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# Conceptualizing Policy on Underwater Cultural Heritage: Towards Legal Protection and Ecotourism Promotion in Karimun Jawa, Indonesia

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## ABSTRACT

Karimun Jawa Island is a promising maritime asset, enriched by abundant water resources in Central Java. However, the allure of this location poses a potential threat to the sustainable ecosystems of marine biota unless prompt government action is taken to safeguard its underwater cultural heritage. This research proposes a comprehensive policy design for legal protection and ecotourism development in Karimun Jawa, balancing economic considerations



and environmental preservation. Employing a socio-legal methodology encompassing interviews, observation, and focus group discussions, the study identifies substantial challenges in managing underwater cultural heritage in Karimun Jawa. These challenges encompass over-exploitation, shipwreck theft, damage from trawlers, natural disasters, and plastic pollution. The research underscores the imperative for the government to formulate measures ensuring legal protection on international, national, and regional fronts. At the global level, immediate ratification of the Convention on the Protection of Underwater Cultural Heritage 2001 is recommended. Moreover, effective collaboration among stakeholders—central and regional governments, local communities, and maritime enterprises—is deemed crucial for sustainable, culturally informed policy formulation fostering responsible management, utilization, and protection of this unique marine heritage.

**Keywords:** Policy Conceptualization, Underwater Cultural Heritage, Legal Protection, Ecotourism, Karimun Jawa

## INTRODUCTION

Indonesia is enriched with marine potential that can be further developed into the ecotourism sector. Coral reefs, mangrove areas, and marine biota are some of the underwater natural features that need protection.<sup>1</sup> Reported that Indonesia has 99 thousand kilometers of coastline, 3.257 million square kilometers of sea area, and 20.87 million hectares of water conservation, coasts, and small islands that have abundant potential to offer for marine tourism. Geographically,

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<sup>1</sup> Roby Ardiwidjaja, *Pengembangan Destinasi Pariwisata Berbasis Lingkungan* (Sleman: Kepel Press, 2013).

Indonesia has the longest coastline in the world and 16,771 small islands. The tropical climate in the country also contributes to the growth of mangroves along the coasts of Indonesia, predicted to be about 25% of the area of mangroves worldwide. Moreover, the growth of the ecology of coral reefs has been recorded to be more than 75,000 km<sup>2</sup> or about 14% of the total area of coral reefs in the whole world. Such a geographical condition offers prospective potential and benefits, allowing for advantageous opportunities in the development of global eco-tourism policies.

Indonesia has strategic shipping lanes for foreign vessels from all over the world. Since hundreds of centuries ago, the Malacca Strait, Makassar Strait, Lombok Strait and Sunda Strait have been the main straits most frequently crossed by vessels from all over the world.<sup>2</sup> However, not all ships are fortunate. Many ships sailing in Indonesian waters experience accidents and sink, leading to the discovery of historical assets in Indonesian waters. In addition to the vast waters, dense maritime activities, ocean conditions, weather, warfare, and piracy have contributed to Indonesia's current richness in underwater archaeological remains.<sup>3</sup>

Historically speaking, the potential of underwater archaeology is analogized as a museum of historical assets buried on the seabed, commonly referred to as underwater cultural heritage.<sup>4</sup> These underwater archaeological assets represent a relevant part of the world's cultural heritage and are essential elements in human history, nations, and their relationships with each other regarding their shared heritage in the form of underwater cultural heritage.

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<sup>2</sup> Vinca Pretylia, "Tinjauan Hukum Pelelangan Benda Berharga Muatan Kapal Tenggelam (BMKT)", *University of Bengkulu Law Journal* 2, No. 2 (2017): 166.

<sup>3</sup> Ridwan, Nia Naelul Hasanah, "The Importance of Empowering Local Community in Preserving Underwater Cultural Heritage in Indonesia: Case Study in Tulamben, Bali and in Taka Kappala, Selayar-South Sulawesi." Asia Pacific Regional Conference on Underwater Cultural Heritage, Manila, The Philippines, 2011.

<sup>4</sup> Vasilike Argyropoulos and Anastasia Stratigea, "Sustainable Management of Underwater Cultural Heritage: The Route from Discovery to Engagement Open Issues in the Mediterranean", *Heritage* 2 (2019): 1588.

The potential of Indonesia's underwater archaeological remains is well-known internationally due to their abundant quantity. The public is increasingly familiar with the information that there are approximately 463 recorded shipwreck sites documented by the Oceanology Research and Development Center or *Litbang Oceanologi*. Meanwhile, the Archives of the Archaeological Organization in the Netherlands note around 245 Dutch East India Company (VOC) ships, and Tony Wells' book, "*Shipwrecks & Sunken Treasure*," mentions approximately 186 VOC ships that sank in Indonesian waters.<sup>5</sup>

The submerged ancient trading commodities in Indonesian waters undeniably serve as a major attraction. Various parties are involved in the handling of underwater archaeological remains. Various artifacts such as ceramics, precious metals, gold jewelry, and ancient coins become the primary targets for treasure hunters. The numerous artifacts that have been successfully raised from the depths of Indonesian waters, both legally and illegally, indicate their high antiquity value. The identified ceramics come from the Tang Dynasty, Song and Yuan Dynasties,<sup>6</sup> and even the Ming Dynasty.<sup>7</sup>

On the other hand, the lack of public awareness regarding the important and strategic value of underwater cultural heritage as national identity and its potential for national economic development is a significant issue in Indonesia. Various research activities on Underwater cultural heritage have been conducted. The Directorate of Underwater Cultural Heritage (*Direktorat Peninggalan Arkeologi Bawah Air*), along with regional Technical Implementation Units (or *Unit Pelaksana Teknis*), such as the Archaeological Office and Cultural Heritage Conservation Office (*Balai Arkeologi dan Balai Pelestarian Cagar Budaya*), carry out site identification and surveys at various sites, especially those of sunken shipwrecks. Several sites that have

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<sup>5</sup> Supratikno Rahardjo, "Prospek dan Tantangan Arkeologi Maritim di Indonesia." *Amoghapasa* 13, No. 1 (2019): 6–10.

<sup>6</sup> Michael Flecker, "The Thirteenth Century Java Sea Wreck: A Chinese Cargo in an Indonesian Ship." *The Mariner's Mirror* 89 (2003): 388–404.

