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The Potentiality of Tourism Resources in Hulu Sungai Selatan Regency, South Kalimantan

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Abstract

Hulu Sungai Selatan regency, South Kalimantan, has potentiality to be developed as tourism destinations. It is especially important for local economic development, cultural preservation, and natural resources conservation. The objective of the research is to identify the tourism potentiality in Hulu Sungai Selatan regency. Result of the study shows that Hulu Sungai Selatan Regency has numerous potential tourism objects, ranging from man-made to natural attractions. On the future development, special interest tourism such as nature-based tourism, ecotourism, culinary tourism religious tourism, history and cultural tourism are potentials to be developed. The sustainable principles of tourism practices should be adopted by local government in every aspect of tourism development. It is especially crucial for natural resources and biodiversity protection; while in the same time enhance the quality of attraction and destination.

Keywords: ecotourism, Hulu Sungai Selatan, tourism development, tropical conservation.

INTRODUCTION

South Kalimantan province in Indonesia is especially important for tropical biodiversity conservation and cultural preservation. South Kalimantan is home for numerous plant and animal biodiversity, in which some of them area globally endemic to the South Kalimantan. The biodiversity of South Kalimantan is important for global economic life, but many biodiversity and wildlife habitat recently under threats. There are needs significant strategy to promote environmental conservation in South Kalimantan [1].

Culturally, South Kalimantan rich in term of cultural ethnicity, in which Banjarese group are the majority of ethnic of group. One of unique culture was floating market, in which market occurs in the Barito River. The interaction between trader and customer occur using traditional boat (called *jukung*) and in many case the transaction was implemented through barter system. There are also numerous traditional ceremony, that influenced by Islam and Dayaks belief traditions. Dayaks is the indigenous people groups of Kalimantan, in which in some aspect influence the culture and traditions of people in Kalimantan[2,3].

South Kalimantan consists of some regency, in which culturally and naturally this regency shows specific characters. It is becomes the

potentiality of south Kalimantan province to develop numerous form of tourism sectors. The development of tourism sector in Hulu Sungai Selatan relevant with the provincial government related to the Provincial Tourism Master Plan, as stated in the Medium Term Development Planning of South Kalimantan Province 2010-2015. According the document, Hulu Sungai Selatan includes as the regional tourism development of South Kalimantan province. Focus of development put Loksado as the capital city in Hulu Sungai Selatan.

The development of ecotourism is relevant with the effort to increase local economic growth, local culture preservation, and environmental conservation. In many case, ecotourism has been selected as a strategic tools for development [4,5,6]. While there are many natural-cultural resources potential in South Kalimantan associated with the development of tourism are beneficial to local economic development, there is little systematic on the resources evaluation. It is especially important for many regions in South Kalimantan, especially Hulu Sungai Selatan. The aims of the study are to identify and to describe the potentiality of tourism resources in Hulu Sungai Selatan for future tourism development.

MATERIAL AND METHODS

Data was collected in Hulu Sungai Selatan through field trip and direct observation. Firstly, the potentials of tourism attraction was identified though secondary data and local

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government document related to the development of tourism in Hulu Sungai Selatan Regency. The field trip explores the natural, cultural, and historical and aspects related to amenity and accessibility of region, with special focus on the role of such resources as part of the tourism destination component. Data was compiled and analyzed for further analysis. The secondary data was collected from numerous institutions dealing with this study. Field trip was performed not only for direct observation but also for verification of the secondary data. Data was analyzed descriptively.

RESULT AND DISCUSSION

Profile of Hulu Selatan Regency

Hulu Sungai Selatan is one of the regency in South Kalimantan Province. Geographically, it is located at 02°29'58"S – 02°56'10"S and 114°51'19"E – 115°36'19" E. The regency covers an area about 1,804.94 km². The Hulu Sungai Selatan regency consists of 11 districts, 4 sub-urban area (*kelurahan*), and 114 villages (*desa*). Administratively, the regency is surrounded by Hulu Sungai Tengah Regency and Hulu Sungai Utara Regency in the north, Hulu Sungai Tengah Regency and Kotabaru Regency in the east, Tapin Regency in the south, and Hulu Sungai Utara

Regency and Tapin Regency in the west (Fig. 1). The distribution area in Hulu Sungai Selatan Regency was shown in Table 1.

Topography profile of Hulu Sungai Selatan regency is dominated by flat land area. Most of the flat area (0–25 m above sea level) was located at the west area of the regency. Totally, the flat area was calculated about 123,452 ha or equal to ± 68% of the area of Hulu Sungai Selatan Regency (Table 2).

Soil texture in Hulu Sungai Selatan regency can be classified into two types, smooth and medium. The average of rainfall was about 1,819.5 mm with rain fall days number was about 181 days. The average of temperature was about 26.25°C–27.25°C and the humidity was about 76,5% - 77%.

The characteristic of land uses in Hulu Sungai Selatan Regency in 2010 was dominated by paddy field. It was calculated about 33.17%. The second largest class was peat swamp about 33.03%. The smallest part of the land classification was orchards. It was calculated about 350 ha or equal to 0.25% of the total area of Hulu Sungai Selatan Regency. For the building area, i.e. settlement was about 1.978 ha or equal to 1.39% of the total area.

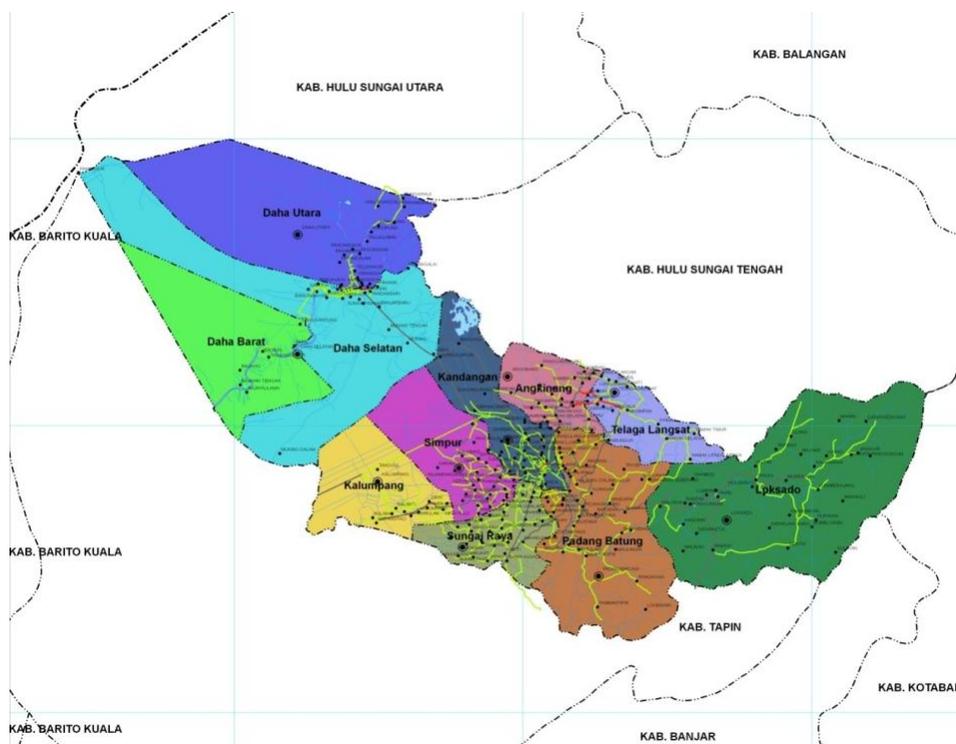


Figure 1. The area of Hulu Sungai Selatan Regency
Source: Regional Development and Planning Agency of Hulu Sungai Selatan [7]

Table 1. Area Distribution in Hulu Sungai Selatan, 2010

No.	District	Main town	Area (km ²)	Number of sub-urban/villages
1	Padang Batung	Padang Batung	203.3	17
2	Loksado	Loksado	338.89	11
3	TelagaLangsat	TelagaLangsat	58.08	11
4	Angkinang	Angkinang	58.40	11
5	Kandangan	Kandangan	106.71	18
6	Sungai Raya	Sungai Raya	80.96	18
7	Simpur	Simpur	82.35	11
8	Kalumpang	Kalumpang	135.07	9
9	South Daha	Tumbukan Banyu	322.80	16
10	North Daha	TambakBitin	268.11	19
11	West Daha	Bajayau	149.62	7
Total area			1804,92	148

Sources: Statistics Hulu Sungai Selatan Regency [8]

Table 2. The Topography of Hulu Sungai Selatan Regency

Class	Land area (ha)
0 – 7 m	105,198
7 – 25 m	18,254
25 – 100 m	16,590
100 – 250 m	17,126
250 – 500 m	10,420
500 – 1000 m	11,226
> 1000 m	1,680
Total land area	180,494

Sources: Statistics Hulu Sungai Selatan Regency [8]

Agricultural area of Hulu Sungai Selatan Regency was distributed at the southern area in 11 districts, in which paddy is the dominant agricultural commodity. The forest in Hulu Sungai Selatan distributed patchily. The protected forest is calculated about 23,919.52 ha and the conservation-production forest is about 18,724.46 ha. Plantation in Hulu Sungai Selatan regency distributed unevenly. Plantation was managed based on community. The commodity which area planted in plantation system are including rubber, coconut, clove, pepper, cinnamon, coffee, cacao, and candlenut.

Tourism Attraction Diversity

There are numerous forms of tourism that can be developed as tourism machine in Hulu Sungai Selatan. The tourism policy of Hulu Sungai Selatan views cultural tourism and nature based tourism as focus of development. As far, the comprehensive data of tourism was absent, represent the poor management of tourist recording system. It becomes the limitation for tourism planning and management because poor of statistical data to support planning and decision. Some data has found in Loksado, the very famous nature based tourism destination.

Cultural tourism

Cultural aspect of local people is the potential resources for future tourism development,

especially in term of attraction and destination hospitality [4,9]. According to scholar, every community that lived in the earth had specific culture, and every culture is unique. South Kalimantan rich in term of cultural capital, which is possible to be developed for future cultural tourism (Table 3). The traditional ceremony such as *Aruh Ganal* (Fig. 2) presents as gratitude ceremony to God, for their fine life.

Table 3. Potential Cultural Tourism Attraction

Cultural Tourism	Location
1. Dayak house (<i>Balai Adat Dayak</i>)	Loksado District
2. Banjar Traditional House <i>Bumbungan Tinggi</i>	Habirau Village, South Daha District
3. Banjar Traditional House <i>Gajah Menyusu</i>	Amawang Village, Kandangan District
4. <i>Aruh Ganal</i> traditional ceremony	Hulu Sungai Selatan Regency
5. Numerous traditional art	Hulu Sungai Selatan Regency
6. Traditional boat (<i>Jukung</i> or <i>Perahu Naga</i>) competition	South Daha
7. Traditional games	Hulu Sungai Selatan Regency
8. Kalang Hadangan	North Daha

There are needs on preservation strategy of cultural assets. It is especially important to provides sustainable cultural attraction for the future. In the perspective where rapid

modernization occurs in South Kalimantan, the preservation of cultural aspect is important.

Historical Tourism

As part of the Indonesia, the history of South Kalimantan has close relation with the past history of Indonesia. In the past, before the Independency of Indonesia, some area in South Kalimantan is autonomic kingdom under sultanate system with Islam as the main religion.

Table 4. Historical Tourism Assets

Historical Assets	Location
1. The monument of <i>Teks Proklamasi Gubernur Tentara ALRI Divisi IV Pertahanan Kalimantan 17th May 1949</i>	Ni'ih village, Loksado District
2. The monument of <i>Peringatan Penyusunan Teks Proklamasi Gubernur Tentara ALRI Divisi IV</i>	Telaga Langsat District
3. The monument of <i>Peringatan Peristiwa Pemencaran Pasukan ALRI Divisi IV 10th May 1949</i>	Pagat Batu, Batu village in Padang Batung District
4. The monument of <i>Gencatan Senjata Antara Gubernur Tentara ALRI Divisi IV - NICA</i>	Sungai Raya District
5. The monument of <i>Mandapai, Upacara HUT ke-IV RI 17th August 1949</i>	Mandapai Village, Padang Batung District
6. The monument of <i>Palagan Negara 2nd January 1949</i>	Hakurung Village, North Daha District
7. The monument of <i>Garis Demarkasi</i>	Karang Jawa Village, Padang Batung District
8. The monument of <i>Peringatan Markas Daerah Divisi IV ALRI Pertahanan Kalimantan</i>	Jelatang Village, Padang Batung District
9. The building of <i>Gedung Juang Divisi IV ALRI Pertahanan Kalimantan</i>	Hamalau Village, Sungai Raya District
10. Benteng Madang sites	Madang Village, Padang Batung District
11. Amuk Hantarukung sites	Hantarkurung Village, Simpung District
12. Tomb of Tumpang Talu	West Kandangan, Kandangan District
13. Tomb of Anam	Ida Manggala Village, Sungai Raya District
14. Tomb of Singakarsa	Singakarsa street, Kandangan District
15. Tomb of AluhIdut	IluhIdut street, Kandangan District
16. Tomb of Ning Bulang	Hantarkurung village, Simpung District
17. Historical building	Hulu Sunagai Selatan Regency

The role of Islam in cultural aspect of South Kalimantan was important. The contribution of the effort to become independence community under Republic Indonesia has also contributed to the number of historical tourism assets. The potential assets of historical tourism is seen in Table 4.

Religious tourism

Moslem is the majority religion in South Kalimantan, and therefore Islamic spirit contributes significantly in daily local life and traditions. There are numerous Islamic heritages which area recently visited by tourist, especially domestic tourist and respected tombs, which are visited by people (Table 5).

Table 5. Potential Religious Tourism Attraction

Religious Attraction	Location
1. Su'ada Mosque	Wasah Hilir Village, Simpung District
2. Tomb of H.M Said	Simpung Village, Simpung District
3. Tomb of Datu H. Abbas	Simpung Village, Simpung District
4. Dome of Datu Durabu	Kalumpang Village, Kalumpang District
5. Dome of Datu Akhmad	Balimau Village, Kalumpang District
6. Dome of Taniran	Taniran Village, Angkinang District
7. Sacred tomb of Datu H.M Rais	Loknyur Village, Angkinang District
8. Tomb of Datu Daha	North Daha District
9. Tomb of Surgi Tuan	Pasungkan Village, North Daha District
10. Tomb of Habib Ibrahimi	Mandala, North Daha District
11. Tomb of Tuan Guru Haji Ali	Pandan Sari Village, South Daha District
12. Tomb of Habib Lumpangi	Lumpangi Village, Loksado District

The history of South Kalimantan shows that the Banjarese Kingdom accepts Islam as a belief and used Islamic spirit as a fundamental aspect in community life management. The development of religious tourism is crucial for tourism in South Kalimantan. It is especially relevant with the recent trend in tourism development in Indonesia.

Nature based-tourism

Nature based tourism attraction and destination were found numerous in Hulu Sungai Selatan. While many areas in South Kalimantan has been degraded, some area in Hulu Sungai Selatan is still remained and provides excellent

habitat for wildlife and provides environmental services which are potential to developed as the tourist attraction (Table 6).

Table 6. Potential Nature-based Tourism Attraction

No.	Natural Attraction	Location
1	Loksado Nature-based tourism	Loksado District
2	Haratai waterfall	Loksado District
3	Tanuhi hot spring water	Tanuhi village, Loksado District
4	Mt. Kantawan	Tanuhi village, Loksado District
5	Lake Bangkau	Kandangan District
6	Delta and Dam of Amandit river	Malutu Village, Padang Batung District
7	Riam Anai	Lok Lahung, Loksado District
8	Kilap Api Waterfall	Tanuhi Village, Loksado District
9	Uring waterfall	Kamawakan village, Loksado District
10	Tangkaramin waterfall	Malinau village, Loksado District
11	Tinggiran Hayam waterfall	Kamawakan Village, Loksado District
12	Mandapai Hot water	Bini Village, Padang Batung District
13	Lake Bidadari	Telaga Bidadari village in Sungai Raya District

The development of tourism can cause damage to natural resources if these resources are used excess and mismanagement. Involving local people in the tourism business, people no longer use natural resources (e.g. wood, sand, stone, etc.) as a livelihood. In addition, involving local communities in making decisions is important in tourism management to assure the quality of their lives in the future [10].

Culinary and Art Tourism

Hulu Sungai Selatan is rich in term of cuisines, which can be developed in culinary tourism. The impact of Banjarese and Javanese traditions produce numerous cuisines of Hulu Sungai Selatan (Table 7). Various hand crafting are also available in the study area. Rattan and bamboo often made into mats, basket, bag, etc (Fig. 3). The crafting is usually made by Dayak women.

Table 3. Potential Culinary and Art Tourism Attraction

Attraction	Location
1. Ketupat*	All districts
2. Cake "Dodol Kandangan"	culinary centre in Sungai Raya District
3. Crackers	Bamban Villages, Angkinang District
4. Craft of metal/brass	South and North Daha District

5. Craft of jewelry and accessories	South Daha District
6. Traditional weapon <i>Mandau</i> handicraft	South Daha District
7. Pottery	South Daha District

*Note: *ketupat* is boiled rice in coconut leaf wrap, served with coconut soup ingredients

Accessibility

The tourism attraction in Hulu Sungai Selatan can be accessed from numerous town and city surrounding Hulu Sungai Selatan. Terrestrial road is the backbone of accessibility. The road was available, and according to national road standard classified as Road Class III A, III B and III C. Hulu Sungai Selatan has many rivers. Therefore, there are 15 bridges of steel and 22 bridges of wood.

Most tourist attraction is difficult to reach because of road conditions and limited only accessible by private vehicle. Some bridges (wooden bridges) are old and broken. In some places, there is no public transport available. Another problem is the lack of adequate tourist facilities and poor management. There is a conflict between local governments and local communities in the management of attraction. In addition, the land where the tourist attraction are on land owned by the community also become an obstacle.

Improvement should be done in some aspects, including improving safety and quality of roads, corridors system for tourist movement, and public transportation that are able to support tourism movement. Access to tourist attraction and destination has also been associated with river corridors in the specific area. Therefore, providing river transportation is also important. Several areas have bamboo rafting as river transportation, in additional to a new experience to travel with bamboo rafting. The bamboo rafting was steered by local people. Each rafting accommodates 2-4 persons, as seen in Figure 4.

Amenity

Amenity for tourism includes accommodation, restaurant, health infrastructure, bank and other aspects supporting tourism business. The availability of amenity instrument was important to the destination. Poor of amenity instrument becomes the crucial aspect for destination competitiveness, in which destination with poor amenities has identified difficult to generate tourism.



Figure 2. *Aruh Ganal* Traditional Ceremony



Figure 3. Handicraft of Rattan by Dayak Women. **a.** Basket handicraft, and **b.** Bag handicraft



Figure 4. Bamboo Rafting

a. bamboo rafting port, **b.** bamboo rafting with passengers, and **c.** experiencing bamboo rafting as passenger

There are accommodations in Hulu Sungai Selatan, such as Hot spring water hotel in Tanuhi, Wisma Loksado Hotel, Graha Amandit Hotel, Bangkau Hotel, Loksado Hotel, Mutia Hotel, Wisma Duta Hotel and Mahligai Antaludin Hotel. These are distributed around the city, but rarely accommodation found near attractions. There is no evidence of the existence of accommodation which is owned and managed by local people or community. Most of privately managed hotel is in good condition, clean, and well maintained. This is different from the situation of Tanuhi Cottage that is not well maintained. Tanuhi Cottage is managed by the tourism department of Hulu Sungai Selatan district. There are 10 units (for 20 people) cottage with a unique architecture that is equipped with swimming pools, hot tubs, hot tubs bubble, cafeteria, office managers, roads and bridges, sanitation, postal security, tennis courts, as well as a relaxing/break places. In addition, tourists complaint that telecommunication signals are very weak.

About 44 restaurants were registered in Hulu Sungai Selatan. These restaurants are able to serve tourist in term of culinary aspect. The restaurants contribute to purpose in tourism aspect by functioning as a place for trying the local culinary menu. In Hulu Sungai Selatan, it is important for the restaurant owner and local government to promote local cuisines. The restaurant owner, local government, and related group in the culinary industry together should be able to promote and make up an authentic traditional menu, in which the tourism get the chance to experience the local food. In such a case, the active involvement of community was essential [11].

Health facility was provided to support community needs to meet basic health standard and diseases problems. It includes city hospitality, public health service in each district (*Puskemas, Puskemas Pembantu, Polindes*), and drug store. However, the facility can also be used to support amenity for tourism development by improving standard services in some aspects.

Freshwater is the basic resources for live and important to support many aspect of life, including tourism. As far, the supply of water was adequate to support tourism development. Freshwater extruded from spring, river and well. In some place, freshwater was supported by Regional water company (PDAM) while electricity was supported by National Electricity Company (PLN).

The Development of Tourism

The development of tourism in Hulu Sungai Selatan should be able to bring all resources into systematic planning with the sustainable tourism vision. Recently, the issues of sustainable tourism increase as a response to mass and unplanned tourism activity that contribute to the numerous degradations in social and environmental aspects [12]. Uncontrolled tourism development and its impact have been reported widely, and it is become an important point for Hulu Sungai Selatan to consider the sustainable development practices in tourism sectors.

Ecotourism seems to be potentials to develop. It is especially important to support local economic growth in the framework of sustainable environmental and biodiversity conservation [13]. It is especially important because South Kalimantan is the home of numerous tropical biodiversity in the globe. The tropical forest has been identified important in global warming issues, and therefore involving tropical forest management in the tourism sector is important.

The development of eco-lodge is through the empowerment of local settlement as community-based tourism accommodation. Besides contributing to the effort in increasing local economic earning, the eco-lodge significantly contributes to the global warming mitigation [14]. The design of eco-lodge principally should be able to involve local people participation and adopt the local culture and tradition. It is especially important to promote local genuine of local community [15].

CONCLUSION

Hulu Sungai Selatan Regency has numerous potential tourism objects, ranging from man-made to natural attractions. On the future development, special interest tourism such as nature-based tourism, ecotourism, culinary tourism, religious tourism, history and cultural tourism are potentials to be developed. The tourism potentiality recorded in this study has similarities with other reports from tourism and natural resources study, in which formulating sustainable uses of natural resources through ecotourism implementation is important.

REFERENCES

- [1] Rahajoe, J. S., and T. Kohyama. 2003. Effects of forest fire on leaf litter decomposition of two dominant species (*Tristaniopsis obovata* and *Calophyllum pulcherrimum*) in a

- heath forest of South Kalimantan. *Tropics* 12(4), 277-286.
- [2] MacKinnon, K. 1996. *The ecology of Kalimantan*. Oxford University Press. Oxford.
- [3] Jannah, A. R. 2007. *Pengelolaan Taman Wisata Alam Pulau Kembang, Banjarmasin, Kalimantan Selatan*. Thesis. Faculty of Fisheries and Marine Sciences. Bogor Agricultural University. Bogor.
- [4] McKercher, B., H. D. Cros, and R. B. McKercher. 2002. *Cultural tourism: the partnership between tourism and cultural heritage management*. Haworth Hospitality Press. New York.
- [5] Epler, B. 2007. *Tourism, the economy, population growth, and conservation in Galapagos*. Charles Darwin Foundation. Ecuador.
- [6] Hakim, L. 2004. *Dasar-dasar ekowisata*. Bayumedia. Malang.
- [7] Regional Development and Planning Agency of Hulu Sungai Selatan. *Map of Hulu Sungai Selatan Regency*. Hulu Sungai Selatan Regency.
- [8] Hulu Sungai Selatan Regency. 2011. *Statistics Hulu Sungai Selatan Regency*. Available at: <http://hulusungaiselatankab.bps.go.id>.
- [9] MacDonald, R. and L. Jolliffe. 2003. *Cultural rural tourism: evidence from Canada*. *Annals of Tourism Research* 30(2), 307-322.
- [10] Le, W., K. Zhang, C. Liu, Q. Xue. 2006. *Tourism's impacts on natural resources: a positive case from China*. *Environmental Management* 38, 572-579.
- [11] Tosun, C. 2000. *Limits to community participation in the tourism development process in developing countries*. *Tourism Management* 21(6), 613-633.
- [12] Liu, Z. 2003. *Sustainable tourism development: a critique*. *Journal of Sustainable Tourism* 11(6), 459-475.
- [13] Aronsson, L. 2000. *The Development of Sustainable Tourism*. Continuum. London.
- [14] Hakim, L., and N. Nakagoshi. 2014. *Ecotourism and climate changes: the ecotourism contribution in global warming mitigation*. *Journal of Tropical Life Science* 4(1), 26-32.
- [15] Levy, S. E. and D. E. Hawkins. 2010. *Peace through tourism: commerce based principles and practices*. *Journal of Business Ethics* 89, 569-585.

Questioning the Readiness of Manado as a Tourism Destination: Poor Service of Waitresses in the Local Restaurants

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Abstract

In the last two decades, Manado local government has forwarded a Manado vision as a tourism destination. Due to this policy, many accommodations and restaurants are built here. Certainly, this is an opportunity for local people to work in the hospitality industry. Meanwhile, so far the tourism development industry is only physical, it was not supported by the human resource local tourism development, in this case, the waitresses who work in local restaurants. The research aims to examine the quality of service of waitresses who work in local restaurants. The research was conducted from October to December 2015, and locations of the area where data were taken are Mega Mas and Sabua Bulu Malalayang. These areas are the centers of local culinary industry. The research method used is descriptive qualitative supported by quantitative data. Field research includes a survey involving 116 respondents, observation and documentation, and the analysis by serv-qual method. Service quality measured based on visitors' perceptions of the five dimensional aspects. They are the tangible aspect, responsiveness aspect, assurance aspect and empathy aspect. Result of this research shows that service quality of local waitresses are still low, where service performance appraisal is 3.11 while the guest expectations of service quality were 4.47. Guest rating on the performance expectations of service and quality of service shows a minus value. This indicates that the guest is not satisfactory with the performance of services provided by a waitress with an average value of -1.35 satisfactions which means that the value of service of local waitress is ≤ 0 . Recommendation is that the local governments should encourage business manager of local restaurants training to improve service quality of waitress. The methods of training suggested are video presentation, vestibule, role plays and case studies.

Keywords: local restaurants, poor service, readiness of Manado, tourism destination, waitresses.

INTRODUCTION

Manado is the capital of North Sulawesi province in the last two decades has forwarded a vision Manado as a tourism destination and also at the end of 2014 set as one of the organizers of MICE events in Indonesia. The city is famous with Bunaken as a marine national park, continuing to improve tourism industry sector. Specifically the hospitality industry and restaurants, until early 2015 there were 86 hotels and inns as well as 323 restaurants [1,2]. The culinary activities of local communities are very close to the culture of eating, so it has been made a culinary festival in this city, which in turn supports tourism in the city.

This is the basis for the government of Manado to establish tourism as a sector featured over the past 10 years. Currently, Manado government is too intense speeding up the construction. However, the development of tourism cannot only

be approached by the development of unique and beautiful location, but also by human activity involved in the tourism. During this time, the understanding of tourism is only in how to sell a unique and beautiful location with a variety of infrastructure facilities and infrastructure in that location, and forget the readiness of human as a operation engine to drive the tourism.

Tourism industry is also known as labor-intensive industries that involve a lot of human resources in them that will interact with each other; including with tourists as a consumer. In addition, tourism is an industry in which the art of man who plays it. It must show an element of his art to play tourist's (guest's) emotions to always be loyal and travel to a destination [3].

Accommodation and catering (restaurant) are the two elements that play the key role of human resources involved to attract tourists (guests) to visit. Inherent factor for human resources is the attitude of hospitality. This attitude is very enforced standards in hotel or restaurant business. A worker in a hotel or restaurant should always apply the standard in interacting with tourists. It

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means is how it shows that workers are friendly, polite and emphatic in serving tourists (guests).

So far quality service standards apply only to the order of the hotel industry. While in the food service industry (culinary) did not seem so considered. This trend occurred at various local restaurants in Manado city. The stake holders in the local culinary businesses hire employees noticed that the service quality does not good, actually the service will also affect the business carried on.

