

# Environmental Security Perspective in the Maritime Tourism Industry Based on Blue Economy Principles

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**Abstract:-** Marine tourism is an important part of the welfare of coastal communities. It even has an impact on environmental damage in tourism destinations. Environmental security needs to be considered to achieve sustainable tourism activities. Sustainable development is known to be applied in the marine tourism sector through the application of the blue economy concept. The researcher aims to explore sustainable development in the marine tourism sector that supports environmental resilience by implementing a blue economy. This study uses a qualitative method with a literature study approach. Data was collected through exploration of literature, documents, scientific journals related to research. The results show that sustainable marine tourism can be developed through ecotourism that pays attention to education, society, and the environment. Cooperation needs to be carried out between stakeholders, so that sustainable development and environmental security in tourism destinations can be maintained to maintain sustainable development and environmental security in tourism destinations.

**Keywords:-** *Environmental Security, Blue Economy, Maritime Tourism, Sustainable Development, National Security.*

## I. INTRODUCTION

Humans have unlimited needs, but the existence of resources for human interests has limitations. In a simple understanding, economics is defined as a study of humans to maintain daily life related to human material welfare [1]. Efforts to fulfill human needs often experience conflicts of interest when faced with environmental problems. Human welfare is a key goal of economic activity with a picture of the success achieved, namely the increasing Gross Domestic Product.

Efforts to achieve prosperity for humans require limits from excessive use of the environment. It should be understood that the environment has limits to be utilized for economic growth and human welfare. Ignoring the existence of the environment will have an impact on humans and other species that use natural resources as a source of life [2]. The relationship of economic growth to the environment has been a matter of debate for several scholars in recent decades. The ongoing debate relates to how economic growth is carried out without having a major negative impact on the existence of the environment.

The World Commission on Environment and Development (WCED) popularized the sustainable development model for improving human welfare in a report entitled "Our Common Future" with the term 'sustainable

development' [3]. Until now, sustainable development has become a strategic issue in preventing environmental damage from getting worse. Saving the environment from excessive exploratory efforts is also a part of security studies, especially environmental security. Environmental damage due to excessive use of the economy will result in the depletion of natural resources which will affect security. Pressure on the environment will contribute to triggering conflicts that affect the politics and economy of a region. On this basis, environmental damage has become part of security studies and is considered as one of the non-military threats [4]. This can be seen from the redefinition of national security which includes environmental elements as one of the studies.

The expansion of security issues was officially recognized when world leaders met in the United Nations Security Council in 1992 which declared instability in the economic, social, humanitarian, and ecological fields as an international threat to peace and security [5]. Security relations in the context of sustainable development will lead us to think holistically about relations that are broader, complex, and lead to the meaning of individual security, patterns of economic activity, and social organization that will affect the use and abuse of the environment by humans [6].

One of the economic activities that have an impact on environmental conditions is marine tourism. The development of marine tourism that offers coastal and marine activities is one type of industry that is growing rapidly [7]. Marine tourism activities interact with environmental conditions by changing the original character of an area to attract tourists. Tourism carried out in coastal and marine areas, although based on ecology, is often not environmentally sound. A review of the literature related to tourism research shows that some countries do not prioritize environmental sustainability and neglect environmental protection in the interest of economic development [8].

Maritime tourism often has a negative impact on marine and coastal environmental conditions. Marine tourism activities such as snorkeling, diving, fishing, and several other activities have a risk of environmental damage when they do not have good management. Another threat comes from the increase in the number of tourists which will cause pressure on the ecosystem, thus affecting environmental degradation and decreasing the quality of marine waters [9]. The increase in the number of tourism has an impact on the possibility of over-tourism.

Over-tourism events occur when local residents, tourists, and visitors feel that there are too many people in an

area which will affect the quality of tourism and disrupt the quality of life of the local community. Over-tourism is triggered by concerns about the high-value ecology that attracts tourism and shows signs of environmental degradation [10]. The possibility of over-tourism in tourism destinations is a problem that must be resolved considering the threats posed to the environment.

