River Ports And Other Archaeological Sites
On The River Banks Of Goa

M. NAMBIRAJAN
Archaeological Survey of India,
Archaeological Museum
Old Goa
Goa

A.S. GAUR
Marine Archaeological Centre
National Institute of Archaeology,
Dona Paula
Goa.

Abstract

Riverine Archeology is the study of river ports, inundated cities and sunken ships. Most of the ancient cities located on river banks with access to the sea were inundated and destroyed or abandoned due to frequent floods or due to a change in the river course or silting. The archaeological remains at river ports may provide vital clues to trace the commercial development of the region. Keeping this in view, an attempt has been made in this paper to study the river ports and other archaeological sites on river banks in Goa. The work is based on the field survey and trial pits undertaken in potential areas. The scope of the paper is restricted to the study of pre-historic sites on river banks and river ports.

GEO-SETTING:

Goa (Lat 14° 53' 57"N and 15° 47' 59"N and Long. 73° 40' 54"E and 74° 20' 11"E) has a coastal strip of 105 km with a scenic alteration of bays and headlands broken by large estuaries of Mandovi and Zuari rivers. While the bays with their sandy beaches and palm groves serve as main tourist attraction, it is the headlands which played significant role in the history of Goa as sites of forts and landmarks for marine and coastal navigation, particularly during the Portuguese period.

All the rivers draining the state originate from the Western Ghats. Mandovi and Zuari are the principal rivers with numerous tributaries Salaulim, Kushavati and others. The Terakhol, Chapora and Talpona are minor rivers. Along the coast river basins develop fertile alluvial flats behind sand bars. Kumbarjua canal, linking Mandovi and Zuari rivers is a significant feature of the drainage system which has brought a vast area under easy river navigation.

Geologically, the rock formation of Goa belongs to the Dharwar Super Group of Archaeaean Proterozoic age. The significant geological features are laterite which dominate a third part of the State, the rest being quaternary alluvial and lithoral formations. Radhakrisha (1952 & 67) states that along the coast line and the land bordering it no sediments earlier than miocene have been recorded, and hence, land must have existed west of the present coastline.

ARCHAEOLOGICAL SITES:

The sub ghat area of Mandovi basin appears to be highly congenial to human life. The area drained by the feeder rivers to Mandovi, Madei and Dudhsagar with their sources of raw material for tools, rich plant and animal life favoured the habitation of the basin. Sali (IAR 1964-65) collected the first unifacial chopper on river Dudhsagar near Shigao. Marathe (1983) also found unifacial choppers from Shigao to Collem along the river channel. Goudellar and Korisetar (1993) reported the first Acheulian bifaces from Goa in the same region besides Tamdisurla on Surla stream joining river Madei upstream. We have also collected hand axes and cleavers from the area. At Shigao the presence of a few thick flakes, scrapers of middle palaeolithic phase and fluted cores and worked flakes of mesolithic phase suggest continuous occupation of the site from the early palaeolithic to mesolithic stage. In the middle and lower reaches of Mandovi, Sali reported mesolithic sites at Marcel, Priol, Candevar and Divadi. At Rivona on the banks of Kushavati, Rao (1978) collected mesolithic tools. On the banks of river Zuari a site with neoliths has been reported at Chicalim. The pot shaped underground chambers cut in laterite found in the vicinity probably belong to the neolithic stage. Neolithic Celts have also been reported from Arali (IAR 1973-74) on the banks of river Sal. Megalithic cairn circles have been reported near the 12th century Mahadev temple at Kurdi on the banks of river Salaulim a tributary of Zuari.
ROCK ENGRAVINGS:

The most significant discoveries of recent times are the engravings found at Usgalimol and Kajur, taluk Sanguem (Kamat 1993). The sites situated at 5 km distance are on the banks of the river Kushavati.

