ANALYSIS OF ECOTOURISM DEVELOPMENT OF SEMBILANGAN BEACH: CHARACTERS, FACTORS, AND CHALLENGES

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ABSTRACT

Sembilangan beach in Bangkalan, East Java Province, Indonesia, is one of the potential and growing areas for ecotourism. This beach has several aspects of ecotourism development that has not been professionally managed to achieve ecotourism goals. The purpose of this study is to analyze the factors supporting the process of ecotourism development in Sembilangan beach, both in terms of visitors and the community. This knowledge is useful to support the strategic steps to accelerate its development. This research was conducted at Sembilangan beach, Bangkalan, East Java Province. Topics or the independent variables are explored related to the perception of tourists, culture, environmental conditions, community participation, economic conditions, and institutions. Data of the respondents are grouped according to their status: visitors and community. Simultaneous and Partial Test is used to understand the correlation. Environmental, economic and institutional factors have a simultaneous influence on community participation in the development of ecotourism. Environmental conditions partially have the greatest influence on community participation in the development of ecotourism Sembilangan beach.

Keywords: ecotourism development, beach, visitors, community, characters, factors, challenges.

INTRODUCTION

The tourism industry is one of the sustainable movements that has many strategic functions, including economic development, social empowerment, and conservation (Peraturan Pemerintah No. 50, 2011; Permendagri No. 33, 2009). The power of the tourism industry to drive the development of international economy can not be underestimated. Approximately, 10% of total worldwide's GDP is contributed by this industrial sector (Hirotsune, 2011). The development countries, especially tropical countries such as South America and Southeast Asia has been benefited from the tourism business. This has a positive impact, tourism has supported 9-10% of total national GDP, which indicates apositive impact of tourism growth. The potential of

Indonesian domestic tourists reaches 250 million trips, with total expenditureof USD 3.6 million (Ministry of Tourism, 2014). In addition, foreign tourist arrivals in 2015 reached 9.73 million visits and generated USD 11.1 billion (CBS, 2016). The number of tourists from ASEAN countries reaches 40% of total foreign tourists, with Malaysia and Singapore contributing 1.49 and 1.74 million tourists/year respectively (Zengeni and Zengeni, 2012). However, since 1990, the ecotourism development in Indonesia is considered very slow and its products very limited in number and inovation. This evidence is due to the lack of guidance on ecotourism and the absence of serious policy from the stakeholders (Triutami, 2009), which are very contrary to nature potential and cultural attractions. Indonesia has 18 of the world's 200 ecosystems and 10% of the world's flowering plant species. In addition to the high level of diversity, Indonesia's geological and geographic conditions also have a uniqueness to explore (Nugroho, 2011; Butarbutar and Soemarno, 2013).

Sembilangan beach in Bangkalan, East Java Province, Indonesia, is one of the potential and growing areas for ecotourism. This beach has several aspects of ecotourism development, including biodiversity and beautiful scenery (Alison, 2015), but has not been professionally managed to achieve ecotourism goals. The purpose of this study is to analyze the factors supporting the process of ecotourism development in Sembilangan beach, both in terms of visitors and the community. This knowledge is useful to support the strategic steps to accelerate its development.

METHODS

Study Site

This research was conducted on October, 2-5th 2017 at Sembilangan beach, Bangkalan, Madura. Sembilangan beach is located about 10 km south from Bangkalan city (Figure 1). This beach has beautiful scenery and a mangrove area that has great potentiality to be developed as a conservation area and a natural observation path. In addition, Sembilangan beach has a traditional fishing port and shipyard. There is a heritage lighthouse (*mercusuar*) of the Dutch colonial period, which has the potential as a historical tourist attraction.

During this time, visitors come incidentally. There is no ticket withdrawals from the local government. Local communities separately coordinate paid parking locations. Daily visits reach 30-50 people and increase to about 100 people on weekends.



Figure 1
Study Location on Sembilangan Beach.
Key: 1. Harbour, 2. Mangrove Area, 3. Beach, 4. Lighthouse.