Several cases that occur at this time, so many workers from outside the city of Manado dominated jobs in the restaurant industry. Especially in well known restaurants and shaped the franchise, it is very rare for the original local employees. It is common knowledge that the information obtained by human resources (workers) are not ready to work in the local culinary industry. The low quality of service is extremely felt by guests who enjoy the culinary of Manado. It is not only felt by new visitors, but also local people who enjoy the local culinary prove that the quality of services delivered by local workers is far below the standard of a culinary industry. Moreover the city government strongly supports the development of original culinary of Manado as a tourist attraction besides marine attraction. Given the local restaurants offer very competitive products with the franchise from outside the area, in terms of visitors who come to enjoy a menu that is offered, then the local workers also need to be considered, so that a single package of quality services.

Ten major factors which determine the quality of services are: (1) reliability, includes two main things, namely consistency of work and the ability to be trusted. This means the company provides its services right since the first moment. Furthermore the company fulfills its promise, for example, deliver the service in accordance with the agreed schedule, (2) responsiveness, namely the willingness or readiness of employees to provide the services required by customers, (3) competence, means that everyone in a company has the skills and knowledge needed in order to provide certain services, (4) access, including ease of contact and encounter. This relates to the location of service facilities within easy reach, the waiting time is not too long, the communication channels of the

company can easily be reached, and others, (5) courtesy, including politeness and courtesy, respect, attention and hospitality owned by the contact personnel (such as receptionist and telephone operators), (6) communication, it means that company provides information to customers in a language that can be understood. In addition, always listen to suggestions and complaints of customers, (7) credibility, namely the nature of honest and trustworthiness. Credibility includes the company name, company reputation, personal characteristics personal contact and interaction with customers, (8) security, which is safe from danger, risk, or hesitancy. These aspects include physical security, financial security, and confidentiality, (9) understanding, the customer is the effort to understand customer needs and (10) tangibles, the physical evidence of the service, could in the form of physical facilities, equipment used, and the physical representation services [4].

Furthermore, in its development, the overall factor is summarized in five dimensions. These five key dimensions of service quality are: (1) tangible (direct evidence), formed the appearance and capabilities of facilities, equipment, tools and facilities and physical infrastructure that is reliable, (2) reliability, the ability to provide promised service with immediate, accurate and reliable including timeliness, the same service to all customers, the level of error skimpy and other things, (3) responsiveness, namely providing fast service to customers and understand what necessary, could include responsiveness, awareness serve and other matters, (4) assurance (collateral) is the guarantee will get the service properly and appropriately so as to develop a sense of trust and comfort for the customers, could include knowledge, skills, politeness, and nature trustworthy owned by the staff, free from danger, risk or doubt and (5) empathy, is giving special or personal attention to its customers in terms of satisfying consumer needs. Empathy also includes the communication, contacts and presence and understand what they need [5].

The relationship between the product with the service that the service company in providing products divided into two parts, namely the construction of service and service delivery, in other words the total quality of service is determined by a relatively construction service

(service design) and service delivery. Construction services consist of construction products, construction of facilities, construction process and construction process operations services to customers. Construction services and delivery services is related to the other in shaping the service quality [6].

Culinary is part of the attraction of a destination, which is in development is strongly influenced by the service provided is good from food products offered as well as human resource airport (delivery). The customer satisfaction also affects the development of a tourist destination, in a comprehensive manner in future.

Previous study highlighting the lack of assurance and empathy on Chinese fast food, so they suggest the need for spending on training both for the quality of food and food supervisors to be trained [7]. Markovic, Raspor and Segaric highlights the quality of service in Croatia with the advanced measurement Restaurants Serqual and Dine-Serv modified [8]. They find that there is a gap between the expectations and the reality of the respondents, which the service expectation too high, while in fact the result of the service is low. This research despite the small sample with limited geography they also provide recommendations for improvement against the food industry in Croatia.

Service products have different characteristics from other tangible products. The characters are: (a) intangible, in a sense that services are intangible and cannot be touched, but can only be felt through the process provided by the service provider, (b) heterogeneous, because the service is generated by humans, the results from a ministry that is done will be different results depending on the perception to receive it, where these perceptions will be affected by the experience and knowledge of each recipient of the service, (c) Produced as consumed or integral (simultaneous production and consumption), product service is a service process itself in terms of when the provider of manufacturing services, at the same time service products sold and (d) vulnerable (perish ability), a service cannot be stored, sold, or returned, because it is not able to separate between production and consumption [9].

Related to the them the product is a collection of goods and services consisting of several formations, namely: (a) supporting Facility, a

support facility that can be consumed or used by consumers is often called means of support, (b) facilitating Goods, a suggestion physical must be provided for the benefit of service delivery or what is often called the infrastructure, (c) explicit service, a service provided by a real (product key services) and can be felt perpetually directly by consumers, and (d) implicit service, a form of indirect services whose shape is more unreal but can be perceived by the consumer and explicit support service [10].

The quality of service is the use of the product suitability to meet customer needs and satisfaction. Matches are based on the use of five main characteristics, namely; (1) technology, which is the strength or endurance, (2) psychological, namely the image of race or status, (3) time, namely reliability, (4) contractual, namely the guarantee, and (5) ethics, the manners, friendly and honest [5].

Suitability of use of a product is when the product used has a long durability, the products used will enhance the image or status of consumers who wear them, the product is not easily broken, having quality assurance and in accordance with ethical when used. Especially for services, needed services to customers are welcome, polite and responsive to customer complaints, which may be pleasant or satisfying the customer. Referring to the service, the level of good service quality will always be seen and measured from the consumer side as well as the fulfillment of satisfaction with the service received.

The meaning of feeling happy or disappointed is a result of someone's comparison between the achievements or products felt and is expected [5]. Quality is fully customer satisfaction. A quality product is a product that can provide utmost satisfaction to the consumer, which is in accordance with what consumers expect of a product [5]. Quality is something that must be done properly by the service provider. Application quality as the nature and appearance of the product or the performance of a key part of the company's strategy is to achieve sustainable excellence, both as a market leader as well as a strategy for growth. The advantages of a product depend on the uniqueness of the quality services that are shown, namely the suitability of the premises expectations or desires of consumers.

One way of selling the services of a company superior to its competitors is by providing quality service and quality, which meet the level of consumer interest. The level of consumer interest towards the services they receive can be formed based on the experience and advice they receive. Consumers choose a service provider based on the ranking of interest. And after enjoying the services they tend to compare it with what they expect.

The level of service quality cannot be judged based on the viewpoint of the company but should be viewed from the perspective of the customer ratings. Therefore, in formulating a strategy and program service, the company must be oriented to the interests of customers by paying attention to service quality components.

In the service concept, the role of the perpetrators service is of no less importance, as players will directly deliver services products to consumers. In a series of service are important aspects, namely the perpetrators of service or human resources itself [11].

One aspect to note is the problem of training of human resources in order to increase the performance of the service process. The important thing to note is the knowledge and skills of human resources. Referring to of the approach, it can be said that the formation of the delivery of services performed by the actors and the affected service will be based on the ability or competence of human resources which can be formed from educational background. While the service process itself also influences the formation of the functional aspects of service quality, such as consumer contact, attitudes, internal relations, behavior, service mindedness, appearance, accessibility [12]. There are four strategies for improving human resources to create customer satisfaction. The fourth strategy is to hire the right employees, building workers to deliver services properly, providing system services that support and retain workers who have the capability [13]. The purpose of this study examines service quality of waitresses at local restaurants to support the development of tourism destination in Manado.

MATERIAL AND METHODS

The research location was in the city of Manado where besides Bunaken National Park as a leading tourist destination, Manado also relies culinary as an alternative tourism to be enjoyed by the

tourists. This research took the two places at the culinary center's namely Mega Mas and Sabua Malalayang area. The choice of location is deliberately based on several considerations, namely (1) it is a locally-based culinary location, and (2) the location of the area is used as a culinary tourism in the city of Manado.

The approach used in this study is a qualitative and quantitative because in determining the value of perception, the perception of the size of the respondents used the Likert scale [14]. Sampling technique accidental a sampling is sampling which done deliberately to the population encountered/ related to the research objectives. The concept of five dimensions of service will be used to assess aspects of the service provided a waitress in a series of service activities in the restaurant area at Sabua Malalayang and Mega Mas Manado. The data collection method was done by: observation, open interviews, and questionnaires. Sample sizes (respondents) taken amounted to 116 diners at two specified locations mentioned in Culinary Region Sabua Bulu and Mega Mas Manado. Research tools used are interview guides and questionnaires. The analytical method used is Likert scale and servqual methods. The questioner was tested by validity and reliability test.

RESULTS AND DISCUSSION

Respondents Character

The characteristics of respondents in this study can be grouped into several groups: gender, age, education level, occupation and region of origin. Thus, based on the problems and the expected goals then the following is illustrated profile of the 116 respondents including: gender, the majority of respondents felt that the waitresses of culinary are dominated by women, 51.72% and men 48.28%, it indicates that women prefer the street activity; hanging out at the same time sitting and eating in the city of Manado.

Then age affect people's motives also assess the waitresses, who work, as well as maturity in judgment objectively based on the experience of working, interacting with other cultures. Respondents aged 41-50 years was 37.93%, age 31-40 years is 34.48%, > 51 years of age are 15:52% and up to 20 years 1.72%.

From the level of 43.10% of undergraduate education, postgraduate diploma 24.14% 19.83%,

while the senior high school only 12.93%. At work, professions influence people to spend time after routine work that takes a lot of time. Profession as the private sector has contributed 28.45%. Government officials 25.86%, 19.83% students, 13.79% professionals whereas only 6.90% of entrepreneurs.

Characteristics of the area of origin that showed 97.50% of respondents came from the province of North Sulawesi (Manado, Minahasa, Sangir Bolmong and Bitung), while from outside the area was 2.50% coming from Bogor and Ternate). This suggests that the local communities, especially those in Manado and its surroundings are the main culinary connoisseurs native to the area.

Based on validity and reliability test to the questioner was valid where as account $r > r$ table (sig 0.05, $n=20$, df namely 0.444), average of the r critic is 0.7739. The reliability test was reliable where Cronbach's Alpha is > 0.60 and average of number of it is 0.6872.

Assessment based on the 5 Dimensions of Service *Aspects of waitresses dressed clean and tidy*

The waiter is a person who plays an important role in preparing the table service to guests. The waiter should have a clean appearance, and hospitality to welcome guests. Then the arrangement of the dining room was clean with regular tableware and available menu. Reception it's polite and nice to guests when guests came would greatly affect the impression (image) which was nice of guests. Although sometimes the taste of the food is not too bad, but because it looks good service from the waitress who led guests are also interested in the restaurant dining place. The analysis showed that the 116 respondents indicated 51.72% are expecting, 48.28% expect. While the performance of services resulted in 41.38% satisfied, very satisfied 3:45%, while the remaining 31.03% is quite satisfied, 20.69% less 3:45% satisfied and dissatisfied. These conditions need to be observed by the manager of the restaurant, where necessary enhance to performance waitresses.

Aspects of waitresses setting up chairs and completeness of eating at the table

From the aspect of waiters setting up chairs tables and other equipment for the preparation of

a meal of respondents gave the hope: 48.28% are expecting, 3.45% expect and reasonably expect. While the performance of services showed: 37.93% quite satisfied, 34.48% satisfied, 3.45% and very satisfied. For the category of negative results showed 20.69% less satisfied, and 3:45% dissatisfied. This means there is still a shortage of waiters in preparing creative layout and complete seat of dining table.

Aspects of waitresses prepared with a list of menu

Preparation and knowledge of diet is needed by a waitress. Readiness with menus in hand indicates that the waitress is ready to serve the guests who will come to enjoy dishes that will be sold. Expectations of respondents to the waitress, who prepared the menu list, i.e. 55.17% expect, 34.48% so expect, and 6.90% is quite expect. While the resulting performance is: 51.72% satisfied, 3:45% very satisfied, while 27.59% were quite satisfied. Poor performance is: 13.79% less satisfied and, 3.45% more dissatisfied. This shows that the waitresses must constantly be reminded to prepare a menu list at the time of serving guests.

Aspects of waitresses assured conformity with the food on the menu ordered

In this aspect it appears that the respondent gives hope that are: 75.86% are expecting, 20.69% expect and 3:45% quite expecting. While the performance of services produced in which: 10.34% dissatisfied, 13.79% less satisfied, 34.48% fairly satisfied, 37.93% satisfied and 3.45% very satisfied. This assessment was given by the respondents are sometimes caused by negligence in caring waitresses or waiter does not repeat order to a guest at the time of booking guests ordering food.

Aspects of waitresses serve exactly the food ordered by guests

This aspect shows respondents' answers to the right attitude right of waitresses serving food were booked guests, i.e. 51.72% are expecting, 41.38% were expecting, and the same percentage 3:45% to the answer not expect and enough. While the assessment of performance, namely: 6.90% dissatisfied, 13.79% less satisfied, 37.93% fairly satisfied, 34.48%, satisfied and 6.90% very satisfied. Results of the assessment of respondents

are still a value that indicates the disappointment of the guests to order food that is certainly far from the time it is delivered at the time of ordering food. (f) Aspects of waitresses skilled to serve the guests order

In this aspect respondent seem to give hope that is: 68.97% very important, 24.14% expect and 6.90% quite expecting. While the resulting performance show: 3.45% dissatisfied, 41.38% less satisfied, 44.83% fairly satisfied, 6.90% satisfied and 3.45% very satisfied. From these results the gap is far enough between the positive attitude of hope and the resulting service performance. This indicates, there should be training for waitresses, remember skills in the general hospitality industry is the most fundamental thing for a waiter in serving guests.

Aspects of waitresses willing to help guests

This aspect of the respondents expects the waiter to always be willing to help guests i.e. 48.28% are expecting, 44.83% expect, and the percentage is 3.45% share fairly and do not expect. While the expected performance are: 3.45% dissatisfied, 20.60% less satisfied, 37.93% fairly satisfied, 34.48%, satisfied and 3.45% very satisfied. These results indicate that the waitress should be responsive to the needs of guests, so managers need to provide training for the waitresses.

Aspects of waitresses serve in a fast time

This aspect indicated the respondent's answers: 55.17% are expecting, 41.38% expect and 3.45% quite expecting. While performance is obtained: 3.45% dissatisfied, 10.34% less satisfied, sharing the same percentage is 41.38% sufficient and satisfactory, while 3.45% very satisfactory. The management should give a warning to the waiter to deliver services quickly and do not delay in serving guests or make guests wait long for things that need to be done fast.

Aspects of waitresses are ready and alert serve guests

For guests who enjoy the food provided restaurant, always think to be treated better by the waiters, where guests expect waitresses always give special attention, alert to the needs of guests. The respondents answer: 58.62% are expecting,

34.48% expect, and 6.90% reasonably expect. While performance is obtained: 6.90% dissatisfied, 31.03% less satisfied, 27.59% fairly satisfied, 31.03% are satisfied and 3.50% very satisfied.

Aspect of waitresses master restaurant menu

This aspect assesses menu knowledge of waiter where the respondents answered: 65.52% are expecting, 27.59% expecting and 6.90% quite expecting. This is a fundamental aspect of how the waitress could serve well, when they do not control the content of the menu that can be held. However, the performance found base on the respondents answers: 3.45% dissatisfied, 27.59% less satisfied, 13.79% fairly satisfied, 48.28% satisfied and 6.90% very satisfied.

Aspects of waitresses provide information about the menu

This aspect is urgent for guests who enjoy the food, and should not be allowed. Sometimes there is a food menu which up, and no information by the waitresses. When guests book and have to wait a long time, and inform that the ordered menu is up, it causes disappointment have for guests. Expectations of respondents to this aspect are as follows: 75.86% are expecting, 20.69% expect and 3.45% quite expecting. Meanwhile, respondents' assessment of the performance was produced was 6.90% dissatisfied, 17.24% less satisfied, fairly satisfied 20.69%, 48.28% and 6.90% satisfied very satisfied.

Aspect of waitresses able to communicate well

Related to the communication aspect, it is fundamental where the waitresses, equipped with the essential good way of talking to guests, because guests are consumers who always ask for good service from the waitresses. It is necessary to understand the culture of origin which is sometimes greatly affect oracle of the people to communicate, especially in high levels of work pressure, this will greatly affect the emotions of the workers. Expectations of respondents: 65.52% are expecting, 27.59% expect and 6.90% enough. Meanwhile, respondents' assessment of performance is: 3.45% dissatisfied, 27.59 less satisfied, 13.79% fairly satisfied, 48.28% satisfied and 6.90% very satisfied.

Aspect of waitresses being friendly, polite and orderly while serving

In this aspect, respondents rates are: 79.31% are expecting, 17.24% expect and 3.45% reasonably expect, while performance assessment by respondents: 6.90% dissatisfied, 17.24% less satisfied, 20.69% were quite satisfied, 48.28% satisfied and 6.90% very satisfied. Restaurants may get a good image at a time when the guest entered already greeted with a friendly smile, polite and orderly serve guests. Because first impressions are decisive guests can feel at home even sit back enjoy a menu that is sold. So from these results is actually reminiscent of the manager to always tell the waiter when guests come to their restaurant.

Aspect of waitresses was able to hear guest complaints

This aspect may sometimes be overstated, and may be considered when guests arrive; guests book the existing food on the menu. But sometimes there are guests who need special attention this case the possibility of a particular disease that may need to remind the waiter to tell the chef to decrease slightly from the usual standard processed by the chef to give to guests. The waiter should always pay attention to this. Ratings given by respondents are: 48.28% expect and 51.72% crave. While the performance appraisal is: 10.34% dissatisfied, 13.79% less satisfied, 27.59% fairly satisfied, 41.38% satisfied and 6.90% very satisfied. This aspect is actually must always be a concern for waitresses and should not be underestimated.

Aspect of waitresses was able to understand guest suggestions

Sometimes waiters consider themselves more knowledgeable than guests who come to eat, and even less likely to want to hear or understand a suggestion, or even angry and tend to ignore the show busyness and irresponsive. In terms of advice could have been a good improvement in performance. The respondents' expectations following aspects: 68.97% and expect, 31.03% crave. While performance is assessed as: 10.34% dissatisfied, 24.14% less satisfied, 27.59% fairly satisfied, 31.03% satisfied, and 6.90% very satisfied.

Aspect of waitresses able to provide solutions guest complaints

In this aspect, sometimes was not controlled well by a waitress that resulted restaurants lose prospective guests to enjoy a dish. This can be seen when the guests are preparing dishes turns table ordered menu is up, and the waitress who serves merely convey and do not provide an alternative solution similar menu is probably better than that booked by guests that have been depleted. Expectations of respondents to the question: 51.72% so expect and 48.28% expecting. While the performance appraisal can be: 10.34% dissatisfied, 13.79% less satisfied, 27.59% fairly satisfied, 41.38% satisfied and 8.69% very satisfied.

Aspect of waitresses provide clear information to the guest services

Information services is strongly needed by a sometimes waitress who received an order different menus with the waitress who serves the table, and could be wrong at the time of delivery of the food menu, as this aspect should not be underestimated by the manager and must be considered. Therefore in this aspect of respondent's rate: 72.41% are expecting, and 27.59% expecting. While performance assessments show: 10.34% dissatisfied, 24.14% less dissatisfied, 27.59% fairly satisfied, 31.03% satisfied and 6.90% very satisfied. The manager of the restaurant should pay attention to this case should not be allowed because it would create a bad image for the local culinary industry that is the city of Manado.

Quality of Service

Furthermore, various indicators of these aspects of service quality had been seen from the waitress at a local restaurant. If the perceived service is lower than expected, then the perceived poor quality of service. From the results of questionnaires distributed to guests who enjoy original culinary Manado. The results are based on a perception of service quality local waitresses are satisfied by 3.11 while guest ratings expectations of service quality is 4.47. The rate of guests' expectations and service performance showed in Table 1.

Table 1. Average Value Expectations, Service Performance of Local Waitress at two locations culinary, 2015

Indicator	Average1 ΣEV	Average2 ΣPV	Average ΣSV
Tangible			
a. Aspects of waitresses dressed clean and tidy	4.52	3.17	-1.34
b. Aspects of waitresses setting up chairs and completeness of eating at the table	4.34	3.10	-1.24
c. Aspects of waitresses prepared with a list of menu	3.93	3.34	-0.59
Reliable			
d. Aspects of waitresses assured conformity with the food on the menu ordered	4.62	3.00	-1.62
e. Aspects of waitresses serve exactly the food ordered by guests	4.24	3.14	-1.10
f. Aspects of waitresses skilled to serve the guests order	5.66	2.62	-3.03
Responsiveness			
g. Aspects of waitresses willing to help guests	4.21	3.14	-1.07
h. Aspect of waitresses serve in quick time	4.41	3.28	-1.14
i. Aspects of waitresses are ready and alert serve guests	4.31	2.86	-1.45
Assurance			
j. Aspect of waitresses master restaurant menu	4.38	3.28	-1.10
k. Aspects of waitresses provide information about the menu	3.03	3.24	0.21
l. Aspect of waitress able to communicate well	5.21	3.28	-1.93
m. Aspect of waitress being friendly, polite and orderly while serving	4.66	3.24	-1.41
Empathy			
n. Aspect of waitress was able to hear guest complaints	4.48	3.10	-1.38
o. Aspect of waitress was able to understand guest suggestions	4.69	2.90	-1.79
p. Aspect of waitress able to provide solutions guest complaints	4.52	3.21	-1.31
q. Aspect of waitresses provide clear information to the guest services	4.72	3.00	-1.72
Account of value	75.93	52.90	-23.03
Account of average value	4.47	3.11	-1.35

Source: research data. Notes: EV= Expected Value, PV= Performance Value, SV=Satisfaction Value

From the ratings in the table it appears that almost all aspects of the show minus values. Only one aspect shows the positive value, and the aspect is waitresses provide information about the menu to the guest. But this aspect does not affect the overall the quality of service. So the conclusion of service quality of local waitresses is still bad. Where guest do not satisfied with the service and the local waitress service performance when viewed from the average total satisfaction with the service, looks average guests have the satisfaction level of -1.35.

One thing needs to be explored further that waitresses to the local restaurant has same tendency in serving the guests are weak in terms of service standards. It is also a tendency in many places both in Asia and in Europe (especially Eastern Europe) [7,8].

Unique local food with good service is affecting tourists to visit a tourist destination [15]. Besides that, the offers services of a restaurant is important, the food quality and also the skills and state of the atmosphere of the restaurant where the guests feel welcome, indirectly affects the destination [16].

While the satisfaction rating related with the components of a destination. As for the components of these destinations are an attraction, infrastructure, restaurants, and service performance [17]. Here can be analyzed that the restaurant and the service performance an indicator for the success of tourism destinations

Views of the marketing mix that local food and landscape unique area affecting a destination, where tourists feel that it really is in a tourist destination that is in direct contact with the local culture, where tourists have to eat at least two or three times a day. From some early research it can be concluded that the development of a local restaurant, which also affects the human empowerment rating in determining the tourist destination. The poor quality of service of local workers will affect also the development of destinations.

Connected with research where the results of a local restaurant waitress service quality in Manado is located on the value of -1.35, signaled that the need to restore the quality of service. It is because the quality of services at a local restaurant is part of the development of a destination.

Supposedly in the pattern of tourism development approach, not only be approached from the standpoint of the location will be developed but also human activities (local resources) should also be considered.

Solutions should move in order to improve the quality of service waitress at a local restaurant is stiffened by recruiting local workforce has the basic skills of food and beverages services namely recruitment of tourism vocational school graduates. But the conditions of new tourist areas certainly faced with a shortage of schools that provide education skills of food and beverages services. The short term planning solution that must be done is to conduct basic training for employees who are already working in the industry of culinary gradually and hope the workers who have been trained can teach to staff who have not received training opportunities, or they become role patron or agent of change for staff yet training opportunities.

The city authorities in long-term planning skills necessary to allocate the opening of school-based tourism skills, so the link between the vision and mission of the city is a tourist town supported by the provision of local workforce competent in the field of tourism.

Connected with the problems in this case, of course, need a short-term solution that must be done by the city government to support service improvements at a local restaurant in the city of Manado. The government should suggest to the owners of local eateries in the city of Manado so that the waitress had to be trained to support the quality of service to guests. Quality service to the guests is not just in food products being served but also about skill and empathy towards guests. Importance of readiness of employees/staff before starting the activity in the restaurant urgently needed. It is difficult to prepare a good performance if the waitress did not have competence in service. The restaurant employees should have minimal training, such as technical skills, product knowledge and interpersonal skills [18].

Training methods suggested in the form on the job or off the job training. Methods of training to be undertaken are depending on the availability of time and working conditions and the situation of employment. When the method of on the job

training that will be implemented then the method of job rotation and demonstration and example, it is suitable to the type of work for the waitresses. This means that practical training is directly practiced, would make it easier for employees to implement in their work. Practically, training method requires the job list for every employee. It was easier for supervisors and staff to view and assess each procedure steps work already done [19]. When on the job training could not be done then the second solution is off the job training. Especially for off the job training, the proper method is: a video presentation, vestibule method and role play and simulation.

CONCLUSION

Guest rating the performance of services and service quality expectations will guest waitress. Almost all aspects of the show minus values -1.35, indicates that the guest is not satisfied with the services provided by the waitress.

Some suggestion that need to be considered, among others: general manager should improve the quality of service by improving every aspect dimension in the quality of services provided to guests. Manado City Government through the Department of Tourism and Culture should encourage local culinary entrepreneurs to pay attention to provide training to local waiters in local culinary industry. As a suggestion for solving the problem of weak local restaurant waitress service quality training is done waitresses. The training can be done on the training and off the job training. For the method of on the job training and job rotation, the demonstration and example, is very suitable for this type of work waiter, while off the training genius proper method is a video presentation, vestibule method and role play and simulation. The next suggestion of this study is it necessary to add the training model for the waitresses.

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REFERENCES

- [1] Statistic Centre Manado. Manado statistic number. Available at: <https://manadokota.bps.go.id>.
- [2] Hakim, L., M. Soemarno and S. K. Hong. 2012. Challenges for conserving biodiversity and developing sustainable island tourism in North Sulawesi Province, Indonesia. *Journal of Ecology and Environment* 35(2), 61-71.
- [3] Richards, G. 2003. Tourism and labour mobility in the European Union. *Tourism Recreation Research* 28(1), 77-86.
- [4] Parasuraman, A., V. A. Zeithaml and L. L. Berry. 1995. Moving forward in service quality research: measuring different customer-expectation levels, comparing alternative scales, and examining the performance-behavioral intentions link. *Marketing Science Institute Cambridge Massachusetts*, 41-42.
- [5] Nasution, M. N. 2004. *Total service management: manajemen jasa terpadu*. Ghalia Publisher. Indonesia.
- [6] Ramaswamy, R. 1996. *Design and management of service processes: keeping customers for life*. Addison-Wesley. UK.
- [7] Tan, Q, A. Oriade and P. Fallon. 2014. Service quality and customer satisfaction in Chinese fast food sector: a proposal for CFFRSERV. *Journal of Advances in Hospitality and Tourism Research (AHTR)* 2(1), 30-53.
- [8] Markovic, S., S. Raspor and K. Šegaric. 2010. Does restaurant performance meet customers'? *Journal of Tourism and Hospitality Management* 16(2), 181-195.
- [9] Parasuraman, A., L. L. Berry and V. A. Zeithaml. 1991. Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing* 67(4), 420-450.
- [10] Fitzsimmons, J. A. and M. J. Fitzsimmons. 1997. *Service management for competitive advantage*. Mc Graw Hill Inc. USA.
- [11] Olsen, M. D., R. Teare and E. Gummesson. 1996. *Service quality in hospitality organizations*. Cassell. London.
- [12] Grönroos, C. 1998. Marketing services: the case of a missing product. *Journal of Business and Industrial Marketing* 13(4/5), 322-338.
- [13] Tjiptono, F. 2004. *Service, quality and satisfaction*. Andi Publisher. Yogyakarta.
- [14] Riduwan. 2009. *Skala pengukuran variabel-variabel penelitian*. Alfabeta. Bandung.
- [15] Björk, P., and H. Kauppinen-Räsänen. 2016. Local food: a source for destination attraction. *International Journal of Contemporary Hospitality Management* 28(1), 177-194.
- [16] Walter, U., I. M. Jonsson and J. Sundqvist, 2015. Eating out: a study of visitors' value creating activities related to food and meals. In: 24th Nordic Symposium of Tourism and Hospitality Research.
- [17] Huang, S. S., Afsharifar, A., & van der Veen, R. 2015. Examining the moderating role of prior knowledge in the relationship between destination experiences and tourist satisfaction. *Journal of Vacation Marketing*, 1356766715618996.
- [18] Pratten, J. D. 2003. The importance of waiting staff in restaurant service. *British Food Journal* 105(11), 826-834.
- [19] Arduser, L. and D. R. Brown. 2005. *The waiter and waitress and waitstaff training handbook: a complete guide to the proper steps in service for food and beverage employees*. Atlantic Publishing Company.

