

MARINE ARCHAEOLOGICAL RESOURCES IN INDONESIAN WATERS AS MARINE TOURISM DESTINATION: CASE STUDIES: LIBERTY WRECK IN TULAMBEN, BALI AND MV BOELOENGAN NEDERLANDS IN MANDEH BAY, WEST SUMATRA

by:

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Abstract

Nowadays, Ministry of Marine Affairs and Fisheries is in trying to introduce the concept of Maritime Conservation Area that integrates the marine archaeological resources or underwater cultural heritage such as an ancient shipwreck, the site, the environmental ecosystems, and the local community. The purpose of establishing a Maritime Conservation Area is to protect the potential marine archaeological resources with a legal protection by law. Marine archaeological resources are the historical evidence for shipping, trading, and travelling activities of humankind since long ago. The shipwreck site could be a valuable object for further research and education and it has an economic value as a marine tourism destination that could benefits the local community. After designating the site as a Maritime Conservation Area, the shipwreck site could be developed to be a potential marine tourism destination in particularly as a wreck diving spot. This paper highlights the existence of several marine archaeological resources in Indonesian Waters that have potencies to be utilized as a special tourism attraction in this case as a wreck diving destination that could attract a lot of tourists from domestic and abroad. The shipwreck tourism destination could increase the economic life of local communities who reside in the vicinity of the shipwreck site.

This paper also would focus on the presence of the Liberty shipwreck site in Tulamben, Karang Asem Regency, in Bali and the MV. Boeloengan shipwreck site in Mandeh Bay, Pesisir Selatan Regency, West Sumatra, which could be utilized as the most important shipwreck diving destination in Indonesian Waters.

Protection by law, preservation and utilization efforts of those marine archaeological resources are important to support the development of marine sector in Indonesia that must be based on a comprehensive and integrated research which combines literature study, interviewing local community, diving activities, and the use of technology.

Key words: Marine Archaeological Resources, Marine Tourism Destination, Wreck Diving, Maritime Conservation Area, Liberty Wreck, MV Boeloengan Wreck

1. INTRODUCTION

Indonesia has the enormous potential marine resources. One of the marine resources in Indonesia that must be protected and managed properly is marine archaeological



resources. History proves that the geographical position of the Indonesian archipelago is a "crossroad" international cruise lines that provide a potential marine archaeological resources. The spread of location sinking-ship generally follow a specific cruise lines and known as *The Spice and Silk Routes*. With the wide water, the potential of shipwreck with its precious cargoes has a strategic value that will be useful for national development in all fields, especially education, economic, social, and culture (Ardiwidjaja, 2007; Wirasantosa, 2008). Marine archaeological resources can be protected by designating it as "Maritime Conservation Area" (MCA). Like other marine resource, shipwreck can be useful if we can develop this potential into assets that provide increased public awareness and knowledge of the history, technology, social and cultural rights; enhance economic impact to increase foreign exchange, and may improve the welfare of the community. The utilization of shipwreck if managed properly will also promote the local economy and improve people's lives around the site.

Marine archaeological resources in Indonesian waters that can be developed as marine tourism destination are *Liberty* shipwreck site in Tulamben Bali and *MV Boelongan Nederland* in Mandeh Bay, West Sumatra. Bali and West Sumatra are well-known by domestic and foreign tourists. Marine heritage tourism activities that can be developed in Tulamben and Mandeh Bay are a shipwreck diving tourism, snorkeling, swimming, sailing boating, fishing, fishing village, and cruising. This research was done to make a study on the use of alternative marine archaeological resources as a marine tourism destination, especially diving tourism. The results of this study are expected to be a reference for the government, especially local governments and other stakeholders in promoting development in the cultural-marine economy sector which is expected to improve the lives of local people in the coastal areas and small islands of Indonesia.

2. MATERIALS AND METHODOLOGY

The research was conducted in the *MV Boelongan Nederland* shipwreck site and in *USAT Liberty* Shipwreck Site. Data taken is data from visual observations, underwater photographic, and film documentation of shipwrecks, marine life, and the surrounding environment. In addition, it is also done interviews with local residents, resort owners, and relevant agencies about the existence of such a shipwreck and potential development in future. The method of data collection is by diving method and literature study such as historical literature about *Liberty* and *MV Boelongan* shipwreck, information about the environmental condition, the results of previous studies, and the data of spatial plans of local governments. Observation and documentation data are then analyzed to see the current condition of the shipwrecks and the sites, and assess the significance of the site to determine the potential use of these shipwreck sites which must be appropriate and in accordance with the conditions of the environment and local communities.