Data Collection and Analysis

We used questionnaires with the sample of respondents determined purposively (n=32) (Usman, 2012). Topics or the independent variables are explored related to the perception of tourists about :1. environmental conditions; 2. organizational institutions; and 3.economic conditions. We also used semi-stuctured inteview with local's culture and community participation topics to understand the communities roles in developing sustainable tourism The likert scale is used as the reference value in the questionnaire, the ranges are from very negative to very positive (scale 1-4). To know the influence of independent variable, we used Linear Regression Analysis. Data of the respondents are grouped according to their status: visitors and the Sambilangan beach's community, which can be used to understand the perceptionof tourists and also the participation of the community. We used Simultaneous and Partial Test to understand the correlation between them. The statistical test was performed by SPSS ver 16.0 software.

DISCUSSION

Visitor Perception

Sig value (0.177)> α value (0.05), so H₀ is accepted on simultaneous test (Table 1). This shows that together all the variables have no effect on perception. In addition, also can be concluded that the correlation coefficient 0.177 can not be used as a conclusion in the relationship between the perception of visitors to the development of Sembilangan beach as an ecotourism area. In detail, it can be stated that simultaneously there is no positive relationship between the perception of society with environmental, economic and institutional conditions to the development of Sembilangan beach as an ecotourism area.

Table 1.
Simultaneous Test of Visitor Perception

Model	Sum of	Df	Mean	F	Sig
Regression	Squares 18.116	3	Square 6.039	1.763	.177 ^b
Residual	95.884	28	3.424		
Total	114.000	31			

Information: a. Dependent Variable: Perception. b. Predictors: (Constant), Institutional, Environmental Conditions, Economics.

By the result of the partial test, it is known that environmental conditions indicate the significance value (0.000) <value α (0.05) (table 2). Therefore, it can be stated that environmental conditions have the greatest influence on visitor perception among two other variables. Through a development model, that is, if the environmental conditions (EC) are formulated by equation = 10.729 + 0.302 EC + e. This equation shows that if an increase of EC by one unit, it will increase the visitor perception of 0.302 units.

Table 2.
Partial Test of Visitor

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		_
(Constant)	10.729	1.458		7.358	.000
Enviromental Condition	.302	.143	.375	2.113	.044

Economics	244	.252	174	970	.340
Institutional	166	.240	125	692	.494

Society Participation

Based on Table 3, it can be known that the significance value $(0.000) < \alpha$ value (0.05). This shows that environmental, economic and institutional factors have a simultaneous influence on community participation in the development of Sambilangan beach ecotourism.

Table 3.

Results of Simultaneous Community Participation Test

Model	Sum of Squares	Df	Mean Square	F	Sig
Regresion	462.982	3	154.327	82.280	.000 ^b
Residue	52.518	28	1.826		
Total	515.500	31			

Information: a. Dependent Variable: Participation. b. Predictors (Constant), Institutional, Environmental Conditions, Economics

The environmental condition factor shows the significance value $(0.000)<\alpha$ value (0.05) (Table 4). Therefore, environmental conditions partially have the greatest influence on community participation in the development of ecotourism Sembilangan beach. Seen through a development model, that is the formula of the equation = 1.611 EC + e, so that known that an increase of environmental conditions will also increase the participation of the community at 1,611 units.

Table 4.
Partial Community Participation Test Results

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Model	Unstandardized		Standardized			
	Coefficients		Coefficients			
	В	Std.Error	Beta	Т	Sig	
(Constant)	.339	1.079		.314	.756	
Environmental Condition	1.611	.106	.941	15.230	.000	
Economics	.183	.186	.062	.984	.334	
Institution	084	.178	030	474	.639	

Information: a. Dependent Variable: Participation

Environmental conditions in which the most influential factor on community participation, supported by natural assets owned by Sembilahan beach: white sand, calm ocean's wave, a historical lighthouse, and the existence of mangroves (see plate 1). People's desire to develop ecotourism is evident by their understanding of the

importance of maintaining this natural asset. One of the activities that is empowered independently is clean the beach, planting and caring mangrove plants. However, the presence of tourists has an impact on the local management. It is very important to educate the tourists by the managers, in this case is doing by the community, to support the sustainability the ecotourism of Sembilahan beach.