<sup>7</sup> Priyatno Hadi Sulistyarto, *Melacak Jejak Budaya Bahari di Kepulauan Karimun Jawa (Tahap II)*. (Yogyakarta: Balai Arkeologi Yogyakarta, 2011).

been previously studied include Karimun Jawa, Madura,<sup>8</sup> Belitung (the former location of the Belitung wreck), and sites in the straits.<sup>9</sup>

The protection of submerged archaeological components in water is crucial for future generations. It is not only part of our heritage but also provides possibilities for conducting research in the future, in line with the development of new investigative techniques. Archaeological remains depict the complexity and diversity of material culture from the past, offering significant opportunities for researchers to achieve a better understanding of the cultural, environmental, and social aspects of past societies.<sup>10</sup>

Out of the numerous potential underwater archaeological remains in the Indonesian seas, only about 10% have been explored. Of this 10%, findings such as ceramics and other detached artifacts have mostly been retrieved and subsequently auctioned or stored in warehouses awaiting auction. Meanwhile, the discovery of shipwrecks is left in the sea, and in the case of the Belitung Wreck, it was even damaged during the retrieval process.<sup>11</sup> Furthermore, it is important to examine the economic potential of the valuable items rediscovered from shipwrecks, as well as the need for tourism management of preserved shipwreck sites, which presents opportunities for sustainable underwater tourism.

Underwater tourism is one of the gems in Indonesia. Waters in Indonesia have been known to be the spots for diving to enjoy underwater diversity and cultural heritage. The waters of Indonesia have been used for trading for centuries, connecting two continents and two oceans, and, as a consequence, hundreds of sinking ships

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<sup>8</sup> Priyatno Hadi Sulistyarto, *Melacak Jejak Budaya Bahari di Kepulauan Karimun Jawa (Tahap I)*. (Yogyakarta: Balai Arkeologi Yogyakarta, 2009).

<sup>9</sup> Harry Octavianus Sofian, "Keadaan Terkini Situs Arkeologi Bawah Air Belitung Wreck, Perairan Batu Hitam, Kabupaten Belitung." *Jurnal Arkeologi Siddhayatra* 15, No. 2 (2010): 20–23.

<sup>10</sup> Malcolm Lillie and Robert Smith. *International Literature Review: In-Situ Preservation of Organic Archaeological Remains*. (Hull: Wetland Archaeology & Environments Research Centre, 2009).

<sup>11</sup> Sofian, "Keadaan Terkini Situs Arkeologi Bawah Air Belitung Wreck, Perairan Batu Hitam, Kabupaten Belitung."

were discovered to be trading ships from other countries. The Ministry of Marine Affairs and Fisheries identified there were 468 physical remains of ships in the jurisdiction of Indonesia. Some sites where shipwrecks from World War II lie have been found in several waters in Indonesia. The presence of these sites can serve as marine resources to build insights into maritime cultures and histories these days. This potential can also serve as a source of prosperity for the locals when such sites are appropriately managed. Indonesian waters are home to biodiversity, covering the triangle zones of coral reefs in the Pacific between the islands in the Java Sea in the west, the Philippines in the north, and Solomon Island in the east.

However, the sites where shipwrecks lie in Indonesia are vulnerable to earthquakes, tsunamis, underwater volcanic activities, climate change, treasure hunts, oil leaks, and plastic waste brought from the coast and the sea. Recently, experts have reported that 25% of marine conservation areas in Indonesia are proven effective in preserving marine biota and fish stock.<sup>12</sup> Restricted opportunities to cultivate marine resources are caused by the fact that the Indonesian Government has not ratified the Convention on the Protection of the Underwater Cultural Heritage 2001, making underwater cultural heritage prone to commercialization.<sup>13</sup>

Karimun Jawa island is home to historical objects and underwater biodiversity. As one of the marine assets that are potential and has underwater natural resources, Karimun Jawa is the main destination for travellers wishing to enjoy the underwater attraction. This condition is an initial asset beneficial for Indonesia in optimizing the development of the marine sector and the policies regarding underwater cultural heritage in the time to come. The island of

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<sup>12</sup> Basten Gokkon, "Indonesia Plans to Protect Its Seas by Extending Its Marine Protected Area," *World Economic Forum* September 15, 2022, <https://www.weforum.org/platforms/centre-for-nature-and-climate/articles/indonesia-plan-marine-protected-area-network-seas>.

<sup>13</sup> Supratikno Rahardjo, "International Convention Vs National Interest: Contestation among Indonesian Government Institutions on Underwater Cultural Heritage Conservation," *Indonesian Journal of International Law* 16, No. 3 (2019): 347–60, <https://doi.org/10.17304/ijil.vol16.3.763>.



Karimun Jawa demographically sits on an area of 4,302.5 hectares. Some ecotourism potential in underwater culture is set for national parks intended to protect biodiversity. Karimun Jawa island approximately has coral reefs lying on 713 hectares of the seabed with 509 coral fish, mangrove forest, coastal forest, tropical rainforest on low land, seagrass, and seaweed. Karimun Jawa represents the natural beauty with pristine and unspoiled forests, white sand, coral reefs surrounding every island, and endemic dewandaru trees as potential natural resources that contribute to marine, environment-based, and recreational tourism at both national and international.<sup>14</sup> Specifically, Karimun Jawa island has endangered green sea turtles (*Chelonia mydas*) and hawksbill turtles (*Eretmochelys imbricate*).<sup>15</sup> Coral reefs and marine biota have always managed to attract both domestic and international travellers to visit the National Park of Karimun Jawa.

Set in this strategic condition, the development of marine ecotourism has shown upward trends in recent years following the pandemic. However, human activities have left some problems harming the ecology of underwater ecosystems. Within this context, this article offers a conceptualization of policy by promoting ecotourism and the protection of legal protection for underwater cultural heritage. This article voices the importance of the conceptualization to the parties concerned and reformulates sustainable policy to manage, utilize, and protect underwater cultural heritage with effective regulations based on local wisdom. This concept is intended to build governance tourism that fulfills and protects the welfare of the locals to ensure that the legal protection of underwater cultural heritage is well protected. This article uses the case study of Karimun Jawa as the basis to conceptualize the policy of

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<sup>14</sup> Grandy Loranessa Wungo, Mussadun, and Samsul Ma'rif, "Edukasi Penerapan Konsep Ecotourism Di Kepulauan Karimun Jawa," *Jurnal Pasopati* 2, no. 3 (2020): 142–49, <https://doi.org/10.14710/pasopati.2020.8186>; Akhsanul Ni'am Laksono and Mussadun, "Dampak Aktivitas Ekowisata di Pulau Karimunjawa Berdasarkan Persepsi Masyarakat," *Jurnal Teknik PWK* 3, No. 2 (2014): 262–73.

