



## Policy Management in Small Island Tourism: A Case Study of Poncan Gadang Island, Indonesia

### KEYWORDS

management policy, small island tourism, coral reefs' damage

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**ABSTRACT** *The government of Indonesia has set some policies on exploiting tourism resources of small islands through the sustainable management program of tourism related activities in order to improve the welfare of the local people in the economic, social and cultural field as well as to enhance regional development.*

*The study investigates the implementation of tourism management policies in Poncan Gadang Island, Sibolga City - Indonesia by tourism stakeholders. The tourism stakeholders include local government, tourism entrepreneurs, tourists and local people. The data of policy implementation were collected by interview method using questionnaires.*

*Results of the study showed that implementation of tourism management policies in Poncan Gadang Island had not been sustainable in managing the environment. The policies had not yet improved the welfare of the local people as well as provided multiplier effects in the economy. However, the condition of the coral reefs of the Poncan Gadang Island degraded after the island became a tourist spot. The local people still had low capacity resulting in low participation in managing the environment so that the damage of the coral reefs in there was dominantly conducted by local fishermen. Furthermore, the number of hotels decreased and small scale business in handicraft souvenirs had not been developed yet.*

*In order that tourism management in Poncan Gadang Island is compatible with the policies, it is recommended to change the concept of mass tourism into special interest tourism focusing on natural resources and environment that involves the tourism stakeholders in the implementation.*

### BACKGROUND OF THE STUDY

Indonesia has a huge potential for tourism purposes. Initially, Indonesia tended to focus on cultural tourism with the destination choices, such as, Bali, Yogyakarta and Tanah Toraja. In its development, tourism orientation shifted from mass tourism to special interest tourism (Tondang, 2007) with the purposes ranging from cultural into nature tourism (Setiono, 2003). This shift is consistent with the trend of bringing people to return to the nature. Therefore, nature tourism develops, such as, Komodo National Park with its famous biota Komodo, Bunaken National Park with its coral reefs and other nature attractions.

Indonesia has a huge potential for nature tourism in small islands. As an archipelagic country, Indonesia has 17.500 islands with a coastline of 81.000 km (Dahuri, 2003). Of 17.500 islands, only five are large islands, the rests are small islands. Development of small islands is a must since the economic values of nature tourism in small islands gives income multiplier effects to other economic activities which are potentially estimated between U.S. \$ 0.55 to U.S. \$ 0.67 (Fauzi, 2005). One of the small islands that has been managed as a coral reefs'tourist site is Poncan Gadang Island in Sibolga City, North Sumatera Province, Indonesia.

Development of nature tourism in small islands has not been optimized due to limited infrastructures of the region, limited development funds, conflicts among organizations (Mawardi, 2007), also the absence of specific policies and strategies for developing small islands (Apdillah, 2006). The development of small islands requires special policies and strategies because small islands have specific characteristics of tourism resources and local people, and the management of those characteristics involves many

stakeholders(Tomboelou, 2000).

The stakeholders who manage small island tourism refer to local government, tourism entrepreneurs and local people(Sekneg, 2009;Depbudpar2004, Soekadijo, 2010). While,Tauhid(2007), Ritonga(2012) and Wilson(2012) add non-governmental organizations and Lubis(2002)includes college into the term stakeholders. The roles of the stakeholders determine the successful management of nature tourism in small islands.

The government of Indonesia has set management policies for tourism in small islands through the Regulation of the Minister of Culture and Tourism, number 67/2004 on Guidelines for Management of Small Island Tourism. Management of small island tourism refers to sustainable tourism activities with the purpose to improve the welfare of the people in the economic, social and cultural sector as well as to improve regional development. Sustainable tourism development may be defined as the development that meets the needs of tourists and the people in the current destination while maintaining and improving opportunities in meeting the needs in the long run. Therefore, the indicators of policy implementation for tourism management in small islands include: (1) increase in sustainable management of the environment, (2) increase in prosperity(economically, socially and culturally) of local communities and (3) increase in regional development.

### LITERATURE REVIEW

#### Small island tourism

Small islands which are suitable for regional investment are the islands lying within the cruise line. They also have the potential of natural resources and geographic position which is relative to the center of economic development(Mawardi,

2007). Potential natural resources for tourism are the natural resources that support tourism businesses. Small island tourism has bright prospects as the demands of coastal tourism from within and out side the country are increasing; small island tourism, therefore becomes the dominant tourism in Indonesia(Dahuri, 1996).