An increase in the number of tourists on the other hand will have an impact on improving the economy for the community. Tourism accommodation service providers and souvenir traders are benefiting from an increase in the number of tourists. Efforts to increase welfare through marine tourism cannot be separated from the fact that the sector has a fast development in the world [11]. However, on the other hand, the increase in the number of tourists must be handled wisely considering that tourist attractions sourced from the coastal and marine natural environment are easily damaged.

Marine tourism activities such as snorkeling have the potential to damage the marine environment from the trampling of coral reefs. The remaining waste from tourism activities also threatens environmental sustainability. Coral damage and environmental pollution due to garbage left by tourists have an impact on environmental degradation. There needs to be an approach that can accommodate environmental protection and economic achievement without compromising both. A sustainable development approach is known to reduce the rate of environmental damage without compromising the use of the environment for the economy.

A sustainable approach cannot be separated from efforts to create environmental security to prevent impacts resulting from environmental damage. The tourism sector requires a sustainable development approach resulting from its influence on environmental, economic, and socio-cultural changes in coastal areas. Tourism can be the most sustainable sector when managed properly [12]. The development of marine tourism in a sustainable manner can be done through the concept of a blue economy. The blue economy approach is believed to be able to strike a balance between the economy and environmental conservation. Based on this background, this article seeks to explain the perspective of environmental security through a blue economy approach in the marine tourism sector.

## II. METHODS

In this research, the method used is qualitative with a literature study approach. The application of library research is carried out through gathering information related to relevant research topics or problems [13]. Literature studies can be used to explore and provide an overview of the problems being discussed. In its implementation, the literature study is carried out through several stages consisting of designing the chosen topic, noting the various sources that have been selected, analyzing, and rewriting the results that have been studied.

In this research, the method used is qualitative with a literature study approach. The application of library research is carried out through gathering inform [14]. The process of

collecting literature study data is carried out through books, scientific journals, the internet, and other sources that correlate with the research topic. The theory and information that will be obtained will be used as review material for research on research. The data obtained will be discussed descriptively in the discussion.

## III. RESEARCH OUTCOME AND DISCUSSION

### A. *Environmental Safety and Sustainable Development*

The term environmental security has been growing since the 1980s until the end of the cold war. Environmental security can be interpreted as two separate words. Environment is defined as the relationship between physical and biological systems, security is termed as an effort to protect national values from foreign threats [15]. Environmental security studies are a form of contemporary security that was born as a necessity to prevent damage and the quality of living space. Environmental security is an inseparable part of human security.

An understanding of environmental security can also be interpreted as the protection of living space, the irresponsible use of resources, and the ineffectiveness of the government and society in managing the environment [16]. Environmental security is needed because there is a view that environmental degradation will result in conflict and pose risks to human life and national security [17]. One of the environmental security issues is finding biodiversity that can interfere with ecosystem functions and their use for economic activities such as tourism [18].

Environmental damage can idle a country's economy which can have implications for a country's national security. For a small country with an archipelagic geography, tourism is a sector that contributes greatly to state revenue. In 2017, tourism in the Maldives generated 76.6% of the Gross Domestic Product (GDP), 65.3% for the Seychelles, 23.8% for Mauritius, and 11.6% for Sri Lanka [19]. The dependence of small countries on the coastal and marine environment is so great when there are no natural resources to increase state revenues. This is inseparable from the strong relationship between humans and the environment.

The close relationship between humans and the environment affects access to natural resources that are vulnerable to damage and scarcity. In overcoming these problems, sustainable development can be the basis for finding a middle ground for environmental and economic interests. Concepts can overcome immediate challenges while focusing on long-term goals [20]. The understanding of sustainable development is not correlated with efforts to achieve environmental security for direct human life.