Plate 1
A. Landscape of Sembilangan Beach in the Afternoon; B. Mangrove Communities;
C. A Lighthouse since Dutch Colonial Government Era (1878).

The perception to a tourism object affects the sustainability of a tourism site. If the perception of tourists to the quality of the tourism object's attraction is low, which can be interpreted as the emergence of dissatisfaction, it will not experienced as repeated visits (Nisa *et al.*, 2014). Visitor's perception is influenced by the variations of tourism's attractions that exist in an object. A scope of positive choice will strengthen the sustainability of tourism consumption (Budeanu, 2007). Sustainability is a superior goal in the tourism industry. The main support from government and regional cooperation between countries will result as a sustainable tourism (Aal, 2014). However, the concept of sustainable tourism is not well understood by tourists. It requires a hard work to educate to the tourists about this concept (Symañska, 2013).

However, the absence of any significant influence from all three factors tested, including environmental factors, is a description of Sembilangan beach which is more

attractive to the the visitors. This has an impact on their lack of sufficient knowledge on topics relevant to observational factors. Visitors who come repeatedly is an indication that there is a 'great interest' of a tourist attraction. Objectively, tourist attractions have been able to be the destination that can serve various tourism needs and supporting facilities (Vetitnev *et al.*, 2013). Satisfaction of tourist destinations will bring loyal tourists. Yoon and Uysal (2005) demonstrated that tourist satisfaction is influenced by the "attraction motivation" inspired by the destination infrastructure, when the "driving motivation", which together with the drivers of tourism, feelings, and instincts, directly affects loyalty to destruction. In addition, there is an indication of the linkage between promotion and repeat visitors, where the medium of inter-community conversation becomes one of the good promotional media (Stange *et al.*, 2002).

In addition, the very small interest of the community in developing the promotion and development of ecotourism becomes a picture of the lack of existence of community organizations that can manage ecotourism development. This underlies the small influences of community participation and the economy. In fact, the coastal community of Sembilangan has a strong foundation in building an ecotourism organization.

The social condition of society work (*gotong royong*) and social discussion (*musyawarah*) to solve a problem has made the community participate in several development and management activities, such as cleaning beach activities, planting, and also caring for mangrove collectively. People also understand the economical benefits of the tourist's visit in Sembilangan beach. There is an increase of communities income through food or beverage sales to the tourists at the coastal area. However, the management process in Sembilangan beach is still partially based, whether individual or in small group, it is considercan be optimized through a structured institution. Therefore, institutional factors are considered have effects on community participation in development through cooperation between the government, the private sector and the community.

The concept of traditional Indonesian values, such as *gotong royong* and *musyawarah*, is an important part of human life because it affects all aspects of human life (Rokeach, 1973). Traditional values in society create a guide to life (Schwartz, 1999) and answers to both basic and universal questions (Zhou, 2011). However, the threat of modernization and globalization can have an impact on Indonesia's traditional conditions (Sihombing, 2013).

Community participation refers to a question of how these communities have an influence in managing the existing resources (Sudana, 2013). Ecotourism, as an important component in the sustainability industry, has a close relationship between human existence and the environment that exists in their living space. The integrity and sustainability of an experience, learning, and tourist visit to nature, landscape, flora, fauna, and the culture within, must be carefully planned and managed. Village-based management, including local participation, allowing benefits to occur, compared to the disadvantages of non-ecotourism management activities that are less sustainable. Ecotourism, natural resources, cultural heritage, village life in Sembilang beach, is an integrated tourism within the scope of local economic activity type (Kiper, 2013).

