An Investment for the Future – Maritime Archaeological Explorations in the Post-War regions of the Eastern Coast of Sri Lanka

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Abstract

The Maritime Archaeology Unit (MAU) of Central Cultural Fund (CCF) is actively involved in protecting the UCH of Sri Lanka, since it was founded in 1992. During the last few years essential steps have been taken to develop the infrastructure and the human resources of the unit or just use MAU. Six archaeology graduates who did a special training under the MAU were recruited in 2011. They had gone through series of trainings such as swimming, snorkelling, life saving, first aid and basic diving. They were introduced to the fundamentals of underwater archaeology. They were encouraged to start their post graduate studies and to gain their international diving license, such as PADI or the SSI. After a year of training they were directed to carry out an underwater archaeological investigation along the East coast of Sri Lanka, from 13th of June to 26th of August 2012. The exploration was scheduled at a favourable moment to test their skills and training. The trainees were under the supervision of four senior maritime archaeologists. The north and east parts of the country were rescued after thirty years of terrorism in 2009. More than two years were taken to secure the area from post war hazards such as land mines. For the whole MAU team this was a new experience and an opportunity to search this area after many years. The team uncovered over 16 shipwreck sites and 4 underwater archaeological sites in the region.

Key words: Archaeology Graduates, Maritime Archaeology, MAU, East Coast, Sri Lanka

Research History

The beginning of maritime archaeological studies in Sri Lanka goes back to as early as 1960s, but systematic field and research activities started with the Galle harbour project in the year 1992. Under the guidance of maritime archaeologists of Western Australian Maritime Archaeological Museum, Australia and Amsterdam Museum of Netherlands diving activities began with the help of the local organizations. Combining the Archaeological Department of Sri Lanka, University of Kelaniya, Postgraduate Institute of Archaeology (PGIAR) and Central Cultural Fund (CCF) various projects were carried out to develop and enhance maritime archaeology in Sri Lanka. Most of the exploration work was based inside the Galle harbour. During this exercise, steps were taken to train a local diving team and ten archaeological graduates from various disciplines between 1995 and 1999. The training activities continued over several weeks, and after finishing training the trainees were again sent to their usual land archaeological projects. Accordingly, a new Maritime Archaeological Unit was created with the background of undertaking the exploration of the Avondster Project which started in 2001 and continued until 2004. The primary exploration was the foundation for creating MAU and in 2001 the trainee graduates who had participated in the Avondster Project were permanently absorbed in the MAU.

The maritime archaeologists and divers had the opportunity to work with many foreign abroad maritime archaeologists and learn from their expertise. However, due to circumstances caused by the Tsunami disaster, most of the data and artifacts that were discovered in previous years were totally destroyed. After a few years, some maritime archaeologists and conservators who had trained with the unit left and as a result in 2010 the number of divers remaining in the unit was reduced to four. The remaining team was not sufficient to recover our history from the sea around our motherland, or to properly manage our heritage. Therefore that team organized a number of workshops in order to uplift the human resources in this field. Over a period of time a number of field schools sponsored by UNESCO, ICCROM and CCF were conducted both nationally

and internationally. During the workshops conducted by the MAU, graduate students of archaeology from national universities got the opportunity to participate and work with the maritime archaeologists. This was considered to be a valuable step in the process of uplifting human resources for the future of the MAU.

Progression of Human Resource in the field

The dangerous terrorism over the last 30 years finally ended in May of 2009. Maritime archaeological explorations that were previously limited to the Southern and Western coasts of the Island could now be carried out all over the country. With this need of excavating the post war regions, a team consisting of ten members was taken into the unit. The main qualification for membership was that the member should have been previously engaged in a field school. After selecting ten such candidates, they were considered as the trainee graduates of the MAU. They were then trained in swimming, snorkelling, life saving programmes and finally they were recommended as licensed divers internationally by giving them international diving licenses. After completing those stages some of the trainees were trained in conservation activities. The trainees were then enrolled in the MSc degree in Archaeology conducted by PGIAR, and also supported in improving their English and Tamil language skills to better communicate with other communities within and outside Sri Lanka.

