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## **ASSESSMENT OF TOURISM RISKS IN COASTAL AREAS: PREPARATION OF TOURISM DEVELOPMENT IN SOUTH COAST AREA, INDONESIA**

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### **ABSTRACT**

The South Coast Special Interest Area of South West Java is an area that will be developed based on the West Java Province Tourism Development Master Plan in 2016-2025. This plan is a follow-up to the Indonesian Government's program that continues to improve the tourism sector. The success of the development is expected to significantly increase the number of visitors. It should be understood that increasing visitors will increase foreign exchange and the economy of the community but will lead to a risk. This study aims to make risk assessments that occur in this area so that it will provide prevention information on risks that might occur. Qualitative results are observed and interviewed. It was found that the risk was caused by low public awareness, lack of preparedness of the local government in developing the tourism sector, a conflict of interest because the south coast was owned by three districts and other reasons.

Keywords: Risk, Tourism, Coastal

## **Introduction**

The optimistic target in 2019 in the tourism sector is believed to be achieved by the continued development of infrastructure by the Indonesian government. The development will have a positive impact both directly and indirectly through the opening of access to tourist destinations that are still not exposed. Indonesia as an archipelago is very rich in cultural values and natural beauty, but unfortunately many people still do not know the existence of these sights. Good infrastructure is expected to be one solution to bring a potential tourist attraction to be introduced to the local Tourists and foreign Tourists.

The increase in the number of tourists visiting Indonesia will certainly provide additional foreign exchange for the government, as well as people living around the tourist attraction will also feel an increase in income either directly from the sale of an original product from the tourist attraction as a typical souvenir area, the innkeeper rents his place, the vehicle owner rents the vehicle and other forms. South West Java region if developed into very potential tourist attractions especially if the government can meet the deficiencies of this region, especially Infrastructure, facilities and infrastructure. Overview of visits to the Special Interest area of South West Java shows an increasing number each year that helped contribute the number of tourist visits West Java region.

The growing number of visits in this area does not mean always have a positive impact but also gives a negative impact and negative impact, where the negative impact will trigger a risk. A significant increase in visit data, this will also provide acceleration to existing risks. Some examples of events that are at risk of damage to tourist attractions that is the destruction of natural ecosystems due to the dense of visitors, the rest of the waste of food and beverages are thrown carelessly. The above examples illustrate the risk of natural damage caused by tourist attractions. In addition to migrants the damage to nature is also caused by the behavior of the local community itself. Bad community behavior will undermine coastal environmental conditions where the causes are economic factors and social factors such as low levels of community education which in turn, environmental damage will have an impact on economic, social and environmental conditions, (Pinto, 2015).

According to Richardson and Flucker (2004), the impacts of tourism on the environment include the impact of the use of transportation, the impacts of the construction of tourism facilities, and the impact of the operation of the tourism industry. To develop a tourism area one of the conditions that must exist is the infrastructure so that access will be open, the opening of this access resulted in increased number of transportation to visit. As we know the means of transportation will provide pollution in the form of exhaust gas containing CO<sub>2</sub> and noise pollution. Because it is a coastal area the use of motorized vehicles will also damage the existing ecosystem with pollution from leaking oil, fuel, and others. Construction of the facility will certainly use a large area of land that requires clearance of land where cleared land is an ecosystem of the area. In the operation of tourism such as hotel and lodging facilities will be associated with either liquid or solid dumping valley, beach recreation will damage the existing habitat.

The increasing number of visitors will lead to the acceleration of coastal abrasion process. Beach abrasion is often referred to as coastal erosion which is the process of eroding coastal areas due to ocean waves. The erosion resulted in reduced coastal areas, especially areas closest to sea water. If allowed to continue, abrasion will crush all coastal areas so that the risk of sea water will inundate all coastal areas and residential areas.

Risk will also occur in the economy around the tourist area, according to Mathieson and Wall (1982), the community will depend on tourism, rising inflation and sky rocketing land prices, rising imports of foreign goods, seasonal earnings, . The WTO (1980) adds to the negative impacts of tourism affecting the economy, the scarcity of food sources, the mismanagement of local products with market demand, the scarcity of energy resources and the cost of waste management. Another impact of tourism will increase an opportunity to commit criminality be it from the local community as well as from the visitors. According to Pizam et al (1982) in Pitana and Diarta (2009), tourism has the potential to be a determinant of the emergence of various forms of crime.