Factors Affecting Level of Participation in the Management of Mangroves as Ecotourism Attraction: Lesson Learned from Cengkong Watulimo, Trenggalek

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Abstract

Ecotourism development can not be separated from the social aspects of the people living around the tourist sites. One indicator that a tourist location is said to be ecotourism-based is the participation of community in the activities of management. This study aims to determine the effect of variables that exist on the level of community participation in the management of mangrove areas Cengkong using Partial Least Square (PLS) method. The variables used in this study are: community characteristics, perceptions, norms, patterns of social relationships, and trust. From the research, the variables that have a dominant influence on the level of participation in the management of mangrove Cengkong is variable of perceptions, norms, and trusts with the value of the effect size, respectively for 0.098, 0.204, and 0.431. While variable of trust has most influence to the coefficient path of community participation with a value of 0.64.

Keywords: Ecotourism, Factors of Participation, Level of Participation, Partial Least Square (PLS).

INTRODUCTION

Cengkong mangrove area is one of the ecotourism-based objects for tourist destination located in Cengkong coastal area. As the ecotourism area, Cengkong mangrove areas have an important role not only for the natural balance of coastal areas, but also for the economy of the people living around the mangrove areas [1,2]. Ecotourism development requires social acceptance that the successful development of ecotourism requires community participation [3]. The settlements of people who live around the conservation area have function as a buffer area. Without the participation of the community, the negative effect in the form of excessive use of natural resources that could damage the existing resources, degrade the quality of the ecology in the area, causing an imbalance in economic growth and cultural erosion. Tourism activities should be able to enhance the role of the community in order to avoid threats to the region and tourism through which exerts a positive impact of increased revenues, improved public infrastructure and empowerment of the local culture.

Community participation in the development process is influenced by many factors. Internal factors affecting such characteristics include age, education level and monthly income.

Besides that, other influential factors are perception, and social capital (norms, patterns of relationship and trust). The stages of participation in the development process are explained as follows. The participation is in the planning stage, implementation stage, deployment stage, and assessment of development stage [4].

Recent grows of mangrove tourism management has been identified as an important strategy for community participation development. It is due to numerous tourist visit and economic benefit derived from tourism activity. Mangrove tourism in Karanggandu Village has been grown as an important variant of tourism product. Demand for natural-based tourism increase significantly. It is important to study the community participation for future sustainable management practices of mangrove tourism. The aims of the research was to analyze the variables that influence level of community participation, and variables that affect the dominant level of community participation in mangrove Cengkong, Karanggandu Village, Sub district Watulimo of Trenggalek Regency. It is especially important for sustainable mangrove tourism planning and management.

MATERIAL AND METHOD

Study area

Research was done in Karanggandu Village, Sub district Watulimo of Trenggalek Regency (Fig.1). This village has wide coastal dan mangrove area which is used as tourism

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destination sites. Mangrove area in Karanggandu Village was about 87 ha. Most people in Karanggandu Village has job that related with tourism activity in the mangrove area. The development of local community participation in mangrove Cengkong area was addressed to improve local community prosperity; in which local people involve and receive benefit from tourism activity. Following the potential site of coastal environment in Karanggandu Village as ecotourism site, local authority and community proposed such area as ecotourism destination in Trenggalek Regency called *Ecotourism of Mangrove Cengkong*. Recently, this area is one of the favorite tourism sites in Trenggalek Regency.

Variables Identification

The variables used in this study consisted of a latent variable (X) and the measured variables or indicators (Y). The variables in the study are presented in Table 1.

To measure characteristic variable, we identified the characteristic respondents to

indicate their level of age, monthly income, and their education using a 5-point Likert-type scale. To measure variable of perception, norms, patterns of social relations, trust and participation, we asked respondent to indicate their level agreement using 5-point Likert-type scale, ranging from strongly disagree to strongly agree. The following items of instrument to measure variables was given in Table 1.

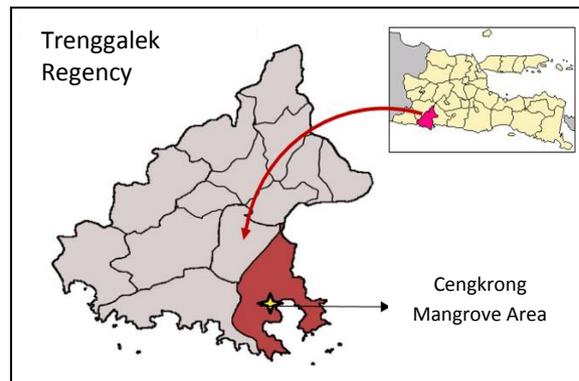


Figure 1. Location of Study Area

Table 1. Latent Variables and Indicators

Latent variables	Variables measured (indicators)	Definition
Characteristics (X ₁)	Age (X _{1.1})	Age of respondents
	Monthly income (X _{1.2})	Respondent income in one month
	Education (X _{1.3})	Formal education respondents
Perception (X ₂)	Knowledge 1 (X _{2.1})	Respondents' knowledge regarding the benefits of the economic existence of mangroves for communities
	Knowledge 2 (X _{2.2})	Knowledge of respondents associated the influence of the mangrove ecosystem for social life
	Knowledge 3 (X _{2.3})	Knowledge of respondents associated the influence of mangrove ecosystems for coastal environmental quality
	Knowledge 4 (X _{2.4})	Respondents' knowledge regarding the benefits of mangrove ecosystems for coastal fauna
	Knowledge 5 (X _{2.5})	Related respondents' knowledge of ecotourism
	Attitudes 1 (X _{2.6})	The attitude of the respondents with the activities of travel
	Attitude 2 (X _{2.7})	The attitude of the respondents with their tourism development
	Attitude 3 (X _{2.8})	The attitude of the respondents to the development of ecotourism
	Attitudes 4 (X _{2.9})	The attitude of the respondents to the management activities
Norm (X ₃)	Family rules (X _{3.1})	The rules applicable in the family
	The rules of society (X _{3.2})	The rules that apply in the community
	Norms of decency (X _{3.3})	Norms of decency held
	Government regulations (X _{3.4})	Government rules that apply
Patterns of Social Relations (X ₄)	Relations with neighbors (X _{4.1})	Conditions relations with neighbors
	Mutual support between neighbors (X _{4.2})	Daily activities that involve neighbors
	Social activeness (X _{4.3})	Activeness in following the activities of the village
Trust (X ₅)	Community involvement (X _{4.4})	The involvement of local communities in managing
	Openness (X _{5.1})	Openness towards tourists
	Confidence in the manager (X _{5.2})	Confidence in the management of the manager in managing the region
	Fairness in decision-making (X _{5.3})	Business fair in making decisions involving the common interests
	Willingness to follow the direction of the manager (X _{5.4})	People want to implement directives and advice from area manager
Participation Stage (Y)	Confidence in the local government (X _{5.5})	Public trust in government that facilitates the development of rural area management
	Planning (Y ₁)	Participation in planning activities
	Implementation (Y ₂)	Participation in the implementation of activities
	Utilization of results (Y ₃)	Participation in the activities of utilization of the results
	Evaluation (Y ₄)	Participation in evaluation activities

The population of this study is that the village community Karanggandu involved in management mangrove Cengkong areas totaling 120 people. For sampling using purposive sampling, while the determination of the number of samples using methods Slovin [5]:

$$n = \frac{120}{120(0,05)^2 + 1} = 92 \text{ sample}$$

Description:

n = sample
N = population (120 people)
d = the value of precision of 95% or 0.05

Quality Data Test

Validity Test

The validity test of an instrument has done by result of output from PLS model which shows the discriminant validity (AVE roots and the correlation between the latent variables). Discriminant validity is a value that measure how much the variable influence another variable [6].

Reliability Test

Instrument reliability test resulted by composite reliability from the output model of PLS. The instrument has a high degree of reliability if the value obtained reliability coefficient > 0.60 [7].

Processing and Data Analysis with PLS Approach

PLS is a component-based SEM or variance analysis method that is not based on many assumptions. The purpose of the PLS is to test the theory of the weak and weak data such as the small sample size or a problem in the normality of the data, predicting the effect of variable X (exogenous) to Y (endogenous variable) and explain the relationship theoretical between these two variables [8].

Research hypothesis

Statistical hypothesis for the inner model of latent exogenous variables (independent) against

endogenous variable (dependent) in this study are:

H₀: $\gamma_i = 0$ opponents H₁: $\gamma_i \neq 0$

H₁: There is the influence of variables X (exogenous) to the level of community participation.

H₀: There is no influence between variable X (exogenous) to the level of community participation

RESULTS AND DISCUSSION

Cengkong mangrove area as one of ecotourism-based area in Trenggalek Regency has an effort management area, i.e. a Community Group Supervisor (*Pokmaswas*) Kejung Samudera which is partner of the Department of Marine and Fisheries in Trenggalek. Moreover, because Cengkong mangrove areas included in the area of forestry area, then Indonesia State Owned Forest Enterprises (*Perhutani*) also participated in the activities of mangrove Cengkong area management. They formed Forest Village Community Institution (*LMDH*) Gunung Madu. Collaborative management of these two groups is expected to manage the mangrove areas Cengkong well.

Characteristics of Respondents

Number of questionnaires distributed as many as 92 respondents. Questionnaires were distributed to the people living around the Cengkong mangrove areas and aged over 16 years. The village community profile Karanggandu who became respondents in this study is shown in Table 2.

Analysis Method with PLS

Evaluation Criteria Goodness of Fit

Evaluation of Goodness of Fit Outer Model

Evaluation Goodness of Fit on the outer models with reflective indicators evaluated by discriminant validity and composite reliability with the following results (Table 3 and 4).

Table 2. Distribution of the Respondent Characteristics

Characteristics	Interval	Total (respondent)	Percentage (%)
Age	20-35	11	12%
	36-50	52	57%
	51-65	29	32%
Monthly Income (Rupiah)	<1000000	55	60%
	1000000-2000000	34	37%
	> 2000000	3	3%
Level of education	Elementary School	35	38%
	Junior High School	23	25%
	Senior High School-Degree	34	37%

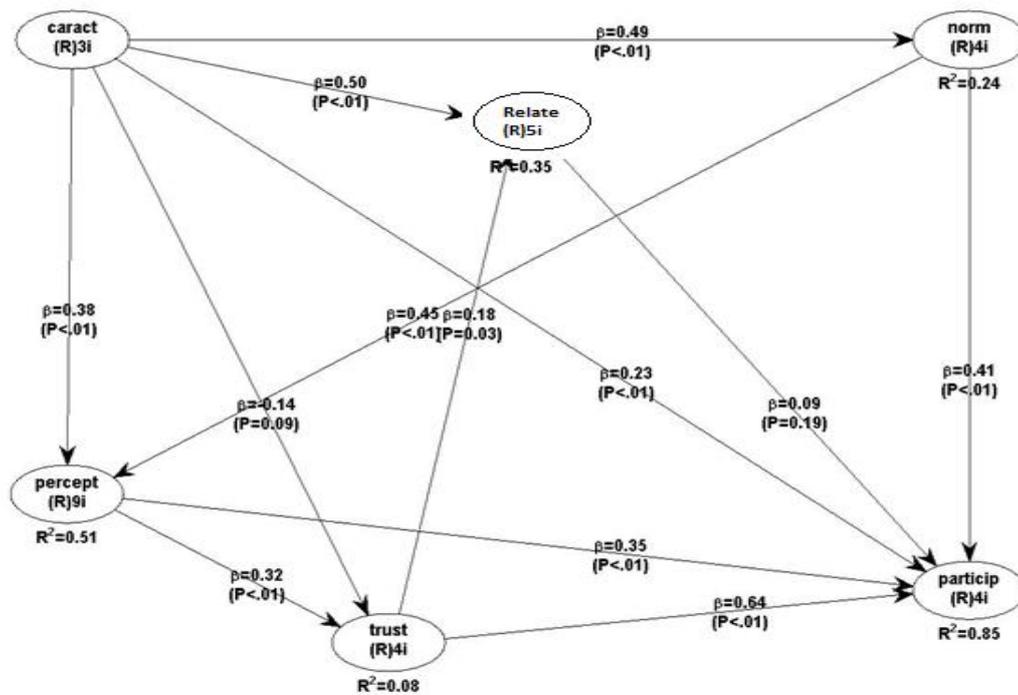


Figure 2. Diagram Construction of PLS Path Modeling

Table 3. Discriminant Validity Results Test

	Characteristics	Perception	Norms	Relationship patterns	Trust	Participation
Characteristics	0.771*	0.583	0.479	0.526	0.196	0.310
Perception	0.583	0.613*	0.609	0.529	0.366	0.279
Norms	0.479	0.609	0.856*	0.689	0.146	0.325
Relationship patterns	0.526	0.529	0.689	0.859*	0.314	0.430
Trust	0.196	0.366	0.146	0.314	0.727*	0.663
Participation	0.310	0.279	0.325	0.430	0.663	0.767*

*Square root of AVE

Discriminant validity of the measurement model reflective indicators assessed by cross loading which compares the value of cross loading of each indicator against the construct is greater than the value of cross loading indicator to construct or other latent variables. The output of the discriminant validity can be seen in Table 3.

Discriminant validity can be seen from the root of AVE (Average Variance Extracted) on a larger diagonal column depend correlations among constructs in the same column. The table shows that the root of AVE on the diagonal column is higher than the correlation between the latent variables in a column other than the diagonal (off-diagonal). This indicates discriminant validity is met.

Composite reliability is a reliability test in PLS which shows the accuracy, consistency of the accuracy of a measuring instrument in measuring [9]. The results of the composite reliability can be

seen in Table 4. Composite reliability is good if it has value of more than 0.7.

Table 4. Reliability Test Results

Variable	Composite reliability
X ₁	0.812
X ₂	0.837
X ₃	0.916
X ₄	0.934
X ₅	0.804
Y	0.781

Evaluation of Goodness of Fit Inner Model

Goodness of fit inner models R-square is evaluated using latent dependent variable and using Q-square predictive relevance to demonstrate that the construct used is a construct that has a good predictive relevance and feasible for use in research. Q-square value must be > 0 which indicates the model has predictive relevance good [6]. R-square value of the result of analysis using PLS software Warp 5.0. R-squared values were obtained in Table 5.

Table 5. R-square Result

	Characteristic (R ₁)	Perception (R ₂)	Norms (R ₃)	Relationship patterns (R ₄)	Trust (R ₅)	Participation (R ₆)
R-squared	0	0.512	0.235	0.346	0.083	0.851

Furthermore, the acquisition of R² inserted into the Q-square following equation:

$$\begin{aligned}
 Q2 &= 1 - (1-R_1^2) * (1-R_2^2) * (1-R_3^2) * (1-R_4^2) * (1-R_5^2) * (1-R_6^2) \\
 &= 1 - (1-0^2) * (1-0.512^2) * (1-0.235^2) * (1-0.346^2) * (1-0.083^2) * (1-0.851^2) \\
 &= 1 - (1-0) * (1-0.74) * (1-0.94) * (1-0.88) * (1-0.99) * (1-0.28) \\
 &= 0.8319
 \end{aligned}$$

Based on the results of the calculation of the value of the Q-square can be seen that the Q-square value of 0.8319. This shows that the inner goodness of fit of the model study factors affecting the level of public participation can be predicted well by the variable characteristics, perceptions, norms, patterns of social relationships and trust with a value of 83.19%. While 16.81% predicted by other variables outside studied.

Discussion

Hypothesis testing is done by comparing the effect size that appears at the output modeling results. Output effect size presents the results f-squared effect size [10]. Effect size can be grouped into three categories: weak (0.02), medium (0.15), and large (0.35) [11,12] effect size values below 0.02 indicate that latent variable effect is very weak predictor of practical view despite having a significant p value.

Based on estimates indicate that the characteristic has the effect size of 0.229 to perception, characteristic to the norm of 0.235, and characteristics of the social relationship of 0.283. These results belong to a group effect size large enough to show the characteristic variable has a considerable influence on the perception, norms and patterns of social relations. Variable characteristics have a weak effect on the variable trust (0.036) and participation (0.077).

Perception variable have an influence on the variables of trust with a medium effect size value of 0.119. While the perception variable has effect size of 0.098 includes enough participation. Norms variable have a large effect size on the perception variable (0.283) and participation (0.204). Otherwise, variable pattern of social relationships has weak influence on participation variable (0.040). The variable of trust has a weak effect size (0.063) on the pattern of social relations variable and the large effect size (0.431) against participation variable.

In an effort to increase community participation in the management of Cengkrong mangrove areas, required efforts from the management and the government to improve the public perception related to tourism activities and management activities in Cengkrong mangrove areas Cengkrong. Public perception identified in this study relates to the knowledge and attitudes the community in tourist activities and Cengkrong mangrove management activities. Activity-based development of the area managers and the government in the form of socialization activities related to tourism management plan and management of mangrove areas Cengkrong overall. Developments activities are expected to improve public knowledge in the management of Cengkrong mangrove areas effort and can make people have an attitude that is able to support the activities and management of Cengkrong mangrove tourism

Test result *effect size* showed that the variables that have a considerable influence on community participation is variable perceptions, norms, and trusts. A person's perception is closely related to the choice in decision-making [13] so that when people have a good perception of mangrove Cengkrong management activities, then the public will also be encouraged to participate in it.

Beside that, adherence to social norms and trusts that are part of the social capital of the community must also be increased in order to ensure continuity of community participation in the management of mangrove Cengkrong. Efforts to improve the adherence to the norms and social trust can be done by strengthening family function [14] and ensure one's social life in society [15]. Family function is meant is to ensure rules that apply remain adhered to and maintained within the family and the community [16]. Compliance with existing norms in the order of daily life is expected to ensure the livelihood of the people and inter-community relations can be maintained.

Social trust should be maintained and enhanced in an effort to ensure public participation in the management of Cengkong mangrove areas. Social trust can be built by establish good communication within the community, openness between the manager of the community, and real support from the government on the management of Cengkong mangrove areas.

CONCLUSION

Variables used in this modeling are the characteristics of the respondent, perceptions, norms, patterns of social relationships, and trust. Based on the results of studies showed that the variables that have a strong influence on the level of community participation in the management of mangrove areas Cengkong is norms and trustsvariables.The dominant influence on the level of community participation in the management of mangrove areas Cengkong is variable trust with path coefficient value of 0.64.

The management of mangrove Cengkong in Karanggandu Village should increase the effort of community participation. Program should be paid to community development which contributes to the mangrove Cengkong management. The community in Karanggandu Village should be involved in mangrove management. Community-based tourism can be an effective strategy to involve community in mangrove Cengkong management.

REFERENCES

- [1] Wood, M. E. 1998. Meeting the global challenge of community participation in ecotourism: Case studies and lessons from Ecuador. Verde America Working Paper Series. The Nature Conservancy. Arlington VA.
- [2] Jacobson, S. K. and R. Robles. 1992. Ecotourism, sustainable development, and conservation education: Development of a tour guide training program in Tortuguero, Costa RicaEnvironmental Management 16 (6), 701-713.
- [3] Rahardjo, B. 2004. Ekoturisme berbasis masyarakat dan pengelolaan sumberdaya alam. Salman Jaya.Bandung.
- [4] Cohen, J. M. and N. T. Uphoff. 1977. Rural development participation:concepts and measures for project design, implementation and evaluation. Rural Development Monograph No. 2. Rural Development Committee Center for International Studies. Cornell University.
- [5] Riduwan. 2005. Belajar mudah penelitian untuk guru, karyawan, dan peneliti pemula. Alfabeta. Bandung.
- [6] Malhotra, N. (2012). *Basic Marketing Research*. (4th ed.). Saddle River: Pearson Prentice Hall. Intl.
- [7] Friedman, M. 2010. Textbook of family nursing: research, theory, and practice, 5th Ed. EGC.Jakarta.
- [8] Abdi, H. 2003. Partial Least Squares (PLS) Regression. Sage.Thousand Oaks.
- [9] Jogiyanto, H. M. and A. Willy. 2009. Konsep dan aplikasi PLS (Partial Least Square) untuk penelitian empiris. BPFE.Yogyakarta.
- [10] Cohen, J. 1992. A power primer. Psychological Bulletin 112, 155-159.
- [11] Hair, J., T. Hult, C. Ringle and M. Sartstedt. 2013. A Partial Least Square premier on Structural Equation Modeling (PLS-SEM). Sage.Los Angeles.
- [12] Kock, N. 2013. Advanced mediating effects test, multi-group analyzes, assessment and measurement models in PLS-based SEM. ScriptWarp Systems.Laredo, TX.
- [13] Ghozali, I. 2006. Structural Equation Modeling, alternative method with Partial Least Square, 1stEd. Diponegoro University Publishers Agency.Semarang.
- [14] Hablemitoglu S. and F. Yildirim. 2008. The relationship between perception of risk and decision making styles of turkish university students: a descriptive study of individual differences. World Applied Science Journal 4 (2), 214-224.
- [15] Santoso, S. 2004.Dinamika Kelompok.Bumi Aksara. Jakarta.
- [16] Rochaniningsih, N. S. Dampak pergeseran peran dan fungsi keluarga pada perilaku menyimpang remaja. Jurnal Pembangunan Pendidikan: Fondasi dan Aplikasi 2 (1), 59-71.

The Model of Institutional Management in Small Islands of Bunaken National Park, North Sulawesi

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Abstract

Bunaken National Park (BNP), North Sulawesi, is a conservation area that has the beauty underwater tourism attraction. The beautiful of underwater landscapes attract both domestic and foreign tourists to visit this region. Economically, tourism has positive impact on improving the economy and welfare of the community. There are, however, negative impacts of tourism to the quality of the local environment. It is characterized by the decline in coral cover area, caused by tourism activity itself. Utilization of natural resources as objects and tourist attraction should be done carefully, considering the balance of ecological, socio-economic and socio-cultural aspects. The concept of ecotourism is a concept that takes into account the balance of these three aspects, for the BNP travel management needs to be done based on the concept of ecotourism. Model of BNP travel management institutions use the systems approach to the Interpretative Structural Modeling (ISM) method. This method is carried out to see the degree of interest among the elements involved in the management of Bunaken National Parks with reference to the expert opinion. Results obtained show that the goals are to protect coral reef ecosystems as objects and tourist attraction, the institutions involved are the Board of Bunaken National Park, a strategic program that is required is to set the number of tourist visits, and the major constraint for the program is the lack of commitment from the actors involved.

Keywords: Conservation Area, Ecotourism, Interpretative Structural Modeling, Model, Sustainable Management.

INTRODUCTION

Bunaken National Park (BNP) is a conservation area that become the object and tourist attraction, which has the underwater beauty and attractiveness. The area ± 89,065 ha in accordance with the Decree of the Minister of Forestry No. 730/Kpts-II/1991. Utilization of Bunaken National Park as one of the tourism attractions has a positive impact on the economy of local communities. Economically with tourism activities in Bunaken National Park, the local community's economy is progressing, but in terms of the environment, BNP suffered environmental degradation. It is widely identified from reduced coral cover. The decline in the percentage of live coral cover drastically occurred at a depth of 3 m.

Stated that the increase of human activities in the utilization of coral reef ecosystems can cause damage to the coral reef ecosystem itself [1]. Use of natural resources as objects and tourist attraction, necessarily requires a careful management planning as it may result in environmental degradation. Tourism as an industry must really have a good planning, implementation and

evaluation in order that the negative impacts of tourism can be tolerated [2]. Furthermore, institutions involved in the management of Bunaken National Park currently consist of the central government and local governments. This resulted in some overlapping of authorities that lead to inefficient and ineffective management of Bunaken National Park. Sustainable tourism policy could be a useful way to encourage new forms of business, increase employment and promote conservation [3]. Sustainable tourism development should be based on the actual analysis of the environmental, social, cultural and socio-economic potentials utilized to improve the welfare of local communities [4].

Based on the problems mentioned above to ensure the sustainability of ecological functions, social, economic, and social culture of Bunaken National Park, it is necessary to build the institutional model of management in accordance with the objective conditions of the local communities and the environment by involving all the stakeholders there. The institutional model developed in this paper is the goal to be achieved, institutions involved, the necessary strategic program, and the main obstacle of courses using Interpretative Structural Modeling (ISM).

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MATERIALS AND METHODS

The research was conducted in Bunaken National Park in North Sulawesi province, beginning in August of 2013 (Fig. 1). The study used interpretative method approach with Interpretative Structural Modeling (ISM). ISM is a computer-based methodology that helps the group identify relations among issues idea and the complex structure. ISM is implemented interactive and a group methodology. ISM is a computer-based method to identify the correlation between ideas and structure within a complex issue. The elements of the system was analyzed and solved into graphic that describe the relation between elements and the level of hierarchy. Related to the contextual correlation, the direct relation is in varied contexts. Stages of this method are:

1. To identify elements that can be acquired through research, brainstorming, etc. related to the ecotourism management policies in Bunaken National Park.
 2. Building a contextual relationship between the elements based on the purpose of modeling.
 3. Make a single Matrix Interactions. This matrix represents the element of respondents to the preparation of the target element. Four symbols used:
V ... The relationship of elements E_i to E_j , not vice versa.
A ...The relationship of elements E_j to E_i , not vice versa.
X ... Interrelasi relationships between E_i and E_j , (can conversely).
O ...Shows that E_i and E_j , not related.
 4. Make a Reachability Matrix (RM) by changing the symbols of Structural Self Interaction Matrix (SSIM) into a binary matrix. The following conversion rules apply:
 - If the relationship E_i toward $E_j = V$ in SSIM, then the elements $E_{ij} = 1$ and $E_{ji} = 0$ in RM
 - If the relationship E_i toward $E_j = A$ in SSIM, then the elements $E_{ij} = 0$ and $E_{ji} = 1$ in RM
 - If the relationship E_i toward $E_j = X$ in SSIM, then the elements $E_{ij} = 1$ and $E_{ji} = 1$ in RM
 - If the relationship E_i toward $E_j = O$ in SSIM, then the elements $E_{ij} = 0$ And $E_{ji} = 0$ in RM
- RM beginning modified to show the whole direct and indirect Reachability, that is if $E_{ij} = 1$ and $E_{jk} = 1$, then $E_{ik} = 1$.
5. Doing the participation rate to classify elements in the different levels of the structure of the ISM
 6. Make a canonical matrix by grouping the elements at the same level to develop this matrix. Resultant matrix has most of the elements of triangular higher is 0, and the lowest is 1. The matrix is then used to prepare digraph.
 7. Make digraph is a concept derived from the Directional Graph, a graph of the elements that are interconnected directly, and the level of the hierarchy.
 8. Make Interpretive Structural Model where ISM generated by moving the entire number of elements with a description of the actual elements.

Analysis of the institutional model is basically to draw up a hierarchy of each sub-element of the element studied, and then make a classification into four sectors, to determine which sub-elements belonging to the AUTONOMOUS variable, DEPENDENT, LINKAGE or INDEPENDENT.

