Maritime Cultural Landscape at Ancient Godawaya Harbor: Heritage in a Changing Landscape

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ශ්‍රී ලංකාවේ ජනයා ඔවුන්ගේ සංස්කෘතිය, ශිෂ්ටාචාරය, තාක්ෂණය හෝ ජීවන රටාවේ අන් කිසිදු අංගයක් සමුද්‍ර කලාපයෙන් සම්පූර්ණ වශයෙන් හුදකලාව අධ්‍යයනය කළ නොහැකි බව දිවයිනේ ස්ථානගතවීම සහ භූ භෞතික ව්‍යුහය පිළිබඳ විමසිලිමත් වීමේ දී පැහැදිලි වෙයි. දිවයිනේ ඕනෑ ම ස්ථානයක් සමුද්‍රයේ සිට කිලෝ මීටර 120 ට වඩා නුදුරුව පැවතීම මෙම අදහසට උපකාර කරයි. එ බැවින් මෙරට ඉතිහාසය ප්‍රතිනිර්මාණය කිරීමේ දී සාමුද්‍රික මානය නොසලකා හැරීම කළ නොහැකි වෙයි. බුන්දල වැනි ප්‍රාග් ඓතිහාසික තැන්පතුවක සිට පොම්පරිප්පු වැනි ප්‍රොටෝ ඓතිහාසික ක්ෂේත්‍රයක්ද මාන්තෙයි වැනි ඓතිහාසික වරායක් හෝ ගාලු වරාය ආශ්‍රිත ව ගිලී ගිය යටත්විජිත නෞකාවක් දක්වා විවිධත්වයකින් හෙබි සාමුද්‍රික පුරාවිද්‍යා උරුමයක් සතු දිවයිනක සාමුද්‍රික පුරාවිද්‍යා අධ්‍යයන වෙත යොමු කොට ඇති අවධානය ප්‍රමාණවත් නොවන බව පෙනේ. සාමුද්‍රික පුරාවිද්‍යාව හා සම්බන්ධවන අධ්‍යයන ක්ෂේත්‍ර රැසක් පවතින අතර පැරණි වරායයන් පිළිබඳ අධ්‍යයනය එහි එක් අංශයකි. පැරණි වරාය පිළිබිඳ ව පවතින අධ්‍යයන ද විවිධ පැතිකඩ ඔස්සේ සිදුකළ හැකි ය. මෙම පර්යේෂණ ලිපිය ගොඩවාය වරාය ආශ්‍රිත සංස්කෘතික භූ දර්ශනය මත පදනම් ව සිදු කරන ලද්දකි.

දිවයිනේ පැරණි වරායන් පිළිබඳ මෙතෙක් කර ඇති අධ්‍යයන බොහොමයක් සරල කරන ලද ආකෘතියකට ආධාර කරයි. ඉන්දියන් සාගරයේ කේන්ද්‍රීය ස්ථානයක පිහිටීම, බොකු, කලපු ආදී භූ-රූපණය මගින් නැංගුරම් පොළවල් ලබාදීම සහ ගංගා මුවදොර ඔස්සේ අභ්‍යන්තරික මධ්‍යස්ථාන සමග සම්බන්ධ වීම එහි දී සලකා බලන ලද ප්‍රධාන සාධක වෙයි. නමුත් පැරණි වරායන් ආශ්‍රිත සංස්කෘතික භූ දර්ශනයේ ඉතිහාසය සහ විකාසනය සම්බන්ධව වඩා පුළුල් පාරිසරික, සමාජ, දේශපාලන සහ ආර්ථික සාධකයන් බලපෑම් කරන බව අධ්‍යයනයෙන් පැහැදිලි වී ය. එම සාධකයන්ගේ ගොනුවීමේ ස්වභාවය අනුව එක් එක් කලාපයට ස්වාධීන ලක්ෂණ සහිත සංස්කෘතික භූ දර්ශනයක් නිර්මාණය වෙයි. මෙකී තත්ත්වයන් සහ ස්වභාවයන් පොදු සංදර්භයක් තුළට ගොනු කිරීම ඉතා අපහසු වෙයි. එ බැවින් එක් එක් වරාය ආශ්‍රිත ආංශුක අධ්‍යයන සහ වඩා පුළුල් පරිමාණයකින් දියත් කරන විස්තෘත අධ්‍යයන දිවයිනේ සාමුද්‍රික ඉතිහාසය ගොඩනැගීමේ දී අතිශයින් ප්‍රයෝජනවත් වෙයි. විශේෂයෙන් දිවයින තුළ සහ බාහිර ක්ෂේත්‍රයන් සමග සන්සන්දනාත්මක අධ්‍යයන තුළින් වඩා පූර්ණ අර්ථකථනාත්මක පසුබිමක් ගොඩනැගීමට ඉඩ ප්‍රස්ථාව ලැබෙයි.

Key words: Cultural Landscape, Maritime Harbor, Godawaya,

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Citation: Abeywardana, Nuwan, (2013) Maritime Cultural Landscape at Ancient Godawaya Harbor: Heritage in a Changing Landscape, The Journal of Archaeology and Heritage Studies, 1(1)

Introduction

As a result of the unique localization and geo-physical structure of the island, the Sri Lankan culture, civilization, technology or life style cannot be completely isolated from the ocean. Any point on the island is not more than 120 km away from the ocean proving that this small island has a strong relationship with the huge water bed around it since the very first day of its formation. Therefore, it is really unfair to neglect the marine coefficient when recreating the Sri Lankan history. Sri Lankan archaeological culture has been enriched by legacies centered on heritance

such as pre-historic sites like Bundala, proto-historic sites like Pomparippu and ancient harbors like Manthei. Having a diversified collection of archaeological endowments that directly relates to the ocean, the attention paid by regulatory bodies to maritime archaeology is not sufficient.

Maritime Archaeology is composed of a number of study areas under which Harbor Studies is one of them. Studying about ancient harbors can be continued on different subject areas. This research was based on the cultural landscape associated with ancient Godawaya harbor. Maritime cultural landscape can be described as an archaeological concept that can consolidate the ocean and the human reactions on it. It is also a main concept for a beginner in the field of maritime archaeology to be aware of. According to the concept of cultural landscape that stems from subject areas like Geography which heavily deals with spatial data, it is emphasized that not only environmental factors but also cultural values are constituent for the formation of a landscape of a particular area.

About two centuries ago, Alexander Von Humboldt has explained the term landscape as the totality of all aspects of a region as perceived by man (Wagner, 1962: 9-13). According to this explanation, a landscape can be identified as a collection of cultural, natural, geographical and aesthetic values. This definition highlights that the cultural landscape is changed or created by human, with or without their intention. That means human experience of the landscape and also they convert the environment into a landscape based on their perceptions.