Special Interest Area of South West Java is an area that will be developed based on the Master Plan of Tourism Development of West Java Province in 2016-2025. Looking at the potential of natural damage as well as other impacts resulting in the occurrence of risks in various elements that exist on the object South Coast Tourism District, then the development planning of this area should be well designed with long-term priority and see the sharing of factors that may have an impact on the attraction . According to some experts Mathieson & Wall (1982), Murphy (1985), Gets (1986) in Dowling & Fennel (2003:7) in tourism management, environmental, economic and social factors become a reference in their implementation. The results of risk mapping from negative impacts on environmental, economic and social factors as well as other related factors will provide strategic input in the management of tourism objects South Beach regency.

Prevention efforts can be undertaken if stakeholders in the tourist area get good information about the potential risks will occur. One of the most undesirable risks is natural disasters occurring due to the destruction of existing ecosystems. If a disaster occurs, it will be difficult to recover the condition of the existing tourist attraction. Protection of people and property against the negative impacts of natural hazards will require a more balanced use of structural and non-structural measures, such as land-based and ecosystem-based planning as solutions for disaster risk reduction, (Moos, et al 2018). Risk mapping will provide guidance on the maintenance of land use, ecosystems, infrastructure development and so on.

### **Literature Review**

The risk that occurs in a coastal area will vary depending on the factors that exist in the region. The theory used is adjusted to see the similarities of the factors in the coastal tourist areas studied. The theory that existed in previous researchers will be a reference as a material in the process of surveys and interviews, where the technique is a qualitative strategy used in this study. In qualitative research, theory is often used as the final point of research. By making the theory as the last pawn of research, it means that researchers apply the process of inductive research that takes place from data, then to common themes, then to a particular theory or model (Punch, 2005).

#### *Concept of Risk*

The concept of risk according to Griffin and Ebert (1996) risk is an event of uncertainty challenging events to come. Joel G. Siegel and Jae K. Shim (1999) define risks in three things: The circumstances that lead to a set of special results, where the results can be obtained with the possibilities already known to the decision maker; Variations in profits, sales or other financial variables; The possibility of a financial problem that affects the performance of a company's operations or financial position such as economic risk, political uncertainty and Industrial problems. According to Kurniawan G.I. & Yuneline M. H. (2017), the definition for risk is an event in the future due to the uncertainty conditions that have a negative impact for those experiencing it as a form of the current decision-making process

### *Risk identification*

Risk identification is an ongoing process of analyzing to systematically find the risks that will threaten the company. In the implementation of the risk management process will start from the identification of risk, this activity is an early stage that finds, records, and determines all the potential risks that will be faced by the company. Principles of Risk Identification according to Kurniawan G.I. & Yuneline M. H. (2017): Understanding of Risk; Knowledge of risk characteristics (frequency); The ability to segment those risks into segments that are separate from each other in a complete and in-depth cumulative; Impact Risks to business continuity (risk magnitude level) and determine the priority of those risks.

Theories on methods and techniques related to coastal tourism areas to be studied include those according to Ramli (2010) such as: Brainstorming, which identifies sources of information about hazards can be obtained from all parties; What-if, this technique is brainstorming, but all team members are guided by the word "what-if"; HAZOPS, (Hazard and Operability Study) are used to identify the hazards that exist in the operational process. Other identification techniques according to Hanafi (2012) are as follows: Risk sequence, Risk identification with this technique refers to a causal sequence which will result in a sequence of events that illustrates the possibility of a risk occurring; Identification of Risk Sources; Contract analysis, this identification aims to see the risks that can arise due to a particular contract. This risk is more related to the risk of lawsuits.

### *Negative Impacts of Tourism*

Risk is the result of uncertainty that gives negative results so that the negative impact of tourism will lead to a risk.