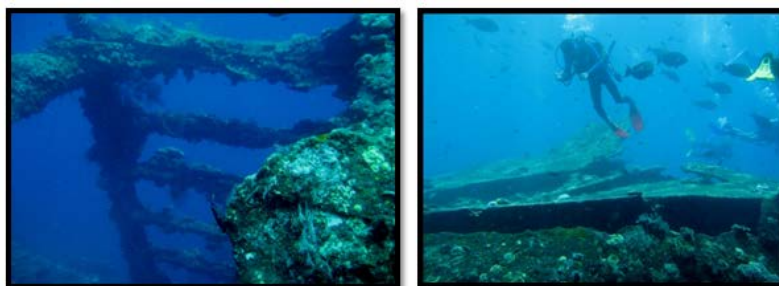
3. RESULT

1. *USAT Liberty* Shipwreck Site, Tulamben Bali

Administratively *USAT Liberty* is located in Pekraman Tulamben Village, Kubu District, Karang Asem Regency, Bali. She was US Army transport ship launched in June 1918. In January 1942, she was torpedoed by Japanese Submarine I-166 on January 1942 about 10 NM southwest of the Lombok Strait. In 1963, the tremors associated with the eruption of Mount Agung caused the ship to be slipped off the beach. In the process, the back of the ship was broken and the wreck was left on its side with the stern just 9 m below the surface, at its shallowest point, and the bow in about 30 m. She now lies about 200 m from shoreline at coordinates position S 08°17'3" and E 115°5'21" (Wikipedia the Free Encyclopaedia, n.d).



The location of the sinking of liberty has become very rich in marine life. We could find easily hard coral, soft coral, baraccuda, stingrays, sea urchins, sea snails, crabs, shrimp, ghost pipefish, pygmy seahorses, mola-mola, surgeon Fish, nudibranchs, grouper, snapper, etc. Diving Season on this site is all year with clear visibility from 10 – 20 m. The sinking of the USAT Liberty has provided enormous benefits to Tulamben community. Liberty has become the main diving object in Bali and the principal livelihood for the local community. The locals could provide lodging services, dive resorts, restaurants, parking, dive guide, souvenir shops, dive shops, car rental, grocery store, helper and porter services, and others. Thus it can reduce the rate of unemployment in the village. The number of divers on the Liberty wreck is an average of 100–200 people per day. It is estimated that the potential and economic value of marine tourism in Tulamben is about US \$3,265,777 per year (Kamaluddin, 2007; Ridwan, 2011: 625).



Liberty Shipwreck. Tulamben Bali (Photo by Nia Naelul Hasanah Ridwan. October 2008)

2. *MV Boelongan Nederland* Shipwreck Site, Mandeh Bay West Sumatra

Dutch shipwreck site found in Mandeh Bay, Pesisir Selatan Regency is located at 14 – 25 m depth with visibility on shipwreck site is about 2 – 10 m. The distance from Cubadak Paradiso Resort to the shipwreck site is only 1.5 NM . The shipwreck site can be reached about 3 hours drive by car from Minangkabau International Airport and from Carocok Harbour about 15 minutes by boat. We assumed that the shipwreck in Mandeh Bay is *MV Boelongan Nederland* ship. It is an 79 m Dutch cargo ship that was sunk on 28 January 1942 by the Japanese air raid during the Second World War. A large quantity of big snappers and groupers use the wreck as shelter and can always be seen on this site. It has to be noted though that the visibility can range from poor to bad due to the location of the wreck on a river mouth. The best time for diving is in the morning from 8 to 11 AM. The visibility on site would be very poor after 11 AM. The findings on site are an iron shipwreck, bottles, wood fragments, and ceramic fragments. The marine life we can see surrounding the shipwreck are many type of sponges, groupers, snappers, surgeon fish, butterfly fish, angelfish, sea urchin, and so on.



MV Boelongan Nederland Shipwreck Site (Photo by Nia Naelul Hasanah Ridwan, Juni 2012)

4. DISCUSSION

Tourism in Indonesia is an important component of the [Indonesian](#) economy as well as a significant source of its [foreign exchange](#) revenues. Indonesia has been recognized as one of the most beautiful destinations international marine tourism. The basic principle in the development of marine tourism standardized by Ministry of Marine Affairs and fisheries should be based on: environmental sustainability, economic development, partnership,

community involvement, and unity. Law No. 10 of 2009 concerning Tourism Development mandates we need to be run to achieve the following objectives: promote economic growth, improve the welfare of the people, eradicate poverty, tackling unemployment, preserving nature, the environment, and resources, promote the culture, the image of the nation, strengthen the identity and unity of the nation, and the friendship between nations. Integrated synergy with the principles of management must be focused on the aspects: integration between the various sectors and the associated private; integration between the various levels of government from central, provincial and district/municipality; integration between research, the preservation, and utilization of tourism; integration of multi-disciplinary science; integration between implementation and authority (Aksa, 2007).