<sup>15</sup> Wisnu Arianto, "Desain Kapal Wisata Katamaran untuk Kepulauan Karimunjawa", *Thesis* (Surabaya: Institut Teknologi Sepuluh Nopember, 2016).

underwater cultural heritage. For this purpose, this article is a socio-legal study that focuses on examining the extent to which legal texts and contexts influence the underwater cultural heritage landscape in Karimun Jawa. The first part of this article discusses the law concerning underwater cultural heritage in Indonesia as the fundament for the policy concept offered. The second part is more focused on describing how the legal framework of underwater cultural heritage works in Karimun Jawa. Departing from the observational study in Karimun Jawa, this article suggests the conservation of underwater cultural heritage through sustainable development-based policy.

## LEGAL FRAMEWORK ON UNDERWATER CULTURAL HERITAGE

The legal framework for the management of underwater cultural heritage spots in Indonesia including shipwreck sites was initiated in the 1980s. Under the New Order regime, the government adopted a set of regulations focused on the efforts to exploit the economic value of valuable objects from the ships. In 1989, Soeharto issued a Presidential Decree Number 43 of 1989 on the National Committee for the Salvage and Utilization of Valuable Objects originating from the Cargo of Sunken Ship, legalizing the rescue and utilization of the valuable objects across the waters of Indonesia.<sup>16</sup> This decree regulated the mechanism of permit that allows foreign and domestic companies to rescue historic shipwrecks based on accepted archaeological standards to maintain the uniqueness of endangered

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<sup>16</sup> Presidential Decree No. 43 of 1989 concerning the National Committee for the Salvage and Utilization of Valuables Originating from the Cargo of Sunken Ships [Keputusan Presiden No. 43 Tahun 1989 tentang Panitia Nasional Pengangkatan dan Pemanfaatan Benda Berharga Asal Muatan Kapal yang Tenggelam].



artefacts.<sup>17</sup> As a response to the spreading rumour of the legendary ship Flor do Mar sinking offshore of the Province of Aceh in 1511, Indonesia introduced Law Number 5 of 1992 on Cultural Heritage Objects,<sup>18</sup> asserting that all cultural heritage objects found within the jurisdiction of the Republic of Indonesia belong to the state.<sup>19</sup> This law states that underwater cultural heritage such as sunken ships and their loads whose owners are unknown are considered equal to the criteria of cultural heritage based on the age, being man-made, and economic value in the ships. This law enables underwater cultural heritage to be resold, and from this sale, 50% will go to the rescuing ship and another 50% to the Indonesian Government.<sup>20</sup>

Although Indonesia has not ratified the Convention on the Protection of the Underwater Cultural Heritage 2001, in 2010, Indonesia adopted Law Number 11/2010 on Cultural Heritage, introducing the scope of the preservation of cultural heritage that takes into account the protection, development, and utilization of cultural heritage on lands and in waters. This law covers the protection towards heritage assets with historical, scientific and cultural values and share the responsibility of heritage conservation between central government, local government and community.<sup>21</sup> The Convention on the Protection of the Underwater Cultural Heritage 2001 implies that cultural heritage is part of the history of human civilization, the state, and the nation, and it should come to the

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<sup>17</sup> Michael Flecker, *Legislation on Underwater Cultural Heritage in Southeast Asia: Evolution and Outcomes, Trends in Southeast Asia* (Singapore: ISEAS Publishing, 2017).

<sup>18</sup> Law No. 5 of 1992 concerning Cultural Heritage Objects [Undang-Undang No. 5 Tahun 1992 tentang Benda Cagar Budaya].

<sup>19</sup> Flecker, *Legislation on Underwater Cultural Heritage in Southeast Asia: Evolution and Outcomes, Trends in Southeast Asia*.

<sup>20</sup> Natali Pearson, "At What Cost: The Impact of Indonesia's Omnibus Law on Underwater Cultural Heritage," *New Mandala* March 12, 2021, <https://www.newmandala.org/at-what-cost-the-impact-of-indonesias-omnibus-law-on-underwater-cultural-heritage/>.

<sup>21</sup> Punto Wijayanto, "Community Involvement in Heritage Conservation: the Case of Kotagede, Indonesia", In Kapila D. Silva (ed.), *The Routledge Handbook on Historic Urban Landscapes in the Asia-Pacific* (Oxon: Routledge, 2020), pp. 445–461.

attention of the state for further protection. Cultural heritage should be at least 100 years old lying partly or wholly underwater, including buildings, artefacts, ships, planes, cargo planes, cargo ships and other objects that represent historical characters and cultures. This convention is designed according to the fact that several countries do not give any legal protection to their underwater cultural heritage.<sup>22</sup> This convention certainly sets the fundamental principles to protect underwater cultural heritage, takes action for the protection of the sites and as practical guidelines for underwater cultural heritage for its member states.<sup>23</sup> This framework can serve as a guideline for the countries that have not ratified the convention when they draft their national laws intended for underwater cultural heritage.

Another legal framework that forms the basis for the preservation and protection of underwater cultural heritage is a series of legislative packages governing local governance. Since the fall of the Soeharto regime in 1998, Indonesia has adopted several laws on local governance aimed at establishing regional autonomy in the conservation of protected areas on land and sea. For example, Law Number 32/2004 on Local Government regulates specific geographical areas for management and conservation purposes. This law grants authority from the Central Government to Regional Governments to establish environmental conservation areas according to the uniqueness of each region.<sup>24</sup> Similarly, in 2014, Indonesia adopted Law Number 23/2014 on Local Government, which replaced the previous law and includes more specific authorities. Under this law, Provincial-level Regional Governments have the authority to explore, exploit, conserve, and manage marine

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<sup>22</sup> Alqiz Lukman et al., "Alternatif Model Pemanfaatan Berkelanjutan Tinggalan Budaya Bawah Air Di Indonesia," *Berkala Arkeologi* 41, No. 2 (November 30, 2021): 251–270, <https://doi.org/10.30883/jba.v41i2.735>.

<sup>23</sup> Lukman et al.