- Negative Impacts on Socio-Culture,  
According Richardson & Fluker (2004: 129-131) such as the impact on population structure, transformation of livelihood structures, transformation of values, and impact on everyday life. According to them also the disruption of daily life resulting from overcrowded people, traffic congestion, excessive use of infrastructure, loss of usability and social benefits of the land, loss of benefits and other businesses, architectural design pollution, crime against tourists and crime by tourists.
- Negative Impacts on the Environment  
According to the Law of the Republic of Indonesia Number 32, Year 2009 Concerning Environmental Protection and Management, Article 21 of the first scope is the standard criteria for ecosystem damage (land damage for biomass production, coral reef damage, damage from forest or land fires, mangrove damage, seagrass beds, and peat damage).

The second standard criterion is the damage caused by climate change (temperature rise, sea level rise, storm, and drought).

### *Tourism Risks Assessment*

Moutinho (2000) has identified the following tourist based factors which need to be considered in risk assessment: Functional risk, the risk that the tourism industry will not perform as expected; Physical risk, the risk is that the tourist product/service will be harmful; Financial risk, the risk that the tourism will not be worth the cost, either in time or in money; Social risk, the risk that a poor tourism may result in embarrassment before others; Psychological risk, the risk that bad tourism choice will harm the tourists' ego. From the theory expressed by Moutinho is very suitable if used on the beach area that is already running well. In this study the object

of the studied object is a coastal area that has not been developed but has a high potential to be developed so that in assessing the risk that there is needed adjustment. Atkin and Brooks (2009) developed 19 major risk variables for risk assessment. Several related variables in this research are: Insufficient implementation planning; Poor relationship between the contractor and the contract manager; Conflict of interest when dealing with in-house tender; Unclear or inappropriate roles or responsibilities; Lack of standards; Risk allocation and improper appreciation; Lack of education and training; Vendors under performance.

The weather in the coast will determine the visit from tourists. If tourists visit and get experience can not enjoy their holidays because bad weather will affect return visit from tourists or will give a negative suggestion to other tourists. In particular, climate change heavily affects decision-making in the tourism industry (Simpson et al., 2008). Study results by the European Commission (Barrios & Ibañez, 2015), which analysed the longterm effects on tourism caused by climate change in terms of duration and frequency of holidays. The tourism industry should take on a risk-prevention strategy as a pillar of a policy for sustainable development aimed at protecting the environment and its deterioration and at playing a key role in dealing with the challenges of climate change (Franzoni & Pelizzari, 2016). Tourist visits will also be influenced by the level of security on the attractions that will be visited. According to Beirman (2003), the perception of safety and security is a key determinant in the decision of tourists to visit a tourist area. Coastal tourism area is a natural tourist attraction so that natural conditions must be maintained even though influenced by infrastructure development and population density due to the development of this tourist area. The risk of natural damage is very likely to occur in the area of natural tourism if not done a good management. Causes of coastal abrasion resulting from human intervention according to Shore Protection Manual Volume I (1984), ie coastal dredging, coastal material retrieval, sediment transport disconnection, decreased parallel coastal sediment supply, coastal wave energy concentration, increased sea depth and natural change beach. Broadly speaking can be said that the risks that occur will affect tourists in making decisions to visit a tourist attraction. The existing literature has generally agreed that tourists tend to avoid destinations with greater perceived risks (Sönmez et al., 1999; Law, 2006; Batra, 2008)

## **Methodology and Data**

### *Research Strategy*

Research strategies are the types of qualitative, quantitative, and mixed research designs that define specific procedures in the study. Some call this research strategy the term research approach (Cresswell, 2007) or research methodology (Martens, 1998). In this study will use qualitative research strategy with the type of design is a case study. This study is a research strategy in which researchers carefully examine a program, event, activity, process, or group of individuals. Cases are fully constrained by using various data collection procedures based on predetermined time (Stake, 1995). In this study will produce a picture of the negative impacts that will cause a risk on coastal attractions. The investigation will be done by way of direct observation of tourist attraction, interview on stakeholders related to south coast tourism object. In terms of research methods, this study included in the survey research, from the level of explanation in the descriptive research, and in terms of time included in the cross sectional study. In qualitative research, theory is often used as the final point of research. By making the theory as the last pawn of research, it means that researchers apply the process of inductive research that takes place from data, then to common themes, then to a particular theory or model (Punch, 2005).

