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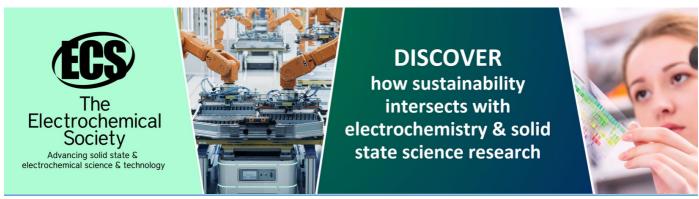
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# Potential Demand of Relatively New and Emerging Marine Ecotourism in Kei Islands

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Abstract. One of the main resources for the economic development of coastal are marine ecotourism. Although for developing country such as Indonesia and especially for an area that located far from a big city like Kei Islands in Maluku, development of marine ecotourism might face a greater challenge than any other places. Considering the potential for multiplier effect on economic of a coastal community, the purpose of this research was to analyze and measure the economic value of new, raw and emerging marine ecotourism spot and determine the demand based on domestic tourist perspective. We pick five new and emerging marine ecotourism spots in this area as case study and used purposive sampling technique to target potential domestic tourist who have visited those five marine ecotourism spots and measure their preference and measure their demand potential by used willingness to revisit (WTR) and logistic regression for analyze the data, this research conducted in Kei Islands, Indonesia. This result can provide broad and comprehensive perspective on developing marine ecotourism in a mildly isolated coastal area like Kei Islands and place similar.

#### 1. Introduction

Ecotourism is a tourism concept that involves the implementation of cultural and environmental factors are utilized with the aim of boosting the economy of surrounding communities [1]. A developing country that has the potential of natural sightseeing is more likely to look at the eco-tourism sector as an alternative source of income and at the same time enhancing the development of the economic potential of rural communities [2]. Thus for the archipelago region with less consistency on revenue can take this opportunity to utilize natural potential they possessed to increase region revenue.

The Kei islands astronomically extend from the ordinates  $5^{0}$  -  $6^{0}$  south latitude and  $131^{0}$  -  $133.5^{0}$  East Longitude and geographically, the Kei Islands have borders of the territory: the north is bordered by the Banda Sea and Papua, the south by the Arafura Sea, East with Aru Regency and the west by the Banda Sea. As archipelagic region, Kei Islands, seems to isolated from big cities one of the clear indictor related this argument is the cost of flight from either Jakarta or Bali to Kei Islands is more expensive than cost of flight from Jakarta or Bali to other countries in Southeast Asia Region, makes its extremely hard for local government in this matter to attract foreign and domestic tourist to visit Kei Islands especially domestic visitors. Based on data from tourism board of Southeast Maluku regency in 2015 there are 17 tourism spots in Southeast Maluku with 2 tourism spots in Tual City makes there are 19 identify marine ecotourism spots in Kei Islands.

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Marine ecotourism spot in Kei Islands has been covered few times by national TV and the story been picked up international tourism website but it has relatively low impact on the number of visitors from outside the region and given the location of Kei Islands are far from big cities in the country makes high travel expenses is also become an inhibiting factor in the development of nature-based tourism sector especially to attract foreign visitors. Social media has drastically changed the conventional promotion system where social media provides access to customer or potential customer to interact with potential customers [3] though the real impact of social media on a product will depend on the characteristics products and markets [4]. Its widely known that promoting through social media can influence customer behavior [5] which in the tourism sector where getting many positive reviews on social media, magazine, also promotions on TV it will have a positive influence on perceived value and the level of consumer attachment to the tourist sites.

Enjoying the natural view may provide intangible benefits for the visitors, though basically, it has no real value in the sense that there is no basic standard for assessing the price of the sights of the natural-based tourism in the world [6]. Some studies using the willingness to pay (WTP) for measuring the economic value of tourist sites, such as the research conducted by [7] used to measure the WTP visitor perceptions on the value of money they wish to spend in maintaining the beauty and preservation of S. Georges Bay beach in Malta; [8] use the WTP to measure the economic value of the National Marine Park of Zakynthos in Greece coastal region then [9] use the WTP to measure the monetary value of the desire of visitors to preserve the beach in Croatia. Customer who have positive value in product and service that their experienced will increase the chance of them to convert their behaviour financially [10] because perceived value is related to a feeling that can be urge into visible behaviour, regarding to their intention to but a product and service, the more positive feeling they have then will increase their purchase intention where income as control variable.

In order to increase the willingness of the local community to pay to enjoy ecotourism spots in this region, then one factor to consider is the support infrastructure of the tourist spots in the region, which is related to an effort to increase of perceived value of the tourist because according to research conducted by [11-13] that better improvement on spot infrastructure includes transportation and foods will increase the perceived value perceived value of local community.

With many of raw and undeveloped marine ecotourism in Kei Islands, also, considering geographical constraint of Kei Islands, makes the role of local visitor to visit the tourism spots become very important. In order to measure the potential demand of new marine ecotourism spot in Kei Islands, we use willingness to revisit as the demand indicator, since most of the researchers tend to use willingness to pay (WTP) as indicator of economic valuation of tourism. WTP has its advantage but to obtain the purposed this research which was to analyze and measure the demand power of newly and undeveloped marine ecotourism spot in Kei Islands then willingness to revisit (WTRv) has better view. WTP and WTRv served same purpose since both measures the value of something but since we try to view the attraction of marine ecotourism spots in Kei Islands, then WTRv has a better advantage.