During their training period, the candidates were taught how to referring to library items, use internet resources as well as studying the documents of the Department of Archives. Boat handling, compressor usage, and diving gear maintenance were practical activities that trainees had to perform. In addition surveying, photography, shooting underwater video footage, as well as survey techniques were taught to them using practical events on land. After that, they trained in map reading, communication and navigation which were conducted by the College of Fisheries and Nautical Engineering. New trainees were trained for about a year and they were guided to work in maritime archaeological sites of the eastern coast of the Island between June 13th and August 26th of, 2012, with explorations over 3 main districts in eastern Sri Lanka. There they discovered new maritime archaeological sites at which time a sequence of experiments were conducted. The trainees were able to explore the new found sunken wrecks and they recorded another 4 archaeological sites during their excavations.

Aims of the explorations

Recording data of maritime archaeological sites of the eastern coast and surrounding areas was the basic goal of these explorations. Other goals of the project were to protect the archaeological heritage of the explored areas and motivate the public regarding the above idea to find out other sites which are recorded but not presently recognized. Exploring these sites both physically and by using remote sensing techniques was also a major aim of this project.

Referring literary and electronic sources

Before the explorations, the libraries of Galle and National Archives were used by a number of members of the exploring team to search for primary and secondary literary sources that discussed the various sites. The team was divided into two, one engaged in referring to information obtained by diving at the sites and the other team engaged in observing the archaeological facts of the surrounding areas. Using the side scan sonar equipment graciously lent to the National Aquatic Resource Agency (NARA) team from the donated - the artefacts of the Trincomalee seabed were discovered. Uppuveli and Irakkandi areas which belong to Trincomalee were totally explored during the project. During the field recording, photography, video films, sketches and site plans under sea were done by the new explorers themselves with the guidance of senior archaeologists.

Background of the Exploration

The Maritime Archaeological explorations over the eastern province of Sri Lanka

According to the estimate of 2012, it was decided to carry out an exploration along the eastern coast of the Island. Explorations were carried out in the district of Trincomalee, Batticaloa and Ampara of the Eastern province region between 13th June and 26th August 2012, adopting following 3 steps:

- 1. Exploration of the Trincomalee District
- 2. Exploration of the Batticaloa District
- 3. Exploration of the Ampara District

Exploration over Trincomalee Districts

The exploration related to the Area was done from the 13th of July until the 31st of July, 2012. There, archaeological sites into wrecks were located; one each from Uppuveli

and Irakkandi. Additionally, the sea between Koneshwaram Hindu Temple and the Harbour which is known Swami Rock was also explored.

The wreck HMS Diomede which was found in the Uppuveli area

Our team was able to discover the ruins of a wreck at 140 feet depth, 3 km away from the coast of Uppuveli, an area particularly called Silver Beach. While the explorations were ongoing in the area, valuable information was discovered by our team doing library research. Further information was found through internet sources, according to which this wreck was ordered on the 14th of August, 1779. It was built by the institution of "James Martin Hill



Fig. 1 Artifact found from HMS Diomede in Uppuweli. (W. M. Chandraratne)

House". After finishing the construction, its first sailing was on the 18th of October, 1781. This wreck was specially built for coastline services during the American Renaissance war period. Two missions done by this vessel have been recorded. One was the capture of the South Carolina in 1782 and the capture of the Indian Ocean in 1794 (Clerk and Wilson, 1964: 200). Records of HMS *Diomede* wreck include photography, videography, survey, and drawing sketches. About 18 cannons were scattered around the vessel. A large number of small cannon balls were scattered around the site, as well as a large number of broken bottles and timber and metal parts (Fig. 1).

The wreck found from Irrakkandi area

This wreck was discovered at a distance of 2.5 km away from Irakkandi lagoon in the

Nilaveli region known as Coral Islands. And it was located at a depth of 7 m. Here also the exploration included photography and sketch drawing. But as the wreck had sunk in accessible



Fig 2 Irakkandai Shipwreck. (W. M. Chandraratne)

shallow waters, a lot of damage occurred to the wreck. Therefore evidence which could be used to identify the wreck was destroyed by treasure hunters, and by explosives used to kill fish in the sea. The wreck was built using iron and it was about 90 m in length. The bow and the stern could be identified easily, as also the propeller. Though the hull had been broken in to some parts had been well preserved. The parts of the engine were scattered in many places. Three anchors were identified, but no records were found regarding the owners of the vessel (Fig 2).