Tourism is traveling from one place to another which is temporary, voluntary as an attempt to seek pleasure or happiness(Spillane, 1987). Tourism can be grouped based on the number(for example, individual tour, family group tour, mass tour), the settings (such as, pre-arranged tours, package tours, coach tours, optional tour and arranged a special tour), and its implementation (for instance, excursion tour, safari tour, youth tour and marine tour). Tourism on special arranged tour includes holiday tour, familiarization, education tour, scientific tour, pileimage tour, special mission tour, special program tour and hunting tour(Suwantoro, 2001).

#### **Tourism destination and attraction of small islands**

Concerning the tourism attractions, tourism in small islands can be divided into natural, cultural and man-made tourist attractions. The natural tourist attractions are in the form of natural land resources(such as forests, mountains, rivers, lakes and beaches) and marine resources(such as coral reefs, caves and underwater volcanoes). The cultural heritage can be tangible like sites, tombs, palaces, and in tangible, such as, cultural performances or cultural traditions. Man-made tourist attractions in essence are human creations that are made available to meet the specific needs that directly or indirectly can be the objects and attractions such as shopping, education, sports, or recreational park(theme park).

Land tourism activities consist of activities of enjoying landscapes, beach sports, wildlife observation, jungle track, mountain climbing, and so forth. Marine tourism activities include snorkeling, diving, parasailing, surfing, fishing, water-skiing, canoeing, sea kayaking and so forth. While, culture-based tourism activities involve fishing, processing fish, observing daily living habits of the fishermen, seeing the customs prevailing in the fishing village, looking at the art of bulding homes of fishermen, watching traditional ceremonies of the fishermen, and so forth (Depbudpar, 2004).

Dealing with the purposes, tourism activities can be distinguished into special interest tourism and mass tourism. In special interest tourism, tourists visit a place because they have interests or specific purposes on an object or activity that can be encountered or performed in the location or in the tourist destination. In this case, the travelers are actively involved in various activities or with the local communities in the tourist sites they are visiting.

Mass tourism means an activity carried out in spare time for free and fun. In the course of mass tourism there is no specific goal to be achieved and it is just for fun. The concept of mass tourism is to bring travelers as many as possible into the tourist sites, and make the most of tourism resources. The concept is more oriented toward artificial facilities(Pendit, 1994) and in its management it employs workers from out side the tourist sights(Pitana, 1999). Since the orientation of tourism entrepreneurs is to increase revenue and the orientation of tourists is to have fun, the mass tourism may degrade the environment and exacerbates social and cultural life of the community (Kusumastuti, 2003).

Considering the characteristics of small islands that are vulnerable to natural resource degradation and have limited carrying capacity, the development of tourism activities in small islands are more directed at the development of special interest tourism activities(Depbudpar, 2004).

#### **Special interest tourism in small islands**

Special interest tourism in small islands means nature tourism on land and in sea of small islands. It generally relies

on a combination of the sun, sea and sand(Dahuri, 1993). Special interest tourism on the natural resources still damages the environment(Kusumastuti, 2003);while according to Dahuri(1993) it may have the positive and the negative impact to the surrounding environment, including social and local culture when the management is not environmentally oriented and not community-based(ecotourism).

Ecotourism is nature tourism activities with the keywords to protect the environment and improve the well-being of local people. Ecotourism is a travel to the nature to preserve and protect the environment(Smith, 1993), increase the economic, social and cultural welfare of local communities(Carter, 1994;Lidberg, 1995; Suryadi, 2001;Restu, 2002;Zar, 2002;Fitriany2004,Sitanggang, 2006;Tuwo, 2011), increase community participation(Boo, 1992)and educate the visitors(Fitriany, 2004). Ecotourism is more focused on the preservation than the utilization and partiality of local communities(Nurfatriani, 2003). Sustainable ecotourism must have dimension of ecology, economy, society and institution(Susilo, 2005), and Dahuri(2001) adds political and legal dimension.

Environmental sustainability becomes important for natural resource-based ecotourism such as coral reefs that are vulnerable and sensitive to changes(Yudaswara, 2004). Community involve men twill preserve, maintain socio-cultural community and position the community as stakeholder managers(Nurfatriani, 2003). Even small island ecotourism is a form of ecotourism leading to meta tourism that does not trade the purpose or object but the philosophy and taste(Tuwo, 2011).

#### **Community-based ecotourism**

The management of conglomerate-based ecotourism (capitalist) should be replaced with a partnership(Basuki, 1996)ora community-based(Pardosi, 2006). The government of Indonesia has stated that the small island tourism management policies should be based on local community(Permenbudpar, 2004). Community-based management can be in the form of partnerships and populist-based ecotourism. Partnership-based ecotourism, which is managed jointly in order to have distribution of responsibilities, authorities and obligations among stakeholders(Basuki, 1996), relies on the harmonious collaboration systems in which each stake holder provides contribution to each other (Pardosi, 2006). Local people living around ecotourism sites are the stake holders who play important roles in the management of ecotourism(Nurfatriani, 2003). The research done by Basuki(1996) showed that partnerships work effectively because the local people gains benefits.