Cosmas says that the Indian Ocean is always full of ships sent by countries like India, Persia, Ethiopia and Sri Lanka (Weerakkody, 2003: 155-165). Since Sri Lanka is localized within South Asia, it was treated as a main trading center by traders from both east and west. Manthei Harbor became highly noticeable among others with the evidences provided by written sources and excavations. But, as a result of the natural deprivations impacted on the naval activities between Manthei and South India, there was a potentiality of new harbors in the southern and western provinces of the island becoming popular. After the 3rd century, 'Ruhunu' kingdom was established in the southern Sri Lanka, having Magama (Thissamaharama) as its capital. Thissamaharama is about 10 miles away from the sea. By comparatively analyzing the geographical relationship between Anuradhapura and its harbor 'Manthei', some parties have tried to name Kirinda as the ancient harbor of Thissamaharama. But there are no sufficient archaeological evidences to support this assumption. But some information has been discovered on a number of fields associated with the naval activities of other different bays and lagoons in this region. Ancient Godawaya Harbor is one such important site.

Godawaya Harbor is located in the Dehilanda village which belongs to Hambanthota District in the Southern Province of Sri Lanka. The location can be accurately interpreted as Northern latitude $6^{0}06^{l}28^{ll}$ and Eastern longitude $81^{0}03^{l}06^{ll}$(fig. 01)

The circular area containing the Gota-Pabbhatha Vihara and the Godawaya road can be seen as a table kept on the beach. Dageba, the most noticeable item of the landscape, is located on its flat peak. A coastal lagoon can be seen from the east while the old embouchure of River Walawe is on the west. Either one of the above two items or both of them can be recognized as the ancient harbor site. Currently, a small fisheries harbor can be found related to the small bay on the east.

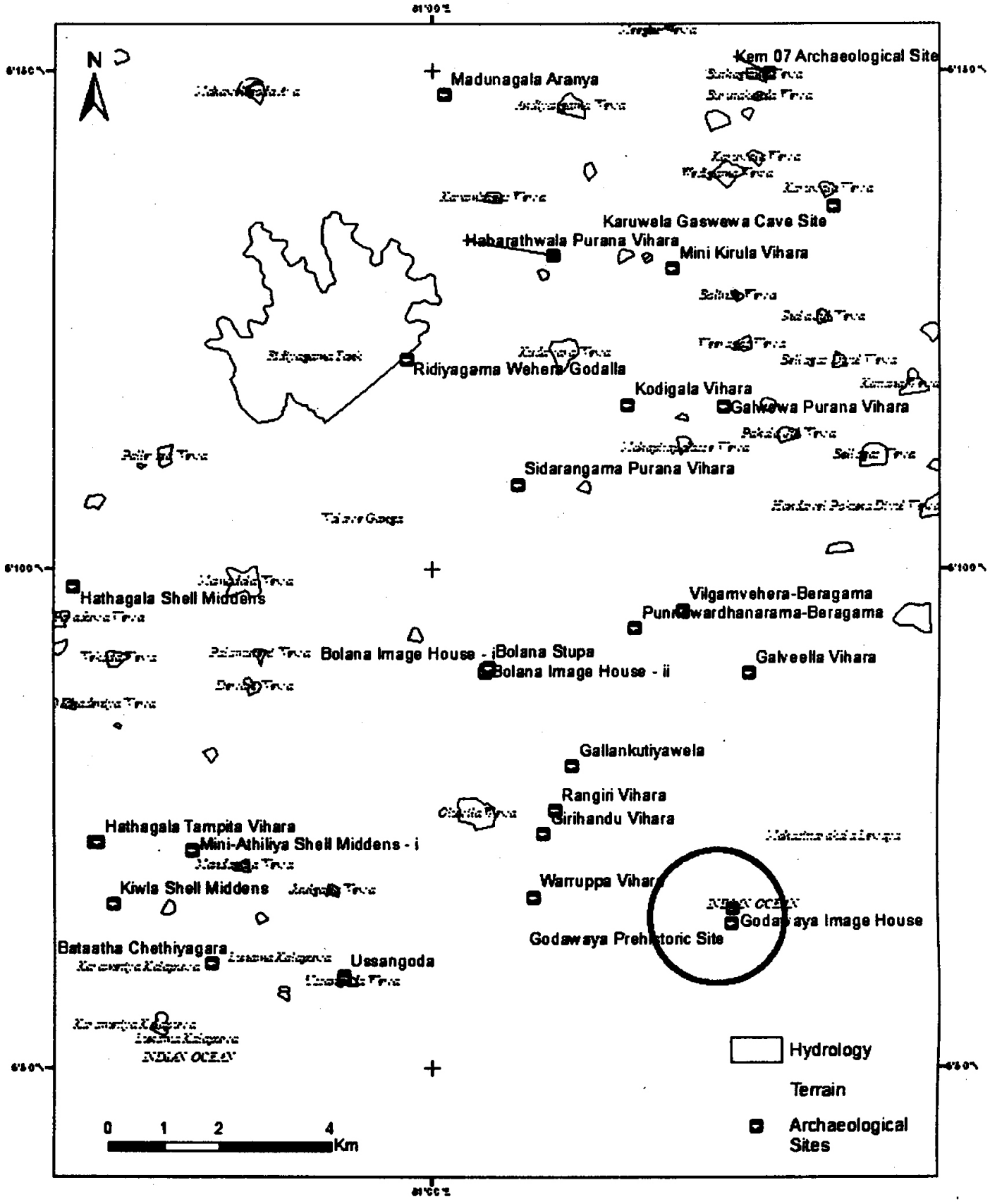

Figure 01: location of Godawaya

(Prepared by Nuwan Abeywardana, 2013)

Figure 02: Godawaya harbor

The macro study area of the site can be sub divided into two parts.

- Southern coastal region
- Lower Walawe valley

Evolution of the Natural Landscape

This site is affected by both north-east monsoon and south west monsoon winds. Coastal line with wide sand bays is the outstanding feature of the landscape. Time to time they get combined with brackish water and huge sand dunes. These large sand dunes have avoided getting into some internal locations. Sand dunes are created as a result of the discordant nature created by sea erosion and the bulk of sand carried by Walawe River. These sand dunes differ from those created by the wind. The old river mouth of the Walawe River is covered by a sand dune of this type and it forms a large lagoon to the inner side.

The main fact which impacted on the formation of the current landscape is a canal which has artificially converted the path of the river to the sea side. This canal was built in order to save human settlements from floods that are located between the old river mouth and the current one. Walawe River meets the sea in a location which is about 4km to the west from the current Godawaya. Some facts prove that Walawe River creates a delta embouchure with at least three branches. Old tributaries can be recognized as dips on the land of the western and northern areas of the river. A noticeable dip can be found from about 800 m to the north from the monastery.