### *Data Collection Procedures*

The data collection conducted in this study will follow data collection procedures based on the strategy concept of Cresswell (2009). The procedures carried out in the field are as follows:

1. Qualitative observation is an observation in which the researcher directly took to the field to observe the behavior and activities of individuals in the research location. This observation is done by looking at the tourist area, the area around the tour, related stakeholders, the existing infrastructure on a certain radius.
2. In qualitative interviews, researchers can conduct face-to-face interviews with participants in whom interviews are conducted on tourist visitors, government-related tourist objects, business actors, community representatives, and community leaders.
3. Collection of qualitative documents, such documents may be public documents (such as newspapers, papers, office reports) or private documents (e.g., diaries, letters, and e-mail).
4. Audio material is used as a tool for obtaining data accuracy when interviewing, the video is used to capture an overview of the situation of the tourist object and the area around the tour. Other than that, used photographs to document the situation in the object area of research.

### **Results and Discussion**

Survey and interviews were conducted in three southern coastal areas (Santolo Beach, Sayang Heulang Beach and Ranca Buaya Beach). The initial data collection process is carried out by conducting literature studies to get the materials to be obtained so that it will generate questions that are used for the risk identification process. The method used is brainstorming. According to Ramli (2010), this method of identification is done through discussions and meetings of different parties and individuals to explore the potential hazards that exist or known to each member of the group. In the interview process, the question materials to be used will refer to the sources of risk, the negative impacts of tourism and the variables that can be used to conduct risk assessment. The process is completely described in the Figure 1.

### *Result*

Based on the above model then performed the identification and analysis process where the initial step is done by documenting the beach area through video and photos, after that conducted interviews to each resource listed on the model in Figure 1. The process is repeated to get the results by dividing it into the causes of risk, key risk and risk details based on key risks. The explanation in detail can be seen in Table 1.