A community-based ecotourism is implemented of, for and by the community so that there is almost no government intervention in it(Lamatenggo, 2002). It is fully managed by the local people, starting from identification of the needs, analysis of capabilities and control over natural resources(Pardosi, 2006). A community-based management is more responsible for the activities directly affecting local people's lives(Pitana, 1999). There was no successful management of natural resources(coral reefs) without the involvement of the local community(White, 1994).

#### **Policy management of tourism**

##### **Policy management of small island tourism**

The government of Indonesia has set a policy of exploiting tourism resources of small islands through the decree of Minister of Culture and Tourism No.67/2004 on the General Guidelines on Small Island Tourism Development. Small island tourism is a sustainable tourism aiming to improve the welfare of the community in the economic, social and cultural as well as regional development. Sustainable tourism development is the development that meets the needs of tourists and the local people(environment, economy, society, culture) in the current area with the goal of maintaining

and improving opportunities in meeting the needs in the future (Permenbudpar, 2004). Therefore, the indicators of small island tourism management are rises in: (1) environmental protection, (2) economic, (3) social, (4) cultural integrity, and (5) regional development.

#### **The management strategies of small island tourism**

The management strategies of small island tourism includes approach on spatial planning, feasibility of carrying capacity, infrastructure development, and environmental management (Depbudpar, 2004). The spatial planning approach begins with clustering small islands as a basis for the preparation of zoning based on similar and uniformation of characteristic; then, organizing clustering as spatial planning by determining space allocation; followed by arranging spatial structure associated with the center of economic growth, managing linkages between small islands and the main land and preparing short, medium, and long term planning.

The carrying capacity approach of tourism in small islands covers: (1) ecological carrying capacity which is the maximum level of the uses of an island, (2) physical carrying capacity which is the maximum amount of uses or activities that could be accommodated without causing damage or loss of qualities to the small islands, and (3) social carrying capacity which is the maximum rate limit in the amount and level of uses that would cause a decrease in the level of quality of the visitors' experiences or satisfaction in small islands.

The facility and infrastructure approach in small islands has to go through the Environmental Impact Assessment Study, and tourism infrastructure development does not exceed to 30% of the island size which is reserved for the development of tourism and other technical provisions. The environmental, eco-tourism management approach in small islands should be developed in an environmentally friendly manner without causing damage to natural and human resources; however, it should be able maintain sustainable use of small island tourism. Identification of critical eco systems as well as the determination of carrying capacity of small islands is very important in the preparation of planning and development of tourism in terms of environmental approach and sustainable development.

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#### **Environmental protection policies on small island tourism**

##### **Agency policy for environmental management**

An agency responsible for the environmental management has to comply 125 policies on the environmental management sector. The policies include, among others, the determination of management plans and environmental protection, carrying capacity of the environment, eco-regional, strategic environmental assessment, environmental quality standards, criteria for environmental damage, environmental economic instruments, the recognition of indigenous peoples and local wisdom. The policies also the management of coral reefs, mangroves and sea grass, and marine water quality for tourism (bathing, swimming and diving). Other policies are about implementing environmental economic instruments, the balance of natural resources, restoration guarantee fund, pollution risk fund, environmental levies and subsidies, waste/emissions trade, payments for environmental services; environmental insurance, eco-labelling, environmental performance reward, environment-based budget, environmental risk analysis (Sekneg, 2009a).

#### **Agency policy for small island management**

An agency managing small islands has to follow 58 policies on small island management sector. The policies include determining: Strategic Plan for Coastal Areas and Small Islands, Coastal Zoning Plan and Small Islands, Coastal Management Plan and Small Islands, Action Plan for Coastal Management and Small Islands and Detailed Zoning Plan. Local governments are obliged to increase public awareness, build partnership between the business community and the government, conduct environmental policy, prevent the decrease in carrying capacity for small islands, apply environmentally friendly technologies and provide awards in the field of small island management (Sekneg, 2007).

#### **Environmental policy for tourism entrepreneurs**

The tourism entrepreneurs have 59 obligations on environmental management of tourist sites. The environmental management policy for them includes conducting an environmental impact assessment, environmental risk analysis, environmental auditing, environmental function restoration guarantee fund, recompensing for natural resource damages, paying recovery cost, preserving the environment and culture, tourism attractions and tourist destinations. Furthermore, the policies state the ban for taking coral reefs for building materials, aquarium ornaments, handicrafts, flower coral; dredging sand; and conducting beach reclamation. The entrepreneurs, moreover, should provide some environmental facilities such as sanitation, waste water management instalation, solid waste management, conservation of fresh water resources, maintenance for flora, fauna and coral reef, and not introduce biota from outside the island (Sekneg, 2009, 2009a, 2007, Depbudpar, 2004).