<sup>24</sup> Jason M. Patlis, "What Protects the Protected Areas? Decentralization in Indonesia, the Challenges Facing its Terrestrial and Marine National Parks and the Rise of Regional Protected Areas", in Navjot S. Sodhi et al., *Biodiversity and Human Livelihoods in Protected Areas: Case Studies from the Malay Archipelago* (New York: Cambridge University Press, 2008), p. 422.

resources, even though they operate under the regulations set by the Central Government.<sup>25</sup>

Law Number 11/2020 on Job Creation brings the age of cultural heritage objects from 100 down to 50 years old.<sup>26</sup> However, in 2010, the Indonesian Government decided to do an interim moratorium on permit issuance allowing surveys and postponing all the permits given to commercial businesses as measures to give protection and conserve the objects to ensure that they stay underwater (see the Regulation of the Ministry of Marine Affairs and Fisheries of the Republic of Indonesia Number 4/Permen-KP/2016) concerning Interim cessation [Moratorium] of License of Survey and Removal of Valuable Objects from Sunken Ships).<sup>27</sup> Referring to this policy framework, the moratorium raises the responsibility among stakeholders in Indonesia to implement the principles outlined in the Convention on the Protection of the Underwater Cultural Heritage, consisting of conserving, preserving, exploiting not for commercial purposes, collaborating with other countries in the management of underwater cultural heritage.<sup>28</sup> It is also important to refer to Law 23/2014 concerning Marine Affairs and Law 27/2007 concerning the Management of Coastal Areas and Small Islands. Under these two laws, underwater cultural heritage is considered marine resources.<sup>29</sup>

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<sup>25</sup> See Art. 27 section (2) Law No. 23 of 2014 on Local Government [Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah].

<sup>26</sup> Law No. 11 of 2020 about Job Creation [Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja].

<sup>27</sup> Minister of Maritime Affairs and Fisheries Regulation No. 4/PERMEN-KP/2016 concerning Temporary Suspension (Moratorium) of Survey Licensing and Removal of Valuable Objects from the Cargo of Sunken Ships [Peraturan Menteri Kelautan dan Perikanan No. 4/PERMEN-KP/2016 tentang Penghentian Sementara (Moratorium) Perizinan Survei dan Pengangkatan Benda Berharga Asal Muatan Kapal yang Tenggelam].

<sup>28</sup> Wiwin Djuwita Ramelan, "Permasalahan Pengelolaan Cagar Budaya Dan Kajian Manajemen Sumber Daya Arkeologi," in *Arkeologi Untuk Publik* (Jakarta: Ikatan Ahli Arkeolog Indonesia (IAAI), 2012), 186–199.

<sup>29</sup> Lukman et al., "Alternatif Model Pemanfaatan Berkelanjutan Tinggalan Budaya Bawah Air Di Indonesia."

The rescuing steps above ended following the introduction of Law Number 11/2020 concerning Job Creation, positioning cultural heritage as an open business opportunity allowing for investment, and this law put the proscription of removing underwater objects with historical and cultural values to an end.<sup>30</sup> Under Article 77 of Law Number 11/2020 concerning Job Creation and Presidential Regulation Number 10/2020 as the delegated regulation, the moratorium on underwater cultural heritage was revoked and new guidelines of permit issuance for businesses “utilizing marine resources” were added. These guidelines include matters regarding spatial planning/zonation, and the rescue of sunken cargo. The impacts of the revocation of this moratorium are that the ‘valuable objects’ taken from the sunken ships in Indonesia are no longer restricted.<sup>31</sup> In terms of their strategic values, cultural heritage sites of sunken ships and their loads principally can be positioned as sensitive areas prone to changes caused by human activities, such as lifting the sunken ships together with their loads, excavating sands and other activities performed either legally or illegally. All these actions are believed to erase the data and presence of cultural heritage around the sites. Therefore, several legal frameworks and the development of the sites of sunken ships and their loads are needed as part of the attraction in diving tourism as shown on Table 1.

TABLE 1. Legal Frameworks in Sunken Ship as Cultural Heritage

<b>International Regulation</b>	<b>National Regulation</b>	<b>Local Regulation</b>
UNESCO: 1. The UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage;	The 1945 Constitution of the Republic of Indonesia, Article 32 paragraph 1: the state improves the national culture by assuring the freedom to maintain and develop the cultural value;	Local Regulation, Master Plan of Regional Tourism Development (Rippda);

<sup>30</sup> Pearson, “At What Cost: The Impact of Indonesia’s Omnibus Law on Underwater Cultural Heritage.”

<sup>31</sup> Natali Pearson, “Resisting Internationalism?: The Evolution of Indonesia’s Shipwreck Legislation,” *Bijdragen Tot de Taal-, Land- En Volkenkunde* 178, no. 4 (2022): 379–409.

International Regulation	National Regulation	Local Regulation
2. Safeguarding Traditional and Popular Culture of 1989 dan 2003;		
3. UNWTO 1999, agreement to promote the conservation of cultural heritage through sustainable tourism;		
4. Universal Declaration on Cultural Diversity of 2001;		
5. UNESCO Convention on Culture Tourism.		
World Summit 1992 and 2002 on Sustainable Development;	Law Number 10 of 2009 concerning Tourism, tourism development aims to preserve culture and reinforce the national identity and maintain environmental quality and function;	Custom and local wisdom
Charter for Sustainable Development 1995;	Law Number 11 of 2010 concerning Cultural Heritage. Article 19 Paragraph 1: particular objects of cultural heritage can be utilized for religious, local tourism and fisheries, sciences and culture;	Custom and local wisdom
The Hue Declaration on Cultural Tourism and Poverty Alleviation 2004;	Law Number 23 of 1997 concerning Environmental Management;	-
ICOMOS 1999 International Cultural Tourism Charter;	Government Regulation Number 10 of 1993 concerning Cultural Heritage Objects	-
WTO Tourism Code of Conduct	Decree of the Minister of Education and Culture Number 087 of 1993 concerning Cultural Heritage Registration;	-

Indonesia is a member state of the United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982) which comprehensively regulates the protection of underwater cultural heritage. Overall, UNCLOS 1982 set the rules to protect underwater cultural heritages, taking into account the two main tasks binding the country by

imposing responsibility on the country to protect archaeological and historical objects found underwater and promote collaborations for such a purpose.<sup>32</sup> Although UNCLOS 1982 applies to all seas, it only sets protection within areas outside national jurisdiction and contiguous zone, leaving underwater cultural heritage within the areas off the contiguous zone to the outer part of the Exclusive Economic Zone unprotected under UNCLOS 1982. As it progresses, the provisions in UNCLOS 1982 have been further developed by the Convention on the Protection of the Underwater Cultural Heritage 2001, stating that the protection of underwater cultural heritage must be done in situ as the first choice that does not allow for or involve any activities aimed for this heritage.<sup>33</sup> The ratification of the convention will be beneficial for the member states in preventing the damage of underwater objects, establishing relationships between stakeholders in the preservation of underwater archaeological objects, promoting tourism and development of capacity and information exchange at an international level.<sup>34</sup>