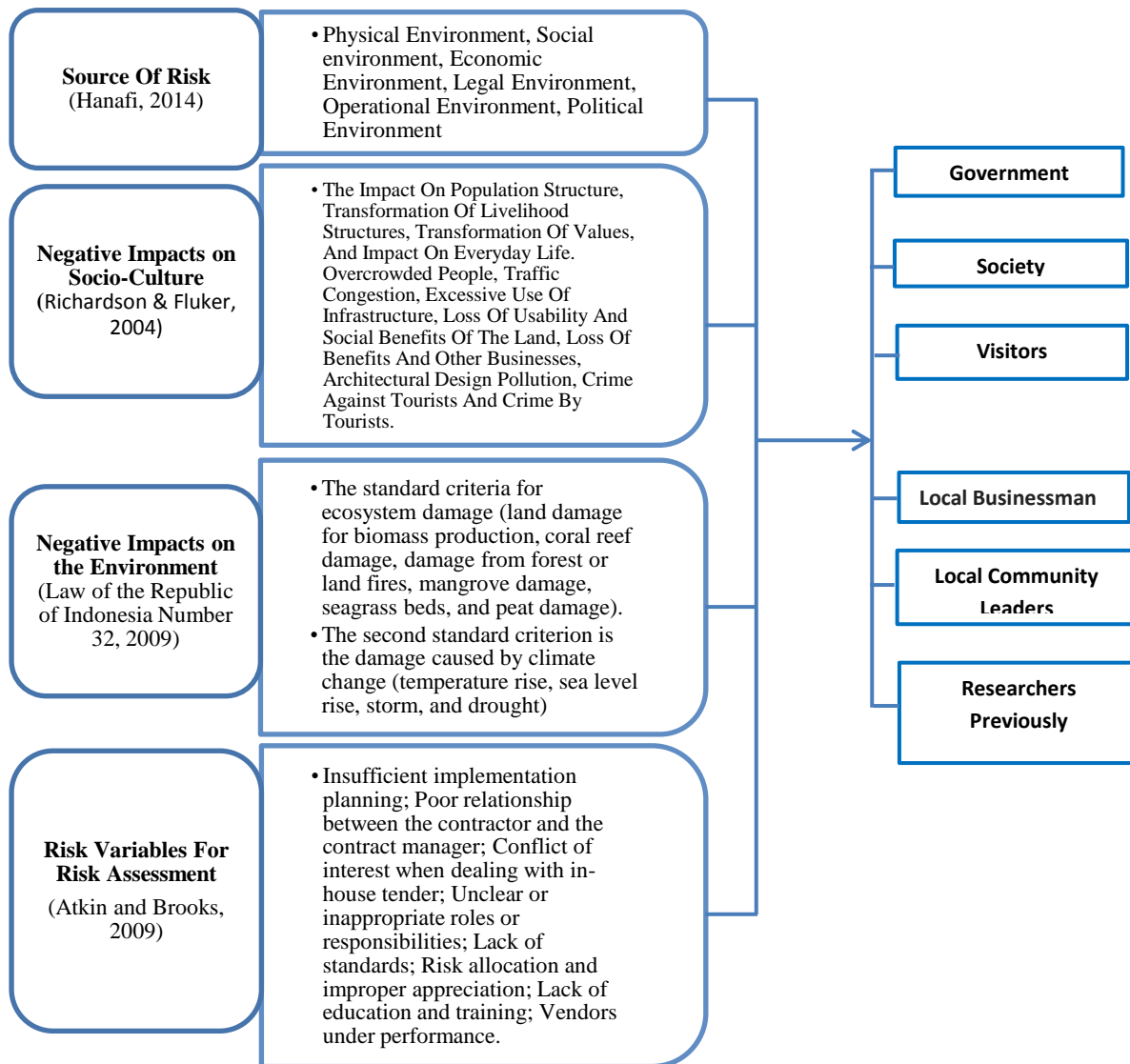


Figure 1. Identification and Analysis Model Using Brainstorming Method For South Coast Tourist Area, Indonesia.

Table 1. Risk on The Southern Coastal Tourist Area, Indonesia.

| No | Key Risks                   | Sources of Risk   | Risks That Occur in The Research Area  |
|----|-----------------------------|---|--|
| 1. | Legality Risk               | The tender process of harbor construction.<br><br>Build a trading place on an illegal area in the beach area. | Fraud documents, the winning bidder fraud by falsifying the documents required to be able to follow the bidding process.<br><br>Loss of interest for tourists visiting, Coastal areas become rundown and ruin the coastal scenery. |
| 2. | Risk of Failure in Planning | Construction of the harbor which is close to the coastal tourist area.  | Roads will be quickly damaged by large vehicles, tourist visitors will be disturbed, increasing pollution from vehicles.   |

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| 3. Accident Risk                             | <p>No integration of inter-coastal development in the south coast area.</p> <p>The setting between the pool area and the ship's ship is irregular.</p> <p>Lack of coast guard personnel.</p> <p>The swimming area is adjacent to the reef area.</p> | <p>The risk of no visitors to the beach because the development is not as good as other beaches.</p> <p>There was an accident exposed to the ship while swimming.</p>   |
| 4. Risk of Environmental Damage              | <p>Construction of a saltwater pool.</p> <p>Increased number of visitors.</p>   | <p>Accident when swimming due to lack of monitoring of the lifeguard.</p> <p>Tourists who swim injured exposed to coral reefs because there is no sign that limits both areas.</p> <p>The risk of damage to the ecosystem in the coastal area due to the existing coral reefs.</p> <p>The risk of dirty coastal environment due to the increasing amount of waste.</p>                        |
| 5. Risk of Lack of Community Awareness Level | <p>Non-standard waste disposal.</p> <p>Increased number of vehicles</p> <p>Determination of the selling price of food that is not standardized.</p> <p>The large number of illegal levies when entering the beach area.</p>                         | <p>The risk of damage to ecosystems and the environment.</p> <p>Risk of environmental damage.</p> <p>Risk of environmental damage due to pollution from vehicles</p> <p>Culinary risks in the coastal area are not sold due to high prices</p> <p>The risk of declining beach visitors.</p> <p>Risk of the occurrence of unhealthy competition.</p>   |
| 6. Risk of Competition Between Tourism Areas | <p>No growing community of merchants.</p> <p>The existence of beach tourism in different districts.</p>   | <p>The risk of conflict between traders.</p> <p>The risk of absence of visitors due to the existence of black campaign conducted by the community of each district.</p>   |
| 7. Economic risk                             | <p>Unstable number of visitors who arise</p>  | <p>Risk of uncertain income people rely on beach tourism</p>  |
| 8. The Risk of A Failed Government Program   | <p>The increasing number of tourists</p> <p>Pier making and culinary tour of seafood.</p> <p>Lack of socialization of long-term government programs.</p> <p>Lack of knowledge in program socialization.</p>   | <p>Increased cost of living affecting the economy of local communities</p> <p>The risk of accidents due to high waves where the size of the waves affected by the weather.</p> <p>Risk of accidents due lacking of personnel who will oversee.</p> <p>The risk of planning failure resulting from the demise of the coastal area and the destruction of the existing natural environment.</p> |