Usgalimol engravings are on laterite platforms (60 x 30 m) which lie just on the right bank of the river where it takes a curve. A part of the engravings is therefore, submerged during monsoon. It is also observed that there is 1.0 m slope from the bank to the water level. It is possible therefore that the soil is washed down from the banks of the river over the engravings. The State Department of Archaeology cleared a part of the debris and found engravings buried under the soil. The symbols engraved at Usgalimol include Zebu bull, dancing female figure, an X shaped horned animal, harpoon, sex symbols like vulvae etc. At Kajur, engraved on a chlorite schist boulder are groups of animals including humped bulls and deer. The date of the engravings is disputed. They are variously dated from upper palaeolithic to megalithic period (Shirodkar, 1994 and Mitragotri 1994).

CHANDRAPURA

Chandrapura the modern Chandor (Taluk, Salcette) is located 14 km east of Margao, on the bank of river Paroda, a tributary of Zuari. The earliest known epigraphical reference to Chandrapura occurs in the Siroda copper plates of Devaraja of Bhoja dynasty. The inscription datable to 3rd -4th century A.D. on palaeographical grounds was issued from Chandrapura. The theory that the city was probably founded by Chandratriya, a son of the Chalukyan king Pulikesin II does not carry much conviction as the city was existing much earlier. The Arabic Sindabur or Sandaburis is identified with Goa (Yule, 1866). Some scholars identify Kherosonesus of the Periplus with Chandrapura (Muller, 1608).

The Satavahanas probably held sway over Konkan including Goa from the end of 2nd century B.C. The excavation at the temple site in Chandrapur by S.R. Rao yielded potsherds, bricks and copper coins assignable to the Satavahana period. On this basis it was suggested that Goa was part of the Satavahana empire. Not much archaeological material is available to establish the commercial prosperity of Chandrapura. However, gold earings and gold coins reported from the site indirectly indicate a flourishing economy. This is further substantiated by remains of a brick temple, mud fortification, sculptures and oral traditions, all pointing to a pristine past. Certain localities in Chandrapur such as Guhalla tolli (tank of Guhalladev) Koudi (toll-gate) etc. indicate the history or the place.

The earliest reference to navigation in the river Paroda occurs in the Panjim copper plates of Jayakeshi I datable to 1052 A.D. (Moreshwar, 1953). The record narrates a sea voyage of Guhalladeva I (980-1005 A.D.) from his capital Chandrapur. The mast of the ship broke off before he could reach the sea and he took shelter in the nearest port of Goa, probably Gopakapattana, where he was given all possible help by an Arab merchant Muhammed. Shastadeva II (1005 50 A.D.) also seems to have proceeded in a ship to worship Somnath. The inscription gives a vivid description of the city of Chandrapur. It states that the city comprised white plastered houses, alleys, horse stables, flower gardens, bazaars, parlour, quarters etc.

River Paroda was navigable even in the first half of 19th century. A ship loaded with furniture sailed from Bombay to Chandrapur (Heras, 1932). Afonso de Albuquerque in his notes mentions that large caravans of merchants came to Goa port from interior countries in quest of horses and other commodities for exchange (Goa Archives). A flourishing trade along the coast was a notable feature for most part of the 19th century also. The country crafts such as patamars, tonas, saudos etc. plied briskly. This clearly indicates the tradition of coastal trading system medieval times also.

GOPAKAPATTANA

Gopakapattana, the modern Goa Velha, is located near the mouth of river Zuari in taluk Tiswadi. According to the Gopaka copper plate Jayakeshi I shifted the capital from Chandrapura to Gopakapattana around 1049 A.D. He also organized a strong fleet at Velakula in Gopakapattana.

One of the copper plates transported to Portugal in 1727 (Pissurleencar, 1938) refers to the construction of a mosque and for its maintenance taxes were levied by Jayakeshi I in 1053 A.D. on the merchant ships which called at the ports, in consultation with traders from Simha (Srlanka), Kerala, Zangavar, (Zanzibar), Gauda (Bengal), Gjurara (Gujarat), Sristhanak (Thana), Chandrapura etc. It is clear from the record that Gopakapattana was a flourishing port around 1053 A.D. and that Chandrapur continued to serve as a minor port.

