The Reducing Of Potential Hazard In The Shore Tourism; Ternate City

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Abstract. The purpose of this study is to identify and determine the potential hazards in coastal tourism activities in Ternate City. The method used in this study is quantitative descriptive. The results of the research found prove that Ternate City has potential hazards in coastal tourism activities. The potential hazards are in the form of Tsunamis, Abrasion, changes in ocean currents, Mount Gamalama eruptions, and environmental damage. Ternate City has many potential dangers that can threaten tourists. There needs to be disaster mitigation and the dissemination of potential hazards found in Ternate City, especially in tourism objects.

1. Introduction
Disaster risk or hazard reduction efforts are one of the actions that can be taken to reduce casualties. Danger is an event in the form of a disaster, accident and anything that can cause harm. According to Meilani (2018; 1) Hazards are defined as sources that have the potential to cause harm, accidents, or adverse health impacts on something or someone. Dangers can threaten someone anywhere such as a place of tourism and so on. The danger that occurs in a place of tourism has the potential to take a lot of casualties, because in that place tourists can spend the weekend with family.

Ternate as one of the islands that has the potential of marine natural resources. Maritime tourism potential has encouraged the government and local communities to develop maritime tourism potential as a tourism destination. The utilization of the potential of marine natural resources as a tourist destination in the city of Ternate has an impact on the environment and potential disasters in tourism objects. Beach reclamation carried out by tourism developers has obviously caused environmental damage to the place, and the community, whether tourists or business people, are less concerned about the environment in the tourist attraction.

Ternate City consists of an archipelago with a land area of 250.85 km², a sea area of 5.547.55 km², and is divided into 7 sub-districts, villages with a classification of 56 coastal villages and 21 non-coastal villages / villages. Based on these data there are 73% of villages/ villages located on the Ternate Beach Coast [1]. The city of Ternate is in the form of an island with 73% of the community or 56 villages / villages located on the Ternate Beach Coast. Beaches located on Ternate Island have
the potential of natural resources that can be made as a marine tourism destination. Maritime tourism potential is a natural resource with certain water characteristics, clear water and various blue variations, topography brings a sloping and steep sea, there are various types of fish, and the beauty of coral reefs. This maritime tourism potential can be used as a place for snorkeling, diving, swimming and fishing [2].

Tourism development as a strategy to improve the prosperity of the community, the economy of the country, create jobs, preserve natural resources, the environment and culture contained in certain areas in this case the community found in Ternate City. Tourism is also a promising industry in the midst of regional autonomy that forces each region to develop every potential resource that the region has. The city of Ternate itself is inseparable from the process of optimizing the resources owned, underwater natural resources are one of the tourism potentials developed [3]. Maritime tourism development in Ternate City is growing rapidly. The development of maritime tourism potential must pay attention to environmental aspects. The environment is a unity of space with all things, power, circumstances, and living things, including humans and their behavior, which affect nature itself, as well as the continuity of life and well-being of humans and other living things [4].

Webster's New University Dictionary defines tourism as a travel for pleasure; businesses provide tourists and tourist places for tourists, and tourists are people who travel for pleasure. There is attention from the definition, according to Gee Makens and Choy (1997) that attention comes from academics and the views of practitioners about travel research require standard definitions that are used for research purposes, and an agreement on tourism measurement as an economic activity and its impact on the economy Country and World economy. In North America, the U.S. and U.S. Travel Census centers for annual travel statistics data consider only trips taken 100 miles or more (one way) from home. But Waters (1987) argues that this criterion is unreasonable and is proposed instead in an annual summary of travel similar to the tourism resource reference guide (1973) that a distance of 50 miles or more is a more realistic criterion. In addition, the Canadian government explained that tourists are people who travel at least 25 miles outside their communities [5].

Tourism is now a staple for local and foreign people. Contemporary society has an important role in carrying out typical tourism activities in a particular region and is able to improve the economy and prosperity of the community in sharing regions and countries. Tourism is considered the first of all forms of recreation other than activities and other free time-expenditure formulas (Holloway, 1994); This implies that the temporary movement of people through destinations that are outside the regular residence and activities that are deployed during the time spent at the destination (Witt, Brooke and Buckley, 1991). Also in most situations, this implies the performance of some costs with the impact on the regional economies visited [6].

Strategic tourism area is an area that has the main functions of tourism or has the potential for tourism development that has an important influence in one or more aspects, such as economic, social, cultural growth, empowerment of natural resources, environmental carrying capacity, defense and security [4]. Tourism with the environment are two interconnected aspects. Tourism is very dependent on the environment and the environment is vulnerable to the impact of tourism activities. Tourism as an activity that develops rapidly and causes the need for conservation and good environmental management. This was officially recognized at the World Tourism Conference in Manila in October 1982; then passed in a joint declaration by the WTO (World Tourism
Organization) and UNEP in 1982. UNEP has devoted a special edition of Industry and Environment to tourism and the environment (Wong, 1993).