#### **Environmental policy for travelers**

There are 11 travelers' obligations which include respecting religious norms, customs, culture, and values in the community, maintaining and preserving the environment, maintaining order and security, preventing any action that violates decency and unlawful activities, preserving the attractiveness tour, creating an atmosphere of safety, orderliness, cleanliness, conducting polite behavior, and preserving the environment in tourism destinations (Sekneg in 2009, Depbudpar, 2004).

#### **Environmental policy for local community**

There are 19 policies on local community participation in small island tourism management. Those policies are in the form of obligations and restrictions. Such obligations include protecting and preserving the tourist attraction, creating an atmosphere of safety, orderliness, cleanliness, conducting polite behavior, preserving sustainable environment for tourist destinations, controlling pollution and preserving the environmental nuftah plasm. In the meantime, the restrictions include: destruction of coral reefs, sea grasses and mangroves, coral reef sutilization, explosive and toxic material application, sand mining, mineral mining, environmental damage due to physical development, activities that harm the small coastal islands (Sekneg, 2009, 2009a, 2007, Depbudpar, 2004).

#### **Improving the welfare of local people**

##### **Development of coastal communities**

Administratively, coastal communities are those who live in small islands and in the subdistricts close to the seas (Sekneg, 2007). Coastal communities are identified with poverty, which is characterized by slum neighborhoods, low aspirations and access to basic social services, such as, education and health service and other social assistance (Depsos, 2005; Satria, 2002). Powerlessness appears as a result of the process of dehumanization by various parties (Kartasasmita, 1996). To cope with the issue, the community should be empowered (empowerment) in order to be able to take them out of poverty, ignorance, backwardness and to be able to strengthen the position of the individual and community in the structure of power (Kartasasmita, 1996, Lumbangaol, 2002).

Tourism development is not only issues on economy (increasing revenue) but also issues of human dignity (Kusumastanto, 2000). Therefore, development should be a "pedagogy of liberation" to enhance the dignity, not otherwise to degrade the human dignity. The development as a process of conscientization is used to foster individual and community critical awareness of the environment situation and to foster their ability to control the environment (Amin, 2005).

### Coastal community empowerment

Community empowerment functions to improve communities' abilities (Kartasasmita, 1996). With increased abilities, they are able to utilize and to preserve coastal resources as well as to improve accessibility towards economic activities (Butar-butur, 1998). Community capacity building is geared to generate power such as wealth, social status, education, information and skill. Therefore, there must be an improvement of public access to natural resources, technology, market and funding (Lumbangaol, 2002). With the empowerment, the local community is no longer the object but the subject of development. Local communities act as the reinforcement instead of the support for business establishment (Lumbangaol, 2002).

Empowering coastal communities requires an understanding on the unique characteristics of the fishermen socially and ecologically. Social system of coastal communities depends partly or wholly on the abundance of coastal and marine resources (Adiwibowo, 1995). Likewise, ecological system of small islands is vulnerable to environmental damage (Fauzi, 2005). Therefore, empowering fishermen demands the application of empowerment principles that fit the characteristics of coastal communities. Tuwo (2011) establishes the principle of job creation, capital sources, new technological sources, markets and solidarity and community's collective actions. Community empowerment will increase the capacity of the local communities. In this study the capacity of local communities is measured in the form of local communities' knowledge level, as an attempt to get public's rights and the level of public awareness on the environment relating to the economy of coastal communities.

### Empowerment by local government

The local government has 62 policies on local community empowerment. The policies, among others, include the provision for the recognition of cultural identity and granting rights of local communities, the provision for the recognition as worker/laborer tourism, play a role in the development process, submit proposals/objections of the proposed business/activity, play a role in the management, make a complaint, to fight for the environment, participate in surveillance, deliver information/reports, and file for representation and recognition of indigenous conservation areas. The local communities has the rights to manage based on customary law, to obtain benefits, information and resources. The local communities, then, are empowered in the scopes of implementation of management, government policies, of prevention of decrease in carrying capacity, environmentally friendly technologies, environmental information, rewards and protection of the rights of the indigenous, traditional societies and local wisdom (Sekneg, 2007, 2009, 2009a).