The Degamve inscription of Sivachitta (Moraes, 1931) speaks of Gopakapattana in the following lines. "The street
of Jayakeshi's capital was completely filled with the palanquins of his Pandits, the poles of which were covered with jewels and inside were the quivering golden earrings (of their owners)

The discovery of gold coins (Heras, 1932) and the oral traditions about the palace site and the tank stand testimony to a prosperous city. However the location of the port was not known until Shirodkar (1990) found the remains of a port wall running over a length of 5 km between Agasim (Agase) i.e. Mahadarvaza and Goa Velha, the ancient Gopakapattana.

TRIAL TRENCH-GPK

The Marine Archaeology Centre, N.IO in collaboration with the Director of Archives, Archaeology and Museums laid out a trial pit (Gaur, 1992) in the intertidal zone near the Village Donda. A pit laid at the junction of the sea and the present road revealed continuation of the royal road upto the river front. The pits also brought to light the remains of a wall upto a height of 1.5 mt. While the top 4 courses of the wall were laid in lime mortar the rest are in dry masonry. It is suggested that the first phase belongs to Kadamba Shilahara period while the later phase belongs to the Portuguese period.

OLD GOA

The date of establishment of the city is not known. Some trace it to the times of first Mohammadan Government which settled down in the island of Goa (Fonseca, 1986). Ibn Batuta who visited the city between 1343 and 49 refers to the Hindu city of Goa on the banks of river Zuari and a Mohammadan city of Ela' on the banks of river Mandovi (Fonseca, Ibid). Joao de Barros traces the origin of the city to 1470 and asserts that it was founded by Melique Hussen when he fled from the kingdom of Omor and settled in Goa. However, this theory does not carry much conviction as there was a city existing around 1340 A.D. The city had a fortification wall and comprised many mosques, temples and gardens and palatial buildings.

The Portuguese conquered the city on 25th November 1510. In 1564 they constructed a fortification wall stretching over 16 km. The city of Goa was the hub of Portuguese commerce in India till the end of 17th century, when the capital was shifted to Panelim, near Old Goa and finally to Panjim in 1754.

The city was flourishing due to commercial activities. It consisted of a bazar, Viceroy's Palace, magnificent churches, a custom house, and an Archbishop's palace. It sheltered 2,00,000 people in an area of less than 3 sq kms.

Old Goa was a prosperous commercial city. Merchants came to Goa from Arabia, China, Armenia, Mozambique, Persia, Bengal, Malacca, Java etc. The city was well built with houses, streets bazaars, churches and gardens in Portuguese style (Barbosa 1989). There were many bazaars but Rua Direta was the main bazaar. All kinds of silk, satin, damask, Chinese porcelain, precious stones, corals, rice, spices and all items of handicrafts were sold.

Goa under the Portuguese had trade contacts with Brazil, Macau, Mozambique, Srilanka, Maldives, China etc. The items of export included textiles, ivory, salt petre, sandalwood, sugar, coffee tea opium, Goan liquors, gunpowder etc. The main imports were slaves, tobacco, Chinese pottery, gold, copper, paper etc. In the domestic market Goa sold textiles, Goan liquors, cashew, arecanuts, domesticated birds etc and imported spices and coconut products from Malabar; rice, wheat and European textiles from Bombay; ship and country vessels from Daman; salt petre, shells, ivory etc from Madras and Pulicat; timber and stones from Chaul; rice, timber for ship building from Kanara. It was connected to the hinterland by land routes as well as riverine waterways. The land routes connected Goa with Vijayanagara and Bijapur kingdoms across the ghats. The existence of a series of passes in the mountains which are lower in altitude provided easy access to the neighbouring regions (Pearson, 1981; 73). There were regular caravans from Deccan to Goa carrying all sorts of materials on horses. oxen, donkeys and other beasts of burden. (Pyard, 1944). This enabled Goa to serve the hinterland as an effective outlet port (Pinto 1994; pp.34)

THE PORT

Old Goa was not a natural harbour. The torrential Mandovi brought silt and other sediments and deposited them near the mouth giving rise to sand banks over a period of time. However, the Portuguese overcame the difficulties and developed it as an emporium.