A kind of participation, not just to achieve a success and efficiency of management, rather kind of knowledge sharing and transformation of the learning process itself as well as the service of human resource development (Okazaki, 2008). In the case of ecotourism development of Sembilangan, education on the importance of environmental conditions as the main asset is not only emphasized to the community, but also to the visitors. The local management approach, in this case is the society, towards sustainability education, will be more efficient and easy to achieve its goals. It is less efficient when it occurs to the development (Timothy, 2007).

The presence of community participation in the form of organization will give way to the maximum profitability of ecotourism. During this time, the lack of initiation of economic factors at Sembilangan beach is a description of the small income generated by food and parking. The presence of eco-tourism developer organizations will bring merchants into a cooperative or association that can minimize competition, facilitate the distribution of goods, sales and increase the selling price (Mensah and Ernest, 2013). In addition, education conducted to the community and visitors can provide hope for a sustainable ecotourism process, so that the investment value invested in the area of Sembilangan Beach is not shrinking and can continue to grow.

However, the presence of ecotourism must really experience the perception test and the proper formulation of the strategy. The general consensus of the researchers concludes that the economic benefits of ecotourism appear more problematic, as people are less interested in the development process and are reluctant to change with old income practices (Theophile, 1995). Ecotourism development requires an in-depth study of each specific case, both in the form of

tourism, its application, and the communities it contains. Ecotourism development that has been built in the Galapagos archipelago provides enormous economic benefits, but research shows that the relationship between tourism and the local economy brings about income and demographic impacts (Taylor, 2002). Future research is expected to lead to perception of local governments in managing Sembilangan beach into an ecotourism that has a national competences.

CONCLUSION

Simultaneously, the three factors, environmental, social, and institutional, do not affect visitor perceptions. Partially, environmental factors have the greatest effect on visitor perception compared to other factors. Analysis on community participation shows the simultaneous influence of environmental, social, and institutional factors on community participation. Partially, environmental conditions become the main influence of community participation in the development of ecotourism in Sembilangan beach.

REFERENCES

- Aall, Carlo. 2014. "Sustainable Tourism in Practice: Promoting or Preverting the Quest for a Sustainable Development", *Journal of Sustainability*, (6): 2562-2583.
- Alison, M. Firman. 2015. "Analisa Potensi Sumber Daya Alam Pesisir Pantai Sembilangan Kabupaten Bangkalan sebagai Pantai Wisata", unpublished thesis. Faculty of Sea Technology, Sepuluh November Institute, Surabaya.
- Budeanu, Adriana. 2007. "Sustainable Touris Behaviour A Discussion of Opportunities for Change", *International Journal of Consumer Studies*, 31.499-508.
- Butarbutar, Regina and Soemarno. 2013. "Environmental Effects of Ecotourism in Indonesia", *Journal of Indonesian Tourism and Development Studies*, 1.3.97-107.
- CBS (Central Bureau of Statistics). 2016. "Indonesia Statistic Table". CBS, Jakarta. [online] http://bps.go.id/. Date accessed: 15 march 2016.
- Hirotsune, Kimura. 2011. "Tourism, Sustainable Tourism and Ecotourism in Developing Countries", paper for ANDA International Conference, Nagoya.
- Kiper, Tuğba. 2013. "Advances in Landscape Architecture", in tech. http://creativecommons.org/licenses/by/3.0. Date accessed: 15 october, 2017.
- Mensah, Ishmael and Ernest, Adofo. 2013. "Community Participation in Ecotourism: The Case of Bobiri Forest Reserve and Butterfly Sanctuary in Ashanti, Region of Ghana", *American Journal of Tourism Management*, 2.1A.34-42