### Empowerment by tourism entrepreneurs

Tourism entrepreneurs implement three aspects of tourism management, as follows. The economic aspect is to improve the economy growth of society; the social aspect is to create a new social welfare (social progress); the cultural aspect is to introduce art and culture of community (cultural progress); and the environmental aspect is to maintain a harmonious and balanced life (ecological balance) (Soekadijo, 2010) and Spillane (1987) includes the aspect of love of homeland.

### Community's economic empowerment

Tourism entrepreneurs have 11 obligations to increase the

economic capacity of the community. The economic capacity building policy covers: developing partnerships with micro, small entrepreneurs and cooperatives, prioritizing the use of local products, providing employment opportunities to local workers, prioritizing tourism consignment and to take part in the tourism management. Company helps to increase the knowledge and skills of the people, organize tourism business training, arrange capital investment through share ownership (Sekneg, 2009, 2009a, 2007, 2007a, Depbudpar, 2004).

### Social community empowerment

Tourism entrepreneurs have 10 obligations to improve capacity building of the local community. Those include an active role in local community empowerment programs, mutual respect between employers and the local community, providing a means of worship, prohibiting all forms of activities related to gambling, prostitution and drug trafficking in the areas and surrounding areas of tourism, providing indiscriminative services, giving the correct information about tourism businesses and preventing unlawful activities and any act that violates decency (Sekneg, 2009, 2009a, 2007, 2007a, Depbudpar, 2004).

### Cultural empowerment

The government gives respect for cultural identities and rights of local communities. Local culture is one of the main tourist attractions. Preservation and development of the culture will increase visitors which will directly increase income of local community and entrepreneurs. Thus, tourism entrepreneurs have three obligations for building the capacity of local culture. They include maintaining and respecting religious norms, customs and tradition, culture and values of the local community lives, preserving the natural and cultural environment and giving respect for religious values, customs and traditions, and values of the islanders and the local community living around the island (Sekneg, 2009, 2009a, 2007, 2007a, Depbudpar, 2004).

### Capacity of coastal communities

Lack of community empowerment correlates with low community capacity. Lack of knowledge relates to low education. Low education is associated with low income (Budiartha, 1999). Khazali's research (2002) shows that empowerment through coaching, training and assisting positively correlates with participation of community. Low community capacity indicates that the empowerment of the government and employers has failed. Where as, the low capacity causing low public participation (Kartasasmita, 1996).

### Regional development and small island tourism

Development of tourism has an important and strategic role in the national development, such as, generate currency exchange, increase employment opportunities, improve incomes and living standards, and stimulate other sectors (Hatmi, 1993). Tourism holds a dominant role in urging the regional development (Suardi, 2010, Suwanto, 1997). Tourist arrivals in tourist spots will open up business opportunities for hotels, guest houses, restaurants, cafes, transportations, hawkers, sports facilities and services. Tourism is able to generate economic growth because it can provide jobs, stimulate various sectors of the economy, as well as contribute directly to the advances in the businesses of constructing and renovating ports, highways, and transporting (Pendit, 1995). Tourism activities provide multiplier effect, which benefit the transportation sector, also the economic sector, communication, accommodation services, trade, food and beverage business, and other businesses (Sugeng, 2007). In the era of regional autonomy, tourism sector became one of the region's economic activators (Purba, 2010).

### RESEARCH METHOD

This study used a descriptive method to describe the condition during conducting the study and to examine the causes of a particular symptom (Sevilla, 1993). The study was con-

ducted between July 2010 and June 2012 in Sibolga City, Indonesia. The respondents for the study consisted of 100 local people, 30 travelers, one tourism entrepreneur, one tourism agency official, one management agency official of small islands, and one environmental agency official. The primary data were collected by measurements, questionnaire and interview. The feasibility study of natural tourism was done through suitability analysis and the implementation policy was analyzed through mathematical analysis to obtain the percentage of implementation.

## DATA ANALYSIS

### Description of the study area

#### Administration of Poncan Gadang Island

Administratively, the island is located in Pasar Belakang Village, Sibolga Kota Sub-District, Sibolga City, Indonesia (BPS, 2011). Poncan Gadang Island is the largest of the 7 small islands in the Gulf of Tapian Nauli, Sibolga City. Poncan Gadang Island lies at the coordinates between 1°42'00" - 1°42'25" north latitude and between 98°45'37" - 98°46'12" east longitude. The land area of the island is approximately 10.7 hectares.

Poncan Gadang Island is suitable for tourism investment, as it is located in the Gulf of Tapian Nauli on the cruise lines. It also has the largest port on the west coast of Sumatra Island. Accessibility through land, sea and air headed to Sibolga is available. Transportation to the island is available by boats, motor boats and canoes. There are tourism resources in the island, among others are white sandy beaches, crystal clear sea water, coral reefs around the island as well as the little mangrove forest and sea grass and springs. Tourism in Poncan Gadang Island was established in 1984 under the name of Poncan Marine Resort, which can be reached within 15 minutes from Sibolga City. Poncan Gadang Island is uninhabited island. The local residents are the residents of Sibolga City with a population of around 84,481 of which 17.50% are unemployed (BPS, 2011).