The tourism industry is an industry that has experienced rapid growth throughout the world and has gradually undergone a change from one secondary need (luxury needs) to a primary need (basic need) which means that in a certain period one must be able to carry out tourism activities. However, tourism is also an industry that is very vulnerable to issues and crises (Putra, 2008). Four aspects that must be considered in tourism development are economic, social, cultural and environmental. One of the positive impacts in the economic field is that tourism activities bring in foreign exchange income. In 2011 foreign exchange earnings from tourism were estimated to reach USD 8.5 billion, up 11.8% compared to 2010. This increase exceeded Indonesia's economic growth which is projected to be at 6.5% and world tourism growth which is only around 4.5% [7].

2. Marine Tourism in the City of Ternate

Ternate City is one of the cities in North Maluku Province, Indonesia. Located below the foot of Mount Gamalama, the astronomical city of Ternate is located between 0 025’41,82” - 1 021’21,78” LU and 12607’32,14” - 127026’23,12” BT. Geographically, the North is bordered by Maluku Sea, bordering the Tidore Kepulauan City in the south and South Halmahera Regency, in the east by Halmahera Strait, in the west by Maluku Sea and Sulawesi Island.

![Figure 1. Map of Tourism and Disaster Risk Management in Object Tourism Ternate City](image)

Tourism as an industry has an important role in improving the economy of the country, society and reducing unemployment. Maritime Tourism Ternate City as an industry that has experienced rapid growth. Marine tourism or beach tourism that relies on natural resource potential (nature) must always be preserved. The condition of marine natural resources contained in the city of Ternate can be seen in the following figure:
The picture above proves that Ternate city has maritime tourism potential that has been developed into a beautiful natural tourist destination.

3. Method
The research method used is quantitative research methods. Use of this quantitative research method with the aim to reveal the facts contained in the field. Related to the impact of marine tourism development on the environment and potential disasters in Ternate City. Data collection techniques are carried out online. Instruments that have been made online are distributed to the people of Ternate City randomly. The research instrument distribution process uses social media such as Facebook, WhatsApp, and Instagram. After all data has been collected, the researcher compiles the data and is analyzed using descriptive statistics. This descriptive quantitative analysis is used with the aim to reveal the facts of the research sample related to the impact of maritime tourism development on the environment and potential disasters in Ternate City [8].

4. Results and Discussion
4.1. Maritime tourism potential of Ternate City can be seen in the following diagram:
Ternate is a city that has the potential to developed into a marine tourism city. The community agreed with the statement as much as 93%. Maritime tourism potential is one of the opportunities that must be utilized to improve the welfare of the community. The community agreed with the statement as much as 92%. Marine tourism should be used as the main program of the developer of Ternate City. The community agreed with the statement as much as 81%. The policy taken by the government in developing maritime tourism in Ternate City was fully supported by the people of Ternate. The community agreed with the statement as much as 84%. Maritime tourism in Ternate is good. The community agreed with the statement as much as 65%. Maritime tourism management in Ternate is good. The people who agree with the statement as much as 55% means that there are still 45% of the community judging that the management is not good and there is a need to improve management.

Good tourism potential, capable of providing high accessibility and visibility. Public infrastructure is actually a major tourist arrival determinant for cultural attractions. More exploration of new functions such as tourist attraction will bring more awareness of benefits. Multivariate analysis and correlation accompanied by better statistical indicators can offer actors and stakeholders the possibility to predict further evolution. The actual dominance of the private sector is an opportunity but can create gaps in the tourism or environmental cycle if it is still out of control and not supported by public institutions. Tourism potential must be considered more as a number of government forces and less as a territorial inventory [9].

Marine tourism places do not need beach reclamation. The community agreed with the statement as much as 70%. Beach reclamation carried out by the developer with the aim of utilizing the land for joint appropriateness. The community agreed with the statement as much as 53%. The negative impact of coastal reclamation is the occurrence of sedimentation, increased turbidity of the water, destruction of habitat and marine ecosystems. The community agreed with the statement as much as 84%. The tourism infrastructure facilities in Ternate are already good. The community agreed with the statement as much as 56%. Kota Ternate has good service for visitors / tourists.

Figure 3. Maritime Tourism Potential of Ternate City
community agreed with the statement as much as 79%. Tourists will feel comfortable when swimming, diving, snorkeling on a clean beach. People who agree with the statement are as much as 100%. Maritime tourism potential is jointly owned, as tourists we must maintain this potential by not damaging or polluting. People who agree with the statement are as much as 100%. Tourists visiting maritime tourism destinations must play a role in preserving the environment. People who agree with the statement are as much as 100%. The development of tourism potential must pay attention to environmental aspects. Formal recognition at the World Tourism Conference in Manila in October 1982; then passed in a joint declaration by the WTO (World Tourism Organization) and UNEP in 1982. UNEP has devoted a special edition of Industry and Environment (Wong, 1993).