Furthermore, for every element of the program is studied are translated a number of sub elements. After that, specified the relationship contextual between sub elements contained existence of a briefing in terminology subordinate toward the paired comparisons, such as "whether the purpose of A is more important than the destination B?", Paired comparisons illustrate the interconnectedness among sub elements or the relationship contextual conducted by experts.If the number of experts is more than one then be made flattening. Rate contextual relationship to the pairwise comparison matrix using the symbol:

- V if $e_{ij} = 1$ and $e_{ji} = 0$
- A if $e_{ij} = 0$ and $e_{ji} = 1$
- X if $e_{ij} = 1$ and $e_{ji} = 1$
- O if $e_{ij} = 0$ and $e_{ji} = 0$

Definition of the value $e_{ij} = 1$ there's contextual relationship between the sub element - i and j, while the value $e_{ij} = 0$ is no contextual relationship between the sub element ke-i and k-j. The results of these assessments are arranged in Structural Self Interaction Matrix (SSIM). SSIM is made in the form of tables Reachability Matrix (RM) by replacing V, A, X and O be the numbers 1 and 0.The matrix is further corrected to be closed matrix that satisfies transitivity rule. Rule transitivity in question is the completeness of circular causality (causal-loop), for example A affects B and B affects C then A must affect C.

Classification of sub-element refers to the processed results of Reachability Matrix (RM) that have met the rules transitivity. Processed products obtained the value of Driver-Power (DP) and the value of Dependence (D) to determine the classification of sub-elements. Broadly speaking, the classification of sub-elements are classified into 4 sectors:

- a. sector 1; weak driver-weak dependent variables (AUTONOMUS). Sub elements included in this sector are generally not associated with the system, and may have little relationship, although the relationship can be strong. Sub elements that go in sector 1 if: DP value $\leq 0.5 X$ and D value $\leq 0.5 X$, X is the number of sub elements.
- b. Sector 2; weak-driver strongly dependent variables (DEPENDENT). Generally, sub-elements that go into this sector is a sub-element that is not free. Sub elements that

- go in sector 2 if: DP value $\leq 0.5 X$ and D values $> 0.5 X$, X is the number of sub eleme.
- c. Sector 3; strong driver-strongly dependent variable (LINKAGE). Sub elements that go into this sector should be examined carefully, because the relationship between the sub-element is not stable. Any action on the sub-elements will have an impact on other elements and influences sub feedback can magnify the impact. Sub elements that go in sector 3 if: The value of DP $> 0.5 X$ and the value of D $> 0.5 X$, X is the number of sub elements.
- d. Sector 4; strong-weak driver dependent variables (INDEPENDENT). Sub elements that go into this sector is the remaining part of the system and so-called independent variables. Sub elements that go in sector 4 if: DP value $> 0.5 X$ and D value $\leq 0.5 X$, X is the number of sub-elements.

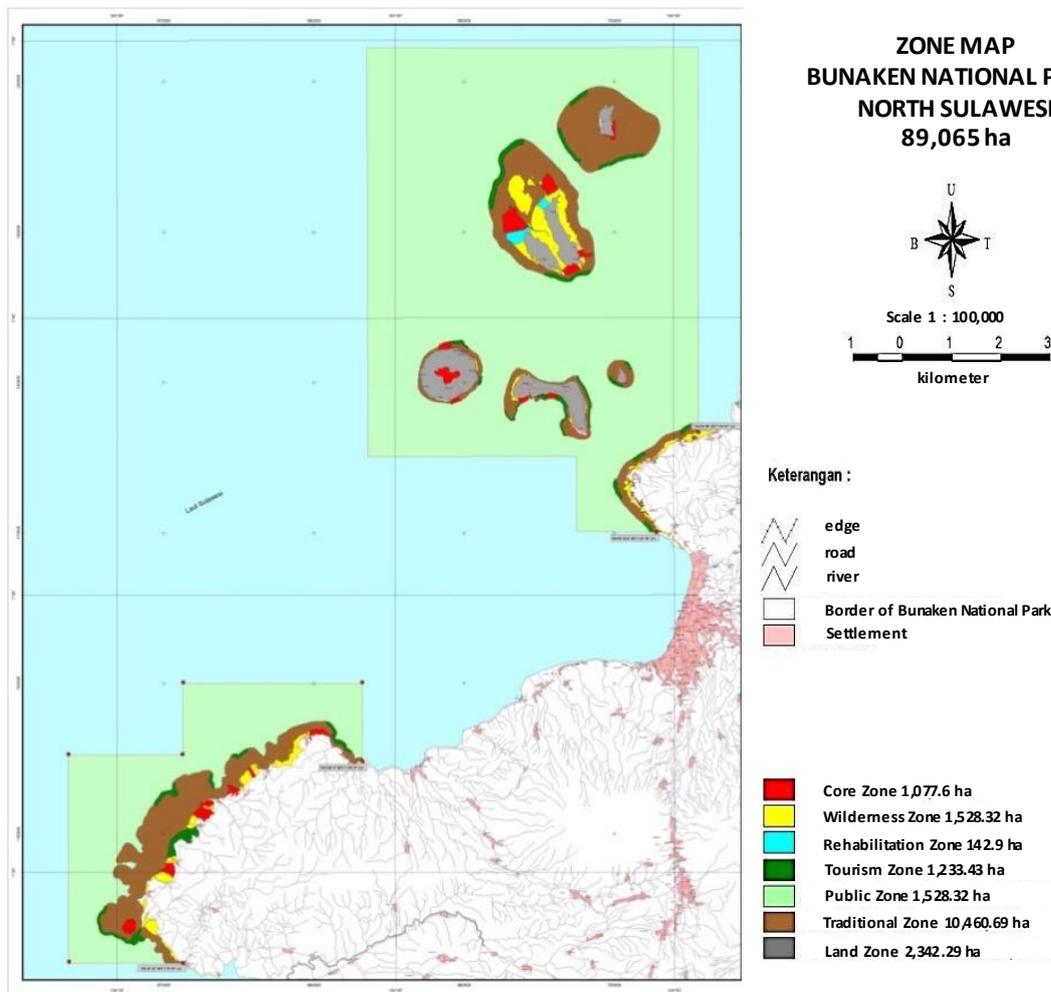


Figure 1. Map of Research location[5]

Data Collection

Based on the type, research data are distinguished as the primary data and secondary data. The primary data obtained through observations and in-depth interviews with public figures, related agencies, the business community which conducts its business activities around Bunaken National Park (tour operator) and the related Society of Social Institutions.

Data Analysis

This study uses a systems approach with the Interpretative Structural Modeling (ISM) method. This method is carried out to see the degree of interest among the elements involved in the management of Bunaken National Park with reference to the expert opinion. Stages: 1) Identify the elements that will be studied through research, brainstorming, and others related to management of tourism park, 2) design of the questionnaire and data retrieval expert, 3) Make Matrix Interactions Single, 4) make Reachability Matrix, and 5) perform the analysis based on the structure and hierarchy. This analysis was basically to draw up a hierarchy

of each sub-element of the element studied, and then make a classification into four sectors, to determine which sub-elements belong to the autonomous variable, DEPENDENT, LINKAGE or INDEPENDENT [6].

RESULTS AND DISCUSSION

Goals to be Achieved

The ISM analysis showed that the achievement of the expected goals has to be conducted in four stages (Fig. 2a). The first stage consists of sub-elements 1 and 8, the second stage includes sub elements 4, 5 and 6, the third stage is sub-element 2, and the fourth stage comprises sub elements 3 and 7. Sub elements that protect coral reef ecosystems as objects and attractions, and sub elements that exploit the potential of attractions inside and outside the region, are the first things that must be considered by the government. This is consistent with the fact that occur in Bunaken National Park, where there is a marked reduction in environmental degradation with extensive coral coverage annually.

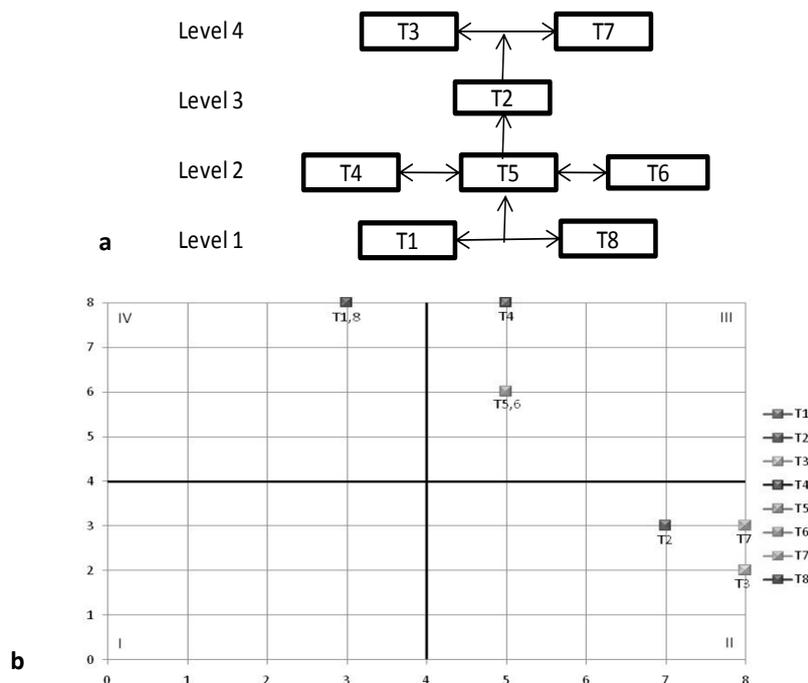


Figure 2. ISM of the Achievement of Expected Goals

a. Hierarchical structure of sub-element objectives, **b.** Matrix of Driver Power - Dependence on Sub Elements Objectives.

Description: T1-T8 = Gols 1-8, i.e. **1.** Protecting coral reef ecosystems as objects and attractions; **2.** Ensuring that the maintenance of security comforts the local environment; **3.** Providing a vehicle for research, education and training; **4.** Improving the welfare of the community; **5.** Strengthening the structure of the regional economy with strong linkages and mutual support among sectors; **6.** Expanding employment and increase employment opportunities; **7.** Ensuring the maintenance of the existence and potential of culture; **8.** Utilizing the potential attractions inside and outside the region.

Overall attraction utilization potential both within and outside the region can withstand the pressure on the environment of Bunaken National Park. Environment has limitations. It was in their utilization requires knowledge and caring attitude [7]. Management of travel on an ongoing basis with reference to the concept of ecotourism, it is necessary to do in Bunaken National Park to maintain the balance of environmental, socio-economic and socio-cultural functions [8]. Stakeholders supposed to give attention to the sustainability of the important dimensions of governance of protected areas [9]. Ecotourism is a concept that has accommodated tourism demand and tourism supply, where it is seen in the six elements that follow the concept of ecotourism, namely: conservation, education, ethics, sustainable development, impact and local benefit [10].

In the second stage, the necessary things to be done are improving the welfare of society, strengthening the regional economic structure with strong linkages and mutual support among sectors and expanding employment as well as increasing employment opportunities. This needs to be done by the government with reference to the principles of tourism development in a sustainable manner with the orientation on efforts to increase employment opportunities, poverty reduction, environmental protection, good governance, integration among the cross-sectors, cross-regional and cross-offenders, and encourage partnerships public and private sectors. If the potential of the tourism sector can be utilized optimally, then the sector can play an important role in efforts to accelerate economic development as a whole.

The third stage what needs to be done is to ensure the maintenance of security that comforts the local environment. It is very closely related to the tourists who visit that require a sense of security and comfort while in Bunaken National Park. Related to the things mentioned above, where tourists who dive often feel disturbed by motorboats passing through them with close proximity that might cause accidents. When all three phases mentioned above are met, then the other sub elements will go according to their respective roles.

Furthermore, Figure 2b shows that the sub-elements 1 and 8 entered the fourth sector which is the independent variable, with a great

driving force but with little dependence on the program. Sub elements 4,5 and 6 are included in the third sector which is a sub-element of the hook (Linkage) from other sub-elements. Sub This element needs attention because it is a sub-element which is not stable so that any action on this sub elements will affect impact other sub-elements, and the influence of the feedback can magnify the impact of the objectives to be achieved.

Involved Institutions

Based on the results of expert opinion, sub elements of involved institutions consisting of 15 sub-elements. ISM results (Fig. 3a) show the agencies that involved in the management of Bunaken National Park the first is sub element 6, Board of Bunaken National Park. Council Bunaken National Park was established by Decree of the Governor of Sulawesi Uatara No. 23 of 2000. Board of Bunaken National Park has a role in terms of mediating without siding (mediation) and managing conflict (resolution) between the parties, helping the security and surveillance, assessing the regional arrangement, and giving consideration to the relevant agencies for issuance of licenses relating to the management of Bunaken National Park.

Next is the Department of Tourism as the party which has the authority and responsibility in the field of tourism. Today the mainstay in the promotion attraction is North Sulawesi Bunaken National Park. As the program launched by the Ministry of Tourism and Creative Economy program at this time is the Destination of Management Organisation (DMO) in a number of tourist sites located throughout Indonesia, and one of them is the Bunaken National Park.

Figure 3b shows that the sub-elements 2, 3, 6, 8, 9, and 11 are included in quadrant IV. This sub-element was a contributing factor to the other sub-elements. This sub element needs serious attention because it is a sub element that has the driving force (power driver) were great in the management of Bunaken National Park travel. Sub-element 1, 4, and 14 are included in the third sector. There are sub elements of a sub-element of the hook (linkages) of sub other elements. Sub elements in this sector has a driving force (power driver) that greatly contribute to the success of the program, but has a great dependency (dependence) as well.

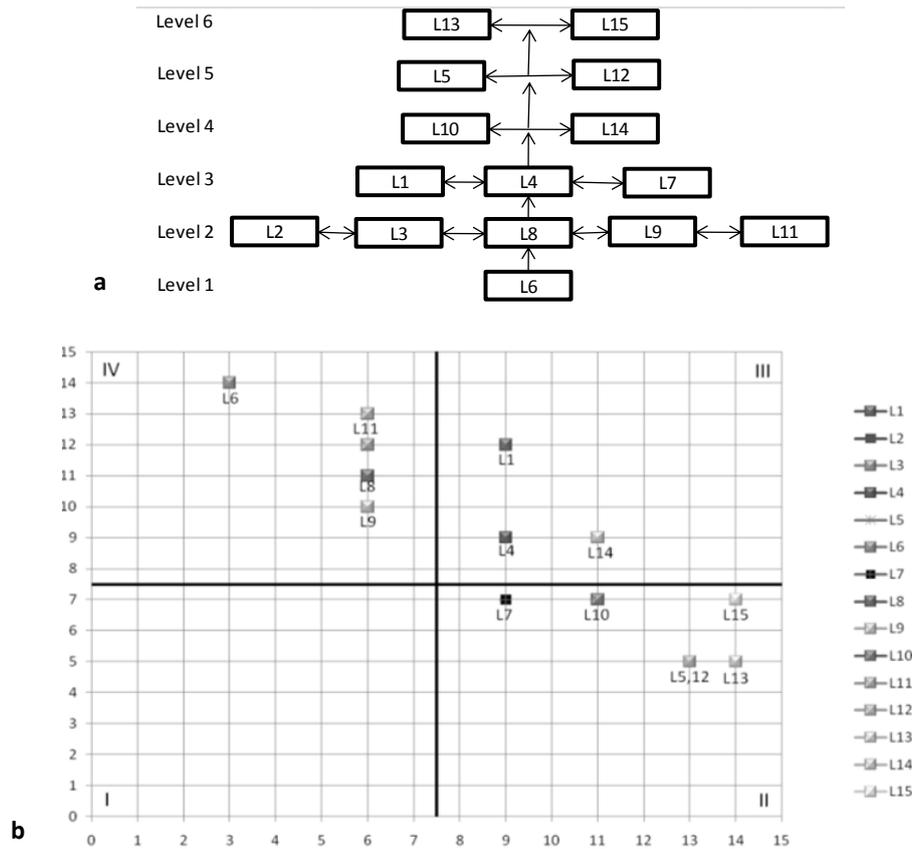


Figure 3. ISM of Agencies Involved in the Management of Bunaken National Park

a. Structure of hierarchical sub elements involved institutions. **b.** Matrix of Driver Power – Dependence of Institutions Involved.
Description: L1-L15 = Institutions 1-15, i.e. 1. the Local Community (2), Forestry (3), Department of Fisheries and Marine Resources (4), the Ministry of Environment (5) Hall Bunaken National Park center, (6) the Council of Bunaken National Park, (7), Universities (8) The provincial government (9), District / City (10) Department of Education, (11) Department of Tourism and Creative Economy, (12) the Ministry of Forestry, (13) Environmental NGO, (14) Business and Tourism Services Sector, and (15) the Public.

Any action on the sub elements involved institutions will affect the success of the program management of Bunaken National Park travel. Likewise, the lack of attention to the sub-elements will affect the travel management program failure Bunaken National Park. Sub elements 5, 7 10, 12, 13, and 15 are in quadrant II. Sub-element is the result of actions performed on a sub element above. If the sub-elements above are met, then the sub element is very important.

Strategic Program

Based on the results of expert opinion, there are nine necessary sub elements of a strategic program. Based on the results of ISM programs and strategies carried out in five phases: the first sub-element 9, the second stage is a sub-element of 2, 3, 6, 7, and the third stage is sub elements 1 and 8 (Fig. 4a).

The program and strategy needed at this time in the management of Bunaken National Parks is setting number of visits. This is consistent with current condition in Bunaken National Park, where the number of tourist arrivals is too high resulting in higher pressure on the environment, which in turn leads to environmental damage. For the next strategy needs to be done is the development of alternative tourism area. Development of alternative area is intended to address the environmental damage caused by greater amount of traffic that exceeds the limit of carrying capacity.

The most important thing to consider in planning tourism development are sustainable ecological, social, economic, and social cultural aspects. Development planning efforts need to involve related stakeholders, to jointly evaluate the advantages and challenges for setting future strategy on an ongoing basis so that tourism can be achieved.

Law enforcement needs to be done in terms of the management of Bunaken National Parks, such as offenses committed while performing tourist activity. Such violations may be stepping on corals, anchoring carelessly, feed the fish, and dispose of waste are not in place. When these problems occur also in the National Park Bunaken is rising trash.

Figure 4b shows that the sub-element (9) Establishing the number of visits is included in quadrant IV. Sub This element is a contributing factor to the other sub-elements. This subelement needs serious attention because it is a sub element that has a great driving force (power driver) in travel management of Bunaken National Park, and has a dependency (dependence) is low on the strategy to be achieved.

Sub elements 1, 2, 3, 5, 6, and 7 are entered in the third sector. There are sub elements of a sub-element of the hook (lingkages) of sub other elements. Sub elements in this sector have a great driving force (power driver) that greatly contribute to the success of the program, but they have a great dependency (dependence). Any action on the sub elements institutions involved will affect the success of program management strategies of Bunaken National Park travel. Likewise, the lack of attention to the sub-elements will affect the travel management program failure of Bunaken National Park. Sub elements 4 and 8 are included in quadrant II. This sub-element is the result of actions performed on a sub element above. If the sub-elements above are met, then the sub element is very important.

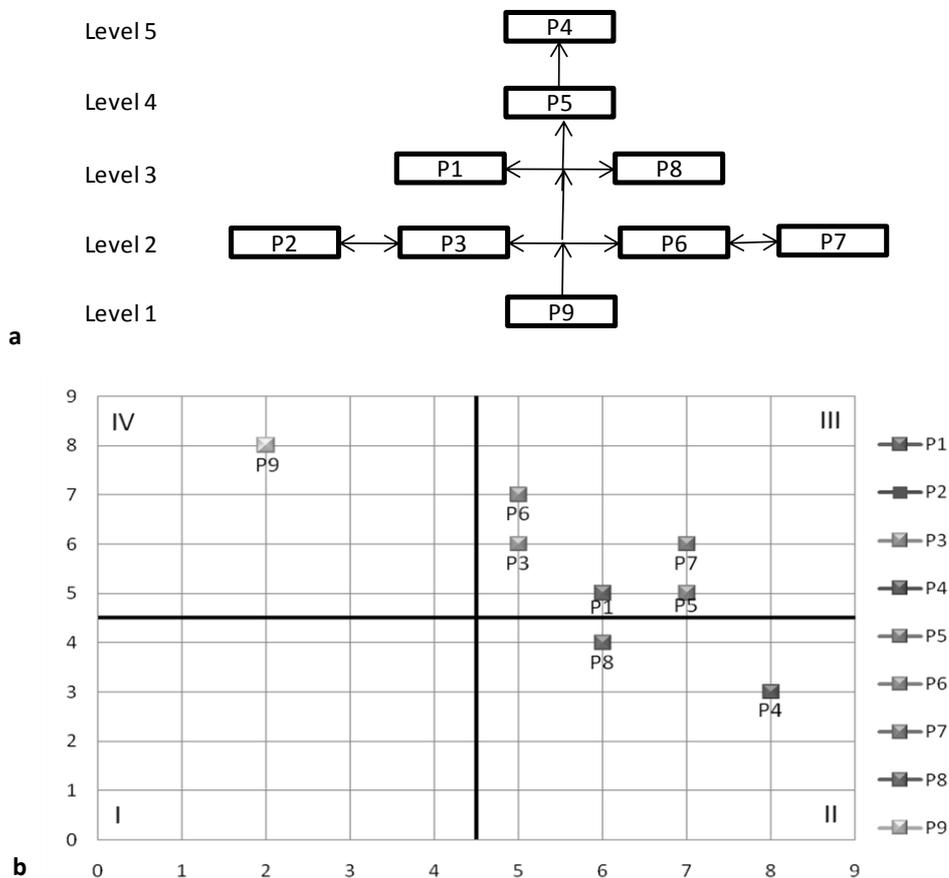


Figure 4. ISM of Strategic Program

a. Hierarchical Structure of program strategies, b. Matrix Driver Power - dependence on desirable strategy program

Description: P1-P9 = Strategic program 1-9, i.e. **1.** Preparation of clear rules and firm; **2.** Development of area of alternative; **3.** law enforcement; **4.** Increased community involvement in aspects of control; **5.** business development outside of Bunaken National Park; **6.** Determination of zoning; **7.** Enhancement of the public through craft industry; **8.** Limitation of visit time; **9.** Establishment of the number of visits.

The Main Obstacle Courses

Based on the expert opinion, 11 sub-elements become obstacles. The results of the analysis of ISM, major program constraint in the management of Bunaken National Park carried out in six stages (Fig. 5a). The first stage is is sub-element (9) Low commitment of the actors involved, the second stage is a sub element (1) Lack of management of National Park, and the third stage is a sub-element (3) Low Knowledge and Public Awareness, and sub elements (6) the lack of coordination in the management of the National Park. The sub elements need attention from the government to achieve the objectives of the program management of Bunaken National Park travel. The principle of conservation area management is based on co-ownership, co-

operation and co-responsibility [11]. The principle of co-ownership, is a common travel area for the utilization and protection carried out jointly based on the value of local wisdom and culture technology. In planning these aspects, we should consider to be successful in the management. In relation to the principle of co-operation, the ecotourism area management has something to do with the principle of setting the respective roles that can be done by the community and all stakeholders [12]. The principle of co-responsibility in the management of the area for ecotourism, protection activities and regional development are a shared responsibility among government, communities and all stakeholders.

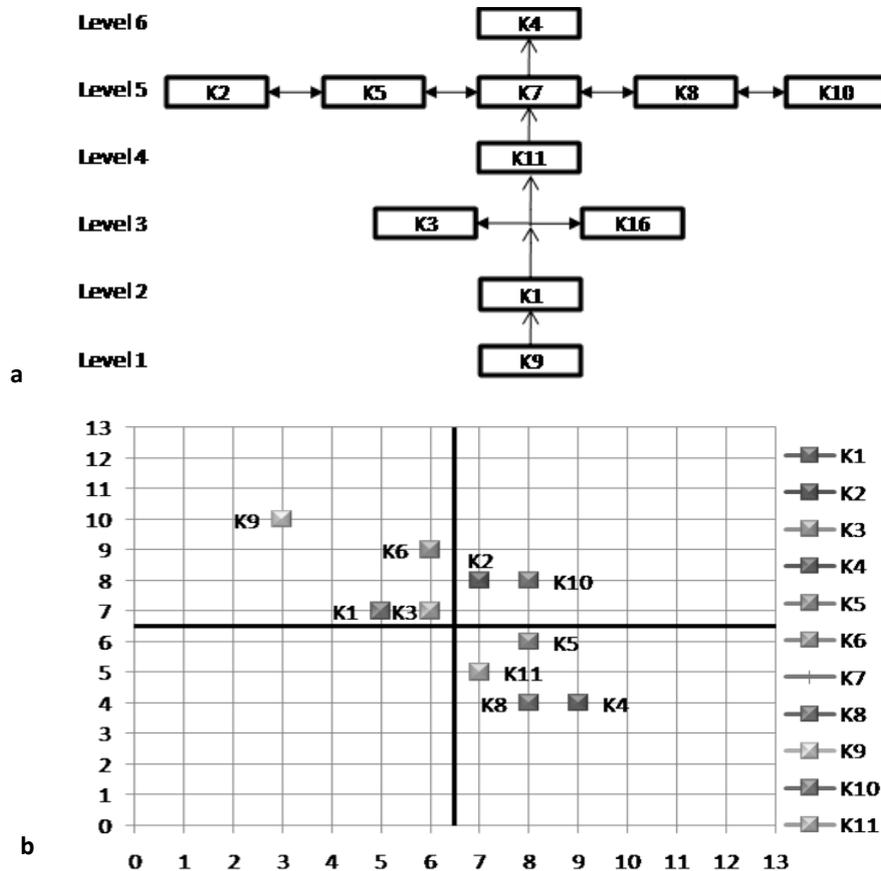


Figure 5. ISM of Main Obstacles in Bunaken National Park

a. Structure of the program's main constraint hierarchy, **b.** Matrix power drivers - the main obstacle of dependence program
Description: K1-K11 = Obstacle 1-11, i.e. **1.** Lack of national park management; **2.** Limitations of the quality and quantity of human resources for securing and managing national parks; **3.** Lack of knowledge and community care; **4.** low income of local communities around the national park; **5.** the low level of education of local communities around national parks; **6.** lack of coordination in the management of national parks; **7.** lack of involvement of local communities; **8.** the difference of interest among stakeholders; **9.** lack of commitment of the actors involved; **10.** lack of coordination among institutions; **11.** low management.

Governments have a great influence in the management of Bunaken National Park based society. One of the policies that needs to be done by the local government is to foster and encourage local communities and form a community institution that is able to manage Bunaken National Park. Involvement of local communities in the management of travel will have a positive impact both on the government, the environment and society itself [12].

Community-based management can be defined as a system of natural resources management in a place where the local people in these places are actively involved in the management of natural resources contained therein. Thus the public will feel concerned with the resource as a unity in life [13].

Figure 5b shows the sub-element (1) Lack of national park management, sub-element (3) Lack of knowledge of benefits and community care, sub-element (6) lack of coordination in the management of national park, and the sub-element (9) Low commitment of the actors involved is at sector IV. Sub This element was a contributing factor to the other sub-elements. Sub This element needs serious attention because it is a sub element that has a great driving force (power driver) in travel management of Bunaken National Park, and has a low dependency (dependence).

Sub elements (2) limited the quality and quantity of human resources for securing and managing national parks and sub-element (10) lack of coordination among agencies that are in quadrant III. Sub elements above area sub-element of the hook (lingkages) of other sub elements. Sub elements in this sector have a great driving force (power driver), but it has a great dependency (dependence) as well. Any action on the sub element of this constraint will affect the success of the tourism management of Bunaken National Park. Likewise, the lack of attention to the sub-elements will affect the tourism management failures in Bunaken National Park.

Sub elements (4) Low income communities, sub-element (5) The low level of education of local communities around Bunaken National Park, sub element (8) The difference of interest among stakeholders, and sub-element (11) Low entry management are in quadrant II. This sub-element is the result of actions performed on a sub element above. If the sub-elements above are fulfilled, then the sub element becomes very important.