#### Feasibility of nature tourism in Poncan Gadang Island

The research conducted by LP-USU (Research Centre of University of Sumatera Utara) (2004), Sitanggang (2006) and Lopez (2009) reported findings that Poncan Island Tower is suitable for coastal and marine tourism. The writer of the study conducted re-research with a variety of assessment model. The results show suitabilities. Maamena's suitability analysis models (2003) is categorized very suitable, the model of Fitriany (2004) is in very suitable category. Furthermore, the model of Forestry (2003), Soebagio (2005), and Tuwo (2011) show suitable category. In case of traveler assessment, 92% of the travelers stated that the natural resources of Poncan Gadang Island is highly potential for tourism. Tourism value of the objects determines the number of tourists who will visit. The results of PATA's study showed that 59.5% of tourists visit Asia for the reason of location of the tourist sites (Ritonga, 2011).

#### Tourism facilities in Poncan Gadang Island

Poncan Marine Resort has cottages, docks, yachts, trails, chartered boats, banana boats, jet skis, snorkeling facilities, fishing equipment, diving equipment, restaurant, karaoke lounges and game rooms. Moreover, the resort has five bungalows each with 20 rooms, one office building, one equipment building and one restaurant, a karaoke lounge and a game room. Other facilities, such as, seafood restaurant, water sport shop, souvenir shop, video game room, billiard room, children playground, fishing tour, ferry service, airport transfers, private car park and Nauli Miai cruise ship. Poncan Marine Resort in Poncan Gadang island is in a network with Wisata Indah Hotel (Sibolga City) and diving resort in the Putri Island, Central Tapanuli, facilitated with 2 bungalows and 4 gazebos (PMR, 2010).

#### Tourism management in Poncan Gadang Island

Results of the study reveal that 52% of the physical manage-

ment of tourism in Poncan Gadang was suitable with the planning; 48% was suitable with organizing; and 56% was suitable with object control. Management of tourism activities covered 52% of object management, 62% of accommodation services, 70% of restaurant services, 52% of souvenir booths, 58% of facility management, 54% of electricity infrastructure management, 62% of water supply, 56% of dock management, 62% of marine transportation, and 40% of drainage management and solid waste infrastructure. Averagely, 56.92% of tourism management was low. There seemed to be correlation between low management and human resources. The results indicated that 48% of employees spoke English, 40% of employees spoke other foreign languages, 62% of employees showed friendliness, 58% of employees was professional, and 62% of employees had communication skills. The study also explained that 54% of the employees had average abilities. These data showed that low capacity of employees led to low management tourism of Poncan Gadang Island.

#### Sustainable environmental management policy

##### Implementation of environmental policies by local government

Regional government of Sibolga City did not implement sustainable environmental management policy for tourism in Poncan Gadang Island. Of the 125 environmental management policies, only 9.60% of the policies had been well-implemented by Sibolga Environmental Agency in Poncan Gadang Island. Department of Marine, Fisheries and Animal Husbandry of Sibolga City had implemented 10.20% out of the 58 management policies in Poncan Gadang Island.

Low implementation of environmental policy by the government of Sibolga City indicated that the delegation of authority from central government to local government was low (Hale, 2000), so that the local government failed to become the spearhead in tourism services (Syahputra, 2010). The local government failed to perform its functions as a service provider and facilitator (Yudaswara, 2004). Autonomous regional form caused the local government suffered from disorientation in improving local people's welfare in terms of income rise and interest to retain power. The policies were greater on the issue of distorting levy at high cost, and of pursuing growth by depleting natural resources (Suparmoko, 1997). This condition indicated that policy failure or government failure led to coastal mismanagement (Fauzi, 2005a).

##### Implementation of environmental policies by tourism entrepreneurs

PT Sibolga Marine Resort had implemented 39.0% out of the 59 environmental management policies in the tourist attractions. The percentage seemed low as the entrepreneurs operated on the basis of profit motives, not on the basis of environmental reasons. They exploited only tourist attractions (Suparmoko, 1997, Sutiyanti, 2005). They did not set as idea portion of profits to repair environmental damages (Kusumastuti, 2003). Their greediness intensified when the local government implemented high cost economic policies that were compensated with excessive depletion of natural resources (Fauzi, 2005). Tourism entrepreneurs in Bali Island oriented to mass tourism which only focuses on the number of tourists' visits without paying attention to the environment and social conditions (Benjamin, 1997).