The river reaches the sea with a heavy load of sand. Clearing upper drainage areas for tea and rubber plantations after the 18th century was the main reason for this. It is clear that a ship with a considerable weight could easily be anchored near the eastern boundary of the river. This fact has influenced the formation of the cultural landscape associated with this site to a certain extent. There are evidences to prove that the landscape in the early half of the 1st century was totally different from the

current one. The Godawaya bay which can be seen on the east side of the monastery has not been affected by these sedimentary deposits. Remarks of a safe natural harbor can be found in the eastern and western physiographic elements of the monastery area. The bay associated with this area is being used as a safe fisheries harbor at present.

Coastal plain earns a considerable importance, when paying attention to the macro area. The coastal plain associated with this region can be seen as an area with an upper coating, which was changed by the aerial and marine activities. This region contains soil with aeolian, residual and alluvial origin. This zone is not suitable for agricultural activities. Thorny bushes on the land are a common sight.

Sand dunes and the beach are noticeable items of the landscape and sand dunes are located along the coastal line. These kinds of sand dunes are distributed in about 1740 acres attached to Walawe River Basin (A Canada-Ceylon Plan Project, 1960: 72). In some places these sand dunes are of about 50-60 ft. of height. Lands with these types of physiographic features are not suitable for agriculture. But thorny bushes which are distributed by the wind are scattered on the land.

Environmental Factors

Inherent climatic features of the dry zone can be seen throughout the year. A clear differentiation can be made between wet and dry seasons. Because this region is not affected by the monsoon wind, dryness and lack of rain can be experienced. These climatic conditions badly effect on the agriculture. Fortunately, the Walawe River which flows across this region creates a proper environment for irrigational activities. Some of the main environmental factors which can be easily noticed are,

- Godawaya site is located in the semi-arid region of Sri Lanka
- Annual rainfall is less than 40"
- Most of the rainfall can be experienced in October and November
- June, July and August months are heavily dry

This inherent dryness is reduced to a certain extent because of the Walawe River. Drainage areas of the Walawe River experience a heavy rainfall throughout the year. Godawaya is served by a continuous water supply due to this reason.

Temperature is a significant feature of the climate. Having a normal temperature of about 80°F influences the sub-tropical nature of the area. The above climatic factor has impacted on the coastal sand dunes and red sand dunes in Ussangoda, Bundala and Pathirajawela. North - central and south-east parts of the plain which belongs to the Vijayan series comprise of gneisses. The coastal line including Ambalanthota has this type of soil structure.

The soil structure of the west part from Embilipitiya to Ambalanthota, which belongs to the Khondalite grade, is composed of a number of different rock types (A Canada-Ceylon Plan Project, 1960: 72).

- Interbedded quartzo - feldspathic gneiss and granulites
- Crystalline limestone, quartzite and charnockite

Archean rocks near the Walawe river mouth is covered with a sedimentary root and they are the elementary materials of the soil in this area.

It is important to pay attention to the Walawe River basin, when considering about the rocks. Rock features are

somewhat similar to Kirinda basin. A number of core rock categories can be recognized in the Walawe basin (A Canada-Ceylon Plan Project, 1960: 72).

- Hornblende-biotite gneiss
- Pegmatite and migmatite
- Granulite and quartzo feldspathic gneiss
- Charnockite and pyroxene gneiss
- Crystalline limestone and quartzite

A number of economically important mineral repositories can be found in the Walawe River basin area (A Canada-Ceylon Plan Project, 1960: 72). Graphite can be seen in combination with vein quartz. This kind of a repository has been created to the south west from Panamure. In many places of the Walawe river basin, pegmatite and pegmatitic rocks can be seen as rock outcrops. A hillock composed of feldspar in combination with pegmatite can be recognized in the southwest side of the Ridiyagama water reservoir. A clean and large vein quartz rock outcrop exists near the main road about one mile away from the main road. Another rock outcrop can be found at about quarter a mile to the north side. They are used for plate manufacturing. None of the limestone species which exists in the Walawe river valley (in the form of small pebbles) have been analyzed. But it is clear that some of them are dolomitic. In many places related to the Walawe River hold records of precious stones. Especially there are a lot of gem fields related to the Belihuloya which is a tributary of the Walawe River. Ridiyagama is a main region where gems can be found in addition to the popular gem fields in the island.

The nature of the elementary materials and the climate that reacts on it highly impact on the creation of soil. Soil of the Walawe River basin is composed of residual and sedimentary materials. Cognate is made of gneiss, pegmatite and migmatite. Colluvial soil is made of materials which are weakly divided or not divided. This is created as a result of the soil erosion and land slips in sloppy areas. Alluvial soil is created by the materials which are transported and stored by rivers. Near the Walawe River mouth, this kind of a sedimentary line can be recognized. Most of the soil categories in the lower plain belong to the red–yelow podzolic group. Grey soil is categorized under the gleisolic category.

Godawaya Harbor related Prehistoric Cultural Landscape

Ancient marine sand dunes and gravel repositories can be described as a collection of evidences which represents the prehistory of Sri Lanka. These repositories which are located near the Northern and South Eastern coastal areas of the island sometimes have a history of about 250 000 or 500 000 – 700 000 years and they are interconnected with the geographic process called the Iranamadu Formation (Deraniyagala, 1992:83). Evidences for the existence of pre historic humans can be clearly recognized here. Our study area is also located within the terrestrial region which belongs to the Iranamadu Formation. Pre historic evidences have not been found from the excavations in the region. But many evidences are recorded within the macro area. Studies of Dr. Siran Deraniyagala about Bundala and Pathirajawela are highly remarkable among them (ibid: 83). Therefore evidences prove that human activities took place in this region from about 125000 years. Remarks of a flake stone tool industry can be found from the layers which ran up to 125000 – 75000 B.P in Pathirajawela (ibid). The above facts are really important in recreating the prehistoric cultural landscape associated with the study area.

To interpret late quaternary terrestrial and environmental changes within the Indian subcontinent marine sand dunes can become useful.

- To identify early changes in the monsoon climate
- To identify the relationship between climatic changes and archaeology

Even though Theri fields in the South Eastern India and marine sand dunes in Sri Lanka which belong to Iranamadu Formation show similar climatic records as a whole, small regional differences can be recognized. There are some hints showing that a more arid climate existed in the season in which those sand dunes were created. It gave the sand dunes the ability to get expanded into the island and widely distributed sand repositories in the region strengthen this fact. The high probability of sand getting collected is a result of the continuously lowering sea level. And also it shows the strength of the wind which blew to the north east side of the South Eastern Asia in the Glazier era. As a remarkable feature of the layer records in Sri Lanka and South India, the later deterioration of sand can be recognized. This decaying had occurred rapidly in the Mid-Holocene era. This decaying hints about a more humid intermediate time period which had occurred in this region.