4.2. Maritime Tourism Development in Ternate City and Its Impact on the Environment

Maritime tourism in Ternate City is an area that is vulnerable to environmental damage. Environmental damage can be caused by the activities of the community and tourists. Issues related to environmental damage, in this case the maritime tourism destination of Ternate City requires the existence of sustainable and responsible management. The growth of an industry has its own impact on the environment in this case the tourism industry. The tourism industry is one way to support the economic needs of the community and the State. According to Salim, 2010; in [10]; Economic needs are supported by technology, humans are obsessed with mastering the environment. "That science triggers new innovations and inventions which originally rolled in small and separate ways and then like a flood culminating in the Industrial Revolution that was sparked in England (1760-1830) and then extended to European land across Japan to the United States and Japan in the century 20th and in the 21st century entered the Asian Continent. The industrial revolution with the introduction of technology, and its various impacts, gradually realized that our environment is faced with a reality, our environment is increasingly under pressure. The pressure caused by a population that continues to grow, the environment becomes damaged and destroyed, degradation of quality caused by pollution and damage by humans, and nature itself.

[11] The Grande Island, off the coast of North Goa, is an important marine tourism activity site in the state, with recreational SCUBA diving being an important form of tourism here. To better understand the history and nature of diving on this site and the changes observed in local marine life over the years, we conducted questionnaire-based surveys from professional divers working in the region. Findings from this study highlight that diving plays a major role in Goa's tourism industry. Professional divers in Goa record the presence of picnic boats and damage their anchors, along with the amount of waste they produce to be a significant threat to coral reefs and the dive industry itself. Although most divers claim that they comply with international guidelines for responsible diving, we recommend that more specific and detailed studies of the behavior of divers and the carrying capacity of the reef itself be carried out, to effectively measure the current impact of this activity on Grande Island.

The results of research related to the development of marine tourism in Ternate and its impact on the environment can be seen in the following diagram:
Maritime tourism development Ternate city became one of the industries that experienced very rapid development. These developments have an impact on the environment. The following diagram will describe the three in the above, namely: Trash is goods or objects that are discarded because they are no longer used. The community agreed with the statement as much as 80%. As good tourists we have to throw garbage in its place. People who agree with the statement as much as 100% A number of tourist destinations in the city of Ternate are free from garbage. The community agreed with the statement as much as 29%. Tourists do not find any garbage at tourist attractions. The community agreed with the statement as much as 25%. The behavior of tourists you meet / see at tourist attractions is friendly with the surrounding environment. (do not throw garbage and damage the coastal ecosystem). The community agreed with the statement as much as 45%. This means that a number of tourist destinations in Ternate, especially marine tourism are still not clean. This can be influenced by people's behavior and the availability of temporary disposal sites. There is a need to increase public awareness and provide supporting facilities that can help people behave.

People who care about the environment reach 99% and throw garbage in its place. Temporary Disposal Sites (TPS) are very important to reduce the behavior of people who are not in accordance with the rules. The people who agree with the statement are 99%. Tourists who dispose of their trash is not in good condition. The people who agreed with the statement were 100%. Availability of temporary disposal sites / trash cans in tourist objects is good. The people who agreed with the statement were 58%. This means that there are still 42% who have not agreed with the statement. There are already cleaning staff in marine tourism objects in Ternate city. The people who agreed with the statement were 64%. The janitor has done his job well. The people who agreed with the statement were 56%. Tourists and business people have disposed of garbage in its place. The people who agreed with the statement were 52%.
4.3. Disaster Potential in Ternate

Ternate City is an area that is very vulnerable to disasters. According to Hasyim, Ternate is one of the areas prone to natural disasters in North Maluku, even from 14 types of potential natural disasters in North Maluku, 13 of which are in Ternate, such as the eruption of Mount Gamalama, floods of earthquakes, tsunamis, landslides and tornados [12]. The potential of the disaster is a threat to the people of Ternate City. The threat of each disaster can occur at any time. To reduce disaster risk, there is a need for appropriate disaster mitigation in Ternate City.

The efforts made by BPBD, continued Hasyim, are maximizing the role of the Tangguh Bencana Village, including conducting socialization to local residents on all matters related to natural disasters, especially actions that must be taken by residents when natural disasters occur [12]. These efforts have been good enough but there needs to be socialization to the people of Ternate City as a whole, especially in the maritime tourism object of Ternate City. The maritime tourism object of Ternate City is a destination that is very crowded with tourists and has access far from the city center and hospital. This requires disaster awareness and procurement of evacuation routes in the maritime tourism object of Ternate City.

5. Conclusion

Ternate is a city that has the potential of marine resources. The potential of marine resources is utilized as a tourist destination. The use of the Wista destination has an impact on the environment. There are still people who have realized the importance of protecting the surrounding environment but have not behaved according to their awareness. There is an increase in the management of maritime tourism carried out by the government of Ternate City and marine tourism developers in facilitating activities carried out by tourists and the procurement of evacuation routes in tourism objects to anticipate the occurrence of disasters such as tsunamis, landslides, and the eruption of Mount Gamalama.

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