##### Implementation of environmental policies by travelers

Of the 11 environmental management policies for travelers, only 54.5% of them had been implemented by travelers. However, travelers received 71.40% of rights. Such high percentage were not followed by the implementation of highly abilities. According to Sutiyanti (2005) and Soemarwoto (2001) the low implementation of environmental protection obligations is due to the low environmental perception (Kusumastuti, 2003). In fact, the success of ecotourism is measured from the level of tourists' awareness of the environment (Tuwo, 2011). These data show that tourism entrepreneurs failed to imple-

ment the guidance for travelers.

### Implementation of environmental policies by local communities

Local people had implemented only 15.90% of environmental management policies in Poncan Gadang Island. Such low percentage of the implementation was due to low empowerment conducted by the local government and tourism entrepreneurs. Low empowerment led to low capacity of local people. Of course, the low capacity led to low public participation in environmental management.

The low implementation of environmental protection policies by local government of Sibolga City, tourism entrepreneurs, tourists and local people resulted in the environmental degradation of Poncan Gadang Island. For example, the coral reefs' covers as tourist attractions in the area and around the island were damaged. In 2008, 25.0% of coral reefs' covers were found in tourist attractions and only 20.0% in the waters of Poncan Gadang Island. Looking back to the year 1997, the reefs' covers in the location of attractions were 27.83% and in the waters of Poncan Gadang Island were 22.86%.

### Policies to improve the welfare of local people

#### (1) Empowerment of local people

##### a. Local people empowerment by local government of Sibolga City

The local people empowerment policies by local government of Sibolga City was low (40.30%), while the empowerment done by tourism entrepreneurs was 80%. According to Kusumastuti (2003), the difference was due to different interests between both organisations. Local government had economy's orientate on through maximizing the economic benefits in the form of levies and also had capital's orientation. Local people had no capital and gave small contribution to levies; local communities ultimately did not receive the attention (Yudaswara, 2004).

##### b. Community empowerment by tourism entrepreneurs Economic improvement for local people

According to the local people, 10.30% of the local economic development policies which includes three major issues, such as, employment in the company, marketing of local handicrafts in ecotourism and capital assistance for local people, had been implemented. These data correlates with the results of the study conducted by Sitanggang (2006) in Sibolga City which showed that the local people was difficult to be empowered because they had no business partners. The study performed by Beyda (2000) in Pandan Island (20 km away from Poncan Gadang Island) revealed that the local government and tourism entrepreneurs were not concerned with the improvement of the small scale business entrepreneurs.

##### Social improvement of local people

According to the local people, 9.0% of the social improvement policies in terms of community involvement in tourism planning, in the Environmental Impact Analysis (EIA)/UKL-UPL, and in the management of tourism had been implemented by tourism entrepreneurs of Poncan Gadang Island. Low control and low enhancement of local people caused tourism bring negative impacts on the social lives of the local people (Dahuri, 1993)

##### Social cultural improvement

41.40% of development policies of local culture in terms of traditional art utilization had been implemented. These data indicated that tourism entrepreneurs had failed to promote the high local culture for tourist attractions (Tawheed, 2009) where as foreign tourists loved to see the performance of local culture (Sutiyanti, 2005). The local people has a typical culture as a mix culture of ethnics groups of Batak Toba, Karo, Angkola, Mandiling, Pakpak, Nias, Malay, Minangkabau, Aceh which finally results in coastal community (Beydha, 2000). The coastal community has specific language called "Baiko-Baiko" language or "Munak-Munak" language. This

is a combination of various local languages. Moreover, the coastal community has special art called "Sikambang", has typical food, such as, "Sambam Pacak" or hot and spicy sauce and other cultures. Tourism entrepreneurs of Poncan Gadang Island had failed to preserve the local language and culture packaged for tourism purposes (Tawheed, 2009).

#### (2) The capacity of local people of Poncan Gadang Island

The low implementation of community empowerment by the local government (40.30%) and lack of empowerment by tourism entrepreneurs (10.30% of economic sector, 9% of social and 9% of culture) were the factors of low capacity of the community. Local capacity in the form of public knowledge only reached 35%. Low knowledge related to low education. Low education associated with low income (Budiartha, 1999). Low knowledge correlated with the courage to get the rights (18%) in accordance with the legislation and concern towards the environment of Poncan Gadang Island (15%). Khazali's research (2002) showed that empowerment through coaching, training and assisting had positive correlation with people participation. When the community capacity is low, this indicates that the empowerment of the government and entrepreneurs has failed. In fact, low capacity of people affects low public participation (Kartasmita, 1996).