The above environmental conditions are important for the study purposes since these repositories are directly interconnected with the archaeological residuals. Geometric microliths could be found in South East India and Sri Lankan sand dunes. The comfortable climate existed in this season had highly influenced the growth of food and water resources. The distribution and red color of archetypes represent a date after the gathering of sand and they are somehow connected with the decaying of sand. None of the sand repositories recorded by the archetypes are younger than the repositories which were found in Theri fields of India. But the microliths appeared in the gravel sand of Southern Sri Lanka differs from the above. Older evidences are found in places like Bundala and Pathirajawela relative to India. They may belong to middle Paleolithic period.

According to the above facts, the coastal line associated with the study area is connected to human activities starting from middle Paleolithic period to Mesolithic period. Even though Ussangoda, a location not far away from Godawaya, has a large pre historic collection, enough explorations have not been made on it.

Is the prehistoric cultural landscape of this region limited only to coastal line? Which kind of interdependence does it have with the internal regions? resembling problems appear. To find solutions to these problems, a number of important studies can be recognized. The experiments which were made around the river valleys of the region own a greater importance here. A number of Mesolithic fields are located near Belihul Oya, which is one of the main tributaries of the river (Deraniyagala, 1971: 13-23). Another attention grabbing factors about Belihul Oya are the ability to reach Walawe River through Belihul Oya and its interconnection with Balangoda culture. And also it has relationships with open area sites such as Bellan Bendi Pelessa.

Pollen analysis related to Horton Plains brings forward some ideas about a Neolithic age. This field is connected to Belihul Oya and through that it is connected to Walawe River valley. Finding marine residuals in fields which belong to Mesolithic culture should be paid attention here. This fact proves that humans in the Mesolithic times had direct interconnections with the ocean.

The oldest prehistoric evidences which had been ever recorded on Sri Lankan archeological sites are found from Southern coastal regions near Bundala and Pathirajawela. It cast doubt whether the pre historic humans who had gathered in southern and South Eastern Sri Lanka, later moved inward the island because of environmental conditions like changes in the sea level. River valleys can be named as the easiest way for such a relationship. Belihul Oya microliths fields and Neolithic fields related to Horton Plains can be identified as a result of the human reactions which moved along the Walawe River valley from the southern coastal line. Anyway, a suggestion like this requires a well-planned study process based on systematic experiments. Old human records on the basal gravel layers and the Mesolithic records on the sand repositories in upper layers highlight that people who migrated inwards the island due to environmental factors, later got attracted to coastal region again. The latter situation is interrelated with the decaying of sand dunes. Even though Godawaya harbor did not have a direct marine relationship, it had acted as a major center of cultural extension from the pre historic time periods. The above problems can be resolved by stabilizing the experiments associated with the region which are now in a very lower level.

Godawaya Harbor related Proto and Early Historic Cultural Landscape

It is important to pay attention to raw materials which can be used to rebuild the cultural landscape of this time period. Human settlements of Early Iron Age and megalithic burial sites can be recognized as the major sites related to proto historic period. The early standpoint was that the oldest evidences found on human settlements in southern Sri Lanka belonged to early historic age. But current explorations extend it till the Early Iron Age (Weisshaar, 1998: 38-51).

Walawe valley earns a special place when paying attention to the macro area. A cist burial was found from the experiments done by Archaeological Department in Mahapelessa in 1995. Martha Preket records another similar cemetery field in Mahagalwewa. According to the experiments done by Post Graduate Institute of Archaeological Research (PGIAR), remarks of a cairn circle field can be recognized in Habaraththewala. But all of these fields are in the primitive experimentation level and require more attention and further investigations.

Other than the Walawe river valley, many other places in this area record about megalithic burials. For instance, Prof. Wijepala talks about the existence of urn burials in Katharagama. The explorations done by the PGIAR with the precedence of Prof. Raj Somadewa highlights a location called Thambarawa related to Kirindi Oya and Menik Ganga where cist burials can be found. Evidences of human settlements have been found near these burial fields. Cist burials have also been found in a place called Bembawa which is closer to Thambarawa. Some pots which include human and animal residuals have been found in a village called Mukkarugoda which belongs to Rathnapura District which is located in the upper Walawe valley (Seneviratna, 1984: 237-307). A number of black and red wares (BRW) which were important to locate human settlements in the proto historic age have been found in many locations of Southern Sri Lanka. But a very small amount of them was found from the excavations related to micro area (Roth, 1998: 1-11). In addition to this some fields containing BRW found along the Walawe River as surface repositories (Bopearachchi, 2004: 539-551).

By examining the layer evidences, records of BRW can be found from the excavations done by Prof. Roland Silva

near the old museum of Ambalanthota (Seneviratna, 1984: 237-307). Proto historic BRW were found from the upper layers of pre historic sites like Bundala and Pathirajawela which are not distant from Ambalanthota. That layer and Mesolithic layer is separated from an oyster shell layer which lives in lagoons. Ridiyagama which is connected to Godawaya through the Walawe River holds records of red wares. For instance layer 3 and 4 of R.D.G.I excavation can be introduced (Bopearachchi and Wickremesinhe, 1999: 26).

Remarkable evidence was revealed recently by a joint expedition conducted by a team of archaeological divers from Sri Lanka, India, Malaysia, Indonesia and Philippines. They investigated an ancient shipwreck located 4km from Godawaya site dated back to 4th Century BC. Various sizes of jars, carinated cooking vessels and many artifacts were recorded during the survey. Among the artifacts large number of BRW vessels were recorded (Gaur et al., 2011: 9-17). This is a direct indication that proves the Proto and Early Historic context in Godavaya.

In addition to the fields which are directly connected with the above areas, many more evidences have been found in areas related to the macro context. For instance, Thissamaharama, Akurugoda, Kirindi Oya, Ellegoda areas and areas that belong to South Eastern Sri Lanka such as Ithikala, Bambaragasthalawa and Kudumbigala can be mentioned. These BRW sites recorded from Southern and South Eastern parts of the island seem to be a little bit older than the megalithic context (Seneviratna, 1984: 237-307). The excellent surface and the manufacturing technology of these pots are somewhat similar to pots which were found in the strata 4A Gedige, Anuradhapura. Therefore, BRW found in Southern Sri Lanka are more likely to be put into the 300-100 B.C. time period.