If we refer to several articles in Law no. 11 of 2010 concerning Cultural Conservation, it is stated that Cultural Conservation refers to material cultural heritage in the form of Cultural Conservation Objects, Structures, Sites, and Areas on land and in water. Meanwhile, Underwater Cultural Heritage is defined as cultural heritage located in the water environment. According to the law, the water environment can include seas, rivers, lakes, reservoirs, wells, and swamps. Cultural, historical, scientific, and economic artifacts submerged in Indonesian territorial waters, the Indonesian exclusive economic zone, and the Indonesian continental shelf must be at least 50 (fifty) years old.

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<sup>32</sup> Nie Bomin, "On the International Legal Protection of Underwater Cultural Heritage," *China Oceans Law Review* 2015, No. 2 (2015): 300–323.

<sup>33</sup> Mariano J. Aznar, "In Situ Preservation of Underwater Cultural Heritage as an International Legal Principle," *Journal of Maritime Archaeology* 13, No. 1 (2018): 67–81, <https://doi.org/10.1007/s11457-018-9192-4>.

<sup>34</sup> Lukman et al., "Alternatif Model Pemanfaatan Berkelanjutan Tinggalan Budaya Bawah Air Di Indonesia."



UNESCO defines underwater cultural remains as follows: "all traces of human existence having a cultural, historical, or archaeological character that have been partially or completely underwater, periodically or continuously, for at least 100 years." These include sites, structures, buildings, artifacts, human remains, as well as their archaeological and natural context. Additionally, it encompasses vessels, aircraft, other vehicles, or their parts, along with their cargo and archaeological and natural context. Furthermore, objects of prehistoric nature are also included (Unesco Convention 2001, Article 1, paragraph 1). In this context, it is evident that the 2001 UNESCO convention on the protection of underwater cultural remains defines cultural remains as traces of human existence that have been underwater for approximately 100 years. Such cultural heritage can manifest in the form of structures, sites, buildings, including planes, ships, and their cargo.

The remains of sunken ships and their cargo are often referred to as treasures by the public, even though it is clear from national and international law that sunken ships and their cargo, within a period of 50-100 years, are categorized as underwater cultural remains. Therefore, underwater cultural heritage should not be considered as treasure. This viewpoint was supported by UNESCO's statement during a seminar in Jakarta in 2010, stating that underwater cultural heritage is not a treasure but rather a cultural heritage for humanity.

The issuance of Law Number 11 of 2010 concerning Cultural Heritage is a breath of fresh air for the preservation of underwater heritage in Indonesia. If the previous law did not give special attention to underwater heritage, in Law Number 11 of 2010, attention has begun to be given to underwater heritage in statutory regulations. For example, in the General Provisions of Article 1, paragraph (1), it is explained that Cultural Conservation includes cultural heritage on land and/or water. Additionally, paragraph (5) clarifies that Cultural Conservation Sites also include locations that are in water. The Preservation scope stated in Article 4 mandates underwater Cultural Conservation to receive Protection, Development, and Utilization.

The aspect of preservation is further conveyed in Article 26, paragraph (4), which prohibits anyone from searching through diving and/or lifting, except with permission from the Government or Regional Government. Article 14, paragraph (1), emphasizes that foreign nationals are prohibited from moving or bringing cultural heritage objects, including underwater cultural heritage remains, out of the territory of the Unitary State of the Republic of Indonesia. However, in Articles 17 and 67 of Law Number 11 of 2010, the sentence "except with the permission of the minister, governor, regent/mayor" has been added. Despite moving towards preservation, Law Number 11 of 2010 has not addressed many technical matters. Additionally, the issuance of government regulations, especially those specifically addressing underwater heritage, is still pending.

To optimize the potential of sunken ships and their loads as cultural heritage, it is necessary to design the conceptualization of the policy aiming to give protection of legal protection for underwater cultural heritage, especially in Karimun Jawa island in Indonesia. Therefore, with the role of the local government through the policy aiming to manage, utilize, and protect, the regulations built based on local wisdom are the primary fundamentals. The urgency to improve the utilization of sunken ships and their loads as cultural heritage with education, tourism, economic, historical, social, and cultural values therein is inevitable. To grab the picture of the distribution of the cultural heritage of sunken ships and their loads, mapping and assessment are required to help establish the formulation of policy.

## UNDERWATER CULTURAL HERITAGE IN KARIMUN JAWA INDONESIA

Indonesia as a maritime state is home to richness and biodiversity, ranging from marine flora and fauna to sunken ships and their loads as cultural heritage beneficial to the interest of fishery, tourism, and

industrial sectors of marine affairs.<sup>35</sup> Departing from this historical heritage, the government declared Global Maritime Fulcrum in 2014, placing Indonesia as one of the worldwide marine civilizations.<sup>36</sup> Apart from the integrated logistic system in the ocean, Global Maritime Fulcrum was designed to allow for new economic potentials in the marine sector, including tourism sector.<sup>37</sup> To reach this goal, human resource management in the maritime sector for Karimun Jawa which is more welfare-oriented for the nation is required. Similarly, protection and prevention against all forms of violations are equally important.

In the 32nd session of the International Coordination Council of Man and the Biosphere Programme (32nd ICC MAB) on 28 October 2020, UNESCO officially declared Biosfer Karimun Jawa Jepara Muria as UNESCO Biosphere Reserve involved as a member of the World Network of Biosphere Reserves (WNBR). With this status, the WNBR of Biosfer Karimun Jawa Jepara Muria network allows members to share their experiences and practices to maintain the sustainability of harmonic development taking place between nature and its people.<sup>38</sup> This declaration is the hard work of Karimun Jawa National Park in the Province of Central Java and the Indonesian Institute of Sciences with full support from the Regency of Jepara, Kudus, Pati, and the Ministry of Environment and Forestry, Non-Governmental Organizations, and local communities. The proposal and the decision to declare Biosfer Karimun Jawa Jepara Muria bring meaning to the

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<sup>35</sup> Tridoyo Kusumastanto, "Arah Strategi Pembangunan Indonesia Sebagai Negara Maritim," 2013, [https://www.researchgate.net/profile/Tridoyo-Kusumastanto-2/publication/266080942\\_Arah\\_Strategi\\_Pembangunan\\_Indonesia\\_sebagai\\_Negara\\_Maritim/links/5424e03d0cf238c6ea73bbd0/Arah-Strategi-Pembangunan-Indonesia-sebagai-Negara-Maritim](https://www.researchgate.net/profile/Tridoyo-Kusumastanto-2/publication/266080942_Arah_Strategi_Pembangunan_Indonesia_sebagai_Negara_Maritim/links/5424e03d0cf238c6ea73bbd0/Arah-Strategi-Pembangunan-Indonesia-sebagai-Negara-Maritim).