CONCLUSION

Goals to be achieved sub elements which protect coral reef ecosystems as objects and attractions, and sub elements which exploit the potential of attractions inside and outside the region are the first things that must be considered by the government. This is consistent with the fact that occurs in Bunaken National Park, where there is a marked reduction in environmental degradation with extensive coral coverage annually.

Institutions involved in the management of Bunaken National Park are the first sub element of Board of Bunaken National Park. The board has a role in terms of mediating without siding (mediation) and managing conflict (resolution) between the parties, helping the security and surveillance, assessing the arrangement of the region, as well as giving consideration to the relevant agencies for issuance of licenses relating to the management of Bunaken National Park.

Sub elements of setting number of visits is a program and a strategy that is needed today in the tourism management of Bunaken National Park. This is consistent with the current condition in Bunaken National Park, where the number of tourist arrivals is too high (exceeding the carrying capacity limits) causing higher pressure on the environment, which in turn leads to damage to the environment.

Sub elements of the lack of commitment of the actors involved need to get the government's attention for the achievement of the tourism management program Bunaken National Park. The principle of co-ownership is a common area of tourism for the utilization and protection carried out jointly based on the value of local wisdom and culture.

REFERENCES

- [1] Supit, A. A. G. 2007. Impact of tourism visit toward change of coral reefs condition in Bunaken Island North Sulawesi Province. Master Thesis. Program of Environmental Studies. Bogor Agricultural University. Bogor.
- [2] Mangkudilaga, S. 2000. Participation poverty alleviation tourism. *Scientific Management Environment* 2(7), 9-16.
- [3] Castellani, V. and S. Sala. 2010. Sustainable Performance Index for tourism policy development. *Journal of the Tourism Management* 31, 871-880.

- [4] Rydin, Y., N. Holman and E. Wolff. 2003. Local sustainability indicators. *Local Environment* 8(6), 581–589.
- [5] Bunaken National Park. 2008. Zonation of Bunaken National Park, North Sulawesi. Office of BUnaken National Park.
- [6] Marimin. 2004. Decision making compound criteria of technique and application. Gramedia Widiasarana Indonesia. Jakarta.
- [7] Gilbert, R. 2003. Ecotourism and education for sustainability: a critical approach. *International Review for Environmental Strategies* 4(1), 75 – 83.
- [8] Eryadi, A. and H. Erkus. 2010. Environmental governance for sustainable tourism development: collaborative networks and organisation building in the Antalya tourism region. *Journal of the Tourism Management* 31, 113–124.
- [9] Bawole. 2012. Analysis and mapping of stakeholders in traditional use zone within marine protected area. *Journal of Tropical Forest Management* 2, 110-117.
- [10] McIntosh, R. W., C. R. Goeldner and J. R. B. Ritchie. 1995. *Tourism principles, practice philosophies*. Willey. New York.
- [11] Tangian, D. and Supit A. 2009. *Introduction ecotourism*. State Polytechnic of Manado. Manado.
- [12] Kiss, A. 2004. Is community-based ecotourism a good use of biodiversity conservation funds?. *Trends in Ecology and Evolution* 19(5), 232-237.
- [13] Berkes, F. 2004. Rethinking community-based conservation. *Conservation Biology* 18(3), 621-630.

Factors Affecting Visitor Interest to Visit Bhakti Alam as Ecotourism Destination in Pasuruan, East Java

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Abstract

The aim of the study was to identify factors affecting the decision making of the tourists' interest to visit Bhakti Alam. This study was conducted in Bhakti Alam as one of the ecotourism destination in Tukur, Pasuruan. A set of questionnaire was set up and distributes to 100 visitors in Bhakti Alam on August 2016. In this research, to generate information regarding visitor perception, a series of interview was done. Data was analyzed using multiple linear regression analysis. The research result shows that variables of advertising, public relations, personal marketing, and sale promotion have significant impact on the visiting decision to Bhakti Alam. This condition also supported by determination coefficient value as 0.608. It means that 60.84% variables about visiting decision can be explained by decision-making factors, while the rest of 39.16% explained by another variable that is not being tested. Variables analysed with T test to advertising, public relations, personal marketing, and sale promotion each partially have a significant impact to visiting decision. The multiple linear result analysis showed that between those free variables and visiting decision has a strong connection. The resulting distribution of respondents answer by Likert analysis showed that variable which has the biggest impact started from sale promotion followed by public relations, personal selling, and advertising. While visiting decision more determined by representative location factor, followed by representative condition, access road, price and products. Therefore it means that environment aspect must be maintained and improved.

Keywords: Advertising, Bhakti Alam Pasuruan, Ecotourism, Personal Marketing, Public Relations, Sale Promotion.

INTRODUCTION

Tourism is one of the huge business, in which it is contributes to the national earning and local economic development. Tourism development provides opportunities to support local development growth. Tourism related to the business activity, and many tourism sites provides interest in the issues of competition [1]. Thus, to run the business well and become competitive, a company has to be able to create and maintain their customers. Regarding to the customers, promotion triggers the consumers to use the product [2].

Bhakti Alam is a ecotourism destination with the main is plantation with diverse tropical fruit. Adinsitrativey, it is located in Ngembal Village, Tukur district, Pasuruhan. Geographically, it is located in 450 to 550 m above the sea level. The main attraction of Bhakti Alam is various tropical fruits and flowers. The facilities available in the Bhakti Alam are a garden of tropical plants, e.g. durian (*Durio zibethinus*), melon (*Cucumis melo*),

starfruit (*Averrhoa carambola*), dragon fruit (*Hylocereus undatus*), watermelon (*Citrullus lanatus*), rambutan (*Nephelium lappaceum*), jackfruit (*Artocarpus integer*), jew plum/kedondong (*Spondias Dulcis*), litchi (*Dimocarpus longan*), avocado (*Persea americana*), and sapodilla (*Manilkara zapota*). Bhakti Alam also provides tourism package to visit dairy farm. Visitors will be invited directly to the processing of cow's milk from the milking process until processing into pasteurized milk that is ready to drink.

The visitors of Bhakti Alam in 2012 is less than 10% each month, even it rarely exceeds 5%. In August, there is a significant increase due to the fact that there is Eid Fitr holiday. The highest number of visitors are on Saturday and Sunday, meanwhile on weekday the number of visitors is less because the brochure promotes the two-day package at the weekend [3].

There are some factors which cause less visitors in the particular days [3]. Bhakti Alam is a relative new developed place, thus not many people know precisely its location as well as its offered potential. Every fruit tree in the area has different harvest time. This makes the number of visitors outnumber the riped fruits, and vice

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versa. Second, the brochure is one of the media to promote Bhakti Alam. The brochure is placed in the ecotourism area, consequently the target audience who have not visited the place have no idea about the information in the brochure. Last, the target number of visitor does not meet the facilities in the ecotourism place, making the quality of maintenance is lower and not maximized. Therefore, this study aims to identify the factors affecting the decision making of the tourists' interest to visit Bhakti Alam ecotourism.

RESEARCH METHOD

Data Collection

This study takes place in Bhakti Alam in Pasuruan regency. The type of data collected in this study is primary and secondary data [4]. To collect data in this study using the instrument:

1. The questionnaire; a set of questions prepared to ask to the respondents. This questionnaire is intended to obtain written information from respondents regarding the interests of visited by tourists. Questionnaire data is collected directly, this is done to get the data that is truly objective. Questionnaire data is closed, the question made such that the respondents' answers limited to one alternative answer provided.
2. *Interview*; gathering information by asking directly the related parties to facilitate data collection both primary and secondary. This is done to get information that cannot be extracted with a questionnaire.
3. *The study documents*; collect information by studying the written data sources is done to obtain secondary data related to the research conducted, for example, the geographical locations and facilities.

Data Analysis

Multiple linear regression analysis used to analyze the influence of independent variable (advertising, public relations, personal marketing and sale promotion) dependent on variables the decision on visits. Formula of multiple linear regressions [5] that used in this research was:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Description :

- Y = the purchase decision
 a = Constant
 b₁ = regression coefficient between advertising with the decision visits
 b₂ = regression coefficient between public relations with the decision visits

- b₃ = regression coefficient between personal marketing with the decision visits
 b₄ = regression coefficient between sale promotion with the decision visits
 X₁ = Variable Advertising
 X₂ = Variable Public Relations
 X₃ = Variable Personal Marketing
 X₄ = Variable Sale Promotion
 e = error disturbance

Test T was used to assess each free variable whether forming regression model has significant influence with Y. Free variable forming regression model inferred significant if the score of T arithmetic > T table or -T arithmetic < -T table or significant score (p-value) < 0,05. The criteria for testing in saw the probabilities value [6].

In the attempt to answer the research question, this study used attitude analysis of Likert scale which is based on the data classification of attitude scale, score, and category. In this study, the highest and lowest scores are determined. The highest score is 5 and the lowest one is 1. The answer in between the two scale is adjusted by the existing answer: strongly agree is 5, agree is 4, neutral is 3, disagree is 2, and strongly disagree is 1. To get the rank, five questions are asked. Then, the score of each respondent is summed up and the rank the score as follows [7]. Based on the formula, the score is displayed in Table 1.

$$\text{category difference} = \frac{\text{the highest score} - \text{the owest score}}{\text{number of category}}$$

$$\text{category difference} = \frac{5 - 1}{5}$$

$$\text{category difference} = 0,8$$

Table 1. Attitude Scale

No	Attitude Scale		
	Attitude	Score	Category
1	Strongly Agree	5	>4.21 – 5.00
2	Agree	4	>3.41 – 4.20
3	Neutral	3	>2.61 – 3.40
4	Disagree	2	>1.81 – 2.60
5	Express disagreement	1	1.00 – 1.80

Source: Modification Likert Scale [7]

RESULT AND DISCUSSION

Data processing with multiple linear regression analysis was carried out in several steps to find the effect of independent variable on the dependent variable. We obtained the following summary from the data processing (Table 2).

Table 2. Result of Multiple Linear Regression Analysis

Variable Dependent	Variable Independent	Regression coefficient	T Arithmetic	p-value	Description
Decision Visit (Y)	Constant	-2.427			
	advertising (X ₁)	0.332	3.362	0.001	Significant
	public relations (X ₂)	0.688	3.906	0.000	Significant
	personal marketing (X ₃)	0.484	3.713	0.000	Significant
	sale promotion (X ₄)	0.754	4.385	0.000	Significant

$\alpha = 0.05$

R = 0.78

Coefficients Determination (R²) = 0.608 (60.8%)

F-Arithmetic = 36.902

F-Table = 2.467

T-Table = 1.985

Sources: Research Result

Results of regression model Table 2 was obtained following equation.

$$Y = -2.427 + 0.332X_1 + 0.688X_2 + 0.484X_3 + 0.754X_4$$

The equation interpreted as follow:

- a Constant value of -2.427 means that if all variables are zero, then the variable Y will have value of -2.427.
- b. Advertising regression coefficient (X₁) of 0.332 means that if Advertising (X₁) increased by 1 unit, then the variable Y will increase by 0.332 units.
- c. Public relations regression coefficient (X₂) of 0.688 means that if Public Relations (X₂) increased by 1 unit, then the variable Y will increase by 0.688 units.
- d. Personal marketing regression coefficient (X₃) of 0.484 means that if the Personal marketing (X₃) increased by 1 unit, then the variable Y will increase by 0.484 units.
- e. Sale promotion regression coefficient (X₄) of 0.754 means that if the Sales Promotion (X₄) increased by 1 unit, then the variable Y will increase by 0.754 units.

Independent variable forming regression model was concluded to have significant effect if the score of T arithmetic >T table or T arithmetic <T table or the significant value (p-value) <0.05. Test for these variables in partial are as follows.

F Test (Simultaneously Testing)

F test is performed to show whether all of the variables used in the regression model had a significant impact on Y or to measure the accuracy of the models used in the regression test. The hypothesis used in the test are as follows.

H₀: Advertising (X₁), Public relations (X₂), Personal Marketing (X₃) and Sales Promotion (X₄)

are jointly does not have significant influence to the visiting decision (Y). H₁: Advertising (X₁), Public relations (X₂), Personal Marketing(X₃) and Sales Promotion (X₄) are jointly have significant effect on visiting decision (Y).

After processing the data the test results obtained the value of F arithmetic 36.902 and the value of F table is 2.467. It can be seen that the value of F arithmetic larger than F table (36.902 > 2.467). It can be concluded that the Advertising (X₁), Public Relations (X₂), the Personal Marketing (X₃) and Sales Promotion (X₄) are jointly have significant effect on the decision to visit (Y).

From the analysis of the research that has been done is known that the influence of advertising, public relations, personal marketing and sales promotion effect are jointly have significant impact to the decision visit to Bhakti Alam. Therefore the model used in this study is feasible and proper to use in subsequent analysis. this condition means that the frequency of visiting decision of travelers to Bhakti Alam is determined by how well the advertising, public relations, personal marketing and sales promotion towards tourists. The influence of these variables can be seen from the value of multiple regression coefficient (R) is 60.8%, which indicates that the correlation or relationship between independent variables together towards the decision Bhakti Alam Agrotourism has been important connections.

Coefficient of Determination

The coefficient of determination used to see the influence percentage of given variable, i.e. Advertising (X₁), Public Relations (X₂), Personal Marketing (X₃) and Sales Promotion (X₄), which affect the decision to visit (Y). After the value of R 0.780, the coefficient of determination can be calculated using the following formula:

$$\begin{aligned} \text{KD} &= R^2 \times 100\% \\ &= (0.780)^2 \times 100\% \\ &= 60.84\% \end{aligned}$$

The value obtained from KD 60.84% which indicates that the Advertising (X_1), Public Relations (X_2), Personal Marketing (X_3) and Sales Promotion (X_4), providing simultaneous effects together amounted to 60.84% the decision visit (Y). While the remaining 39.16% influenced by other factors not observed.

Test T (Partial Test)

Advertising

Based on Table 2, it is obtained score of T arithmetic on the advertising variable (X_1) of 3.362 (significance of p-value 0.001). While the value t table with 95 degrees of freedom ($n-k-1$) = 1.985. When compared to the T arithmetic > T table (3.362 > 1.985).

Table 3. Advertising Variable (X_1)

No.	Description	Frequency (%)	Score
X_{1.1}	Print Ads		
	Strongly Agree	12	60
	Agree	54	216
	Neutral	29	87
	Disagree	5	10
	Strongly Disagree	0	0
	Total	100	373
X_{1.2}	Electronic Ads		
	Strongly Agree	11	55
	Agree	49	196
	Neutral	33	99
	Disagree	7	14
	Strongly Disagree	0	0
	Total	100	364
X_{1.3}	Billboard		
	Strongly Agree	8	40
	Agree	65	260
	Neutral	24	72
	Disagree	3	6
	Strongly Disagree	0	0
	Total	100	378
X_{1.4}	Facilities		
	Strongly Agree	14	70
	Agree	64	256
	Neutral	20	60
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	390
	Average score	100	3.76

Sources: Research Result

These tests showed that the Advertising variable (X_1) significantly affects the decision making to visit Bhakti Alam (Y). It is also consistent with the previous study [8] which stated the interest to visit ecotourism objects is

based on advertisement, either simultaneously or partially, have a real impact on tourist arrivals. This is consistent with the theory, advertising is a form of communication that does not immediately provide information about the advantages and benefits of the products are structured so that will change someone's mind to make a visit [9].

In terms of advertising variable on the decision visits in Bhakti Alam is based on the calculation of the total questions asked about 4 (four) elements that represent aspects of the decision visits (Table 3). Cumulative table of advertising variable in Bhakti Alam showed a total score of 3.76. This proves that advertising can be influence respondents to visit based on the analysis of attitude scale: agree.

Public relations

Based on Table 2, it is obtained value of T-arithmetic in the public relations variable (X_2) of 3.906 (significance of p-value 0.000), while the value of t table with 95 degrees of freedom ($n-k-1$) = 1.985. When compared the T arithmetic > T table (3.906 > 1.985), these tests showed that the Public Relations variable (X_2) significantly affects the decision making to visit Bhakti Alam (Y). In the study that has been conducted, it is concluded that public relations variables significantly affect tourists' decision making to visit [10]. These results are in accordance with the opinion which reveals that the public relations activities include a variety of programs designed to promote and protect the image of the company or individual products [11].

Table 4. Public Relations Variable (X_2)

No.	Description	Frequency (%)	Score
X_{2.1}	Training Ground		
	Strongly Agree	18	90
	Agree	51	204
	Neutral	31	93
	Disagree	0	0
	Strongly Disagree	0	0
	Total	100	387
X_{2.2}	Competition Ground		
	Strongly Agree	11	55
	Agree	57	228
	Neutral	31	93
	Disagree	1	2
	Strongly Disagree	0	0
	Total	100	378
	Average score	100	3.82

Sources: Research Result

According to Table 4, it could be seen that in terms of public relations variable on the decision

visits in Bhakti Alam is based on the calculation of the total question asked about 2 (two) elements that represent aspects of decision visits. Cumulative table of public relations variable in Bhakti Alam showed a total score of 3.82. This proves that public relations can influence respondents to visit based on the analysis of attitude scale: agree.

Personal Marketing

In Table 2, it is obtained value of T-arithmetic in the personal marketing variable (X_3) of 3.713 (significance of p-value 0.000), while the value t table with 95 degrees of freedom ($n-k-1$) = 1.985. When compared to the T arithmetic > T table ($3.713 > 1.985$), these tests showed that the personal marketing variable (X_3) significantly affects the decision making to visit Bhakti Alam (Y). This study also consistent with the statement that interest to visit ecotourism is based on advertisement, either simultaneously or partially, has a real impact on tourist arrivals [12].

Personal marketing variable on the decision visits in Bhakti Alam ecotourism is based on the calculation of the total question asked on the 3 (three) elements that represent aspects of decision visits (Table 5). Based on cumulative table of personal marketing variable in Bhakti Alam ecotourism with a total score of 4.03, personal marketing can influence respondents to visit based on the analysis of attitude scale: agree.

Table 5. Personal Marketing Variable (X_3)

No.	Description	Frequency (%)	Score
X_{3.1}	Presentation		
	Strongly Agree	21	105
	Agree	59	236
	Neutral	18	54
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	399
X_{3.2}	Confirmation		
	Strongly Agree	19	95
	Agree	61	244
	Neutral	18	54
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	397
X_{3.3}	Reminder		
	Strongly Agree	32	160
	Agree	52	208
	Neutral	14	42
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	414
	Average score	100	4.03

Sources: Research Result

Sale Promotion

Based on Table 2, it is obtained value of T-arithmetic in the Sale Promotion variable (X_4) of 4.385 (significance of p-value 0.000), while the value T table with 95 degrees of freedom ($n-k-1$) = 1.985. When compared to the T arithmetic > T table ($4.385 > 1.985$), the tests showed that the Sale Promotion variable (X_4) significantly affects the decision making to visit Bhakti Alam (Y).

Based on coefficient values in Table 2, it is known that the independent variables that have the highest coefficient is sales promotion (X_4) of 0.754. This means that the sales promotion is the dominant variable in influencing the decision of tourists to visit in Bhakti Alam ecotourism. As previous study mentioned [13], it is concluded that sale promotion variables significantly affect tourists' decision making to visit Bhakti Alam.

Table 6. Sale Promotion Variable (X_4)

No	Description	Frequency (%)	Score
X_{4.1}	Training Ground		
	Strongly Agree	22	110
	Agree	52	208
	Neutral	25	75
	Disagree	1	2
	Strongly Disagree	0	0
	Total	100	395
X_{4.2}	Competition Ground		
	Strongly Agree	12	60
	Agree	45	180
	Neutral	38	114
	Disagree	5	10
	Strongly Disagree	0	0
	Total	100	364
	Average score	100	3.79

Sources: Research Result

Table 6 showed that in terms of sale promotion variable on the decision visits in Bhakti Alam is based on the calculation of the total question asked on 2 (two) elements that represent aspects of decision visits. Based on cumulative table of sale promotion variable in Bhakti Alam ecotourism with a total score of 3.79, sale promotion can influence respondents to visit based on the analysis of attitude scale: agree.

The Visiting Decision

The representative location of Bhakti Alam could affect the respondent to visit the place based on the calculation of the total question asked on 5 (five) elements that represent aspects of environment (Table 7). Based on cumulative table of decision visits in Bhakti Alam ecotourism with a total score of 3.88, decision to visit Bhakti

Alam affected by environment on the analysis of attitude scale: agree.

Table 7. The Visiting Decision (Y)

No.	Description	Frequency (%)	Score
Y ₁	Representative Location		
	Strongly Agree	24	120
	Agree	54	216
	Neutral	20	60
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	400
Y ₂	Access Road		
	Strongly Agree	17	85
	Agree	59	236
	Neutral	19	57
	Disagree	5	10
	Strongly Disagree	0	0
	Total	100	388
Y ₃	Representative Condition		
	Strongly Agree	21	105
	Agree	55	220
	Neutral	22	66
	Disagree	2	4
	Strongly Disagree	0	0
	Total	100	395
Y ₄	Product		
	Strongly Agree	16	80
	Agree	49	196
	Neutral	31	93
	Disagree	4	8
	Strongly Disagree	0	0
	Total	100	377
Y ₅	Price		
	Strongly Agree	17	85
	Agree	52	208
	Neutral	27	81
	Disagree	4	8
	Strongly Disagree	0	0
	Total	100	382
	Average score	100	3.88

Sources: Research Result

CONCLUSION

The decisions to be interested in visiting Bhakti Alam ecotourism are affected by the variable of sale promotion, and then followed by public relations, personal marketing, and advertising. Visiting decision is more determined by factor of representative location followed by a representative conditions, road access, pricing and products.

Based on the data and the result of the analysis, it can be summarized which factors affected the visitors' decision to visit Bhakti Alam ecotourism. Those factors are advertisement, public relations, personal marketing, sale promotion, as well as decision to visit, which all

of them affected significantly and positively to visit interest. The result indicated that if those factors are implemented more maximize, then the visitors' interest to visit Bhakti Alam will increase, thus it can support the ecotourism sustainability.

REFERENCES

- [1]. Buhalis, D. 2000. Marketing the competitive destination of the future. *Tourism Management* 21(1), 97-116.
- [2]. Chrismardani, Y. 2012. Komunikasi pemasaran terpadu. *Jurnal Neo-Bis* 8(2), 176-189.
- [3]. Aprilia, R. P. and Sayatman. 2014. Perancangan media promosi langsung. *Jurnal Sains dan Seni POMITS* 3(2), 2337-3520.
- [4]. Wandasari. 2013. Perlakuan akuntansi atas pph. *Jurnal EMBA*, 1(3), 558-566.
- [5]. Sanusi, A. 2003. Metodologi penelitian praktis: untuk ilmu sosial dan ekonomi. Buntara Media. Malang.
- [6]. Santoso, P. B. 2005. Analisis statistik dengan microsoft excel dan spss. Andi Publisher. Yogyakarta.
- [7]. Kusmayadi and E. Sugiarto. 2000. Metode penelitian dalam bidang kepariwisataan. PT Gramedia Pusataka Utama. Jakarta.
- [8]. Areks, E., M. Nadjib and S. Cangara. 2015. Pengaruh penggunaan bauran promosi terhadap tingkat kunjung wisatawan. *Jurnal Komunikasi Kareba*, 4(4), 360-373.
- [9]. Tjiptono, F. 2008. Strategi pemasaran. Andi Publisher. Yogyakarta.
- [10]. Widayanti, R. 2012. Pengaruh bauran promosi terhadap kunjungan wisatawan domestik (Studi Kasus di Taman Rekreasi Sengkaling Malang). *Jurnal Dinamika Dotcom* 3(1), 1-17.
- [11]. Kotler, P. and K. Keller. 2009. Manajemen pemasaran, 2nd Ed. Erlangga. Jakarta.
- [12]. Andreansyah, R. B. and Triyuniati. 2014. Pengaruh strategi promosi terhadap keputusan berkunjung wisatawan mancanegara. *Jurnal Ilmu dan Riset Manajemen* 3(6), 1-17.
- [13]. Wardah, Z., Topowijono and M. G. Wi Endang NP. 2016. Pengaruh bauran promosi terhadap keputusan berkunjung (Survei pada Pengunjung Taman Safari II Prigen Pasuruan). *Jurnal Administrasi Bisnis* 40(1), 23-30.

Tourism in Samarinda City, East Kalimantan: Recent Status and Future Directions

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Abstract

Tourism in Samarinda city, East Kalimantan, has been growing significantly and provides opportunities to develop as an alternative economic earning of city government and city dwellers. It is especially important to reduce mining activity and promotes more sustainable economic activity in Samarinda. The aims of the research were to identify the tourism potentials in Samarinda and discuss the opportunities for future tourism development. Research finds that basically tourism in Samarinda city grows significantly, following the growth of tourism in East Kalimantan Province. As a capital city, the basic infrastructure and amenity to support tourism are available in numerous form. There are also tourism attractions distributed in Samarinda city, ranging from natural, cultural and man-made attraction. These provide potentiality for Samarinda city to transform the regional policy in development, with put tourism is one of the main machines for future economic growth.

Keywords: mining, sustainable tourism, tropical forest, urban development.

INTRODUCTION

In Indonesia, tourism contributes significantly in economic sectors. The GDP of tourism in Indonesia in 2015 was recorded about IDR 461.36 trillion, or equal to 4.23% of national GDP. Tourism also contributes significantly in order to increase national economic value and support jobs for local community in many regions in Indonesia. In Indonesia, statistical records on 2015 state that tourism sectors able to provide jobs for 12.16 billion of people [1]. According to scholars, tourism effective to provides opportunities to increase economy activity, especially in combating poverty and providing jobs for local community. Therefore, numerous countries in the globe provides serious attention to the tourism sectors development [2,3,4].

Tropical forest ecosystems are the significant resources for tourism. It is especially important because Indonesia in country with huge forest. Tropical forest is crucial form of biodiversity, in which Indonesia was classified as mega-biodiversity countries together with Brazilia and Congo. Kalimantan is home of numerous mega fauna, including Orang Utan (*Pongo pygmaeus*) and Bekantan (*Nasalis larvatus*). Tropical forest of Kalimantan is home of about 350 bird species, 150 reptile species and 15,000 plants species. Many of them are endemic to Kalimantan Island. Since 1995, more than 600 species was found,

indicates the significant position of Kalimantan as home of global biodiversity. Kalimantan is home for 350 to 400 tribal communities with its diverse culture and language. There are also numerous indigenous knowledge exist, in which its contribution to Kalimantan's biodiversity conservation has been identified important [5,6,7]. These are potential resources for tourism development in Kalimantan Island.

Samarinda city in East Kalimantan has policy to put business, industry and trading as pillars for city development [8]. Basically, the city of Samarinda has uniqueness which is potential to convert as tourism attractions. It is including richness of species and ecosystem diversity as well as cultural diversity. There are also opportunities for tourist visitation due to numerous visitors has been identified made various activity in Samarinda [9]. Statistically, the trend of tourist visitation to Samarinda is similar with the trend of tourist visitation to East Kalimantan [10].

Throughout the world, trend and opportunities for tourism development lead to the city government made numerous collaboration with stakeholder, especially to increase stakeholders support in tourism development. These also implemented by city government of Samarinda. Through the collaboration, city government of Samarinda wishes to be able to increase and accelerate tourism development. Limit of the tourism development in Samarinda related to the poor of basic data related to the tourism attraction and its opportunities. There are also opportunities to increase the availability and quality of tourism accommodation.

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Samarinda is facing serious environment impact due to intensive mining [11]. There should be an alternative development approach with the objectives is increasing social and economic benefits while in the same time environment conserved. The development of sustainability tourism in Samarinda has significant positive impact to environmental conservation. There are opportunities to use tourism as a media to enhance land conservation in Samarinda, especially in pat mining area in city. The aims of the research were to identify the tourism potentials in Samarinda and discuss the opportunities for future tourism development.