Many conditions which are related to the early historic age have been identified in the extended region. Especially early Brahmin epigraphy is noticeable. They are reported in many areas near the River Walawe as well as Southern and South Eastern parts of the island. Mr. K. Rajan of Thanjavur University has done a comparative study between the post firing marks of the BRW found from site like Ridiyagama and kelaniya in Sri lanka and Kodumanal, Thamilnadu (Bopearachchi, 2004: 539-551). A symbol similar to the Brahman letter 'M' has been recognized in both of these regions. And also a symbol like a ladder was found in Kodumanal, Ridiyagama and Kelaniya. Petrographic analysis of these vessels discovered from Kelaniya and Ridiyagama show similar mineral contents. Then a doubt arises whether the Godawaya harbor related to Walawe river mouth was used to connect these two areas which are distant from each other about 200km.

Evidences that describe the resource usage in the early historic age were discovered in the Walawe River valley, especially Ridiyagama and Samanala Wewa sites. The ovens that work with the aid of wind which were found from Samanala Wewa may belong to 2nd century B.C (Juleff, 1990: 75-105). Even though the technical conditions differ, glass and metal ovens which were found from Ridiyagama show similar construction features. In addition to this, a number of irrigation systems which are evolved since the early historic age are noticeable in the River Walawe valley (Brohier, 1934-35: 92).

According to the above described facts, to recreate the proto and early historic cultural landscape related to Godawaya harbor, attention should be paid to a number of conditions. Especially environmental conditions play a major role here. Other than Mahaweli River, Walawe

is the only river which flows towards the dry zone with a stable water supply all over the year. That is why it shows some potentiality towards agriculture based on irrigation. Therefore we can recognize this area as an attractive landscape from the early historic age. The later irrigation pattern which got familiar in the region proves this fact.

More importantly, the soil exists in the lower Walawe plain is appropriate for agricultural activities. This region is one of a major rice production center of the island. The northern part of the plain is more suitable for that. A greater portion of this plain shows a deep soil cover. Normally flat and low physiographic conditions are good for irrigation systems. None of the geographic features of this land badly affect the irrigation works and a distribution completely based on gravitational power can be recognized. A greater portion of the land is fertile and good for agriculture.

The eastern part with a shallow soil profile earns a greater importance. This is the zone which separates Walawe basin from the Kirindi Oya basin. And also it acts as a division between the River Walawe and the Malala Oya. Relatively high physiographic features, rock outcrops and dry soil in this area make a bad combination for agricultural tasks. Ridiyagama plain, the southern part of the Walawe lower valley looks flat and smooth differing from the northern part. Soil shows differences based on the density and texture of the drainage and mostly it is shallow and dry. A greater portion of the sedimentary plain of the Walawe basin belongs to the Ridiyagama region. At present these fertile lands are completely utilized for agriculture.

These conditions play a considerable role in recreating the cultural landscape of the region. Especially the red ware found near the Walawe valley from Ridiyagama to Godawaya hint that human settlements belonged to primary Iron Age had been distributed all over this river valley. It can be guessed that most of these human settlements were formed in the Ridiyagama region because of its relative fertileness and suitability for irrigation works. This fact may be a big influence for the growth of this zone as a main trading center in the island. River Walawe might have been used for water convenience as well as the transportation by people.

Being full of mineral resources also has an impact on the landscape of this area. Locating closer to the mineral line which runs from Ambalanthota to Trincomalee might have affected the attraction of proto and early historic ages. It is guessed that mineral composition includes yapas, mica as well as gold. And also Ridiyagama is recognized as a gem zone which is excluded from the major gems manufacturing region of the island. These resources might have been used to fulfill the requirements of people from this area as well as from other area from the early historic period. Metal and glass ovens found from Ridiyagama and the Samanala Wewa related to Belihul Oya provide great hints on the resource usage of this era. Several inscriptions can be recognized describing this fact.

Because of the environmental tendencies described above, this zone won the human attraction from the primary Iron Age. The activities which were slightly established in the proto historic age, little by little got enhanced and organized with the usage of irrigation techniques, resource utilization and commercial relationships. With the involvement of Buddhism, all the human activities were reorganized with a new background. A small scale centralized field was growing around Ridiyagama, because

it had geographic features which were supportive serve people as an exchange center among various human settlements.

It is important to recognize the root of the human settlements which are located in the lower Walawe valley. A number of questions arise, when examining the above fact. Whether it was connected to a centralized core like Thissamaharama which was growing from early historic ages or grew depending on the cultural and technical enhancements of the internal Mesolithic sites are two points to consider. Another existing doubt is that it might get connected to a foreign root. The guess that the internal cultural enhancements affected this area can be highlighted than the others, because there are some evidences of a Neolithic era related to Horton Plains which is connected to the Walawe valley and megalithic burials related to Rathnapura which is also located near Walawe valley. But the most reasonable guess according to the remaining evidences is that human settlements were highly influenced by early historic cores. Anyway the distribution pattern of the sites depicts that this area had relationships with that kind of cores and other external areas from the early historic age. Therefore it is fair to guess that Godawaya harbor was used for naval activities of those human settlements from the early historic age. By entering to the River Walawe through the Godawaya harbor, travelling along the river and getting connected to different areas is possible. Therefore naval elements can play a major role when recreating the cultural landscape of Godawaya in Proto and Early Historic ages.

Cultural Landscape of Godawaya Harbor in Late and Middle Historic Ages

Environmental and cultural factors can be categorized under a number of groups, when studying the cultural landscape of Godawaya Harbor.

- Unique physiographic conditions
- The special inscription which can be seen below the Dagaba
- Post imitated Roman coins which were found from 6 km to the north and 8 km to the west from the site

The temple in this site belongs to 1st-3rd centuries. An epigraphy created by Gajabahu 1 proves this fact (Paranavitana, 1983: 101). It explains the relationship between the temple which is currently called Gota-Pabbatha Vihara and the harbor called Goda-Pawatha. The following line is included in that epigraphy – "Sidham godapawatha patanehi suka suriy raja gamini abhaya viharata dini". And also Mahawansa mentions about a Gota-Pabbatha Vihara. It is connected to the ruling period of Mahallakanaga who came to the power after the death of Gajabahu. Mahallakanaga who was the uncle of Gajabahu acted as the ruler for about six years after the death of Gajabahu. He has also constructed temples and monasteries such as Sejalaka in east, Gotapabbatha in south, Salipabbatha in NagaDeepa, Beejagama, Thanaweli, Thoba in Ruhuna, Nagapabbatha and Girihalika according to Mahawansa. Having the same name for both the temple and the harbor demonstrates the socio-economic, political, geographical and architectural relationships between those two.

In addition to these evidences from the literature, archaeological residuals which are discovered in this area can also be considered as important factors. Especially coin collections, which were found in places like Beragama which is about 1km away from Godawaya may be useful (Walburg, 1998: 52-60). They are considered as imitated Roman and Indian

Roman coins which belong to the 2nd half of the 4th century and the 1st half of the 5th century respectively. These discoveries can be related to the naval history of the island.