There were two anchorages in Old Goa, the quay of Viceroy and the quay of Catherine. The original structures have now been totally lost. The quay of viceroy was located near the Viceroy's Arch on the banks of the river. There were large buildings where cargo was stored and weighed. This jetty was built mainly for the use of Viceroy and other higher dignitaries.

The quay of Catherine, also called fish bazar, was located in front of St. Catherine Chapel. It was the landing
place for cargo and passengers. Alfandega (Customs House) is located to the south. Ships were moored at a pier near the custom house, known as "Ribeira da Galles" (Valle, 1991). Linschoten (1888) who stayed in Goa from 1583 to 1588 says "ships of 200 tones or thereabouts may easily discharge before the town of Goa. upwards into the river". "ships are hauled ashore for the rains and thatched to preserve the decks from the damp" which may indicate the fall in commercial activity during rainy season. From about the beginning of 17th century the city probably started losing its importance as a port. Tavernier the French traveller who visited Goa between 1642-48 refers to a mark of poverty in Old Goa, which he attributes to the incursions of the Dutch and the English. The other reason for the decline was the outbreak of epidemics.

SHIPWRECKS

Portuguese and British shipwrecks near the coast of Goa are well known (Thakkar 1991 and Gudigar and Sundaresh 1992). However, there were two shipwrecks in the rivers which are relevant here. Mascarenhas (1987) mentions a wreckages of Kadamba ships near the St. Joao island at the mouth of river Zuari. The author does not give the source of information nor complete details. It may be noted that the Panjim Copper plates of Jayakeshi I (1052 80 A.D) while referring to the pilgrimage of his predecessor Guhalladeva I (980-1005 A.D.) from Chandrapur to Somnath mentions that the mast of his ship broke off before he could reach the sea and he took shelter in the nearest port of Goa, probably Gopakapattana. This vaguely points to a Kadamba shipwreck between the ports of Chandrapur and Gopakapattana. There are references to several shipwrecks in Goa waters.

Seven small ships sank at Nerul river on 24th April, 1648 (Thakkar, 1991).

CONCLUSION:

Field survey carried out in Goa has indicated concentration of prehistoric sites along the coast and in Mandovi -Zuari basin. Some sites are reported on other river banks also. Of the three ports included in the studies Chandrapura could not have been a major river port as it is located for too interior. Further onshore and offshore survey needs to be done in Gopakapattana to locate remains of the port town. Efforts are to be made to locate the Kadamba shipwreck and the seven Portuguese ships that sank in Nerul river. Although Old Goa was an important port town of the Portuguese, it is clear that trade was not based on any local products except cashew. It was serving as an outlet catering to the needs of Portuguese strongholds like Brazil, Macau, Mozambique, Sri Lanka, Chaul, Daman and Diu on the one hand and hinterland on the other.

REFERENCES


Fonseca J.N. da 1986: A Historical and Archaeological sketch of the city of Goa, New Delhi, (Reprint)


Pinto, Ceisa; 1994, Trade and finance in Portuguese India. New Delhi.

Pyard, F.L; 1988: The voyages of Pyrard da Loural to the East Indies, the Maldives, Moluccass and Brazil, vol. II, part. I (reprint)


Pissurlenkar, P.S, 1938: *Inscricoes pre-Portuguesa da Goa, Orienta Portuguesa*, (Goa Archives), Panjim. Radhakrishna, Rao, K.V.,