<sup>36</sup> Simela Victor Muhammad, "Indonesia Menuju Poros Maritim Dunia," *Info Singkat Hubungan Internasional*, November 2014.

<sup>37</sup> I Gede Wahyu Wicaksana, "Indonesia's Maritime Connectivity Development: Domestic and International Challenges," *Asian Journal of Political Science* 25, No. 2 (May 4, 2017): 212–33, <https://doi.org/10.1080/02185377.2017.1339618>.

<sup>38</sup> UNESCO and Permanent Delegation of the Republic of Indonesia to UNESCO, *Rekam Jejak 70 Tahun Indonesia UNESCO 1950-2020* (Paris: Kantor Delegasi Tetap Republik Indonesia untuk UNESCO, 2020).

protection and conservation of biodiversity remaining in Central Java from human threats and global climate change.<sup>39</sup> The Biosfer Karimun Jawa Jepara Muria embraces three conservation areas, including Karimun Jawa National Park, the protected forests of Mount Muria and the cultural heritage of Mount Celering. Overall, they sit on an area of 1,236,083 million hectares, consisting of 118,965 hectares as the core zone, 173,273 hectares as the buffer zone and 943,777 hectares as the transitional zone. All these three types of cultural heritage are home to ecosystems involving small islands, marine ecosystems, mangrove forests, tropical rainforests, lowlands, and mountainous areas.<sup>40</sup>

Of these three protected areas, Karimun Jawa National Park has been the most preferred destination for tourism in Central Java. Every year, Karimun Jawa National Park could gain RP. 11 trillion coming from fisheries as the primary sector and tourism as the supplementary one. The economic value has come from natural resources and the natural beauty of the area managed under the concept of the biosphere, conservation of biodiversity for efficient and sustainable research and development, like fisheries that contribute to the livelihood of 779 local fishermen. Biosfer Karimun Jawa Jepara Muria has flora and fauna including Javan Leopards, Peacocks, Pythons, Green Turtles, 23 species of butterflies, Javan Deer, eagles, and many more. In addition to its function as a research laboratory, Biosfer Karimun Jawa Jepara Muria also serves as a local community-based ecotourism and marine tourism development centre. High social awareness of existing marine potentials set the strategic meaning for national development. In recent years, the Indonesian Government has started to change the development orientation to manage the potential from land-based to marine-based development. Coastal and marine tourism potentials in Karimun Jawa also give opportunities to developing countries to preserve and protect ecosystems and species by utilizing marine and sub-marine zones in the interest of sustainable

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<sup>39</sup> UNESCO and Permanent Delegation of the Republic of Indonesia to UNESCO.

<sup>40</sup> UNESCO and Permanent Delegation of the Republic of Indonesia to UNESCO.

tourism.<sup>41</sup> Despite its huge potential, Indonesia faces over-exploitation, causing ecological degradation that can harm the sustainability of the marine environment.

The core zone in Karimun Jawa National Park must be protected for the preservation of the ecosystems, rare flora and fauna and their habitat that can withstand disturbance and change, making them the sources of germplasm that consists of plants and animals and other benefits of the development of science and education. Historically, the area of Karimun Jawa has become the transit centre for foreign ships heading for Java Island. In the ruling period of Demak, when the main harbour shifted from Tuban to Jepara, Karimun Jawa was deemed to be a strategic location for transit in the Java Ocean.<sup>42</sup> According to the Chinese Chronicle, there were 20,000 Kubilai Khan's fleets led by Shih Pi, Kau Sing and Ike Mese docked at *Karimon* (Karimun Jawa) for a further route to Tuban.<sup>43</sup> Ardiwidjaja (2017) argued that valuable objects were discovered to be from several points, having been identified since 2011, including the points where Chinese Seruni, Sebaran, and Panama Indono ships lie. These points are popular for snorkelling and diving spots (Putra, 2022). The following are pictures of the cultural heritage of Karimun Jawa Indonesia.

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<sup>41</sup> United Nations Environment Programme (UNEP), *Green Economy and Trade Trends, Challenges and Opportunities* (Nairobi: United Nations Environment Programme, 2013).

<sup>42</sup> St. Prabawa Dwi Putranto and Agus Aris Munandar, "Underwater Archaeological Museum: Utilization of Karimunjawa Sites," in *Proceeding ISETH (International Conference on Science, Technology, and Humanity)* (The 2nd International Conference on Science, Technology and Humanity, Surakarta: Universitas Muhammadiyah Surakarta, 2016), 28–37, <https://proceedings.ums.ac.id/index.php/iseth/article/view/2352/2307>.

<sup>43</sup> Dwirahmai Suryandari, "Shipwrecks of Karimunjawa: Indonesia's Underwater Heritage, Make Heritage Fun," December 30, 2016, <https://www.makeheritagefun.com/karimunjawa-underwater-heritage-issue-preservation/>.

<sup>44</sup> Roby Ardiwidjaja, "Pelestarian Tinggalan Budaya Bawah Air: Pemanfaatan Kapal Karam Sebagai Daya Tarik Wisata Selam," *Amerta Jurnal Penelitian Dan Pengembangan Arkeologi* 35, No. 2 (2017): 133–148.