Based on some studies about understanding wreck divers such as in Australia and Micronesia, wreck divers primarily visit shipwrecks to see historically significant sites, artifacts, and marine life. Recreational scuba diving has become increasingly popular and it is estimated that there maybe as many as 28 million active divers throughtout the world today (Edney, 2011: 575; & 2006: 205; Garrod and Gossling, 2008:7-8). As well as adding challenge, shipwreck also offer unique and diverse diving experiences and have become important recreational resources for divers (Delgado, 1988; Edney, 2011: 575). The most important value significance of shipwreck as a marine archaeological resources are: shipwreck is a unique windows into the past; each shipwreck represents a moment frozen in time and each has a special story to tell; shipwreck is finite, fragile, and non renewable; shipwreck is an interesting and valuable object for further and intensive research and education of various aspects such as history, archaeology, marine ecology, etc.; shipwreck site can be a resource for enjoyment and can be an alternative source of economic improvement as it has economic value as a marine tourism destination and will give benefit to local community; shipwreck site can be an artificial reef which is an important part of the marine environment and providing essential habitats for marine life and fish, as well as recreational opportunities for divers and fisherman; this resource should be protected, preserved, and managed in a responsible and sustainable way as the site can be damaged and lost due to natural and human factors; and there is the needs to improve and develop all aspects of community's life especially from the marine and fisheries sector. Canadian Harvard Aircraft Association–Dive Recovery Team (2008), mentioned that a shipwreck is attractive to divers for several reasons: it is an artificial [reef](#), which creates a habitat for many types of [marine life](#); it often has an exciting or tragic history; it presents new skill challenges for [scuba divers](#); it is part of the [underwater cultural heritage](#) and may be an important [archaeological resource](#) and [aviation archaeology](#); it provides a first-hand insight into context for the loss, such as causal connections, geographical associations, trade patterns and many other areas, providing a microcosm of our maritime heritage and [maritime history](#).

Liberty and *MV Boelongan* shipwrecks are important to be preserved and to be developed as marine tourism destination because the location of the shipwrecks are easy to access from Bali International Airport and from Minangkabau International Airport, they also can be easily reached from Tulamben Beach and Carocok Tarusan Harbor; these sites have a beautiful scenery and the wrecks condition are quite good so then they can be opened for public to improve the locals welfare and they can be a tourists' favourite destination in their regions; *Liberty* and *MV Boelongan* are World War II wrecks which are historically significant and still part of living memory of they were involved in the war; the shipwreck locations are not too deep and these sites have a diversity of marine life which can attract the interest of tourist. It should be emphasized that economical utilization of underwater cultural heritage and maritime heritage as marine tourism attraction should not be directed at short-term goals, but directed at the long-term goals with respect to the principle of sustainability (Rahardjo, 2011). To make *Liberty* and *MV Boelongan* shipwreck site as a tourist-class destination, it is necessary to: give law protection by designating the site as Cultural Heritage Site and Maritime Conservation Area; enhancing cooperation amongs government, community, other stakeholders; raising public awareness program, and



capacity building, bridging social gap between community and private bussiness sector; developing alternative livelihood for community; developing investment and helping in seeking financial assistance such as loans from banks, provide a marketing opportunity for local tourism businesses, establishing infrastructure; providing complete rescue teams and medical emergency for security and safety of the tourist; continuing research to asses the site significance, involving popular media (print, television, internet) for publication; monitoring regularly; and preserving traditional customs, culture, and environment.

5. CONCLUSION

Marine-heritage tourism development in Bali and West Sumatra are expected not to ignore the principles of upholding human rights, cultural diversity, and local wisdom; provide maximum benefits to the people's welfare, justice, equality and proportionality; nature preserve and the environment; empower local communities, and strengthen the integrity of the unitary state of Indonesia. Marine cultural tourism activities that can be developed in *Liberty* shipwreck site and *MV Boelongan Nederland* shipwreck site is the wreck diving, snorkling, swimming, sailing boating, fishing, fishing village, tropical gardens, cruising, and cuisine. Depth of shipwreck site, visibility, current strength, distance from the beach, diversity of marine life, landscape of the site, condition of shipwreck, and historical background are needed to be taken into account in term preserving and developing shipwreck as marine tourism destination. The development of marine-heritage tourism must be based on an integrated and multidicipline research with the marine archaeology research as the core.

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