#### (3). Participation of local people of Poncan Gadang Island

Participation of the local people on the environmental management protection of Poncan Gadang Island was low (15.90%) while the public perception of environmental sustainability was high (74.50%). Public participation should be as high as public perception (Lumbangaol, 2002). Such difference appeared because the local people had no chance to participate in the environmental management activities of Poncan Gadang Island and because the tourism conditions of the island did not conducive towards the environment (Dipokusumo, 1999). Research of Kusumastuti (2003) which was conducted in Kepulauan Seribu showed the same results.

Low community participation correlates with their high contribution in the destruction of coral reefs. 90% of coral reefs destruction in Poncan Gadang Island were associated with fishing activities, 10% of the destruction were due to waste and domestic waste. Poisoning contributed to 30% of the destruction, mining activities influenced 30%, explosives affected 15%, boat anchors gave impact to 5%, bubu (fishing device) damaged 5% and fish nets affected 5% (Lopez, 2009). Although explosives were considered illegal, those activities helped fishermen to obtain the maximum income and they had no other choices (Soede, 2000). In this case, the mistakes were not completely on the fishermen (Sitanggang, 2006). Local government and tourism entrepreneurs play a role in the empowerment to increase community awareness and capacity that will lead to high participation.

#### Regional development improvement

The presence of tourism in Poncan Gadang Island has not showed real impact on the development of Sibolga City. This is characterized by the absence of increased number of hotels and restaurants as well as activities that are not directly related to tourism such as handicraft industry and souvenir marketing. The number of hotel and hotel rooms in Sibolga City declines, in 2008 there were 28 hotels with 826 rooms, while in 2011 the number decreased to 27 hotels with 624 rooms. The number of restaurants and food stalls rose slightly from 435 in 2008 to 165 in 2011. Similarly, handicraft businesses, traditional arts and cultural activities did not increase. Tourism related activities in Poncan Gadang Island in Sibolga City have not been a major driver of the regional economy.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

(1). Natural resources of Poncan Gadang Island has suitability for coastal and marine tourism. However, the manage-

ment has not implemented sustainable environmental policies. The Environment Agency of Sibolga City that play a role in environmental management, Department of Marine and Fisheries of Sibolga that play a role in the management of Poncan Gadang Island, PT. Sibolga Marine Resort as tourism entrepreneur which play a direct role in the environmental management of the tourist attractions, tourists who enjoy the sites also obliged in environmental conservation in the island, and local people whose lives are related to natural resource conservation, have low implementation of sustainable environmental management policies. As a result, the environment degrades; coral reefs' covers (for snorkeling and diving) in Poncan Gadang Island were in better condition before becoming tourist attractions.

- (2). Tourism management of Poncan Gadang Island has not improved economic, social, cultural welfare of the local people. This is because the empowerment of the local people by the government of Sibolga City is still low. Local people empowerment by tourism entrepreneurs in economic, social sector and local culture is also very low. As a result, local people capacity is low in relation to knowledge, action to get people's rights and concern for the environment. This very low capacity leads to low public participation in the environmental management. The implications, among others, are coral reefs in the waters of Poncan Gadang Island are dominantly destructed by local people.
- (3). The existence of tourism in Poncan Gadang Island has not showed real impacts on the regional development. This is characterized by no improvement in businesses which are directly or indirectly related to the tourism industry. Furthermore, number of hotels and hotel rooms declines, number of restaurants and food stalls rises lightly, the condition of home industry and handicraft are undeveloped.

### Suggestions

- (1). To attain the sustainable tourism management of Poncan Gadang Island, it is required a change in orientation from mass tourism to special interest ecotourism resource that involves all tourism stakeholders of Poncan Gadang Island. It is therefore necessary to redesign tourism management of Poncan Gadang Island in which local people get involved and the main orientation is to preserve rather than to use.
- (2). Improving the welfare of local people (economically, socially and culturally) is a must for small island tourism business sustainability. Therefore, improving the welfare of local people begins with the empowerment of local people by local government and tourism entrepreneurs in order to increase the capacity of local people, involving local people participation in tourism management and making the local people a part of the tourism managers of Poncan Gadang Island.
- (3). Tourism in Poncan Gadang Island will improve the development of Sibolga City if the tourism entrepreneurs are willing to change the orientation of tourism into environmental preservation and local community welfare tourism. Improving environmental sustainability of tourist attractions and improving socio-cultural sustainability to support tourism related activities will increase the satisfaction of tourists so that they would be willing to spend a lot of money. In addition, those improvements will increase business profits, increase state revenues, maintain the continuation of tourism business, increase prosperity of local people and improve the regional development.

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