Sustainable development was first echoed in a draft World Conversation Strategy made by the United Nations Environment Program (UNEP) and the International Union for the Conservation of Nature (IUCN) in 1980. In 1987 sustainable development was introduced through The Bruntland Commission Report entitled *Our Common Future* [21]. In the report, sustainable development is defined as one that meets the needs of the present without compromising the

ability of future generations to meet their own needs. Sustainable development requires political commitment from all countries by collaborating with experts on economics, environmental protection, and social development. In fact, planning and utilization of natural resources has minimal impact on the environment [22].

Sustainable frameworks that correlate complex security issues with human security issues and patterns of economic activity occur frequently. Sustainable development, which is intended to prevent environmental degradation, has now developed into an international decision. This is inseparable from the fact that environmental degradation that occurs across national borders with impacts felt by all human beings and needs to be overcome through global cooperation [23]. The process of global cooperation can be seen from the UN member states which showed their intention to adopt several international documents at the UN Conference on Environment and Development in Rio de Janeiro from 3-14 June 1992. The declaration adopted was based on the basic principles to achieve sustainable development that there are 27 items.

The existence of statements on sustainable development involving several countries can be seen that environmental issues cannot be limited geographically. All countries open their eyes to environmental problems that cross state administrative boundaries. Global warming, air pollution, and several environmental problems including environmental security are joint studies. The conference produced several outputs that deserve attention, such as The Rio Declaration, Agenda 21, and The Commission on Sustainable Development. It is clear that all the results issued are related to sustainable development. On this basis, the concept of sustainable development has played a major role to date in environmentally friendly development efforts.

Every country faces big challenges to implement sustainable development. Awareness of sustainable development from the smallest unit, namely the household to the industrial scale. The obstacles faced are related to the presence of the industrial revolution which often results in the exploitation of humans and the environment [24]. The commitment of the leaders who attended the conference was demonstrated through Agenda 21 to achieve sustainable development worldwide. The topics managed through Agenda 21 relate to the quality of human life, efficient use of natural resources, protection of global ownership, human management, and sustainable economic growth.

#### *B. From Green Economy to Blue Economy*

The implementation of sustainable development is increasingly visible when it is applied in solving the problem of the economic crisis in 2008. The green economy concept is one of the two themes discussed at The 2012 UN Conference on Sustainable Development (Rio+20). In short, the definition of a green economy relates to an environmentally friendly economic paradigm with its development contribution to poverty alleviation. The implementation of the Green Economy was carried out by the United Nations (UN) for each of its member countries in November 2008 [25].

This sustainable development covers three policy areas, namely, social and environmental. These three pillars must be developed in a balanced manner considering that what happens will only grow the economy and social and environmental development. This inequality can be seen from 20 percent of the population of developed countries which control 80 percent of world income and 80 percent of the population of developing countries only control 20 percent of world income [26].

Green economy implementation refers to the process of reconfiguring businesses and infrastructure that are used to get better benefits from investments in natural, human, and economic capital which also directly reduces greenhouse gas, waste, and social emissions. The green economy helps the government of each country to green the country's economy in policies, investments and creates clean technology, renewable energy, water services, green transportation, management, green buildings, and sustainable agriculture and forests [27]. From some of these goals, it can be seen that the green economy thrives in creating sustainable development through environmentally friendly management without a permanent residence.

Sustainable development as a joint concession between world countries has also experienced an expansion of meaning that is not only country-oriented. The sea is also a concern for sustainable development known as the blue economy. The concept of a blue economy is given by countries that are lucky in geography. This is based on the form of an archipelagic country and is divided into small islands. Countries with an archipelagic geographic constellation or Small Island Developing States (SIDS) introduce that maritime and marine economies are also an important part of economic development.

Small Island Developing States (SIDS) have unique characteristics of the economy, geographic location and size, vulnerability to natural disasters, fragile and limited ecosystems, limited human and financial resources, vulnerability to environmental changes. Most countries including SIDS have a concentration of population and economic activity related to marine. Likewise with tourism, SIDS and those sourced from environmental services have a great influence in generating foreign exchange [28]. Maritime tourism is known to have played a major role in state revenue.