The theft of shipwrecks can be a threatening issue faced by the National Park of Karimun Jawa, having taken place since 2013. The stolen shipwrecks were those from World War II. Sumandoyo (2018) reported that the most stolen shipwrecks were those coming from trading ships that have existed since colonial times. This looting sparked protests from England, Australia, and the Netherlands as the ship owners. These protests were addressed to Indonesia as a coastal state deemed to be capable of keeping the historic objects within its territory. On the other hand, the missing shipwrecks in the waters of Indonesia are highly valuable since they carried valuable metals such as copper cables, propellers, phosphor, and bronze. These shipwrecks have the potential in keeping historic assets for the states where the ships came from, including the three Dutch ships sinking in Java Island: HNLMS De Ruyter (6.650 tons), HNLMS Java (6.670 tons), and HNLMS Kortenaer (1.316 tons), a British ship called HMS Exeter (10,660 tons), two American ships such as the United States Steamship (USS), Pope (1,215 tons), and USS Perch (2,000 tons), and several ships from Japan and Australia.<sup>45</sup>

In terms of biodiversity, coral reefs in Karimun Jawa National Park mostly form a sloping bed of coral reefs, with a steepness of 30° of the front zone of coral reefs, where the highest abundance of coral reefs at the bottom part is steeper, running as low as more than 10 meters.<sup>46</sup> Up to 2006, there have been 353 species in total in 117 genera and 43 families found during the survey in the whole water of Karimun Jawa.

The historical objects and biodiversity in Karimun Jawa National Park are facing some issues, where trawlers have unintentionally damaged shipwrecks. This destruction is seen as common in the

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<sup>45</sup> Muhammad Mu'adz Hafidz Ridlo and Muhammad Faizal Alfian, "Posisi Indonesia dalam Rezim UNESCO Perlindungan Cagar Budaya Bawah Air: Pencurian Bangkai Kapal Milik Asing di Laut Indonesia," *Journal of International Relations* 7, No. 2 (2021): 66–76, <https://doi.org/10.14710/jirud.v7i2.30454>.

<sup>46</sup> Emma V Kennedy et al., "Coral Reef Community Changes in Karimunjawa National Park, Indonesia: Assessing the Efficacy of Management in the Face of Local and Global Stressors," *Journal of Marine Science and Engineering* 8, No. 10 (2020): 1–27, <https://doi.org/10.3390/jmse8100760>.



waters of Southeast Asia with the shallow seabed and frequent fishing activities. Trawlers could drag a shipwreck, dismantle it into parts and carry them some kilometres away along the seabed. Offshore to the east of the Malayan peninsula, for instance, Longquan shipwreck of the 15th century was found in the deep water, loading ceramics from China and Thailand, 'scattered along by trawl nets of Thailand'<sup>47</sup> before further action was taken. The exploration and infrastructure of the deep sea such as cable installation, oil drilling, and other exploration activities for other natural resources have caused damage to underwater heritage. Natural disasters like the tsunami in Samudra Hindia 2004 could also pose a threat. Inviting treasures such as gold, silver, and ceramic also significantly raise a threat to this underwater heritage in Southeast Asia. Such attractive aspects and exploration supported by underwater exploring devices are obvious in the removal of objects from shipwrecks, while these issues remain unregulated. These activities can be seen as the practice of 'looting', 'rescuing', 'souvenirs, strip mining' or 'treasure hunts'. The objects illegally obtained are to be further sold at local or international markets.

Wijaya et al., argued that biodiversity at Karimun Jawa National Park is facing some problems of plastic waste found at the beach and coral reef spots. The intensity of marine tourism activities such as snorkelling and diving also contributes to the damage of coral reefs. This negative tendency is raised by low awareness of coral reef conservation among visitors. Wijaya et al. added that during snorkelling activities, tourists stepped on coral reefs and they even took some valuable coral reefs to bring home. Coral reefs are also threatened by fishing nets that are often stuck in the coral reefs and

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<sup>47</sup> M Flecker, "The Ethics, Politics, and Realities of Maritime Archaeology in Southeast Asia," *The International Journal of Nautical Archaeology* 31, No. 1 (2002): 12–24, <https://doi.org/10.1006/ijna.2002.1017>; Atika Wijaya et al., "Toward the Community-Based Sustainable Marine Tourism: Identifying the Impact of Tourism Development in Karimunjawa Island," *International Journal of Academic Research in Business and Social Sciences* 11, No. 5 (2021): 275–288, <https://doi.org/10.6007/IJARBSS/v11-i5/9924>.

they broke the coral reefs when the nets are lifted to the surface.<sup>48</sup> Karimun Jawa National Park reported that in 2012, coral reefs in 68 hectares in Karimun Jawa were damaged with different severity conditions.<sup>49</sup>

One of the problems causing by barges carrying coal often damage coral reefs. The operators of these barges often dock their barges in the area of the National Park by lowering anchors smashing coral reefs underwater.<sup>50</sup> Reclamation involving activities such as mangrove logging, coral reef removal, and the development of tourism infrastructure and facilities both on land or in seawater is often performed without taking into account the ecological conditions of the sea. Although these activities are geographically far from the essential spots of Karimun Jawa National Park, the spreading impact all over the waters will certainly lead to more serious problems in some years to come; it will affect the next generation and the marine environment that is passed down to the further next generation that may witnesses the damage caused.

Although diving and snorkelling are substantially beneficial for the local economy, they will still be a threat when these activities are not supported by the dissemination of information given by stakeholders to visitors, encouraging them to take part in preserving coral reefs.<sup>51</sup> Information dissemination can involve comprehensive public education on the pristine ecosystems and fish resources

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<sup>48</sup> Fitri Ciptosari, "Pemasaran Pariwisata oleh Tour Operator dan Implikasinya Terhadap Tujuan Konservasi (Studi Kasus: Taman Nasional Karimunjawa)", *Thesis* (Salatiga: Universitas Kristen Satya Wacana, 2015).

<sup>49</sup> Laksono and Mussadun, "Dampak Aktivitas Ekowisata di Pulau Karimunjawa Berdasarkan Persepsi Masyarakat."

<sup>50</sup> Tommy Apriando, "Tongkang Batubara Parkir di Karimunjawa Rusak Terumbu Karang," *MONGABAY*, September 23, 2018, <https://www.mongabay.co.id/2018/09/23/tongkang-batubara-parkir-di-karimunjawa-rusak-terumbu-karang/>.

<sup>51</sup> Amalia Febryane Adhani Mazaya, Fredinan Yulianda, and Taryono, "Marine Ecotourism Demand (Snorkeling and Diving) and Coral Reefs Resources Valuation in Karimunjawa National Park," *Jurnal Ilmu Pertanian Indonesia* 25, no. 1 (January 27, 2020): 26–34, <https://doi.org/10.18343/jipi.25.1.26>.

through regulatory synergy among related institutions involved in tourism, fishery, and conservation management.<sup>52</sup>

## TOWARDS SUSTAINABLE GOVERNANCE ON UNDERWATER CULTURAL HERITAGE

One of the approaches to sustainable development fostered by the Indonesian Government recently requires the concept of marine ecotourism, especially diving tourism. On one hand, this tourism upholds conservation efforts. On the other hand, diving contributes sufficient educational and economic benefits. However, the problem is that the attraction of diving tourism can pose a threat to the conditions of coral reefs, mangroves, seagrass, and underwater fauna.