After western nations got involved in direct transactions with Sri Lankans, the priority given to Tamil intermediates were reduced little by little. Because of this direct trading with other nations, Sri Lanka became a major trade center in the Indian Ocean. In the journey towards becoming a remarkable center of the ancient maritime Silk Road, many factors got involved. Island's location in the Indian Ocean, affects of water currents and monsoon winds and the service provided by harbors of southern coastal areas are some of them. The interesting factor here is that there are no evidences of a broad commercial process associated with the Kirinda Harbor, which is related to Thissamaharama, the capital of Ruhuna. Reefs which are distributed around the Little Basses and Great Basses in front of the Kirinda Harbor may be a reason for lacking the attraction of sailors. Because of this reason Godawaya Harbor gained much popularity than the Kirinda Harbor.

Evidences about human settlements near the monastery have not been remained. It may be due to a number of reasons such as agricultural usage, digging the land for clay and cutting bricks etc. Bricks for building houses were made by drying soft clay which was mixed with cultural layers. About fifty archaeological residuals have been destroyed as a result of the above actions. There are some records of human settlements with high density on the Walawe River banks. From the excavations done by Prof. Raja de Silva in 1997 near the Amabalanthota Rest House and the Girihandu Seya, rulated pots belonged to Thissamaharama type have been discovered. These are belonged to western proto types.

Discovery of a sealed coin from the trench 09 layer 03 of Godawaya excavations in 1997 leads to a problem. (Weisshaar and Roth, 2001) This is the main evidence which explains the long distance businesses between Indian subcontinent and its neighbouring countries. But it is difficult judge whether this coin is aged a lot based on the atmosphere within which it was found in.

The same problem appears with the Laxmi coins which were discovered in Godawaya excavations. Recognition of imitated Roman coins belong to 4th and 5th centuries hints about the large scale commercial background existed in the ancient Ruhuna kingdom. It can be believed that most of these coins were molded within Sri Lanka. All these coin collections were found in places which are not distant from Godawaya.

Another important discovery was done about the commercial activities of Godawaya in the 1995 excavations. It is the well secured clay seal which was found in trench 05, layer 02. It contains a picture of a lion looking at the right side, similar to the lion coins of king Mahasen. A similar seal was discovered in 1997 excavations. These seals were used for tasks such as merchandise coverage, taxing and customs duties etc. Custom officers have used this seal with the king's emblem to make merchants free from taxes and to allow them to travel upwards the river. These kind of seals have been noticed in Thissamaharama too. According to these evidences, Godawaya harbor played a remarkable role in the trading activities of the southern coastal region at least from the ruling period of Gajabahu I. Chinese clay pots and the transportation and storage clay pots of the celadon types which were found in the trench 03 layer 02, seem to be the oldest of those types found in the island (Weisshaar et al, 2001).

Godawaya field is divided into 3 main sectors.

1. GODA3 - Monastic Complex
2. GODA1,2,3 - Huge Residential Area
3. GODA5 – Sea Port

Information about the GODA5 sector which is known as Sea Port is important. About 8 stone pillars were exposed by the tidal waves which occurred in the southern coastal area in 1997. Residuals of a particular structure could be recognized as a result of the excavation done later related to this (ibid). It may be used for some task related to the harbor. There are some evidences of a relationship between the Walawe River and the Sithrakallu levaya.

Drainage of water from River Walawe to the Sithrakallu tank was explained in the land registration plans of 1900 and above. This is separated from Godawaya only by a sand barrier which is a few meters wide. Therefore a doubt arises whether the tank was used for some task related to the harbor those days. James Cordinar who is a traveler as well as a monk has provided some details about the Godawaya bay (Cordiner, 1983). But it is not clear whether the bay was located in the current location or closer to the lagoon which is to the west. How the fishery villages and the harbor were located in the first half of the 19th century can be understood by these records. According to the perceptions of the fishermen of the area, Godawaya bay is the safest landing location associated with the lagoon. There is a belief that the Muslims who were distributed in the 15th century, in coastal areas like Hambanthota, got into the island through the Godawaya bay. When examining the above fact and all the other evidences found from excavations, Godawaya bay fulfills all the requirements to act as a remarkable ancient harbor. The above mentioned epigraphy plays a major role here. It is located near the rock plain which is to the North West from the Dagaba, facing the harbor. Two assumptions can be made considering the location and the content of the epigraphy.

1. Since it is located in the center of the monastery complex, it might be used to communicate to the visitors, the economic and political power the monastery had. This was for a religious purpose, thus being located near the harbor is not necessary,
2. The second assumption is that it may be used to make the merchants and sailors aware of taxes and custom regulations of the harbor. This will be correct if the epigraphy is located near the harbor and sailors passing it can see its content.

When considering all the evidences as a whole, the following assumption can be made. The architectural structure related to Godawaya bay is really interesting. It is unique and there are no records of a similar structure in the island. Any way there are not enough information to combine this with harbor activities. According to categorization details, these structures and the structure of the monastery that belong to the same time period.

Human settlements are distributed to few miles along the Walawe River. The earliest evidences of pottery found from these areas belong to 1st century and the latest evidences belong to 6th and 7th centuries. Houses might have been built using clay and wooden materials. But when considering the bricks discovered, it can be guessed that stable materials were used for some buildings, not only in the monastery and the harbor, but also in the villages. They might have found these materials in the clay mixed soil of the Walawe valley.

About 15kg of ironic soil which were found in the GODA4 explorations hint about a metal industry (Weisshaar et al, 2001). A big amount of bones, glasses and pottery have been found. Discovery of two clay seals is another remarkable fact. Among the regional clay pots, Near Eastern, Roman and Early Chinese Celadon Wares were also recognized. Identification of Chinese ceramics which belong to kingdom 3 may be great evidence which demonstrates the earliest relationships between China and Sri Lanka.

C. Lassen and R.L. Brohier try to recognize the Godawaya harbor in combination with ancient classical roots. For instance Tolami's Cape of Dionysos and Odoke can be taken. Earning a considerable recognition through the writings of about 40 worldwide writers, demonstrates the strength of the international relationships ancient Sri Lanka had. Some of these writers were Onesicritus of 4th century B.C., Megasthenes of 3rd century B.C., Eratosthenes of 3rd century B.C. and Strabo from 64 B.C. to year 24. It is not reasonable enough to judge Manthei as the only harbor which was coupled with marine activities of the ancient Sri Lanka, since this island was a main trade center which interconnected a number of nations from the red sea to the South East Asia and it had a number of amazing bays, lagoons, natural harbors and river mouths which can definitely be used for marine activities. The distribution pattern of Roman coins found in Sri Lanka shows some favors to highlight harbors in the wet zone. The unique location of harbors in the southern Sri Lanka provides a venue for sailors to meet each other who enter the Indian Ocean from the east and the west of the island. The nature of the winds and the water currents play a major role here. Medieval literature proceedings mention about harbors of southern Sri Lanka, but the involvement of these harbors with marine activities seems to be older than that period.