#### *C. Maritime Tourism in the Blue Economy*

Maritime tourism is related to activities that occur in coastal and marine areas. This activity is supported by the natural beauty that attracts tourists to continue visiting tourism destinations. Attractions such as snorkeling, diving, fishing, sailing, surfing, and various other activities are direct with the natural environment. On the other hand, ship activities using cruise ships are also part of tourism. For countries located in islands, marine tourism is a priority to improve the local economy. Marine tourism activities carried out can be interpreted as a person's long journey to a destination that focuses on the marine environment. The marine environment area that is used for marine tourism is an

area that is influenced by seawater salinity and is influenced by tides [29].

Maritime tourism can support a multiplier effect that has an impact on people's welfare but also has an impact on environmental damage. Various sectors that drive the community's economy are positively affected by marine tourism. Restaurants, inns, artisans, tour guides, fishermen, and catering businesses are the groups that experience direct impacts from tourism. The welfare of the community will be realized through tourism, but environmental conditions which are an attraction need to be considered. The application of the blue economy concept in tourism development is a solution so that the environment is not forgotten in economic development. Environmental degradation due to tourism has an impact on biodiversity, air pollution, and disturbances to ecosystems. This can happen when there is no sustainable development effort in the implementation of tourism. Marine activities make optimal use of environmental resources, but also pay attention to ecology and should preserve biodiversity. The World Tourism Organization (WTO) points out that tourism causes environmental degradation and the need for sustainable tourism development. Tourism needs to take into account the current and future economic, social and environmental impacts.

Environmental damage due to tourism is known to have an impact on damage to coral reefs and coastal and marine ecosystems. The development of marine tourism using the blue economy concept ensures the preservation of the environment for future generations. This sustainability is part of ensuring national security is maintained so that security and conflicts in society can be avoided. Sustainable development in national security is a tool that can protect human life by providing a sense of security from long-term risks [30]. Blue economy is one of the efforts to achieve sustainable development.

Sustainable marine tourism requires the cooperation of various stakeholders. Sustainability which is the goal requires the participation of the government, community, private sector, social institutions in economic development that helps protect the environment for future generations [6]. Cooperation between stakeholders is needed because tourism carried out in coastal and marine areas has an impact on various sectors. Local government, central government, community, private sector, non-governmental organizations, and the media are stakeholders that need to be involved. This collaboration that involves all stakeholders can be done through the pentahelix concept.

The pentahelix collaboration is a design that integrates five sectors, namely business, community, academic, government, and media [31]. The existence of a pentahelix that supports efforts to achieve sustainable development in the tourism sector can be done. It is hoped that with pentahelix cooperation, recommendations and suggestions will be very diverse in developing sustainable tourism. One application of sustainable tourism in line with the principles of the blue economy is ecotourism.

The implementation of ecotourism incorporates educational, social, and environmental elements which are an important part of sustainable development. Tourism is no longer only concerned with the economy, but also with education, maintaining local communities, and the environment as a source of livelihood. This is in line with the three principles of the blue economy to achieve increased welfare through the economy for the community, maintenance of social life, and a sustainable environment. The economic process has been and continues to be carried out with efforts to achieve economic benefits without the development of human life that has been preceded and the environment that accompanies it [32]. The blue economy shows its role as a guide for environmentally friendly development. Environmental carrying capacity is a concern so that the utilization of marine environmental services is not overexploited.

#### IV. CONCLUSION

Marine tourism has an impact on the damage to the marine environment which indirectly threatens the environmental security sector. In maintaining environmental security in the tourism sector, sustainable development is needed. The blue economy can be seen to guide sustainable marine tourism so that the environment can be conserved and utilized for the future. The process of collaboration between stakeholders is very necessary for realizing sustainable tourism. The application of ecotourism is known as an effort to support the blue economy concept. Elements of education, social and environmental will unite to form sustainable tourism. For countries or regions located in islands, application of ecotourism must be applied to ensure an environment that becomes an attraction for marine tourism.

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