#### 2. Methodology

This study located in Kei Islands, we used questionnaire to collect the research data. On 300 questionnaire only 270 questionnaires that valid to use for data analysis. Respondents of this study were local tourist who has been visited five raw and newly emerged marine ecotourism spots in Kei Islands namely ngur munwatwahan in Ohoidertutu Village, Traditional Village in Tanimbar Kei Village, Letman Reefs on Letman Village, Ancient trace on Ohoidertavun Villages and Waterfalls in Kei Besar Island (Figure 1). We measure their willingness to revisit with answer "yes" and "no" and analyze determinant factors that influence their decision. This study conducted from May to July 2017, we used purposive sampling to choose the exact respondents that meet criteria, where those who have their own income and able to bring themselves to the marine ecotourism locations on this study. By choosing these respondents, we hope can provide us the best sources for analyzing our data to obtain the objective of the study. For data analysis, we use logistic regression analysis with SPSS 24.

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Figure 1. Study area

#### 3. Result and Discussion

Based on logistic regression analysis, from 9 variables with total 24 indicators only 5 variables with 10 indicators that have significant effect on willingness to revisit of local visitors to newly emerged marine ecotourism sports in Kei Islands. On table 1 can be seen the result of significant effect of determinant factors to local tourist willingness to revisit. Based on the purpose of visiting newly emerged marine ecotourism spots, local tourism which has a lifestyle to travel tend to not revisit the spots. Based on our interview with the respondent, it showed that top marine ecotourism spot in Kei Islands likes Baer Islands, Ngubloat Beach or Hawang Cave, still attract them more that the newly emerged one. They mentioned the infrastructure and transportation that to freely available and costly as one of the factors they tend not to revisit although they admit it has a better natural view.

Table 1. Logistic Results on Willingness to revisit

	В	Sig.	Exp(B)		
Purpose					
Lifestyle	-1.512	.057*	.220		
Travel Companion					
Travel with Partner	1.912	.050**	6.767		
Travel with Friend	1.841	.012**	6.301		
<b>Type of Marine Ecotourism</b>					
Islands and Reefs	-2.204	.015**	.110		
Traditional Coastal Village	-2.027	.025**	.132		
Marine Tourism spot for Sports	-3.645	.013**	.026		

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Income				
IDR 1 million to IDR 2 million	1.157	.071*	3.182	
IDR 2 million to IDR 3 million	1.056	.096*	2.876	
Intangible Aspect				
Self-Challenge	.163	.043**	1.177	
Preference	180	.083*	.835	

\*Significant on 10%; \*\*significant on 5%

#### 3.1. Based on Travel companion

As newly emerged marine ecotourism spots that located quite far from the city, makes travel companion become a choice to visit these spots. Based on logistic result, those who used to travel with friends and their partner (spouse, girlfriend and boyfriend) tent to revisit the location. This may relate to the cost of travel to these newly emerged marine ecotourism spots, when travel with others the cost may be lighter than when traveling alone. Respondent mentioned about the view of these spots especially the waterfall and beautiful white sand beach suited their purposes to entertain their partner.

### 3.2. Based on type of marine ecotourism

Based on islands and reefs, local visitors tend to not to revisit newly emerged marine ecotourism spots. Aside from the transportation and infrastructure, the reefs in Letman and ancient trace in Ohoidertawun still underperformed against Kei islands top reefs spot namely Baer Islands. Most of local tourist visit newly emerged marine ecotourism spots out of curiosity at first and made the comparison which makes it hard for newly emerged marine ecotourism spots to compete with established one especially on transportation and infrastructure related. Based on traditional village, local visitors also tend to not to visit this kind spots, because same as the previous reason, its about cost of travelling to this village, not to mention the location that far from city area, despite have been appeared several times on national TV but traditional coastal village in Tanimbar Kei village still find difficult to attract more local visitors. Same goes to newly emerged marine ecotourism spots that were used to sports activity, local tourist tends to revisit the locations.

#### 3.3. Based on income

Based on income, can be seen on table 1 that local visitors with income from IDR 1.000.000 to IDR 4.000.000 tend to revisit the newly emerged marine ecotourism spots in Kei Islands. As it mentioned in the discussion, the travel cost plays a significant role on local visitors decision to revisit newly emerged marine ecotourism spots, therefore, those who have more to spend to able to make extra spending to revisit these newly emerged marine ecotourism spots.

### 3.4. Intangible aspects

Based on intangible aspect, local visitors who have the adventure spirit in them tend to revisit these newly emerged marine ecotourism spots. Since these locations meet the criteria of adventure spots makes it's understandable to find those who love a challenge to revisit the spots. In the other hand, those who have certain preference on marine tourism spots tend to not to revisit these newly emerged marine ecotourism spots. Its because they already have plan includes plan on scheduling and financial to spend on traveling makes it hard to revisit since high cost on traveling, in some time, we cannot visit some of the newly emerged marine ecotourism spots because of weather and season related to wind and sea wave.

#### 4. Conclusion

In general, it's still hard for a local tourist to revisit to these newly emerged marine ecotourism spots, since it's all the infrastructure and transportation is not sufficiently available as [14] pointed out that destination with better quality on access has high chance to grow. In general these newly emerged marine ecotourism spots have potential as sources of local economic revenue especially on villages that located

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far from city area, because as most of the established marine ecotourism spots on Kei Islands faced decade ago related to transportation and infrastructure, these newly emerged marine ecotourism spots has legitimate potential to be better perform in the future because most of the local visitors that been visit these newly emerged marine ecotourism spots give very positive review on the view, the problem is how to get there same as local government problem to attract more foreign and domestic visitors to Kei Island, they have to how to attract more local visitors to newly emerged marine ecotourism spots in Kei Islands.

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