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|-----------------------------------|---|---|
|                                   | Development that is not accompanied by a strong promotion.<br>Government-owned lodging that failed.   | The risk of development of coastal areas will be stagnant and there is inequality in its development.<br>Risk of development failure in coastal areas.<br>The risk of no tourists visiting.   |
| 9. Architectural Design Pollution | An unintegrated development plan<br>Incorrect development master plan<br>Master plan development that is not designed for long term<br>There is no standard in the arrangement of the construction of the place to stay | Risk of maintenance costs are swollen because there are no visitors.<br>The risk of lack of visitors due to the design of irregular infrastructure.<br>The risk of lack of visitors due to the design of the infrastructure is not interesting.<br>Increased visitor risk subsequently decreases. |
| 10. Political Risks               | The southern coastline of the area is divided into 3 districts.<br>No integration of coastal tourism development among districts.   | The risk of falling tourist arrivals due to a messy and seemingly rundown place to stay.<br>The risk of slow development of tourism due to conflict of interest of each district.<br>The risk of not developing one of the beach tourism  |
| 11. Culture risks                 | The existence of cultural differences between visitors and the local community.<br>There is no standard income arrangement for local artists.   | The risk of a dispute.<br>The risk of loss of local culture.  |

### *Discussion*

South beach character from the analysis of experts requires special treatment of the contours and natural conditions that exist so that if done a development required experts who have a certain certificate. The government should be able to further analyze the value of a contract using specialized experts. Good analysis will produce an appropriate contract value, so there is a reference to determine the contract price. The price of an appropriate contract will provide a reasonable price standard, so that the company offering the price will be at the appropriate price range. The positive impact is that the government will not decide the winner of the tender based on the lowest value. From the interviews it was found that the winning bidders were fraudulent by falsifying their documents and certifications.

The development of the pier will indeed have an impact on the advancement of the people's economy, but it should be reviewed again, considering one of the development programs is coastal tourism. With regard to these matters in the development planning of the docks, it should be noted also the impact that will occur on the existing tourist attraction, because with

the dock there will be passing large vehicles, which will result in easy road damage and the environment will be dusty, it will be the existence of pollution that comes from the exhaust fumes of large vehicles. Under these conditions an integrated planning is needed and refers to long-term sustainable development. Structuring using a good master plan will certainly help solve the problem. A good master plan will cover the overall long-term development of the entire region so that there will be complementary interconnections of any development undertaken in the region. In addition, the desired characters and themes will be sustainable that show the characteristics of each region in one unity in the southern coastal tourist area. There will be no overlap between the themes that will be carried for each coastal area. A good master plan will include a good road infrastructure arrangement, for example by arranging different paths between tourist visitors with vehicles and delivery trucks passing to the dock, or different time arrangements and things. This arrangement is very important because if the tourist area and the dock develops there will be congestion. In this case the master plan that is designed must be accompanied by the role of marketing in promoting this beach tourism so that the balance of output and input on the planning of southern coastal tourism development.

