Rouletted Ware, similar to the Arikamedu types (Wheeler et al. 1946: 17-24). No doubt a large-scale excavation at this complex/site would yield interesting data about the exact location of the Kalinga war and the subsequent conversion of emperor Ashoka into Buddhism. The standing monolithic elephant at Kayama, at the southwestern periphery of Radhanagar fort as also a stupa at the top of the hillock, clearly indicates the existence of Buddhism before the time of Ashoka's invasion (Tripathy

personal observation 2006). However, at present a tentative conclusion can be drawn that it was not the Sisupalgarh only where the great Kalinga war was fought. However, the iron implements and profuse amount of Northern Black Polished Ware at the site of Radhanagar indicates that the sites faced the ravages of a war, most probably by the Mauryan emperor Ashoka. Further excavation in the field season 2006-07 is expected to yield significant data about the site as also to the region where Buddhism had an early footing even before the advent of the Mauryas.

Narla-Asurgarh in Kalahandi district was also dug in a very limited scale, confining to two to three trenches, that also not up to reaching the natural layers. The site yielded a hoard of 539 silver punch-marked coins as also a number of Northern Black Polished Ware sherds, Rouletted Ware (which unfortunately no body has detected so far) (author's personal observation at the Museum of Khariar, Kalahandi) which possesses utmost importance in terms of urbanization and trade as it reveals Mauryan material in hinterland Orissa. Manamunda Asurgarh likewise was excavated in a very limited proportion by the Department of History, Sambalpur University in 1982 and 1990 (Behera 1982: 16-22; IAR 1990: 80-85). The archaeological material yielded from the excavation provoked several thoughts among young archaeologists to study the site in a holistic perspective which resulted in the thorough analysis of pottery and other antiquities including the landscape of the site by the present author (Tripathy 2002b). The archaeological material yielded from the site was very interesting. There was a close relationship of the site with almost all important urban centres like Radhanagara, Sisupalgarh and Jaugada in coastal Orissa and even with the port site of Manikapatana and Palur. There is absolutely no doubt that the site played an important role in the diffusion of urbanization and state formation as revealed from the

archaeological material. The site yielded several types of ceramic wares such as Red Slipped Ware, Black Slipped Ware and Black and Red Ware. Besides, the Red Ware with a Grey Core is also transported from outside. The pottery assemblage of Manamunda-Asurgarh has been subjected for X-Ray Diffraction Analysis (Tripathy 2002b) which speaks that Knobbed Ware, Black Slipped Ware, Black and Red Ware as also Red Slipped Ware were migrated from Coastal part of Orissa to the central/western Orissa due to extensive trade network. Ethnographic parallels were also drawn from the existing trade activity between western/central and coastal Orissa (Tripathy 2000: 60-67; 2002b).

It is imperative to note that all urban centres in Orissa are located on the banks of small rivers than bigger ones as also in a little distance from the sea coast and to the major rivers because in the case of small rivers, it is not possible to carry large fleets for attack. This was because of less flood dangers as also for protection. For example, Radhanagara is located on the banks of Kelua, a tributary of the Bhahmani, Sisupalgarh on the banks of the Gangua, a small rivulet of the Daya river, Narla-Asurgarh on the banks of the Sandul, a tributary of the Tel, Kharligarh and Budhiagarh on the banks of Rahul, a tributary of the Tel. The Early Historic site of Manamunda-Asurgarh is the only urban centre, which is located at the confluence of the Mahanadi and the Tel, indicating the centre's flourishing and briskly trade and merchandize. A meeting place of at least three trade routes 1. Susupalgarh-Ujjain via Tel and the land route along the Tel, 2. Radhanagara-Manamunda Asurgarh-Vidisha-Ujjain, and 3. Manamunda-Asurgarh-Sripura-Vidisha-Ujjain, the site has the maximum trade potential like Sisupalgarh and Radhanagar.

From the archaeological, literary and other evidences it is quite clear that Orissa like the Gangetic valley also came into the firmament of

the Second Urbanization. The evidence of a number of Early Historic forts with elaborate planning for protection and hydraulic system as also a number of peripheral settlements clearly indicates the character of urbanization in Early Historic Orissa. Out of the 8 forts, only one i.e., Radhanagara is honeycomb shaped. This clearly suggests that Radhanagara served as the capital of ancient Orissa and is the earliest fort in entire Orissa.

From the above discussion it is quite clear that trade in various forms was mainly responsible for urban growth in Orissa. The thriving trade network of ancient Orissa with several South East Asian as also sometimes including the Roman world was the principal factor for the formation of complex society in Orissa. Even the hinterland part of Orissa, which was connected to each other by several water and land routes, acted as resource bearing zones as the entire region of hinterland Orissa, is replete with gemstone deposits and forest resources. The flourishing nature of the coastal urban centres was possible basically due to the rich resources which were exploited in a systematic way and then traded. More archaeological work in this respect will unravel the hidden aspects pertaining to urbanization and state formation in early Orissa.

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Dr. Balaram Tripathy is working at Orissan Institute of Maritime and South East Asian Studies, Museum Building, Bhubaneswar 751 014