RESEARCH METHOD

Data Collection

Research consists of two aspects, namely secondary data exploration and field observation. Secondary data exploration was done through document exploration, compilation and analysis to generate the information regarding tourism status in Samarinda. Secondary data was collected from numerous institutions, including Statistical Office of Samarinda City, Office of Tourism, and Office of Regional Planning and Development.

Data Processing and Analysis

Field work was done by visiting the entire mentioned tourism object in Samarinda city. Each object was visited and mapped using Global Positioning System (GPS) equipment. The gathered data was collected and stored in computer system. Coordinate point was involved in digital map of Samarinda city and analyzed using software ArcGis 10.1.

RESULT AND DISCUSSION

Tourism in Samarinda

Literature and document survey confirm that tourism sector in Samarinda grows significantly (Fig.1). These data seems to be similar with tourism grows in East Kalimantan. This trend also similar with the national and global tourism grows, indicated that tourism is important and has positive impact for local economic growth. These trends are offering opportunities for future tourism development in Samarinda.

Increase of tourist visitation in East Kalimantan province has positive contribution to the increase of tourist in Samarinda. Grows of tourism in East Kalimantan should be viewed as a

significant challenges for tourism development in Samarinda. In such a case, numerous aspects related to the improvement of tourism facility, infrastructure and attraction are needed. It is especially crucial for Samarinda city government to manage natural resources and environment following sustainable tourism principles and implementation.

The tourism attractions

The city of Samarinda geographically located at city 0°25'9.68"S 117°9'13.34"E in tropical regions of Kalimantan Island, Indonesia. Located in the centre part of the East Kalimantan, Samarinda lies on the banks of the Mahakam River (920 km), one of the longest rivers in Indonesia [9]. Basically, tropical forest is abundance and can be found easily in every site of Samarinda. There are opportunities to find beautiful tropical landscape and species diversity of Samarinda. According to official document regarding Samarinda Cities Spatial Planning [12], there are about 28 tourism object was found in Samarinda. It is ranging from natural to cultural object (Table 1).

The distribution and percentage of tourism attraction in Samarinda city was given in Fig.3. Man-made tourism attraction has high east percentage, represent the commitment of city government to provide public facility for recreation purposes. Recreational sites and objects in the city often established by city government as part of the effort to provide recreation object for city dwellers. In urbanized area where natural resources limited and many forest has been converted into building, providing man-made tourism attraction is important. There are often policy to ensure recreational facility by city government to enhance urban community in enjoying landscape [3,13].

It was followed by heritage attractions which are distributed widely in Samarinda city. It includes old building with historical value, tradition and local knowledge. These attraction has been visited by tourist who are interested in heritages aspects. Heritage tourism is common in developing countries and as far it is the important segment of tourism industry in developing countries [14]. In Samarinda city, natural attraction are ranging from water-based tourism attraction (i.e. Waterfall and dam) to the park (Mulawarman Botanical garden).

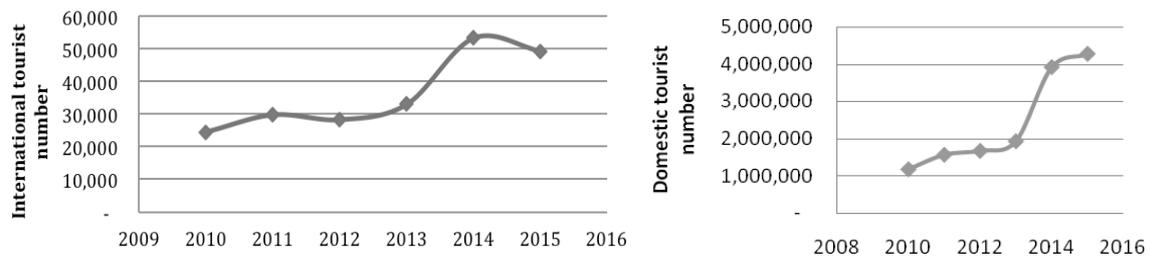


Figure 1. Trend of International and Domestic Tourist Arrival in East Kalimantan 2010 – 2015

Source: Statistic Center of East Kalimantan [10]

Table 1. Tourism Attraction in Samarinda City

Types of attractions	Name of object	District
Nature	Tanah Merah Water Fall	North Samarinda
	Mulawarman University Botanical Garden	North Samarinda
	Pinang Seribu Tourism Object	North Samarinda
	Batu Besaung Lake	North Samarinda
	Benanga Reservoir	North Samarinda
	Lubang Muda Water Fall	North Samarinda
Man-made	Tjius Palace Fishing Area	Sambutan
	Mahakam Lampion Garden	Sungai Kunjang
	Arya Ironwood house	North Samarinda
	Alaya Hill Food Court Area	Sungai Pinang
	Jungle Water Park	North Samarinda
	Citra Land Water Park	Sungai Pinang
	Bumi Sempaja Water Park	North Samarinda
	Citra Niaga Souvenir Centre	North Samarinda
	Home Industry Center	Sungai Pinang
	Turmeric Rice Village	Samarinda Ilir
Sejati City Garden	Sungai Kunjang	
Culture and events	Pampang Culture Tourism	North Samarinda
	Tongkonan Makroman Tourism	Sambutan
Heritage	Old House Heritage Site	Samarinda Seberang
	Weaving Village Culture tourism	Samarinda Seberang
	Islamic Center Religious Tourism	Sungai Kunjang
	Budhist Center Religious Tourism	Sungai Pinang
	Tihien Le Kong Temple	Samarinda Ilir
	Villa Annie Heritage Site	City of Samarinda
	La Mahong Daeng Mangkona Sanctuary	Samarinda Seberang
	Shiratal Mustaqim Mosque	Samarinda Seberang
Darussalam Great Mosque	City of Samarinda	

These provides alternative for urban dweller to enjoy outdoors. Event has been considered few (7%) but significantly contribute to tourism industry in Samarinda city. Event able to call potentials tourist to come and enjoy entertain, tourism program and facility in city. It is easily observed in sport and cultural event which are able to generated tourist [15].

Samarinda has potential culinary art which were few developed and promoted as one of the potential special interest tourism. More than 150 restaurant and recognized outlet has been indentified by tourism office the city. It ranging from traditional to modern food. Traditional menu from Pandang (West Sumatera), Java to

Sulawesi were available for visitors. These provides opportunities for future culinary tourism in Samarinda. Recent development of culinary tourism is positive, and it is become opportunities for numerous area to developed the area as culinary tourism destination [16,17].

From the perspectives of tourism product, tourism attraction in Samarinda city can be said diverse and potentially can be used to promote more interesting city tourism program. Tourism planning development was influenced by the balance of natural resources (supply) and marked demand [3]. Supply consists of attraction accessibility, information service and accommodation. Demand was consist of tourist

motivation. The city government of Samarinda should implement the comprehensive analysis regarding this aspect to establish Samarinda city as sustainable and competitive tourism destination.

Tourism attraction in Samarinda needs to be improved. Environmental consideration should be put as a key to enhance the quality and sustainability of natural attraction. It can be observed in case of waterfall in Samarinda city. In dry season, there are no water flow to create waterfall. Environmental crisis in Samarinda city seems to be related to the impact of mining activity and forest degradation in East Kalimantan. Therefore, environmental programs should be implemented to support tourism development.

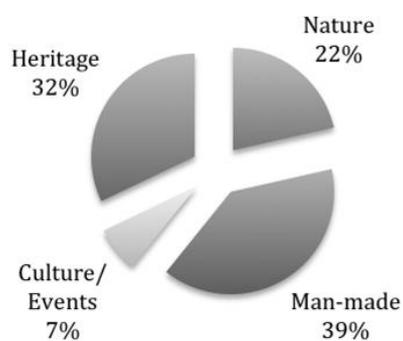


Figure 3. Tourism Attraction in Samarinda

Amenity factors

Tourism amenity is crucial in tourism destination. The destination without amenity support is often received low attention in market, and influence the low competitiveness in tourism market [3]. There are of accommodation, restaurant, health facility and business facility in Samarinda city, represent the readiness of Samarinda as tourism destinations. Samarinda has 5 and 4 star hotel, 23 guest house, 76 restaurant, 8 souvenir gallery/art shop, 3 transportation company, 5 terminal and 3 port to support tourism in Samarinda. The types and distribution of amenities aspect of tourism in Samarinda City can be classified sufficient to support tourism development. There are, however, significant actions in improvement program, especially in order to increase amenity service quality.

Accessibility

Accessibility is important aspect for tourism consideration to visit attraction. Sites with interesting attraction but poor accessibility will lead to the minimum number of tourist

visitation. The gateway to the city tourism destination is from Samarinda airport and Samarinda port. There are road to access numerous tourism object.

Effort to increase tourist invitation number in the future seems to be related to the direct flight to Samarinda. The accessibility to Samarinda are facing problem related to direct flight. As far, tourist to Samarinda should arrive in Sepinggan Airport in Balikpapan from Balikpapan (the second important city in East Kalimantan). From Balikpapan, tourist need 3 hour to Samarinda. The long land trip from Balikpapan to Samarinda as far supported by national roads.

Transportation is seems to be an important aspect for tourism competitiveness in Samarinda city. As far, number and quality service of tourist transportation was poor. Public transportation often becomes the option to access the entire destination.

Attraction distribution

The spatial distribution of tourism object in Samarinda was given in Fig. 4. From this figure, most of the tourism amenity located in the centre of the city, while tourism attraction located in the suburb of Samarinda city. These attractions were joined with the tourism amenity in the downtown of Samarinda through provincial roads.

Based on the spatial distribution, it is clear that most of the heritage object located near the Mahakam river. These seem to be related to the past history of Samarinda, in which first activity of people in Samarinda was centered near the river. In Kalimantan, River plays an important role as corridor for transportation [5], and therefore it is common for community settlement located near the river. In South Kalimantan, Rivers is important not only for transportation, but it is also important for trading. There are opportunities for floating market in South Kalimantan [18].

Recent development of Samarinda city is flowing to the north part of the city. The development of man-made attractions also found in the north area. This development seems to be following the infrastructure development and the human population in the north area of the city. This is becoming the opportunities for the city government of Samarinda to blow the issues of tourism development to counter-measure mining activity in the suburb of the city.

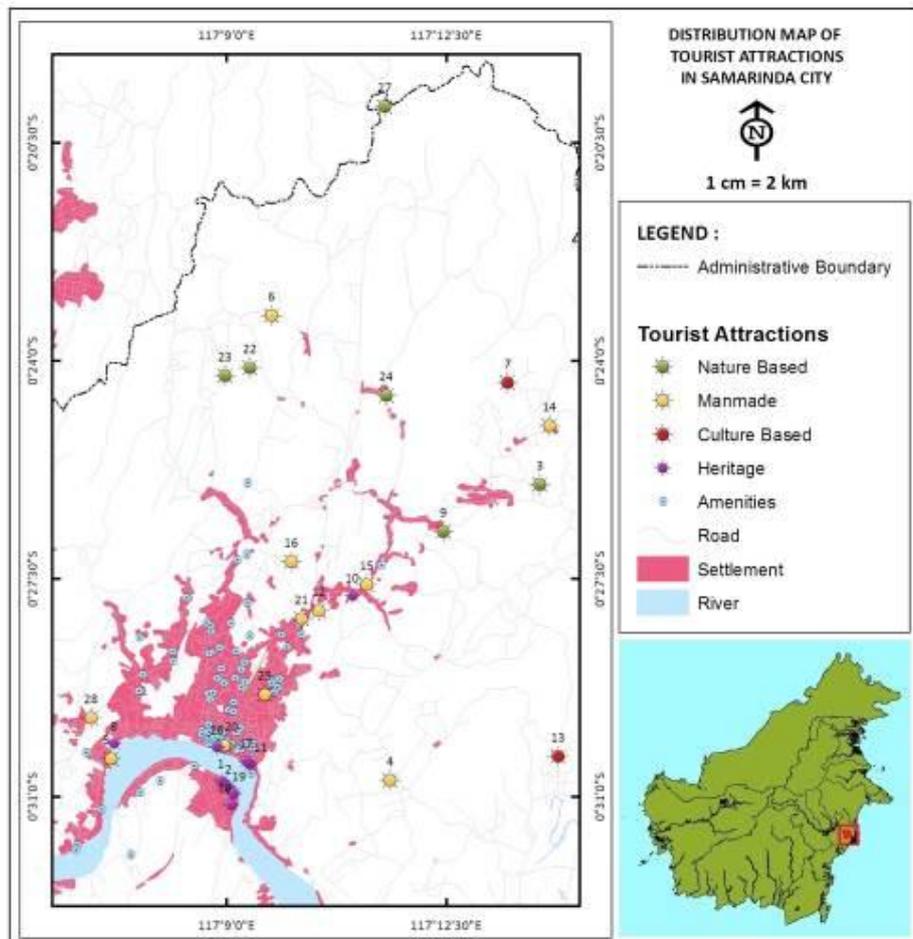


Figure 4. Distribution of Tourism Attraction in Samarinda City Area

Description:

- | | | |
|---|--|---|
| 1. Old House Heritage Site Samarinda Seberang | 9. Mulawarman University Botanical Garden (Fig. 7) | 19. Shiratal Mustaqim Mosque (Fig.6b) |
| 2. Weaving Village Culture Tourism Samarinda Seberang | 10. Buddhist Center Religious Tourism | 20. Citra Niaga Souvenir Centre |
| 3. Tanah Merah Waterfall | 11. Tihien Le Kong Temple | 21. Home Industry Center |
| 4. Tjius Palace Fishing Area | 12. Alaya Hill Food Court Area | 22. Pinang Seribu Tourism Object |
| 5. Mahakam Lampion Garden (Fig. 5) | 13. Tongkonan Makroman Tourism | 23. Batu Besaung Lake |
| 6. Arya Ironwood House | 14. Jungle Water Park | 24. Benanga Reservoir |
| 7. Pampang Culture Tourism | 15. Citra Land Water Park | 25. Turmeric Rice Village Sungai Pinang |
| 8. Islamic Center Religious Tourism (Fig. 6a) | 16. Bumi Sempaja Water Park | 26. Darussalam Great Mosque |
| | 17. Villa Annie Heritage Site | 27. Lubang Muda Water Fall |
| | 18. La Mahong Daeng Mangkona Sanctuary | 28. Sejati City Garden |



Figure 5. Mahakam Lampion Garden. Source: Personal documentation (2016)



Figure 6. Religious Tourism in Samarinda. a. Islamic Center Samarinda, b. Shiratal Mustaqim mosque, Samarinda Seberang.
Source: Personal documentation (2016)



Figure 7. Mulawarman University Botanical Garden. a. Entry Gate, b. Pathway in the garden.
Source: Personal documentation (2016)

Future Direction of Tourism Development in Samarinda

Samarinda has opportunities to develop tourism as one of the key to accommodate economic development, cultural preservation and environmental conservation though sustainable tourism principles. There are also opportunities to physically enhance the role of tourism development to minimize and countermeasure environmental degradation caused by mining in the city area.

Recently, degraded land after mining activity abundance in Samarinda city. The development of ex-mining land as tourism object can be done through comprehensive planning, including land evaluation, product development construction and marketing. Several aspect of ex-mining lands which are potentially becomes attraction includes (1) ex-mining sites, both in the lands area, cave, and landscapes of ex mining land (2) transportation for mining which are recently passive after mining (3) mining processing machine and building and (4) cultural aspect related to the mining which are found in surrounding mining area. These aspects can be

managed as tourism product to attract tourist visitation in ex land mining area (Fig. 8).



Figure 8. Post Land Mining Area. **Source:** Personal documentation (2016)

The restoration of ex mining land will become the important key for tourism development. Scholar point out that restoration program in ex land mining and degraded area is the crucial strategy in environmental conservation [19,20]. The restoration program of ex mining land can be integrated in tourism development, and especially gaining public support for project sustainability.

The terms that have been used for *Restoration* is "the act of restoring to a former state or position or to an unimpaired or perfect condition". To restore means "to bring back to the original state or to a healthy or vigorous state". This usage implies returning to an original state and to a state that is perfect and healthy [21].

Land restoration comprises three components: determination of end land use, determining the main limiting factors for restoration and means of alleviating them, and finally planning and implementation of the restoration program. End land use is a prerequisite for effective land restoration. This will determine the stakeholders, the scope for restoration, the key constraints that have to be alleviated, and help define the goals for determining success. End land use has a major bearing on the degree of difficulty of the task of restoration and hence its cost [22].

CONCLUSION

Samarinda city has 28 tourism destinations, ranging from man-made, natural, cultural, heritage and event. Man-made attraction is has the highest percentage (39%) represent the city government commitment to provides recreation object for urban dweller. The amenity was fair, but transportation should be increase to enhance tourism satisfaction. Tourist trend to Samarinda should be anticipate and become opportunities for tourism development. One of the opportunities is establishing ex mining land as tourist destination.

REFERENCES

- [1] Ministry of Tourism. 2016. Report on the accountability of Tourism Ministry 2015. Ministry of Tourism, Republic of Indonesia. Jakarta.
- [2] Weaver, D. and M. Oppermann. 2000. Tourism management. John Wiley and Sons. Brisbane.
- [3] Gunn, C. A. and T. Var. 2002. Tourism planning: basics, concepts, cases, 4th Ed. Routledge. New York and London.
- [4] Putri, S. D., Soemarno and L. Hakim. 2015. Strategic management of nature-based tourism in Ijen Crater in the context of sustainable tourism development. Journal of Indonesian Tourism and Development Studies 3(3), 123-129.
- [5] MacKinnon, K. 1996. The ecology of Kalimantan Vol. 3. Oxford University Press. Oxford.
- [6] Van Paddenburg, A., A. Bassi, E. Buter, C. Cosslett and A. Dean. 2012. Heart of Borneo: investing in nature for a Green Economy. WWF Heart of Borneo Global Initiative. Jakarta.
- [7] Rahu, A. A., K. Hidayat, M. Ariyadi and L. Hakim. 2014. Management of Kaleka (traditional gardens) in Dayak community in Kapuas, Central Kalimantan. International Journal of Science and Research 3(3), 205-210.
- [8] Government of Samarinda. 2009. Regional Regulation on the Implementation of Tourism Business in Samarinda. Government of Samarinda City. Samarinda.
- [9] Provincial Government of East Kalimantan. 2008. Main plan of regional tourism development of East Kalimantan. Province of East Kalimantan. Samarinda.
- [10] Statistic Center of East Kalimantan. 2016. East Kalimantan in numbers 2016. Provincial Government of East Kalimantan. Samarinda.
- [11] Ayub, S. O., Y. B. Widianarko and M. Izzati. 2015. Dominance and diversity of forest plant species growth on post coal mining soil in the Samarinda City, East Kalimantan Province, Indonesia. Journal of Biodiversity and Environmental Sciences 6(6), 29-39.
- [12] Government of Samarinda. 2014. Regional Regulation No. 2: Samarinda Cities Spatial Planning. Government of Samarinda. Samarinda.
- [13] Boka, R. Y. 2016. The evaluation of incentive-disincentive system in tourism development: a case study of Lake Linow development, Tomohon, North Sulawesi. Journal of Indonesian Tourism and Development Studies 4(2), 49-56.
- [14] Herbert, D. T. 1995. Heritage, tourism and society. Mansell Publishing. London.
- [15] Gibson, H. J., C. Willming and A. Holdnak. 2003. Small-scale event sport tourism: fans

- as tourists. *Tourism management* 24(2), 181-190.
- [16] Long, L. M. (Ed). 2004. *Culinary tourism*. University Press of Kentucky. Lexington.
- [17] Sukenti, K., L. Hakim, S. Indriyani, Y. Purwanto and P. J. Matthews. 2016. Ethnobotanical study on local cuisine of the Sasak tribe in Lombok Island, Indonesia. *Journal of Ethnic Foods* 3(3), 189-200.
- [18] Ellyn, N., M. S. Djati, T. Hidayat and L. Hakim 2015. Tourist profiles and perception as a basic planning for sustainable tourism development Lok Baitan Floating Market, South Kalimantan. *IOSR Journal of Environmental Science, Toxicology and Food Technology* 9(11), 11-16.
- [19] Sengupta, M. 1993. *Environmental impacts of mining monitoring, restoration, and control*. CRC Press. Boca Raton, Florida.
- [20] Cooke, J. A. and M. S. Johnson. 2002. Ecological restoration of land with particular reference to the mining of metals and industrial minerals: A review of theory and practice. *Environmental Reviews* 10(1), 41-71.
- [21] Bell, R. W. 2002. *Restoration of degraded landscapes: principles and lessons from case studies with salt-affected land and mine revegetation*. CMU Journal 1(1), 1-21.
- [22] Kuter, N. 2013. Reclamation of degraded landscapes due to opencast mining. In: Özyavuz, M. (Ed). *Advances in Landscape Architecture*. Intech. Available at: <http://www.intechopen.com/books/advances-in-landscape-architecture/reclamation-of-degraded-landscapes-due-to-opencast-mining>.

Ethnobiological Study of *Larung Sembonyo* Ceremony in Watulimo District, Trenggalek as a Basic of Ecotourism Planning

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Abstract

This research aims to describe the ritual plant species and types of offerings that are used in *Larung Sembonyo* ceremonies and to know the community's role in the conservation of ritual plants. Plant diversity and utilization survey were conducted by semi-structured and structured interviews to the informant. The selection of informants was using snowball sampling technique. Data was analyzed descriptively with ICS and FUVs index. The results of the study found 38 species of *Larung Sembonyo* ritual which is divided into 23 families. Types of offerings are used in *Larung Sembonyo* ceremony as much as 31 types, each of which has its own meaning. The 10 highest Value Index of Cultural Significance (ICS) of *Larung Sembonyo* ceremonial plant is *Oryza sativa* L., *Oryza glutinosa*, *Cocos nucifera* L., *Musa paradisiaca* L., *Pandanus amaryllifolus* Roxb., *Piper battle* L., *Aliumcepa* L., *Alium sativum* L. and *Manihot esculenta* Crantz. The five highest Family Values Use (FUVs) were occupied by Family Arecaceae, Euphorbiaceae, musaceae, Solanaceae and Poaceae. The higher FUVs the more uses and utilization of these plants in a ritual ceremony *Larung Sembonyo*. Karanggongso community has indirect conservation efforts on plants that are used for rituals. The conservation efforts were carried out by planting crops in the garden, home yard, even in the woods. The concept of management mostly still uses traditional knowledge. The *Larung Sembonyo* has special value to integrates in ecotourism development planning. *Larung Sembonyo* has special uniqueness which are able to attract visitor.

Keywords: Conservation, FUVs, ICS, *Larung Sembonyo*.

INTRODUCTION

The tourism sector has been predicted to be the largest industry in the world at 21st century. Tourism sector will increase world revenues and require much labor. Tourism industry is one of main sector in Indonesia, because Indonesia has a lot of natural beauty and culture that has the potential to be introduced to the world. Recently, Indonesia's tourism sector is more concentrated in tourism based of ecotourism. Ecotourism will be an interesting concept because that do not only tourism activity but also environmental conservation at the same time to tribute the local culture [1]. Assets that become favored tourist attractions today is the local wisdom. Local knowledge is the main attraction for tourists are getting fed up with the kind of tour there. Tourism based on local wisdom is very dependent on a particular communities. Local knowledge can be packed into the unique cultures such as knowledge society, belief systems, cultural rituals and ceremonies.

Tourism will not be formed without culture. If an area wants to promote tourism, it should promote the culture in the destination [2].

Forms of local wisdom a society which is dealing in tourism development can be seen in Sekaten ceremony in Yogyakarta. Sekaten celebration is a tradition to commemorate the birth of Prophet Muhammad. There are three activities related to Sekaten tradition are: The exit of Gamelan Kanjeng Kyai Gunturmadu and Kanjeng Nagawilaga, Garebeg Maulud and Sekaten crowd [3]. The government makes Sekaten Yogyakarta as a tourist attraction because of the ceremony managed to give a special attraction for tourists. In fact, most tourist arrivals in Maulud coincided with *Sekaten*. Thus *Sekaten* tradition is strongly support the development of tourism in Yogyakarta.

One tradition that has the potential to support the development of tourism in Trenggalek is a traditional ceremony *Larung Sembonyo*. *Larung Sembonyo* ceremony is hereditary community of Karanggongso, Tasikmadu Village, Watulimo District, Trenggalek Regency. *Larung Sembonyo* ceremony use as gratitude to God. In addition, *Larung Sembonyo* ceremony is a means of honoring ancestors who had been opening Prigi region. *Larung Sembonyo*

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ceremony has strong related with ethnobotany. Ethnobotany is the science that examines the perception and public knowledge about how to use plant species [4]. In addition to providing benefits, plants require human action as one form of conservation. Cultures that exist within a region will indirectly bring people to always maintain and preserve the existing sections it. This research is important to know the types of plants used for ceremonies, and to analyze the community knowledge about the value and meaning of plant species.

RESEARCH METHOD

This research was conducted in the Karanggongso beach, Tasikmadu Village, District of Watulimo, Trenggalek Regency. Karanggongso is one Tasikmadu hamlet in the village, so that jurisdiction contained in Tasikmadu Village. Geographically, the village located on coordinates $8^{\circ}17'43''\text{S}$ - $8^{\circ}24'25''\text{S}$ to $111^{\circ}44'8''\text{E}$ - $111^{\circ}45'08''\text{E}$. Tasikmadu Village has area about 2.846 ha. The Tasikmadu Village located in coastal Prigi has three main tourism sites: Prigi Beach, White Sand Beach and Karanggongso Beach (Fig. 1).

Plant Species Diversity Survey

Survey conducted by the diversity of plant species recorded at the same time documenting plants recognizable. When they find plants that are not known, the first step taken is to ask local people about the local name of the plant [5]. Further, when the unknown type, the plant was documented as a herbarium. Result from documentation was identified using the book Flora of Java.

Plant Utilization Survey

Stages of plant utilization survey were conducted by semi-structured and structured interviews to key informants. Criteria informants are people who are experienced and know details about the Larung Sembonyo ritual. Limitation of informants in this study is already married, because at that age a person can receive social conditions. To reduce the Subjective factors, interviews conducted at least twice. Related to that, qualitative research is particularly vulnerable of the subjectivity [6].

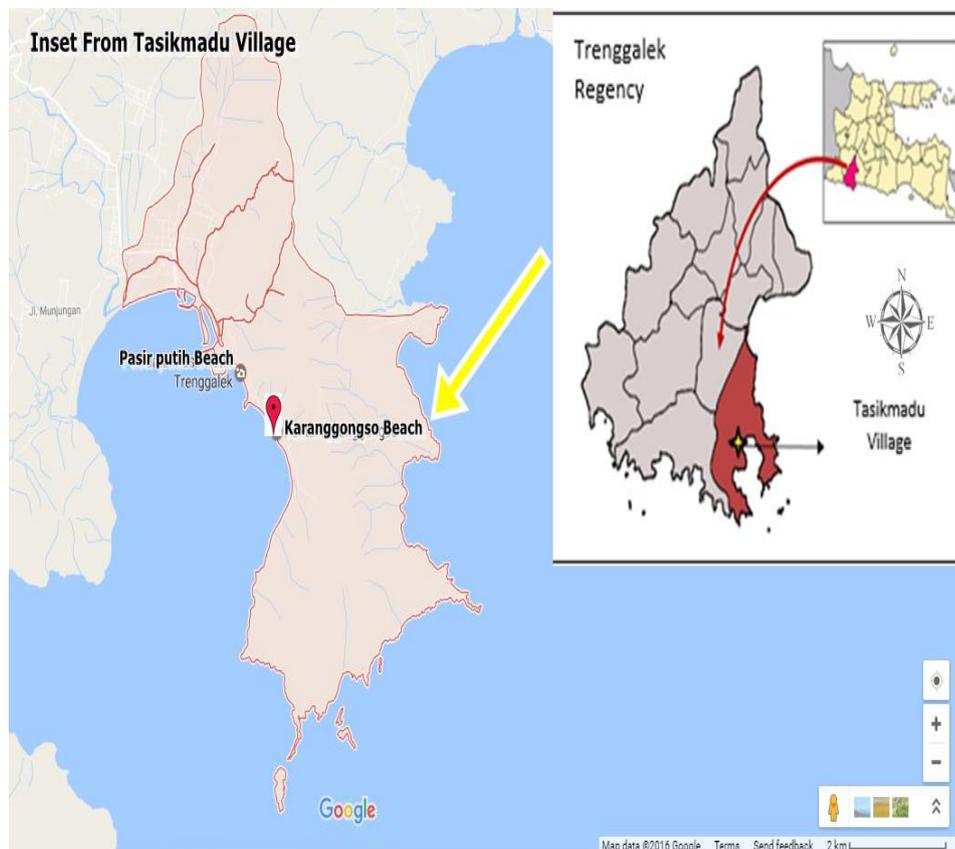


Figure 1. Study Site in Karanggongso, Tasikmadu Village. Source: Modified Google Map

Analysis of Plant Utilization

Analysis of plants utilization is done by using Significant Cultural Index (ICS) and Family Use Values (FUVs). ICS is the result of Ethnobotany analysis that shows the values of the interests of each species based on its role in society. The Data is taken from interviews with informants. The Cultural Significance Index was calculated using following formula [7]:

$$ICS = \sum (qx \text{ I xe}) ni, i = 1$$

Description:

ICS = Utilization calculation of plant species, from one use to further use (n)

Q = Quality value; quality value calculated by giving a score or value to a plant species: 5 = staple food; 4 = food secondary/additional + primary material; 3 = other food stuffs + secondary + medicinal plant material; 2 = ritual, mythology, recreation and so forth; 1 = recognition

i = Intensity value: intensity illustrates the use of the plant species that are useful, 5 = very high intensity 4 = moderately high intensity; 3 = intensity moderate use; 2 = intensity low usage; 1 = intensity use is very rare

e = Exclusivity value; 1 = most preferred, and is the top choice; 2 = there are other plants as a most preferred choice; 3 = secondary sources or low utility value.