In-depth analysis in master plan planning is necessary so that there will be different treatment also the priority scale if you want to get equity in the development of the area on the south coast, considering the southern coast consists of several coastal areas. This is important because the results of the survey conducted found that the beach area that only specializes for tourism looks neater and cleaner and organized when compared with the tour that has two functions of coastal tourism and dock. In one of the coastal areas, the survey results show that the swimming area is not too wide and the area is united with the ship's berthing, this condition becomes a problem that must be considered in the development planning, because there is only one place safest for swimming or to berthing ship area of the coast. Each region will have its own planning. At the time of the interview also obtained a plan to build a saltwater pool where construction by way of leveling the reef and the construction of infrastructure ponds that will be adjacent to the sea so that the pool of water will be filled from the waves that come. The design is interesting, but that must be considered include: whether the design is in line with the master plan that has been designed? The flattened coral will not damage the ecosystem? The magnitude of the waves will not endanger the tourists, because to fill the pool must be a big wave?

A good master plan will not work well if business people, community leaders, and the community are not fully involved in terms of their proportion in the sense that they should understand well the purpose and objectives of the planning to be undertaken as well as to know the good impact and also the bad impact. Submission that will not thoroughly inhibit the development can even lead to the failure of a master plan that has been prepared properly. As in the case found in interviews where the public set prices for merchandise at a value well below the fair price, this has caused tourists to be reluctant to buy the existing merchandise in the area. The impact is also felt on the merchant who sells goods at normal prices where the merchandise so does not sell. This case shows the lack of understanding of society in long-term planning, and it is part of the government's task to be able to explain in detail so that actions that will only benefit in the short term can be avoided. Public awareness in the sustainability of coastal tourism activities is very important in terms of development, structuring, supervision, and maintenance. This condition must be understood, because the tourists who come will be greatly influenced by local culture, so if the culture is brought bad then the tourists will be free to follow it seems like throwing litter, damaging the environment, behaving outside the norm and others. In this case the community must be an example either directly or indirectly. The lack of awareness of the public, as well as the number of buildings for trading in illegal areas,

this situation causes the area around the coast to become uncomfortable and spoil the scenery. In this case from the interviews, the government has handled and there is already a common point where the trader is willing to be moved to a legal place.

From the interviews and survey results, there is a lack of staff in the local government so that this could be a cause of lack of socialization from the local government, the lack of personnel is of course also impact on the supervision of the beach area so it is possible for illegal levies when tourists will enter the beach area. In addition, the lack of existing staff will have an impact on very limited supervision when tourists will swim or do beach tourism activities. Community traders from interviews obtained that communication and productivity they do only run 50%.

The lack of visitors and the unstable tourist visits will affect the decision of the people who will rely on coastal tourism, so far the government has been trying to help the community by developing the economy in the fields of fisheries, agriculture, and livestock. In the field of agriculture communities have constraints with the limited supply of water to irrigate their rice crops. The government is also seeking to develop local culture as a show that can be shown to tourists. The problem is that if the artist focuses on the show, it will affect their livelihood because from the interviews it is found that the payment earned from the art show is uncertain both from the possibility and smallness as well as the possibility of whether or not the honorarium may be paid. This condition will bring the reluctance of artists to perform, and the long-term effects of existing local culture will become extinct.

### **Conclusion**

Risk handling will be better if prevention can be done compared to having to deal with an existing risk. South beach area, Indonesia, is a coastal tourism area that will be developed so that identification and risk analysis conducted will provide input in its development. Lack of public awareness will lead to ignorance of the risks they have and will face. In this case the role of government will determine the success in the development of coastal tourism area by providing clear direction. Looking at the readiness of local governments in an effort to develop this area, from the research results are still many shortcomings, if you look at the many risks faced from the planning and the program implemented. Arrangement, standard setting, less supervision will be an obstacle in the ongoing development of this coastal tourist area. The risk due to architectural design pollution is evident when conducting field surveys so it is desperately needed a master plan that is well designed so that it is clearly a distinctive theme that characterizes the benefits of this region. The southern coastal area, divided into three districts, will be a source of risk in equitable development in the absence of integrated cooperation. This research has not yet been studied further which conditions more detailed risks if the south coast area is growing rapidly, so it is necessary to perform a further stage to obtain a more complete result of identification and analysis.

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