Swami Rock near the Koneshwaram Hindu Temple

During the exploration over this area a huge amount of valuable evidence was discovered. Among the evidence found were the tips of stone pillars, and polished stone slabs. This evidence was discovered after two days of diving activities. According to the history of this place, a religious place constructed of 1000 stone pillars was situated here. During the Portuguese period it had been demolished by them and the ruins dropped away from the rock into the sea.

1. Exploration over Batticaloa Districts

SS Lady McCullum

During the exploration of the Batticaloa District a small area called Kayankerni, in the Vakare region was explored. Three kilometers away from Kayankerni coast there was an iron wreck scattered on the seabed. A local diver named Mr. Kolabage Jagath Lal gave the team the information regarding the wreck. According to the information obtained from the fishermen of the area, this wreck was identified as the "SS Lady Mc Cullum" which had sunk during the British rule in Sri Lanka, but future explorations could change this idea. The explorations over other naval sailings discovered in this area were explored only for 2 to 3 days. The main goals when accessing the region was to identify the nature of wrecks scattered around the sea bed, survey the wrecks, draw sketches, photograph and videotape the wrecks, and calculate the GPS values of the sites. This wreck was scattered on the seabed at a depth of 17 m and many parts of the site were totally destroyed. The saved parts were scattered over a large area, but the bow and the stern were easily identified. The propeller and the shaft were preserved as well. Two boilers and 3 iron anchors were found there, the anchors being from the bow,

the stern and from the middle part of the wreck. From the remaining evidences it could be calculated that the length of the wreck was about 71 m from bow to propeller, while the width was about 13.8 m.

The British Sergeant wreck

Five km away from the Kayankerni coast of Vakare area in the Eastern province, another wreck was found scattered at a depth of 25.5 m. By the information that came from local villagers, it was considered that this is the wreck, the *British Sergeant*, sunk during British rule, therefore during the same period as the *SS Lady McCullum*. This may also change as a result of further investigation. This wreck was the most protected wreck of all the wrecks explored in eastern province from Trincomalee to Baticaloae by the MAU team during this project. The ship was broken in to two parts; one part was 75 m long, while the other part was 52.8 m. Its width of the stern was about 16 m. Since the exploration was done in three to four days; only sketches, photographs and survey plan were completed during that time. According to the fishermen in this area, the wreck sank because of bombing attacks during the Second World War.

Other archaeological heritages around Kayankerni

Stone Bridge

This is located across the Kayankerni lagoon in the Vakare region between Baticaloe – Tricomalee A 15 road. It was constructed from west to east and at eye level. Stone pillars of the bridge lay scattered up to about a 200 m distance. Some pillars have fallen down across the lagoon. The pillars have sunk below the lagoon water up to a certain level.

Wrecks around Pasikuda

Three wrecks were identified during the exploration over Pasikuda coast line. The naval wreck was identified at a depth of 9 m. Parts of the vessel were scattered in many areas and many were destroyed, but the propeller and the propeller shaft were well protected, while the bow and the stern of the vessel could be easily identified. During the observations over the wreck another iron wreck which was somewhat larger was discovered. From the explorations done up to now, the name of this vessel could not be identified.

Pasikuda Boiler Wreck 1

The above mentioned wreck was situated 3 km away from Pasikuda coast at about 6 m in depth. It was built with iron and steam-powered. Among the remaining evidences of it there were three boilers found and the propeller and propeller shaft were well protected. Two iron anchors situated near the bow of the wreck and another anchor at the middle of the wreck. During the excavations the team surveyed, drew sketches, photographed, videographed and calculated the GPS value of the site.

Pasikuda Boiler wreck 2

The above mentioned wreck was located 50 m away from the previously mentioned boiler wreck 1. Three boilers were discovered there, but one was almost destroyed. The propeller and the propeller shaft were also present. There were four other archaeological sites around Pasikuda. Several architectural items which belong to the Dutch period were identified around the Pasikuda coast, among them the remains of a jetty and the base of a warehouse. During the explorations in Kayankarni and Pasikuda areas the fishermen of the area Misters S. Novil, Eeshwaran Prabhu and Velmurugan Arunlath helped the archaeological team greatly.