FUVs are used to determine the usefulness of each species based on the parts of the plant is widely used. The Family Use Values (FUVs) was calculated using following formula:

$$FUVs = \sum UVs / (ns)$$

Description:

U_i = Amount of plant function that mentioned by respondents for each family

n = Amounts of respondents

RESULT AND DISCUSSION

History of Larung Sembonyo ceremony

Larung Sembonyo ceremony derived from the existence of a history of Hindu Mataram Kingdom. Hindu Mataram kingdom had a great desire to expand the territory to the land of China. However, widening the area with war is feeling enough. Finally, the Hindu Mataram kingdom tries to expand the kingdom that is still in the jungle area. The royal Officials have planned to open forest and use it for settlement. The people from day to day were more and more and required wide space to accommodate the people.

Hindu Mataram kingdom sent a knight named Raden Tumenggung Yudonegoro who has trusted

to solve the problems in the kingdom. Mataram Hindu king was tasked Raden Tumenggung Yudenogero to open the southern region for a settlement. In this mission, King of the Mataram Kingdom sent 5 knights, i.e. Raden Tumenggung Yudonegoro, Raden Yahuda, Raden Yahudi, Raden Joyohadilogo and Raden Prawiro Kusumo. Raden Tumenggung Yudonegoro has successfully opened Pacitan and continued to open up the area Sumbreg District of Munjungan. Tumenggung Yudonegoro journey continues towards the East, but their journey was hampered because Tumenggung Yudonegoro entourage could not see this area. This is expressed into proverb "*Meniko wono engkang gegirisi spto molo spto mati*", that mean this area has been controlled by something that can get sick and die. In the end Tumenggung Yudonegoro conducted meditation in Goa Lowo to inquire of God. At the time meditation Tumenggung Yudonegoro had instructed was married to the daughter of the Queen South Coast named Putri Gambar Inten. Tumenggung Yudonegoro then approves the request and undertakes all the requirements of Putri Gambar Inten.

Until now, the requirements from Putri Gambar Inten to Raden Tumenggung Yudonegoro become a culture for the people of Karanggongso. The rituals or ceremonies were conducted each year by the people of Karanggongso. *Larung Sembonyo* ceremony is a coastal people activity as a form of gratitude to God for sustenance given. In addition, the aim of this event is to commemorate ancestors who have opened region of Prigi coastal. People of Karanggongso are mostly fishermen, so *Larung Sembonyo* activities initiated by the fisher community. *Larung Sembonyo* in Karanggongso ceremony led by indigenous leaders and village elders. The position of traditional leaders are Recognized hereditary ancestor from people of Karanggongso.

Larung Sembonyo ceremony in Karanggongso

Larung Sembonyo ceremony held on Monday or Saturday Kliwon in *Selo* month of Javanese calendar. *Larung Sembonyo* activity is largely utilizing products from the region of Karanggongso. The materials used in the ceremony are choice materials. In addition,

materials such rituals to get it are not advisable to buy in the market. Because people worrying the purity of the materials. According to the people, the materials used for the ritual should be a total purity. The people who are directly taking a part in the ceremony are required to take a shower.



Figure 2. *Larung Sembonyo* procession. a. The ritual offerings Carnival, b. Jodhang, c. The offerings are floated out to sea, d. Traditional Leader of Karanggongso

The event of *Larung Sembonyo* ceremony are hajat pray, Campursari, float procession, wayangan, and ruwatan (Fig. 2). Hajat pray was held on the evening before the float procession. The aim from hajat pray is to ask the Lord to show protection *Larung sembonyo* ceremony can run smoothly. In addition, the community expects all request granted by God. After that, the event continued with campursari art. In the event, traditional leaders and elders prepare the equipment ritual offerings for the ceremony next day. The ritual offerings required there are two kinds of offerings are floated to sea and offerings for ceremonial meal. Differences two offerings are on the Manten. Manten is a pair of dolls made from rice flour and shaped like a pair of bride. The entire ritual offerings that will be floated out to sea placed on jodhang.

Larung Sembonyo procession held at 9:00 pm. The event began with carnival ritual offerings brought from one of the community home to the place event *Larung Sembonyo* ceremony. Procession customary ritual offerings consist of a

indigenous leaders, *jodhang*, *Kembar Mayang*, *ambengan*, and *jaranan*. The procession float out to sea was required before 12.00pm. If exceeded a predetermined time, the people believed there will be something undesirable. The indigenous leader Karanggongso will reciting incantations or petition before daunting offerings. Spells that contains named for tumenggung totaling 16 people along with his request.

Ritual Offerings

Overall 31 types of offerings are to be present in *Larung Sembonyo* ceremony, because each offering have a particular meaning and a purpose (Table 1, Fig. 3). The ritual offerings were symbolized *Larung Sembonyo* is Manten (Fig. 4). Other ritual offerings are complementary for Manten.

Manten is the offering has the pair of bride men and women are placed on Takir. Takir made of banana leaves is the embodiment of a boat. The pair of Manten made from rice flour dyed to look like a human. The embodiment of manten is rather like the original so that around the bride doll comes with Riph. Riph is a form that resembles various types of flowers. Also Riph derived from rice flour dough. Manten which will be floated placed on jodhang and arrangement flanked by two bananas and Followed by *cok bakal* serta *Panji anom*. The offerings that will be floated out to sea on a later transferred to a boat made of banana stems and woven coconut (coconut leaves).

The offerings total is 30 pieces besides Manten is a complementary offering. However, its presence is very important in the ritual *Larung Sembonyo*. The offerings were classified Jenang-Jenangan means salvation. The people expect given the safety and go away from the evil. *Buceng* shape is like a cone to the top. *Buceng* made from rice meaningful things related to God. The people expects the ease and help from God. In addition *Buceng* is symbol as a means of human apology to his God. *Sego punar* is yellow rice that comes with a fried egg and serundeng. *Sego punar* is symbol form the cleanliness of everything that is not good. *Paes agung* is the supreme form of offerings that consists of an assortment of snacks. For example: fried bananas, wajik, *jadah*, and jenang. *Paes agung* serve as a means to ask the God to lengthen its age and dilapangkan sustenance. The use of *ayam ingkung* as ritual animal sacrifices has meaning for life and love of neighbor disclosure.

Table 1. Larung Sembonyo Ritual Offerings

No	Offerings	Description
1	<i>Jenang abang</i> <i>Jenang sengkolo</i> <i>Jenang ngapuro</i>	The offerings consist of three kinds of <i>Jenang</i> that has meaning for safety of man to God. <i>Jenang</i> is porridge made from rice and glutinous.
2	<i>Mule metri lodho sego gurih</i>	<i>Mule metri lodho sego gurih</i> is divided into two meanings, namely <i>mule metri</i> : rice with eggs while <i>Lodho sego gurih</i> from <i>uduk</i> rice with <i>lodho</i> (types of processed chicken spicy with coconut milk).
3	<i>Buceng sakembaran</i> <i>jongkong mripih iwel-iwel</i>	<i>Buceng sakembaran jongkong mripih iwel-iwel</i> consists of several types of food that is <i>Buceng sakembaran</i> (rice formed cone totaling four pieces), <i>jongkong</i> (foods derived from cassava grated), <i>mripih</i> (dough of rice flour by food coloring), and <i>iwel-iwel</i> (food comes from the sticky rice in which there are brown sugar and wrapped in banana leaves).
4	<i>Sego punar</i>	<i>Sego punar</i> the epitome of cleanliness consisting of rice cooked with a little grated turmeric yellow and surmounted by a fried egg and <i>serundeng</i> .
5	<i>Jenang ponco Warno</i>	<i>Jenang ponco warno</i> consists of five pieces of dough made from rice flour and was given five different colors. Colors used are red, yellow, green, white and brown. <i>Jenang Poncowarno</i> denotes the number of tests of life
6	<i>Sekul kulub (Brokohan)</i>	<i>Sekul kulub</i> consisting of rice cooked into the rice and equipped with vegetables (vegetables mixed with grated coconut).
7	<i>Panggang buceng</i>	<i>Panggang buceng</i> This consists of <i>buceng</i> (rice shaped cone) and grilled of <i>lodho</i> .
8	<i>Pindang angkep lan sate</i>	<i>Pindang angkep lan sate</i> consists of two kinds of food that is <i>Pindang angkep</i> made of chicken cooked with <i>kluwak</i> and <i>sate</i> . The offerings this function to send prayer to 16 Watulimo minister.
9	<i>Buceng emas</i>	The shape of the <i>Buceng emas</i> is rice which is formed a small cone and the top covered with a fried egg.
10	<i>Buceng Robyong</i>	<i>Buceng Robyong</i> an offering consisting of rice shaped like a cone with a small size and at peak tucked four kinds of flowers are <i>soka</i> , <i>euphorbia</i> , <i>hibiscus</i> and <i>cananga</i> flowers.
11	<i>Buceng rusak taman</i>	<i>Buceng rusak taman</i> made of rice processed into rice and shaped like a cone. At the cone is colored red, yellow, green with a circular motif.
12	<i>Buceng palang</i>	<i>Buceng palang</i> material and shape similar with <i>buceng rusak taman</i> the only difference being a motif found on a cone.
13	<i>Buceng meteng</i>	Forms of offerings " <i>Buceng meteng</i> " This is a cone shaped white rice and banana leaves are looped in a cone. <i>Buceng meteng</i> is addressed to Ibu Siti Hawa, who was pregnant.
14	<i>Buceng jebug</i>	Forms of <i>Buceng jebug</i> almost the same as the others, but the only difference being in the top furnished with bamboo strips.
15	<i>Buceng panggang intil</i>	<i>Buceng panggang intil</i> an offering that looks almost same with the others, but the difference lies only in the additional <i>intil</i> grilled skewers placed at the top of the cone.
16	<i>Horog-horog Kaleh mlinjon</i>	The food in these offerings are made from rice flour by a different color then shaped oval and sprinkled with grated coconut. These offerings as a symbol to honor the Queen <i>Emas</i> and the other followers.
17	<i>Mas kemambang</i>	<i>Mas kemambang</i> symbolized by the sticky rice by water in the container <i>takir</i> .
18	<i>Dawet</i>	<i>Dawet</i> is one of the offerings in the form typical drink in the island of Java. The beverage ingredients from coconut milk, brown sugar, and rice flour.
19	<i>Bulu sangkrem</i>	<i>Bulu sangkrem</i> a snack made from rice bran then add brown sugar as a flavor and wrapped in banana leaves.
20	<i>Gulo gimbal gulo gingsing</i>	<i>Gulo gimbal gulo gingsing</i> made of glutinous rice wrapped with brown sugar.
21	<i>Jenang blowok</i>	Shape types of offerings <i>jenang blowok</i> consists of foods from rice flour which is equipped with brown sugar on top.
22	<i>Jenang katul</i>	<i>jenang katul</i> made from rice bran made mush mixed with brown sugar.
23	<i>Kupat mupat lan Kleman</i>	<i>Kupat mupat lan Kleman</i> consists of <i>kupat</i> made of rice wrapped in coconut and include sweet potato.
24	<i>Jajan pasar</i>	<i>Jajan pasar</i> consists a variety of foods in the market.
25	<i>Paes agung</i>	The shape of <i>Paes agung</i> is a wide variety of snacks as ever fried bananas, wajik, jadah, ampyang and <i>jenang</i> .
26	<i>Panji anom</i>	<i>Panji Anom</i> an offering consisting of several kinds of materials such as <i>Boreh</i> , <i>srimpi oil</i> , <i>cananga</i> , <i>pandan</i> , and <i>Limaran (sirih, tobacco, menyan and money)</i> . The offerings are usually used to avoid interference from evil spirits.
27	<i>Rarangginang</i>	<i>Rarangginang</i> is a food that comes from glutinous rice.
28	<i>Manten</i>	The offerings <i>Manten</i> is the most important offerings of all the existing offerings. This is because the main intent <i>Manten</i> becomes a symbol that is being implemented by the community Karanggongso. The <i>Manten</i> shape a pair of the bride in <i>Takir</i> (lining of the banana leaf) as a form of boat. The bride embodiment derived from rice flour that is colored to look like humans in general.
29	<i>Kesimpar polo polo polo gumantung kependem</i>	<i>Polo kependem</i> which are embedded in the soil such as cassava, sweet potatoes, potatoes, uwi and <i>gembili</i> . <i>Polo kesimpar</i> are fruits there are above the ground and does not depend on trees like watermelon, honeydew, cantaloupe and ect. <i>Polo gumantung</i> are fruits that hang on trees such as mango, papaya, durian and guava.

No	Offerings	Description
30	<i>Cok bakal</i>	<i>Cok bakal</i> offerings consist of all equipment or materials in the kitchen. The contents of <i>Cok Bakal</i> such as rice, coconut, banana, <i>kembang telon</i> (jasmine, flower, cananga and rose), onion, garlic, chili, brown sugar, tobacco, chew of betel, <i>gantol</i> (betel rolled and lace-up) , <i>badheg</i> (water fermented from tape), eggs, pecans, <i>kluweg</i> , cigarettes, lighters, and money.
31	<i>Kembar mayang</i>	<i>Kembar Mayang</i> is <i>ubo rampen</i> which comprises a pair made from <i>janur</i> (banana leaves), andong, banyan leaves, lancur or croton, <i>debog</i> (banana stem), <i>Mayang</i> (flower of pinang) and coconut amounted to 4 pieces. <i>Kembar Mayang</i> a symbol of hope and prayers to the family the course of a marriage ceremony.



Figure 3. The Ritual Offerings of Larung Sembonyo



Figure 4. The ritual offerings of Manten

Value Index of Cultural Significant (ICS) Related to Larung Sembonyo ceremony

The use offerings of *Larung Sembonyo* ceremony is not separated from the use of plants. Many types of plants are used as a symbol of ritual. There are 38 species of plants used in *Larung Sembonyo* ceremony. The plant is divided into 23 families. ICS analysis showed the value of a species in a particular culture. Thus, the higher the value of ICS that is owned by a particular species of plants is very closely shows its function in life [8]. ICS value is classified into five categories (Fig. 5): very high (>100), high (49-71), medium (26-48), low (3-25) and very low (0-2).

The Plants have been observed function will generate ICS value. Based on the calculation of the ICS value, there are top ten species of *Larung Sembonyo* (Table 2). Rice (*Oryza sativa*) is a ritual plant that has the highest value of ICS. The ICS

value rice is 70 (Table 2). The function of rice in *Larung Sembonyo* ceremony is a major of food ingredient. The existence of rice cannot be replaced by other crops. This is because the rice has special meaning in the rituals in addition to functioning as a staple food. Rice for the Java people is considered as an incarnation from Dewi Sri, she is fertility and good fortune [9].

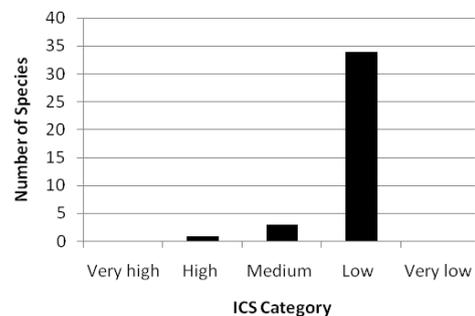


Figure 5. Category Value Index of Cultural Significant (ICS) of Ritual Plants *Larung Sembonyo*

The use of rice in the ritual offerings such as to *Buceng (tumpeng)*, *sego gurih*, *sego punar*, basic materials of *manten*, basic ingredients of *jenang-Jenangan*, complementary *cok bakal*, *brokohan*, basic ingredients of traditional snacks, *iwel-iwel*, basic materials of *horog-horog*, basic materials of *ripih* and the basic material for *kupat*. The demand for rice in *Larung Sembonyo* ceremony absolute must have given all of offerings based on rice (*Oryza sativa*). The need of rice comes from the people Karanggongso harvest. The people take aside the half of the total harvest for *Larung Sembonyo* activity. The people of Karanggongso have realized that to the need of rice so it is necessary to the conservation of the rice crop. The implementation of conservation activity that can be conducted by the community is the sustainable and consistent planting. The implementation should give an attention to the planting system in conservative way. The conservative measures for rice crop is possible to do because of the people's livelihood

is mostly become farmers. The agricultural sector is one of the main livelihoods for Watulimo District than as fisherman [10]. The Conservative measures are visible in Watulimo farmers are still applying Java calculation (*Pratanamangsa*) in planting. *Pratanamangsa* is a calendar simple, easy to implemented and used the natural phenomenon as a regulator of the growing cycle.

Table 2. Top ten ICS score

No	Species of Plant	ICS Score
1	<i>Oryza sativa</i>	70
2	<i>Oryza glutinosa</i>	36
3	<i>Cocos nucifera</i>	36
4	<i>Musa paradisiaca</i>	34
5	<i>Nicotiana tabacum</i>	24
6	<i>Pandanus amaryllifolius</i>	24
7	<i>Piper betle</i>	24
8	<i>Allium cepa</i>	19
9	<i>Allium sativum</i>	19
10	<i>Manihot esculenta</i>	16

Family Use Values (FUVs)

Based on the FUVs calculation, Arecaceae was the highest family with FUVs value (Table 3). The important Species that role in contributing to the highest value is the coconut (*Cocos nucifera*) and pinang (*Areca catechu*). Part of plant from Arecaceae family is widely used in the *Larung Sembonyo* ceremony include stems, leaves, flowers, fruits and seeds. Palm stems are used as firewood to process foods offerings. Coconut fruit used as food ingredients offerings. Coconut leaves (*janur*) and flowers (*manggar*) used for decoration kembar mayang in *Larung Sembonyo* ritual. Manggar have meaning in a life that needs to consider the behavior [11].

The second family with the highest score of FUVs is the family Euphorbiaceae. The species that represent family Euphorbiaceae are croton (*Codiaeum variegatum*), Cassava (*Manihot esculenta*), *Euphorbia milli* and hazelnut (*Aleurites moluccana*). The organ plant which widely used from Euphorbiaceae family is flowers, leaves, seeds and bulbs. Flowers of the species *Euphorbia milli* become a symbol in *buceng*. Kemiri is used as a spice in cooking, while cassava is processed into food for the offering. Cassava is easily available in the Karanggongso region, because cassava is very easy to be planted. Cassava survived for long drought and less water condition even without fertilizer. In addition, the cassava plant can be used as an alternative crop plants gap [12].

The third family with the highest FUVs calculation is Musaceae. The species of this family grow wild around the yard or moor. In addition, many species Musaceae is growing wild in the woods. The species that represent this family are banana (*Musa paradisiaca*). Species of banana are often used in rituals are *pisang raja* (*Musa paradisiaca* L. (aab Group) cv King), *pisang kepok* (*Musa paradisiaca* L. cv Kepok) and *pisang kawak* (*Musa paradisiaca* L. cv Kawak). Part of the plant used in *Larung Sembonyo* ritual is stems, leaves and fruit. Banana stems are used for the frame of the boat, and as a pedestal to put puppets and *Kembar Mayang*. Banana leaves to wrap offerings and as a place mat. While bananas as complementary offerings and processed into food such as fried bananas.

Table 3. Five Highest of FUVs Score

No	Plant Taxonomy	FUVs Score
1	Arecaceae	4.7
2	Euphorbiaceae	3.1
3	Musaceae	3
4	Solanaceae	1.9
5	Poaceae	1.8

The plants used in *Larung Sembonyo* ceremony mostly been available in the surrounding community residences. The Community to needs of the plants can take in the woods, yard, farm or field. The community use ritual of plants is classified as moderate. Rituals performed Karanggongso community is also not too much. But the community has indirect conservation action against the plants that are used for rituals or ceremonies by planting the crops in the fields, yards or even in the woods. Home gardens play an important role to support cultural aspect of the local community, especially through the availability of numerous plants in home gardens with its cultural function [13].

Larung Sembonyo as Tourism Attraction

Larung Sembonyo ceremony is potential as a tourist attraction in Trenggalek because in addition to bring the tourists in this area, it also keeps the existence of the culture. It becomes an effort to preserve local culture and local wisdom Tasikmadu particular. Because of cultural heritage and history is travel attractions culture as a tourist attraction of foreign and most effective media to provide concrete examples of the values and culture of the great work of the ancestors [14]. If the existence of a tradition maintained *Larung Sembonyo* will indirectly also

conserve plants used in rituals. The local community will try to keep these plants still exist around in the environment. Plants conservation can be done by planting ritual plants in around the yard, fields or forests. Shape preservation of local culture not only for environmental conservation manjaga but plays an important role for learning and education development everlasting, improved quality of life and show the best value owned by the public [15]. In addition, the traditional ceremony of float Sembonyo as one of the tourist sights can be used as a factor which supports the development of nautical tourism in the District Watulimo [16].

CONCLUSION

Larung Sembonyo is an activity of coastal community as a form of gratitude to God for sustenance given. In addition, this aims is to commemorate ancestors who have opened Prigi Gulf region. The event from *Larung Sembonyo ceremony* is sholat hajat, campursari, float procession, puppet and ruwatan. Plants used in *Larung Sembonyo* ceremony there are 38 species, divided into 23 families. Value of Index Cultural Significance (ICS) ten highest of *Larung Sembonyo ceremony* plants is *Oryza sativa* L., *Oryza glutinosa*, *Cocos nucifera* L., *Musa paradisiaca* L., *Pandanus amaryllifolus* Roxb., *Piperbattle*L., *Alium cepa* L., *Alium sativum* L. and *Manihot esculenta* Crantz. Five highest Family Use Values are occupied by Family Areaceae, Euphorbiaceae, Musaceae, Solanaceae and Poaceae. The higher the value of FUVs, the more the use and utilization of these plants in a *Larung Sembonyo* ceremony are. The ritual offerings are used in *Larung Sembonyo* ceremony amounting to 31 each placed on the container (*Takir*). Karanggongso community has indirectly conservation efforts on plants that are used for rituals. The conservation efforts carried out by planting crops in the fields, yard, even in the woods. The concept of management is most still use traditional knowledge.

REFERENCES

- [1] Hakim, L. 2004. Dasar – dasar ekowisata. Bayumedia Publishing. Malang.
- [2] Jupir, M. M. 2013. Implementasi kebijakan pariwisata berbasis kearifan lokal (Studi di Kabupaten Manggarai Barat). Journal of Indonesian Tourism and Development Studies. 1(1), 28-37.

- [3] Taryati. 2009. Nilai-nilai yang terkandung dalam perayaan Sekaten di Yogyakarta. Jantra 4(7), 506-522.
- [4] Martin, G. J. 1995. Ethnobotany: a methods manual. Chapman and Hall. London.
- [5] Batoro, J. 2014. Pengelolaan lingkungan dengan pendekatan Etnobiologi-Etnobotani. University of Brawijaya Press. Malang.
- [6] Walujo, E. B. 2004. Pedoman pengumpulan data keanekaragaman flora. Bogor Research Center. Bogor.
- [7] Turner, N. J. 1988. The importance of a rose: evaluating the cultural significance of plants in Thompson and Lillooet Interior Salish. Rouyal British Columbia Museum. British.
- [8] Turner, N. J., M.B. Ignace. and R. Ignace. 2000. Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. Ecological Applications 10(5), 1275-1287.
- [9] Purnomo. 2012. Tumbuhan kultural dalam prespektif Adat Jawa: kajian aspek filosofi, konservasi, dan pemanfaatan tumbuhan dalam kultur dan tradisi Jawa. University of Brawijaya Press. Malang.
- [10] Statistic Center of Trenggalek Regency. 2016. Statistik daerah Kecamatan Watulimo 2016. Available at: <http://trenggalekkab.bps.go.id>.
- [11] Endraswara, S. 2006. Mistik Kejawen Singkretisme, Simbolisme dan Sufisme. Narasi Publisher. Yogyakarta.
- [12] Putri, W. K. 2016. Ethnobotanical survey of home garden in Pandansari and Sumberejo to support ecotourism program in Bromo Tengger Semeru National Park, Indonesia. International Journal of Research in Agricultural Sciences 2(1), 6-12.
- [13] Hakim, L. 2014. Etnobotani dan manajemen kebun-pekarangan rumah. Selaras Publisher. Malang.
- [14] Ridwan, M., A. Fatchan., and I. K. Astina. 2016. Potensi Objek Wisata Toraja Utara Berbasis Kearifan Lokal Sebagai Sumber Materi Geografi Pariwisata. Jurnal Pendidikan. 1(1) 1-10.
- [15] Soeroso, A., and Y. S. Susilo. 2008. Strategi Konservasi Kebudayaan Lokal Yogyakarta. Jurnal Manajemen Teori dan Terapan I. 1(2), 144-161.
- [16] Fadilah, S., and R. Suprihardjo. 2016. Pengembangan Kawasan Wisata Bahari Kecamatan Watulimo, Kabupaten Trenggalek. Jurnal Teknik ITS. 5(1) C50-C53.

***Maneke* as Local Wisdom in the Community of Small Islands in Sangihe Island Regency, North Sulawesi**

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Abstract

Maneke is one of the local wisdom in Sangihe Islands Regency, inherited from the ancestors of the people of Sangihe. *Maneke* contains the norms and values of life and customs to keep the mutual relationship between humans and nature. This local wisdom, however, has gradually become extinct. The aim of the research was to describe the *Maneke* as a local wisdom in Sangihe Islands. Sangihe Island Regency is one of a cluster of islands located in North Sulawesi province with 150 islands, 26 inhabited and 79 uninhabited islands. There are two islands on the cluster of uninhabited islands located in two Districts in Sangihe. The focus of this research is done on the Batunderang Island in the Sub-district of South Manganitu and Para Island in the District of Tatoareng. This study used a qualitative approach to the design ethnography emphasizes the natural setting to see, learn, express and understand how to observe, and observations with in-depth interviews and conduct focus group discussions with community members, traditional leaders, public figures, figures from religious leaders and members of the implementation group of *Maneke*. *Maneke* is a socio-cultural system that has a socio-cultural elements contained in the components of the superstructure ideology, social structure and infrastructure material. *Maneke* is the component of the superstructure ideology because it has cultural values and norms into view, knowledge, activity and behavior patterns which are actualized in the traditions, customs, rituals beliefs or religion.

Keywords: local knowledge, *Maneke*, marine tourism, Sangihe Island.