- Ministry of Tourism. 2014. "Statistical Profile of Domestic Tourist", Center of Data and Information, Ministry of Tourism. Jakarta, 114p.
- Nisa, Khairun; Fauzi, Hamdani; and Abrani. 2014. "Persepsi Wisatawan dan Masyarakat Terhadap Wisata Alam di Areal Hutan Pendidikan Unlam Mandiangin, Kalimantan Selatan", *Jurnal Hutan Tropis*, 2.2.121-126.
- Nugroho, Iwan. 2011. *Ekowisata dan Pembangunan Berkelanjutan*. Yogyakarta: Pustaka Pelajar.
- Okazaki, Etsuko. 2008. "A Community-Based Tourism Model: Its Conception and Use", *Journal of Sustainable tourism*, 16.5.511-529.
- Peraturan Pemerintah No. 50 Tahun 2011 tentang Rencana Induk Pembangunan Kepariwisataan Nasional Tahun 2010-2025". [online] http://bphn.go.id. Date accessed: 15 october 2017.
- Permendagri No. 33. 2009. "Pedoman Pengembangan Ekowisata di Daerah. [online] http://kemendagri.go.id. Date accessed: 15 october 2017.
- Rokeach, M. 1973. The Nature of Human Values. New York: Free Press.
- Schwartz, S. H. 1999. "A Theory of Cultural Values and Some Implications for Work", Applied Psychology: an International Review, 48.1.23-47.
- Sihombing, Sabrina O. 2013. "Idetifying Changing in Indonesian Values and its Impact to Indonesian Consumer Behaviour", *The Internet Journal Languange, Culture, and Society*, 36.101-109.
- Stange, Jennifer; Brown, David; and International, Solimar. 2002. *Tourism destination Management: Achieving Sustainable and Competitive Results*. Washington: International Institute for Tourism Studies.
- Sudana, I Putu. 2013. "Strategi Pengembangan Desa Wisata Ekologis di Desa Belimbing, Kecamatan Pupuan Kabupaten Tabanan", *Jurnal Analisis Pariwisata*, 13.1.11.
- Symañska, Elžbieta. 2013. "Implementation of Sustainable Tourism Concept by The Tourists Visiting National Parks", *Journal of Environmental and Tourism Analyses*. 1 (1):64-79.
- Taylor, J. Edward; Yunez-naude, Antonio; Dyer, Geroge A.; Stewart, Micki; and Ardila, Sergio. 2002. "The Economics of Eco-tourism": A Galapagos Island Economywide Perspective", *Environment and Development Economics*. 14.2.139-162.
- Theophille, K. 1995. "The Forest as a Business: Is Ecotourism the Answer?", *Journal of Forestry*, 93.25-27.
- Timothy, D.J. 2007. "Empowerment and Stakeholder Participation in Tourism Destination Communities", in A. Church and T. Coles (eds) *Tourism, Power and Space* (pp. 199–216). London and New York: Routledge.
- Triutami, H.W. 2009. "Keterlibatan Warga Pulau Pramuka dalam Usaha Ekowisata di Kepulauan Seribu", unpublished S-1 thesis, Faculty of Human Ecology, Institut Pertanian Bogor.
- Usman, Husaini and Akbar, Purnomo Setiady. 2012. *Pengantar Statistika*. Jakarta: Bumi Aksara.

- Vetitnev, Alezandr; Romanova, Galina; Matushenko, Natalia; and Kvetenadze, Ekaterina. 2013. "Factors Affecting Domestic Tourists' Destination Satisfacation: The Case of Russia Resorts", *World Applied Sciences Journal*, 22.8.1162-1173.
- Yoon, Y. and Uysal, M. 2005. "An Examination of the Effects of Motivation and Satisfaction on Destination Loyalty: A Structural Model", *Tourism Management*, 26.1.45-56.
- Zengeni, N. and Zengeni, D. M. F. 2012. "Visa Regime Policy and Tourism Recovery and Development in Zimbabwe", *International Journal of Development and Sustainability*, 1(3): 1008-1025.
- Zhou, X., Qing, Y., Ling-Nan, H., and Shang-Qing, C. 2011. "Cultural Value as a Form of Currency", *Advances in Psychological Science*, 19.2.143-158.