Especially harbors like Gota-pabbatha (Godawaya), Deva Nagara (Devundara), Nilwala Thiththa (Mathara), Gimha Thiththa (Ginthota) and Bhema Thiththa (Benthota) are mentioned in these sandesha kavya. Most of these harbors in the South and West are named 'Thiththa' (Bopearachchi and Wickremesinhe, 1999: 42). These harbors can easily get connected to internal areas of the island. Being located near river mouths is another special feature. When considering about the South India, most of the harbors including Ponnani, Muziris, Porakad, Korkai, Karikal, Poduke are located in relationships with main rivers. Even though all three South Indian capitals are located more internally in the country, all of them have their own coastal harbors.

It can be assumed that ancient harbors lacked stages for lifting goods (jetty) and the transportation of goods to internal centers was done using small ships or boats. Physiographic and environmental features of Godawaya are influential to go to an assumption like this. According to Somasiri Devendra, the native Sri Lankan ship and its sub categories should be able to travel safely in sea as well as the ocean. The ancient double log boat was completely in line with the above requirement.

A relationship between Godawaya and Ridiyagama can be imagined by examining the location of Godawaya near River Walawe mouth and the similarities of archaeological materials and potteries discovered from these two places. To explain this relationship it is important to pay attention to the explorations done on Ridiyagama. The ancient human settlement was located around two ancient tanks. Since British regulatory bodies tried

to enhance the irrigational system in the beginning of this century, some of the important evidences about the human settlements have been destroyed. According to Brohier, the water channel which is about 5 miles long and starts from the Liyanagahathota dam is the main nourishing area of this tank (Brohier, 1934-35). It was constructed according to the mechanisms of ancient water channels. Architectural structure can be seen clearly in the shallow water on August and September every year due to drought.

Excavations were done on this (Bopearachchi, et al., 1999). 6 layers and 45 contexts were discovered from R.D.G. 1 excavation. Layer 4, context 10 discovers B.R.W. and the layer 4 context 21 records about copper residuals, Mica, beads, BRW, Terracotta equipment and burnt carbon (ibid). Context number 26 and 31, which belong to the earliest layer record on some parts of the pots and copper residuals, denoting the beginning of the human settlements in this area. These evidences hint about a time period from 4th century to 7th century. Seven layers could be recognized from the R.D.G. 3 excavation (ibid). None of the physical residuals found from these layers belong to a period after 7th century and it is a noticeable fact. Discovery of about ten ovens and hundreds of iron slags hints about a large scale metal industry related to this site. More than 20 iron and glass ovens were examined by the 1996 excavations in Ridiyagama. Even though these ovens differ technology wise from the ovens which were found near Samanala Wewa and work using wind, there should be some similarities. Residuals found near Samanala Wewa runs in to 2nd century B.C. When studying the cultural landscape of the region two important facts to consider are,

1. Metal industry of Samanala Wewa and Ridiyagama belong to early centuries

2. Geographically both of these sites are connected with the Walawe valley (Samanala Wewa site is located associated with Walawe and Belihul Oya valley)

Then the assumption that can be made through these facts are, the manufactured items of this region reached the southern coastal area along the River Walawe. If these goods were exported, then Godawaya might be practically the closest harbor. These assumptions are quite compatible with medieval Islam writings. They mention that metal from the Serendib Island was used for making swords.

BRW have been discovered from Ridiyagama, along the River Walawe as well as shipwreck from Godawaya. As a result of the Thissamaharama – Akurugoda excavation which is being carried on as a joined effort of Sri Lanka and Germany, not only early historic BRW, but also Indo – Roman rouletted wares and Indian red polished wares were discovered (Weisshaar, 1998: 38-51). A large amount of beads which were made using various materials have been found in the Ridiyagama area. Among them Carnelian, Lapis Lazuli, Rock Crystals, Agate and Amethysts are special (Bopearachchi, et al., 1999). Pieces of semi-precious stone help to create an imagination about a bead manufacturing industry which was continued in this area. Another important fact is that Ridiyagama is a gem producing region which is located away from the main gem region of the island. Beads found from Ridiyagama show some similar features to the beads found from Arikamedu, Karaikadu, Uraiyur and Alagankulam – four main sites of South India. All the above facts nourish the imagination which can be made about the huge network of social and commercial relationships which was created by the location and features of Godawaya harbor.

Carnelian and Lapis Lazuli seem to be imported and prepared here. Indian Karshapana and imitated Roman coins were also imported. These clay wares, statues, beads and coins like archeological objects which were discovered in Ridiyagama and the Walawe River valley might have been transported in to the island after they have entered the country from Godawaya harbor.

In the present, about 8km along the River Walawe to the landside is suitable for marine activities. But it has not influenced the interaction of the harbor with Ridiyagama which is about 12 miles into the country. Water level of the river has been reduced because of the human reactions. Mainly, clearing upper river areas for cultivation during the foreign ruling periods has hugely affected this issue. The other causes can be soil erosion and use of river water for different irrigational systems. For instance Chandrika Tank, Ridiyagama Reservoir and Udawalawe Reservoir can be mentioned. The river turns in to a deep basin near Ridiyagama and there is a water level of about 4km from the river bed. The amount of water released from the Udawalawe Reservoir in monsoon periods is a reason for this water level increase. Therefore, we can finally guess that there might be naval transportation facilities available in the past even to more distant places than Ridiyagama, because at that time affects caused by humans on the nature were kept in a very lower level.

According to the previously described facts, a number of important conditions emerge, when studying the cultural landscape of Godawaya harbor.

- Existence of internal trade centers: They are connected to the river in a manner that they can easily reach the ocean. These centers were recognized in areas which were used to exchange and distribute imported and exported accessories through ships.

- Archaeological residuals which can be found near river mouths and valleys, have reached southern and western coastal areas as a result of marine commercial activities.

The path which was formed through Mannar strait was popular as an alternative way to reach southern Sri Lanka in ancient times. But due to various environmental phenomena, this path way has become a shallow one over time. And also this route to the south is dangerous because of the hidden coral reefs. Currently this type of reefs can be recognized in the South East part of the island. A lot of accidents were caused by these reefs during the British ruling period and the construction of light houses near Great Basses and Little Basses was a result of this. But more importantly these natural dangers only affected the ships which travelled to the open sea from Kirinda. Without examining these environmental factors, some are trying to relate epigraphical evidence about marine activities found from places like Sithul Pawwa to commercial activities. The sign of a ship with one mast found from Akurugoda excavations earns some importance here. Two pieces of BRW with the same sign were discovered in 1996 Ridiyagama excavations. The only factor that is highlighted by all these things is that the commercial transactions were successfully carried out in the southern coastal area overcoming all the barriers.