Nowadays, the development of the promotion of marine ecotourism, including diving tourism in Indonesia, takes place comprehensively as an instrument that generates a chance and issue as the fundamentals to grow the conservation of the diversity of attractions of marine resources and cultural heritage as part of the attractions to tourists.<sup>53</sup> This existing data detect that there are 400 spots where sunken ships from the past lie, while according to the maritime history of Indonesia, it is predicted that there have been thousands of sunken ships from World War II.<sup>54</sup> The real number could be higher; according to the research reports issued by UNESCO, there are twenty thousand ships from countries worldwide; they sailed to South Malacca and never returned to their countries. Some

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<sup>52</sup> Ernik Yuliana, "Pengelolaan Ekowisata Bahari Di Kawasan Konservasi Perairan Taman Nasional Karimunjawa," in *Optimalisasi Peran Sains Dan Teknologi Untuk Mewujudkan Smart City* (Tangerang: Universitas Terbuka, 2017), 89–116.

<sup>53</sup> Ardiwidjaja, *Pengembangan Destinasi Pariwisata Berbasis Lingkungan*.

<sup>54</sup> Natali Pearson, "Protecting and Preserving Underwater Cultural Heritage in Southeast Asia," in *The Palgrave Handbook on Art Crime* (London: Palgrave Macmillan, 2019), 685–730.

sources said they sank into the waters of Indonesia.<sup>55</sup> These objects could be damaged by treasure hunt to be further sold or auctioned legally or illegally for private collections.<sup>56</sup> Extensive potentials and the waters and archaeological objects such as sunken ships and their valuable objects have strategic value for national development, especially in educational, economic, social, and cultural aspects. Compared to 25,000 locations of sunken ships around the British waters with an area not more than one-tenth of the area of waters in Indonesia, there are 2,000-3,000 locations or more of sunken ships with economic value.<sup>57</sup> The ecotourism using cultural natural resources such as sunken ships and their loads along with the act to bring the understanding of economy to the fore has triggered a conflict of interests with the preservation of the value in the natural resources concerned.<sup>58</sup>

To tackle this issue, a new policy concept by promoting ecotourism features related to underwater cultural heritage is required. This ecotourism should be based on nature, appreciation for traditional culture in the area, maintenance of tourist spots involving local people, provision of job vacancies, especially in alternative jobs and the improvement of local people's and tourists' awareness.

In addition, to prevent and reduce damage and destruction to cultural heritage and its environment, proactive resource management (including living monuments and their environment) is necessary. Management should encompass various integrated approaches aimed at maintaining social-economic, cultural, and ecological sustainability and balance within the context of sustainable development. Cultural heritage can serve the present generation and be passed down to future generations continuously. This aligns with

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<sup>55</sup> Rahardjo, "International Convention Vs National Interest."

<sup>56</sup> Anna Petrig and Maria Stemmler, "Article 16 UNESCO Convention and the Protection of Underwater Cultural Heritage," *International and Comparative Law Quarterly* 69, no. 2 (April 2020): 397-429, <https://doi.org/10.1017/S0020589320000081>.

<sup>57</sup> Lu Caixia, "The Belitung Shipwreck Controversy," 2011, sec. 58.

<sup>58</sup> American Anthropological Association, *Resolving Conflicts in Heritage Tourism: A Public Interest Approach* (Chicago Hilton Towers, 2003).

Young's perspective on the importance of cultural heritage, which refers to the collective cultural outcome of learned or patterned behaviors from specific groups of people, inherited from previous generations, and subsequently enhanced (modified) before being passed on to the next generation.

Therefore the promotion of diving ecotourism and sustainable tourism policy reform is very important are expected to transform the utilization of sunken ships and their loads as cultural heritage objects from the economization of the commodity to the economization of experience and knowledge to exchange. In a conceptual scope, underwater cultural heritage must not be exploited commercially for trading or speculation interests. Sustainable protection of underwater cultural heritage will give benefits to the development of sciences especially related to non-destructive analyses that are currently in progress such as site surveys, digital construction, landscape mapping, mapping of collective objects, desktop research, photos and films, analyses of organic and inorganic matters, sonar and magnetometer surveys, or even experimental archaeology.

Marine ecotourism is categorized by the government into a particular category of tourism related to the activities at coastal zones, on the surface of the sea or seascapes or under the sea. This concept is offered by utilizing virtual reality technology to help promote Karimun Jawa more widely to the people or visitors and spreading new insight to the people when they do tourism activities. In reality, this kind of tourism is often preferred by foreign tourists due to the attractions given by environmental and cultural heritage conservation that involves the participation of the people in tourism management . Moreover, the presence of sunken ships with their loads and different kinds, shapes, and ages underwater has not been effectively taken care of, and this lack of efficient management is likely to pose a new threat to the sustainability of the marine environment where underwater cultural heritage lies. Within this purview, the policy of sustainable ecotourism can be an alternative to the utilization of underwater cultural heritage as a diving tourism attraction and the continuous conservation of the existing underwater cultural heritage.

## CONCLUSION

Indonesia as an archipelago is home to diverse underwater natural resources and cultural heritage. This richness is to be optimally protected within the framework of sustainable eco-tourism development. The urgency of the design of conceptualization of sustainable policy and the strategies of management and legal protection of underwater cultural heritage is inevitable. It is expected to build the pathway to the future. Karimun Jawa as a barometer of exotic maritime eco-tourism with the beauty of coral reefs, fish, and abundant underground cultural heritage offers a unique destination for both domestic and foreign tourists. This potential should be appropriately and sustainably maintained and serve as a reference to achieve the Golden Indonesia 2045 and become the developed and leading country. Through the collaboration of stakeholders, the re-conception of the design of sustainable tourism policy can be promoted to protect underwater ecosystems. The idea of building this operational concept of policy and the strategic plan to protect and preserve underwater cultural heritage is necessary to develop sustainable eco-tourism strategies. This can be initiated by the government by immediately ratifying the Convention on the Protection of Underwater Cultural Heritage 2001 to set comprehensive guidelines for the protection of underwater cultural heritage.

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