Wrecks around Batticaloa

Batticaloa boiler wreck 1

This wreck was located in the Navaladi area of Batticaloa. This wreck was found 3 km away from the Navaladi lagoon, at a depth of 9 m. Of the boiler wrecks explored during MAU explorations, this was the only wreck which was powered by five boilers. Here also, the propeller and the propeller shaft were well preserved. The evidence of the wreck was scattered on the sea bed protected well enough to identify the bow and stern. The maximum length of the wreck was about 102.8m (Fig. 3).

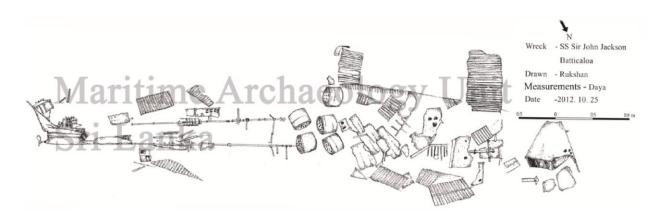


Fig. 3 Sketch plan of Baticaloe boiler wreck-1. (W. M. Chandraratne)

SS Brennus

The Nawaladi lagoon situated in the Nawaladi area of Batticaloa is very close to Silamunei coast of the eastern province. The wreck lies at a depth of 7 m, and is 3 km from the Nawaladi lagoon. The people in this area use the word "Sakkara Kappal" to name this vessel. Here 'sakkara' means jaggery and 'kappal' refers to the ship according to Tamil language. Boilers could be seen in the wreck and there is also the propeller and the propeller shaft present.

The wrecks around Kalmune

The explorations carried from Kayankarni area of Batticaloa were taken up to Kalmune coast of the Ampara district. From the explorations done there, four wrecks were recorded. Two of them were in the deep sea and due to bad weather during the time our team was unable to explore those two. However we were able to explore the other two wrecks during that time.

Kalmune boiler wreck

This above mentioned wreck was located in the Kalmune-1 coastal area of the Kurundedi village in Kalmune area of Ampara district. Three km away from Kalmune-1, on the coast line facing the Kodieththam mosque. The wreck lay at a depth of 12 m. This wreck was found in the deep sea. The remains of two propellers, a propeller shaft and three boilers were identified. The length of the wreck was about 102.80 m and the width was about 33.7 m.

Kalmune iron wreck

This wreck was recorded at a depth of 9m and located 50 m away from the Kalmune boiler wreck. The engine parts could be easily identified among the greatly destroyed wreck.

1. Explorations around Potuvil area in Ampara district

As the third step of the eastern coast exploration project carried out by MAU of Galle, the team moved to Potuvil area in Ampara from Batticaloa. From the explorations done during the 19th to the 24th of August, 2012, facts regarding five wrecks were recorded and archaeological evidence regarding the religious place of Potuvil Muhudu Maha Viharaya was discovered during the exploration.

Akkareipattu boiler wreck

This is located in the Attalachchene area of Ampara district. This wreck was powered by steam.. The wreck had sunk very close to the coast line and therefore half of the wreck was covered with sand near the beach while the other half was covered with sea water. Although a permanent exploration was not done there, during a snorkelling survey the remains of the ship were identified. Several boilers were found and in the future further exploration should be done related to this site. There the guidance of Mr. J. Yogarasha was a great help for our activities.

Wrecks around Tirukkovila

Tirukkovila boiler wreck

This wreck was located two km away from the Tirukkovila coast in the Vinayagapuram area of the Tirukkovila region of Ampara. It lies on the seabed at 7 m. Due to the bad visibility of the sea water and with survey time being only relegated to one day, the shape of the wreck was not identified but certain facts regarding this wreck were discovered. This boiler wreck was powered with four boilers according to our initial discoveries.

Tirukkovila iron wreck

This wreck was also identified from the Vinayagapuram area of the Tirukkovila region of Ampara district. Certain parts of the wreck could be seen above the surface of the sea water and those parts had been destroyed by the treasure hunters of the area. From the

information collected from the villagers it was recognized this wreck had sunk in the recent past.

Wrecks around Potuvila

Komari boiler wreck

At four km away from the Komari coast of Potuvila region in Ampara district, this wreck lies at a depth of 8 m. The visibility was poor and as a result only three boilers were found, but later it was observed that the propeller and the rudder were also present. Due to the bad weather conditions we were unable to record any photographs, drawings or surveying regarding this archaeological site.