Ships travelling around the island have to face a lot of troubles due to South West Monsoon rains. But again the sea becomes calm by October due to weakening monsoon winds. This condition is safe enough even for smaller voyages to travel.

The activities of fishermen in southern and western coastal areas provide evidences to prove the above fact. And also the arrival of foreign nations in early B.C. periods is somehow related to south west monsoon rains. Merchants of western countries leave in July from Myos, Hormos and Berenice. With the aid of south west monsoon winds, they reach the harbors of western coastal area of India by September or October. Then they have a period of about one month in their hands to continue business there. Again they leave India by November with the aid of north east monsoon winds. These merchants did not have a requirement to reach the east of Sri Lanka or India, since the items manufactured in the east could be easily found in the western coastal plain. Naval history records how South Indians act as intermediates between Roman and Sri Lankan merchants. A voyage full of goods left from Occident cannot reach Southern Sri Lanka before October. And also this is a good time period to reach the eastern coastal region of India.

Medieval and Colonial Cultural Landscape of Godawaya

It will be useful to pay attention to the Hambanthota district to which Godawaya belongs, in order to realize its medieval and colonial cultural landscape. The word Hambanthota was added to the Sri Lankan's vocabulary from the 18th century. Cordinor's idea is that this name has some relationship with the journey of Governor North in 1800. Another belief is that the place which was used to hide ropes for hunting elephants later got the name 'Hambanthota'. Forests of Walawe Valley were good habitants for wild elephants. The meaning of the term 'Azanos' used by Tolami in his maps was 'the areas which elephants use to feed'. This term was used by Tolami to denote Walawe River in the 2nd century. Those days Sinhala kings secured two things very enthusiastically. They were elephants and salt of Hambanthota. Both Portuguese and Dutch people have marked Hambanthota as well as Godawaya in most of their maps. Several names such as Mago, Magamme and Maleteuer were used for these areas.

Magama was the capital of ancient Rohana. Dutch regulatory bodies decide to locate Malay people in Hambanthota and related areas. It is believed that they have entered the island through Godawaya Harbor in 14th and 15th centuries. Records show that this area had been completely covered by forest and was not suitable for humans to live during the periods of foreign rulers. For example James Cordinor has named Magampaththuwa as an area covered by forest with no sign of agriculture (Cordiner, 1983). It had been really difficult to pass this area and water was an extremely limited resource there. Therefore ocean was the only alternative to pass this area. Ocean way was also dangerous due to hidden reefs during this period. Sunken ships near Great and Little Basses forts prove this fact. This kind of a sunken ship can be found a few sea miles away from the Godawaya Harbor site. Knox says that Hambanthota Sea is not suitable for naval activities.

The open muddy field between Kirindi Oya river mouth and the current Kirinda village which is about half or quarter a mile wide and distributed about 2 miles in to the country is known as the Karijja Wela. In the place where it is opened to the sea, residuals of marine living beings can be discovered. There is a belief that it acted as a large bay providing a safe anchoring location for ships. Kirinda Village was entirely full of Muslims in the colonial ruling periods.

Summary

The above described detailed information about the evolution of cultural landscape related to Godawaya can be summarized in the following manner. Human activities started in this area from the prehistoric age. Even though no direct evidences were found in the harbor site, it can be assumed that there were some relationships with nearby prehistoric sites such as Bundala and Ussangoda. When paying attention to time frames and places like Horton Plains which are connected to Walawe valley with some pre historic signs, a distribution from these places in to the country can be recognized. In the proto historic period, human settlements that used primary iron were distributed in this region. Fertile agricultural lands, River Walawe and the ease of getting water highly influenced the establishment of these settlements. This situation can be clarified with the discovery of Habareththawa, Maha Pelessa and Mahagal Wewa like megalithic sites and early historic BRW sites. Ridiyagama provides strong evidences about the growth of the region as an improved production site with advanced business transactions. How Godawaya grew as a harbor during this period utilizing its unique geographic and environmental features can be realized through the archaeological and literature based evidences. As a result of this, a network of relationships and a layer of human settlements were established interconnecting coastal areas like Godawaya and internal places like Ridiyagama.

The main layer of human settlements of Godawaya runs to the 6th century, according to the excavations. And also the human settlements in Thissamaharama Akurugoda seem to be diminishing parallely after 5th century A.D. The reason for the gone sift was that the capital of southern Sri Lanka which had been established related to Magama in the south east portion moved to south. It can be caused due to environmental, economic or political reasons. A noticeable reduction of the human settlement layer can be seen by the 7th century. It might be due to environmental conditions like sea erosion and blocking of rivers etc.

But some evidences could be found even after the 7th century in this region. Southern part of Rohana – Sri Lanka had been divided into two provinces by 11th and 12th centuries. River Walawe was considered to be the boundary between those two. Those days River Walawe was called Maha Nadee. And also the temporary ruling center of Vijayabahu I in the 11th century – Sippaththalaka was located between Ambalanthota and Katharagama. King Dappula of Rohana has built a temple near Pandi Kulama tank in year 659 and Parakramabahu I has repaired the Pandu Kombala tank. This is believed as the ruined tank located near Ridiyagama and known as the Pandi Kulama tank today.

West part from the Walawe River was known as the Dolos Dahas Rata. Maha Naga Hula was the capital of it. This was also mentioned as Manawulu in literature writings and Paranawithana says that this is located near the Ramba Vihara which can be found when one walks about 8 miles from Ambalanthota along the Embilipitiya road. This is a very famous place related to the fights of Parakramabahu I and Vijayabahu I. Details about few roads of this period are important for recreating the cultural landscape. The story of Vijayabahu mentions about a coastal main road (Werala Maha Maga). A number of other main roads can be recognized in the micro area.

- Road from Maha Naga Hula to Udun Dora
- Road from Maha Naga Hula to Buththala

That means the cultural landscape of the region continued to evolve consistently even after the 7th century.

Medieval and colonial cultural landscape of Godawaya can be analyzed with a basis like this. As mentioned earlier, after the 7th century we can see a decaying of human settlements in this region. It can be assumed that a number of environmental and cultural factors together caused this decaying. Any way this does not mean that the region became isolated after the 7th century. There are many evidences which depict the human reactions in this region after this particular time period. For instance, Chuulawansa, which talks about the actions of Maha Parakramabahu related to Rohana can be considered.

Centralized location of the region might be supportive to get combined with the commercial activities at that time.

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