INTRODUCTION

Local wisdom has been considered contributes significantly in local development. The existence of local wisdom for a long time causes people able to withstand a variety of environmental problems that happened. In many areas, however, local wisdom has been reported decrease and no longer exists in many communities. In Indonesia, local wisdom widely found and it has been reported contribute to the local community's life. The exploration of Indonesian local wisdom has been done to support sustainable development agendas.

Maneke is one of the local wisdom hold in Sangihe Islands. *Maneke* is passed down from the ancestors of the Sangihe people. It contains norms and values of life and customs to maintain a reciprocal relationship with the environment [1]. *Maneke* are rules which are agreed by the community in Sangihe with provisions regulating the ban to take and the permissibility of citizens in the use of natural resources and environment

within a specified period. The tradition of *Maneke* can be encountered in nearly all North West Nusa, another name of Sangihe Island. It is especially found in the small islands i.e. Bukide, Manipa, Batunderang, Bebalang, Kahakitang and Sitaro Islands.

Several studies have been conducted to see local wisdom *Maneke*, among others, the Sangihe towards public participation and implementation of *Maneke* [1]. Another study mentioned Local Wisdom *Seke* as a system for the results in terms of social and economic and community land rights in the sea of Sangihe Talaud [2]. Meanwhile, other study focused on customary rights and the environmental aspects of the activities of fishermen [3,4]. Research conducted by Akamichi and Mantjoro [5] is viewed in terms utilization and ocean management as well as some fishing gear are in some islands in the Sangihe and Talaud. In general, concepts and paradigms that they use in the studies mentioned above are centered on the notion of customary rights and the environmental aspects of the marine fishing activities.

Nowadays the existence of local wisdom is threatened by alien values which participated in through globalization. Globalization and

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modernization resulted in widespread information that can be accessed from different places and cultures in a society will impact the weakening of local wisdom, the weakening of local culture and social harmony fragility [5,6,7]. The success of the changes in rural communities is due to: (1) a rural community that has a tradition of strong kinship and cooperation so that they can easily share information and knowledge, (2) the rural communities are used to honor the next generation [8,9]. Local knowledge is also endangered because: (1) local knowledge is transferred by word of mouth, through rites and practices directly with the traditional method, while the next generation loss due to transfer media to better understand modern methods; (2) education programs that promote foreign values, science, language and history; (3) health programs that minimize the importance and effectiveness of traditional medicine; and (4) loss of land that separates the community from the environment associated with their knowledge and practices traditional foods [10]. Local knowledge is a heritage for generations that reflected the values of life are fused in the form of religion, culture and customs. It adapt to their environment, managing the environment wisely intangible knowledge, belief, understanding, tools, ethics, norms, customs, values of life, cultural values and activities to meet their needs [4,11,12].

Local knowledge is the legacy of our ancestors in the values of life, which is fused in the form of religion, culture and customs. In the development of a community to adapt the environment, they develop intangible wisdom e.g. knowledge or ideas, tools, combined with traditional norms, cultural values, the activity of managing the environment in order to make ends meet [13]. Indigenous or local genius is the truth that a tradition, which is also a cultural identity as a philosophy, values, ethics, norms, beliefs, customs customary law, special rules and ways of behaving that institutionalized traditionally [14]. Knowledge of local or traditional (indigenous knowledge) is the ecological aspect in the form of a unique knowledge of the system of living and was instrumental on conservation. There is a community and a part of the local culture that does not sacrifice the interests of future generations [7,12,15].

Recently, tourism has been considered as one of the new important economic earning among Sangihe Island dwellers. In such a case, the

contribution of local wisdom is considered important. *Maneke* as part of the culture belongs to social institutions is important in natural resources and the environment resources management, especially for island as tourism destination. Based on the above discussion, this study is aimed to describe the conception of super structure of *Maneke* covering ideology, values and beliefs, social structure and infrastructure-related material of *Maneke* as local wisdom in Sangihe community views in the past.

RESEARCH METHOD

Data Collection

This study was conducted on October 2014 to May 2015. This research was conducted in two rural/island located in the district of South Manganitu namely Batunderang and Tatoareng Island. This study applied designed ethnography, namely close observation where researchers studied a cultural group in a natural setting in a specific time period with the collection of research data through observation. Observation and in-depth interviews were conducted to the members of the public in the study site [16].

Data Processing and Analysis

This research was conducted with a detailed analysis of the background conditions, the person, the subject of activities, as well as the places and events related to the focus of research. This study focused on describing the conception of *Maneke* which includes super structure in the form of ideology, values and beliefs, social structure and infrastructure-related material as local wisdom in Sangihe community views in the past. Selection of key informants and informant conducted by the method of purposive and snowball sampling. In this snowball process, researchers will stop collecting this information from key informants if: (1) according to the researchers the information needed is enough, (2) if there has been a repetition of information by key informants about the same problems. These data include the place, actors, and activities.

The more detail dimensions include: (a) a room or area, based on their physical appearance; (b) the offender, everyone involved in the activities; (c) the activities, what people do in a given situation; (d) object, which is contained in the location of activities, (e) actions, all activities performed by an individual, (f) the event or events, which is a series of activities

carried out by individual people or groups of people, (g) time, which is a sequence of activities, (h) goals, which is something that is expected or will be achieved by the individual based on the meaning of his actions, and feelings, the emotions felt and expressed by someone.

Data and information is obtained from various sources, using multiple data collection techniques (triangulation). Collecting this information from key informants carried out continuously until saturated. The data analysis was also conducted simultaneously with data collection in the field.

RESULT AND DISCUSSION

Sangihe Islands

Sangihe is derived from the word *sangi* which literally is the daughter of heaven and *ihe* is gold. Tahuna domiciled in the capital and the overall number of islands in the archipelago numbering 105 islands with details, 79 uninhabited islands and 26 uninhabited islands. Small islands between Sulawesi and the Philippines inhabited by a group of people called Tribe of *Sangir* (Sangihe) *Talaut*. Sangihe Talaut community leaders said that once the tribe Sangihe Talaut come from some migrant groups into one tribe named Sangihe Talaut.

Sangihe Islands Regency is located between the islands of Sulawesi and Mindanao (Republic of the Philippines). In general, the average air temperature per month was 27.3°C.

History of Maneke

Maneke which comes from the word *Seke* in the local language means *meliwung Sangihe* is an expression commonly used by the local community while going fishing. The other word of *Maneke* is *Meliwung Kina* or fishing, as expressed by *Opolao/Kapitalaung* (village head) of the island. *Maneke* on the island is also called the community with *Kalase*. *Maneke* also means *Mahi Maneke*: let's do and admit. *Maneke* also has social significance as the proverb ancestors of Batunderang namely *Maneke Kina*, *Maneke Taumata* which means that people fishing, or collecting. This was disclosed by *Kapitalaung* (village head) of Batunderang Island.

At the time of *Maneke*, community must admit that to catch scad fish (*Decapterus* sp.) using a tool called fish float or fish gutter is very simple and environmentally friendly. Ingredients and how to make laden with traditions and customs that predate the manufacture must be admitted. According to the elders of Sangihe, the

development of fishing tackle were once only made of palm leaves that spun on a rope from *Seho* tree (palm tree/*Arenga pinata*) and then assembled in such a way to link the two ends above the water and pulled to shore. In these circles, there are a lot of fish that will be distributed throughout the local community. This can be seen in Figure 1.



Figure 1. Reconstruction of *Maneke* in fishing that used in the past. (a) Community gathers for fishing tackle, (b) fish collected with traditional nets from the leaves of palm tree

Seke is a simple fishing equipment and has peculiarities. Said to be strange because only by the size of the 95 cm tall bamboo and approximately 35 m long bamboo (*Pandihe*) and then released in the sea coral at a depth of 8 to 10 m, can catch *Malalugis/gutters/Kite* fish (*Decapterus macrasoma*) and *Dolosi/Tahumang/Lolosi* fish (fish with a yellow tail). Besides using tool, *Maneke* habits that performed before using the tool *Pandihe* is reading of spells to collect or call the fish. Thus the fishing catches a lot of fish and complies with *eha/peliie* and hope for an easier or smooth implementation of *Maneke*. Likewise, the way the distribution of fish, is for the whole community on the island.

The Concept of *Maneke* on Sangihe Community

Different ways of describing various socio-cultural systems has been proposed by

scientists. In this study, the basic components of the socio-cultural system are:

1. ideological superstructure consisting of the ideology of social values and cultural, religious/faith/religion, knowledge and norms
2. The social structure that consists of the presence or absence of social stratification, e.g. the division of labor
3. Infrastructure material consisting of technology, infrastructure, and economy (sharing)

Maneke as Superstructure Ideology

Maneke for Sangihe Community expressed by key informants and sources is seen as the values and norms of social and cultural, ecological and economic. *Maneke* is implemented in a pattern of behavior for a living, socializing, connecting with the community and the natural environment and in belief/faith/religion they believe to compliance with the God Almighty. *Maneke* also seen as a social value and present the sense of togetherness, unity, deliberation and consensus, bear the same problems as a community in order to achieve harmony and prosperity in life together in the community. As said by informants and key informants that *Maneke* is an awareness, and attitudes of their responsibilities, in preserving the ecological value of nature and the environment. *Maneke* give them the knowledge and awareness that the environment is essential to human survival. Therefore, they must take care to preserve and safeguard the environment, and human activities should be accompanied by a sense of responsibility towards nature and the environment, towards fellow human beings and towards the God Almighty.

The key informant said that with *Maneke* many restrictions and rules become the norms in behavior to maintain order, not to damage the environment with excessive resource extraction. Others also said that in *Maneke* many things become *peliiie/eha* which should not be violated and later if breached will result in bad things happening within themselves as well as everyone in the village.

Eha or *peliiie* is Sangihe local wisdom in the form of restrictions/ban or environmental ethics rules for public and Sangihe community. *Eha* is a hereditary habit among the people Sangihe form to pick crops and seafood when it's time to take that done before *Maneke* [1]. In *Maneke* have various rules that must be followed and done so

it will go well and succeeded in catching fish as livelihoods. The rules in the form of prohibition and must be done at the time of making the tool *Maneke* or when fishing or after *Maneke* has been completed. The rules and ways of making *Maneke* tools are includes: (1) choose/lift *tonaseng*, (2) cutting wood (*menuwang kauang*), (3) *Memepi bala/cut ruyung/Nibong*, (4) *Medea Bulo/find bamboo*, (5) *Mengandong Re*: roll or spin the rope of palm, (6) *Meluwu*: cutting and splitting up to whittle rattan, (7) Make *elise* (*mengelise*), (8) *Menemi*: tuck coconut leaves (leaf) on the ropes, (9) Loading into the boat *kengkang* (*mengengkang*), and (10) perform *Maneke* sea fishing.

On the superstructures ideology, *Maneke* passed down by ancestors of Sangihe community hundreds of years ago with its traditions. It is contains the philosophy, values and norms, ethics contained in stages of *Maneke* and how to behave in society in doing *Maneke*, before *Maneke* and after *Maneke* done. These traditions are inherited from the past to the present. Traditions should be passed on and used as a guide in the move and behave in society. This is realized in the society of past Sangihe who look and make conception of *Maneke* as values, norms in all activities of the community in the past. These traditions contain cultural values and beliefs actualized in rituals performed in conjunction with local knowledge *Maneke*, whether it is done before, during or after *Maneke* to enjoy the fruits of success of the *Maneke*. Local wisdom of *Maneke* practice's success lies in the obedience and regularity of the stages in the implementation of which has been reduced during the *Maneke* hereditary. Obedience and adherence to the *eha*, *mapeliie/peliie* as norms, planning *Maneke* carefully until execution will produce a catch as much as expected by the community. Violations and irregularities stages of *Maneke* and the lack of cohesiveness and unity causing the results are not as expected.

Maneke as Social Structure

In the social structure, organization of *Maneke* or *Seke* group as an organization in which people have the motivation and purpose together that enjoy a balanced life without any distinction. The organizational structure of *Maneke* has stratification and division of labor in doing *Maneke* led by *Tonaseng*. *Tonaseng* that being responsible are positioned with the highest status and role in *Maneke* by society and in

everyday life. *Tonaseng* make the decisions related to *Maneke* and the village head (*opo lao*) helps in deciding which should and should not. In *Maneke*, position of *Tonaseng* as a leader and in charge is higher than *opolao* or village head [1,6].

The daily life of Sangihe community in the past, looked and sat *Tonaseng*, indigenous elders, traditional leaders in high-status positions in the community. The highest stratification of society occupied by *Tonaseng* (the leader of *Maneke*) must lead the group and their activity in the form of *Maneke*. The group consists of leaders and members of the board who have each task in preparing, implement and sharing the *Maneke*. As proposed by key informants and informant that *Tonaseng* is highly respected and get a high position in the community because of its supernatural powers and authority in leading the community earn a living in *Maneke*.

Tonaseng is the designation for maneke leader who has the task to collect or gather, organize and plan ways to manufacture and regulate fishing techniques, gave the command in *Maneke*, using the tool, and divide the result *Maneke*. *Tonaseng karuane* or assistant of *Tonaseng* help *Tonaseng* and set *lekdeng* or member of *Maneke* in duty at the time and in the preparations before *Maneke*. *Tonaseng* assistant is also has knowledge of the sea and supernatural knowledge. A secretary called *Mindoreng* are also responsible for the distribution of the fish (Fig. 2).

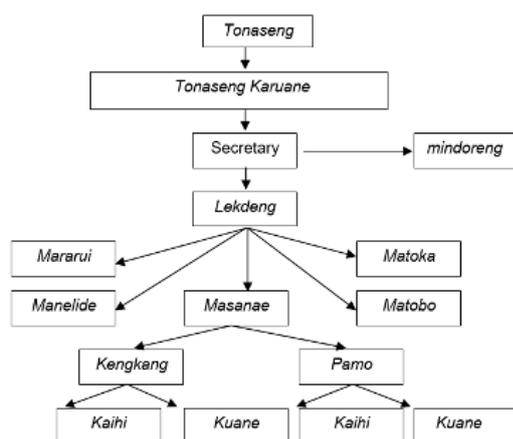


Figure 2. The Organizational Structure of *Maneke/Seke*

Secretary (also called *Mindoreng*, the person who shared the fish) and treasurer along with several members will count the catch, and a *Mindoreng* will command the division in several (four to five) members are in charge of distributing the fish to the relevant after the distribution is calculated. *Lekdeng* is *Maneke*

members consisting of young and strong people by using *kengkang* boat with *pandihe* and ropes to pull *pandihe* as well as in the *pamo* boat. *Lekdeng* have served on the *kengkang* boat, on left (*kaihi*) and right (*kuane*), as well as at the *pamo* boat. Then there *Mararui* that will observe on the fish and fish flock position if it is at a location where *pandihe* be reduced or will get to that location. The organizational structure of *Maneke* can be seen in Figure 2.

Maneke as Material Infrastructure

Tool equipment and technology of *Maneke* appliance consists of *pandihe*, *elise* and *tuwo*, assembled from materials that are environmentally friendly and have ecological values as well as in the release at the time of *Maneke*. It have philosophy and become a tradition, heritage from ancestors filled with noble values and norms that maintain the relationship between humans and the nature, human beings with each other and with the human creator. Manufacture of this equipment has a rule that has been patterned customary namely *Pandihe*. The right wing is all the leaf blade to the right, and left wing is all the leaf blade to the left of palm tree or leaf of young coconut plants (*Cocos nucifera*).

Piercing or *menebi* was last job as a sign that *Pandihe* has been created then held feasts *salimbangu sehide* (feast of thanks together) as a thanksgiving for *Maneke* equipment has been completed. The benefits of the leaf inserted on the bottom and top of the *Pandihe* is to keep the fish in it. Complete equipment *Maneke* consists of 1) *Pandihe* (*kauang*, *bawalira*, *bulohoro*, *sasehide*, *laelisang*, *tuwo elise*, *talontong*, *ue/une*, *daluvo*, *saleni*), 2) *Elise*, and 3) the boat consists of *pamo* and *kengkang*. Figure 3 is the *Maneke* tool.

Maneke in Batunderang and Para Island conducted twice in a day in the morning (dawn) at 04:30 am and in the afternoon at 17.30 pm and the tool will be placed at a depth of 10-20 m. *Maneke* facilities and infrastructure such as transport by using boats that are not machine-powered thus not pollute the environment and rowed so it does not interfere with nature and the environment. Location or point of *Maneke* which where the tool is released discussed in advance and carried out in rotation with its rules obeyed by all groups of *Maneke*. Violation of this will get sanctions.



Figure 3. Tools for *Maneke*. a) used tools of *Maneke* and b) freshly made tools of *Maneke*

Explanation of a *Tonaseng* mentioned that to go *Maneke*, they put on five to six boats. One boat called *pamo* boat (type of boat) we also use one or two *kengkang* boats (canoe boat-size) and three *londe* boats (small outrigger canoe). *Pamo* boat use to accommodate the fish. *Kengkang* boat and *londe* boat is for the *pandihe* and used by fishermen who served as *metelide* or bamboo rod holders (telide) in each end of *pandihe*. In addition to being the major reservoir of the catch, *pamo* boats also serves as a command boat because therein the *Tonaseng* located. *Tonaseng karuane* or assistant of *Tonaseng* were on the *kengkang* boat that brought the *pandihe*. Sometimes *Patoka* loaded on the *kengkang* boat or also in the *pamo* boat. There are fishermen who served as *mamatoka* or position that held the bag of fish at the end of *pandihe*.

In the distribution of results, *maneke* have social values, solidarity, mutual help for the welfare and survival of one another, as reflected in division. It results *Maneke* prioritizing social value of the economy. Results of *Maneke* will be distributed to all the people who are live in the island, although the group that conducted the *Maneke* consists only of several members of the village. The locations of the *Maneke* were rotated in several hamlets, but the *Maneke* still done by only one group.

The first distribution of the catch is given to the orphans, the elderly and people with disability. After the first distribution is completed, it was given to widows, widowers, community leaders, traditional leaders, religious leaders, teachers, nurses and the public. Then the last will be distributed to members of *Maneke*, *Tonaseng* and administrators groups/ organizations of *Maneke* as described earlier.

According the explanation on the catch distribution, local knowledge of *Maneke* has a

sublime value in arranging the life together for the various aspects of the social, cultural and economic as well as ecological aspect.

Implication for Tourism Development in Small Islands

The local wisdom is important in tourism destination management. It is especially important as an instrument to implement sustainable tourism practices. Indigenous knowledge and local wisdom has been indentified contributes to numerous aspect to increase destination sustainability and competitiveness. In Bali, it is observed that local wisdom contributes to the cultural landscape preservation, which is important in tourism industry. Local knowledge also contribute to the flora conservation along tourism corridor, and therefore increase scenic beauty of tourism corridors [17]. Local wisdom also contributes to the tourism governance observed in coastal tourism development in south Malang Regency.

Sangihe Island has opportunities in tourism development. The geographic position of Sangihe in North Sulawesi provides opportunities for ecotourism development, with Bunaken as a magnet for tourism development [18]. *Maneke* provides many positive aspect for the future tourism planning and development in Sangihe. *Maneke* able to be promotd as a cultural attraction, in which it has potential value to be presented to the visitors. The recreational use of environmental resources requires the provision of community with its local wisdom. These will ensure the sustainability of tourism practices.

Marine should be considered as important resources in tourism development. Water area are subject to various recreation activity, and therefore it is important to protect water environment from numerous potential threats.

The local wisdom actually not only contribute to the protection, but also serve the potential cultural attraction for visitors. This makes *Maneke* extremely suitable for tourism development.

CONCLUSION

Maneke is a socio-cultural system that has a socio-cultural elements contained in the components of the superstructure ideology, social structure and infrastructure material. *Maneke* is the component of the superstructure ideology because it is has cultural values and norms into view, knowledge, activity and behaviour patterns. These are actualized in the traditions, customs, rituals of beliefs/religion, rules existing at the time of preparation, practices and after *Maneke*. Necessity and prohibition/taboo also exist in *Eha/pellie/telling* to maintain the relationship between man and his creator, the human and the natural environment and human beings with each other.

Maneke is a component of the social structure in a socio-cultural system that has elements of social stratification and division of labour. It is actualized in the structure of the organization or group structure of *Maneke/Seke*. Local wisdom *Maneke* as an infrastructure component material is an equipment and technology as well as the people's livelihood in the economic system that materialized in equipment of *Maneke*. Activity of the community who live and work in the small islands in the Sangihe Islands Regency in fishing exclusively hereditary derived from a common ancestor of Sangihe community. *Maneke* have socio-cultural nature or socio-religious uniqueness and rich in wisdom.

Maneke has potential to be developed as tourism attraction. The main problems related to the involvement of *Maneke* in tourism programs is the limitation skill of human resources in tourism development. It is especially common in developing countries. In such a case, important program are increasing human resources development. There are urgency needed for social and cultural empowerment. It is especially required to continue the local wisdom of the community in Sangihe. Tourism is the new stimuli to *Maneke* preservation.

REFERENCES

[1] Tambas, J. 2001. Public participation in environmental conservation through

- Maneke* on small islands in District of South Manganitu, Sangihe Talaud. Master Thesis. Sam Ratulangi University. Manado.
- [2] Wahyono, A., Sudiyono, F. I. Tufail. 1993. Social and cultural aspects of maritime society, Eastern Indonesia. Sea Land Rights Village of Para, District Manganitu, Sangihe Talaud. Research Series PMB / LIPI 4/1993.
- [3] Adhuri, D. S. 1993. Sea land rights and community dynamics fishermen in eastern Indonesia: a case study in Bebalang Island, Village of Sathean and Demta. Magazines Social Sciences Indonesia 20(1), 143-163.
- [4] Wahyono, A. 1993. Changes flocking awareness at fishermen trawl (Purse Seine) in Sangihe and Talaud, North Sulawesi. Magazines Social Sciences Indonesia 20(1), 61-73.
- [5] Akamichi and Mantjoro. 1996. Sea Tenur and transformation in The Sangihe Islands of North Sulawesi, Indonesia: The Seke Purse-Seine Fishery. Senri Ethnological Studies 42.
- [6] Sartini. 2004. Digging local wisdom. Journal of Philosophy 37(2), 111-120.
- [7] Mufid. 2010. Ethics and philosophy of communication. Kencana Prenada Media Group. Jakarta.
- [8] Saharuddin. 2009. Empowerment of the poor based on local wisdom. Sodality: Transdisciplinary Journal of Sociology, Communication and Human Ecology 3(1), 17-44.
- [9] Brookfield, H. 2008. Family farms are still around: time to invert the old agrarian question. Geography Compass 2, 108-126.
- [10] Bernstein, H. 2013. Commercial agriculture in South Africa since 1994: natural, simply capitalism. Journal of Agrarian Change 13(1), 23-46.
- [11] Tobin, B. 2004. Towards an international regime for protection of traditional knowledge: Reflections on the role of intellectual property rights. Paper presented at the Bioethical Issues of Intellectual Property in Biotechnology Conference, Tokyo, Japan. Available at: <http://ipgenethics.group.shef.ac.uk/conference/papers/Tobin.pdf>
- [12] Keraf, S. 2006. Environmental ethics. Compass. Jakarta.
- [13] Akhmar, A. M. and Syarifuddin. 2007. Revealing indigenous South Sulawesi. Regional PPLH (Environmental Research

- Center) Sulawesi, Maluku and Papua. Ministry of Environment Indonesia.
- [14] Hadiwijoyo, H. 1980. Series history of western philosophy 2. Canisius. Yogyakarta.
- [15] Berkes, F., J. Colding and C. Folke. 2000. Rediscovery of traditional ecological knowledge as adaptive management. *Ecological Applications* 10(5), 1251-1262.
- [16] Creswell, J. W. 2010. Research design, approach qualitative, quantitative, and mixed. Student Library. Yogyakarta.
- [17] Hakim, L., J. E. Kim and S. K. Hong. 2009. Cultural landscape and ecotourism in Bali Island, Indonesia. *Journal of Ecology and Environment* 32(1), 1-8.
- [18] Newman, C. M., E. LeDrew. 2005. Towards community-and scientific-based information integration in marine resource management in Indonesia: Bunaken National Park case study. *Environments- A Journal of Interdisciplinary Studies* 33(1), 5-24.

MANUSCRIPT SUBMISSION

FOCUS AND SCOPE

Competitiveness of destinations, products and Indonesian tourism business; Diversification of tourism products; Incentive system of business and investment in tourism; Information, promotion and communication in tourism; Tourism supporting infrastructure; Security and convenience in tourism; Tourism policy; Unique tourism community life (living culture); Local knowledge, traditions, and cultural diversity; Diversity and attractions in ecotourism; Diversity of natural attractions in ecotourism; Pluralistic diversity of ecotourism society; Diversity of ecotourism activities; Hospitality of the local resident; The quality of tourism services; Quality of HR in tourism (Standard, accreditation and competence certification); The market share of tourism and integrated marketing system; Package of tourism attraction; Development of tourism regions; Community based Eco-Tourism.

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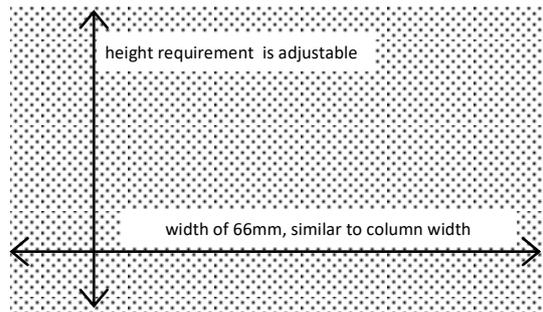


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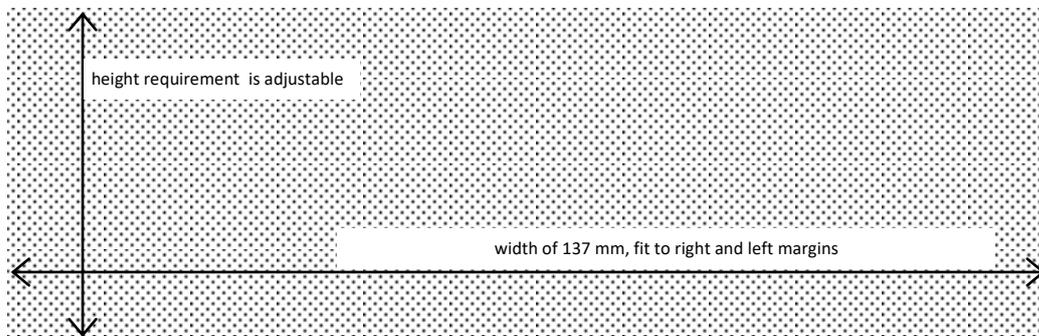


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- [4].Syafi'i, M., Hakim, L., dan Yanuwiyadi, B. 2010. Potential Analysis of Indigenous Knowledge (IK) in Ngadas Village as Tourism Attraction. pp. 217-234. In: Widodo, Y. Noviantari (eds.) Proceed-ing *Basic Science National Seminar 7* Vol.4. Universitas Brawijaya, Malang. (Article within conference proceeding)
- [5].Dean, R.G. 1990. Freak waves: A possible explanation. p. 1-65. In Torum, A., O.T. Gudmestad (eds). Water wave kinetics. CRC Press. New York. (Chapter in a Book)
- [6].Astuti, A.M. 2008. The Effect of Water Fraction of *Stellaria* sp. on the Content of TNF- α in Mice (*Mus musculus* BALB-C). Thesis. Department of Biology. University of Brawijaya. Malang. (Thesis)

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- [1].(Calibri 10 Justify, citation labelling by references numbering)
- [2].Vander, A., J. Sherman., D. Luciano. 2001. Human Physiology: The Mecanisms of Body Function. McGraw-Hill Higher Education. New York. (Book)
- [3].Shi, Z., M. Rifa'i, Y. Lee, K. Isobe, H. Suzuki. 2007. Importance of CD80/CD86-CD28 interaction in the recognition of target cells by CD8⁺CD122⁺ regulatory T cells. *Journal Immunology*. 124. 1:121-128. (Article in Journal)

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