Omari boiler wreck

In the region where the above mentioned Komari boiler wreck is situated, about five km away from Omari coast line this wreck was found. Photography recording and drawing sketches were done here. The bow of the wreck is located at 7 m depth, and the stern lies at a depth of 18 m. During the exploration facts regarding the three boilers were identified and parts of the wreck were scattered over a large area. Unfortunately many parts were greatly destroyed.

Maritime Archaeological activities around Muhudu Maha Viharaya in Potuvila

The major objective of the exploration during the 20th to 24th of August 2012 was to discover facts regarding the Buddhist archaeological ruins of the religious place "Muhudu Maha Viharaya" which was considered to have sunk in the sea. There, from folk stories related to this fact it appears that at a certain period 'Buddha statues' and other architectural items could be seen above the surface of the sea. Therefore our team was in a hurry to dive in this area. Another story of the area tells us that the great lady "Viharamaha Devi" had landed on the island from this place. We started our explorations in the hope of verifying the truth or falsity of these stories (Weerakatiya,



Fig. 4 Exploration team-1. (W. M. Chandraratne)

2011: 1-10).

Experimented Region

The Experimented Regions were decided by the initial diving done before the explorations. And this region was

located 400 meters away from the temple to the east and 500 meters away from the coast line in the shallow sea. The depth of the region was between five and seven meters. The area consisted of huge rocks. The wind was blowing from east to west. Throughout the exploration, a rough nature could be seen in the sea. This roughness was increased in this region because of the stone pillars lying in the area.

Method

The simplest method used here was snorkelling and duck diving using the equipment we had in the experimental region. The basic method of 'swim- in- line' and through that duck diving was used. If we got any record of archaeological evidence or identified a place for further experimentation, a buoy was attached to the area. We entered the experimental site after swimming about 500m wearing diving equipment. The areas that were identified by a buoy during the initial snorkelling survey, detailed exploration were then started from that point. There the divers went throughout the site and were able to collect some photographs and videos with ecofacts related to the site.

Results

After the explorations a few items having architectural value were identified. There was a circular shaped place which was considered to be a man made creation was which was highlighted by a buoy. Much evidence which could be considered as being created by humans was identified by the basic snorkelling survey. In further conservations, these evidences were found to show the shapes of moonstones, balustrade stones as well as bricks which are closely related to the construction of Buddhist temples and their architecture too matches the idea of temple items. Unfortunately, facts or evidence to prove this idea were not found; for those questions further exploration is required.

Conclusion

The Maritime Archaeology Unit (MAU) of Central Cultural Fund (CCF) is actively involved in protecting the UCH of Sri Lanka, since it was founded in 1992. Last few years essential steps have been taken to develop the infrastructure and the human resources of the unit or just use MAU. Six archaeology graduates who did a special training under the MAU were recruited in 2011(Fig. 4). The terrorism over the last 30 years finally ended in May of 2009. Maritime archaeological explorations that were

previously limited to the Southern and Western coasts of the Island could now be carried out all over the country. Explorations were carried out in the district of Trincomalee, Batticaloa and Ampara of the Eastern province region between 13th June and 26th August 2012, adopting following 3 steps: Exploration of the Trincomalee, Batticaloa and Ampara Districts. The well trained team uncovered over 16 shipwreck sites, such as HMS Diomede wreck, Irrakkandi wreck, SS Lady McCullum, British Sergeant, Pasikuda Boiler Wreck 1, Pasikuda Boiler wreck 2, Batticaloa boiler wreck 1, SS Brennus, Kalmune boiler wreck, Kalmune iron wreck, Akkareipattu boiler wreck, Tirukkovila boiler wreck, Tirukkovila iron wreck, Komari boiler wreck, Omari boiler wreck and 4 underwater archaeological sites (Muhudu Maha Viharaya in Potuvila, Kayankerni Stone Bridge and Swami Rock near the Koneshwaram Hindu Temple) in the region.

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Biography

W. M. Chandraratne (b. 1968), working as a Research Officer of Maritime Archaeology and Officer- in- charge of the Maritime Archaeology Unit (MAU), Central Cultural Fund (CCF) of Ministry of Culture and the Arts, Galle Fort, Sri Lanka since 1994. He has participated in several workshops and training programs on underwater archaeology and related subjects and published over 20 research articles both in reputed local and international journals.