

Disaster risk and travel decision of Middle Eastern tourists to natural destination in Indonesia

F Rahmafitria^{1*} and Misran²

¹ Resort and Leisure Management Program, Indonesia University of Education,
Bandung, Indonesia

² School of Tourism, Bandung, Indonesia

*Email: rahmafitria@upi.edu

Abstract. Disaster risk perception of tourists become one of prominent things to be concerned as a parameter to drive tourist willingness to visit, especially for a destination with high proneness natural hazard. Since the Middle Eastern tourist become one of the potential international tourists in many country, their perceived risk is also very important. This research aims to analyse Middle Eastern tourist's perception on safety and attractiveness of natural destination in Indonesia. According to a set of questionnaires on risk perception, most of the respondents said that Indonesia has low criterion as a prone disaster destination. However even though they do not recognize the mitigation system and safety procedure in case of the disaster occur, they still tend to visit again. The rare frequency on disaster evidence and the good reputation of tourism sector in Indonesia may cause their high credibility and the low perceived risk on disaster evidence. The theory of familiarity in influencing perceived risk also has an implication of their low perceived risk. This phenomenon means that the management should developed a well-planned mitigation system to eliminate risk and lowering their expectation to avoid disappointed in visiting the destination.

Keywords: disaster preparedness, middle eastern tourist, natural destination, perceived risk

1. Introduction

One of the challenges in managing nature based destination is the preparedness of mitigation system, as the most unique the nature is, the most hazard and high prone it is [1,5,15].. The level of risk on nature-based destination, will be influenced by hazard level and its vulnerability, both on social and management context [20]. Thus, reducing social vulnerability, particularly for the nature-based destination, could be an alternative to reduce risk, which will much relate with tourist's knowledge and their understanding on destination proneness. However, tourist's perception on destination risk and decision to visit will be very important in risk analysis because many individuals do not consider risk factors when selecting area to visit [17].

Tourist's perceived risk and its influence to visit decision, is very important in developing mitigation system in natural destination. Learning about their perception will be very beneficial in determine planning and marketing strategic of the destination. Since the Middle Eastern tourists become one of the targets of international tourists in Indonesia, then their preference is very important to define.



Destination preparedness to overcome and dealing with natural disaster will be the key of tourists' safety and security feelings, developing their loyalty to revisit and promote to others.

Things to be the once importance of this research is the growth of Middle Eastern tourists in Indonesia. According to the data from the ministry of Tourism in Indonesia, the number of Middle Eastern tourists in 2016 was increasing 66.14% (198,434 tourists) from its number on 2015. The data also indicated that 60% of them are likely to visit Indonesia for its natural and cultural attraction, and doing shopping. About 35% of them are likely to visit nature-based destination in West Java, East Java, Central Java, Jakarta and South Sulawesi. Thus, this condition shows us the importance of managing nature-based destination properly, to attract more outbound tourists. On the other side, it is also necessary to construct the safety and security system on natural destination by developing mitigation system for tourists.

Since the number of Middle Eastern tourists to visit Indonesia is getting increase, the preparedness of the destination become an important action. Destination preparedness is not only about facilities and infrastructures for tourists' activities, but also about their safety and security aspect, including the mitigation system regarding the high proneness of natural destination in Indonesia. This research shows the important of understanding tourists' perception on mitigation system which covering the stages of before the disaster happen, and analyze their willingness to revisit the destination [3]. Research in destination mitigation preparation mostly focused on infrastructure and mitigation model, and still small number of tourists perceive risk.

2. Literature Review

A decision to buy a product related to travel and tourism does not take place instantly. Once a potential tourist is interested to buy a product, s/he needs to have awareness about advantages and disadvantages of the product first. This is a very important process before s/he then decides to try it and buy it [2]. However, as the travel and tourism industry includes in the service sector the trial process only happens by buying the product [6].

This process obviously occurs chronologically without any disruption. And in the travel and tourism industry, the risk may disconnect this process as something may happen behind our design, whereas natural disaster categorized [8]. In fact, scholars then define that the real issue lies in the tourist perception about the disaster, not the disaster itself, and therefore decision to travel may change or not change according to this perception [7].

Therefore, as a high-risk industry from the natural disaster it needs to consider the perception of the tourist [7]. It means that the personal tourist decision is sensitive with reconsideration [2]. However, the decision review depends on the personal that has the capability to change the decision. Individual perception is significant and may become a substitution of the decision [2]. While the tourist who follows the group of the family, the group leader has the most powerful decision, including a respectable woman, such as a wife or a mother.

In addition, this perception is also various based on the cultural background, where most of the visitor prefers to change their plan and decision after the information of natural disaster event [16]. In most countries, probably majority of natural disasters are not become a problem, but the people perception to the natural disaster [7].

Regarding on the disaster risk that generally understood widely, then risk controlling is become an important thing. Luckily, there are some effective ways for managers to minimize the risk. Firstly, seeing on how familiar the tourist with the offered product, as tourist with more familiarity to the destination may reduce the risk. In addition, the risk may decrease by lowering the expectation to the product. Rising expectation tends has probability to the disappointed tourist. On the contrary, lower expectation produced the tourist are ready to accept the risk. Collecting more information before buying a product may also eliminate the risk, therefore the tourist who has more knowledge to the product will easily accept the predictable risk [2].

Furthermore, the tourist decision to visit is influenced by many factors. As well as branding positive image may reduce this sensitivity [14]. There are some important points according to competition and

sustainability between other similar destinations. These important steps to create competitive image are: a) putting a strong image inside the potential tourist memory, b) differentiating the image to create a unique destination other than another destination, c) and performing a positioning to the destination based on the previous image [13].

3. Methodology

The research was focus on tourist's perception regarding their preference on perceived risk with 1) tourist's knowledge on natural disaster as independent variable, and 2) their visit intention as dependent variable. A set of Arabic questionnaire were spread through a survey on the destination, and assisted by local guides who trusted already by the tourists. Some literature had mentioned that most Middle Eastern people seem to be more introverting, suspicious hard to please (Visit Britain, 2010). Thus, the role of senior local guides was very important to re-enforce the process of the survey. The questionnaire was using a Likert scale ranging from 1 (very low) to 6 (very high), which also defining perceived risks as very low to lack of knowledge on disaster and their willingness to visit, and vice versa. Thus, the analysis was using ANOVA, to find the influence between the variables.

The research conducted on August 2017, in some nature destinations in West Java, Indonesia, which become popular for most of Middle Eastern tourists. Puncak area in Cipanas and Sariater Resort in Subang, West Java are the sample of region for this research. There were 71 respondents participated in this research, due to the difficulties to propose Middle Eastern tourists to full fill the questionnaire. The respondents presented by open questionnaires.

4. Result and Discussion

Since the travel pattern of Middle Eastern tourist become frequently increase, Indonesia's government has set a specific target, which in 2019, there will be 5 million Moslem tourist visit Indonesia (a quarter of total target of international tourist). Therefore, four aspects of destination preparedness is setting up, namely product, human resources, institutions, and promotion. Regarding with destination readiness (product), tourist preference become one of the indicators to identify what kind of tangible product and services that attract them.

From the survey of Middle Eastern tourists, most of the respondents come from Saudi Arabia (93.75%), and all of them are Moslem. Their age is between 25 – 45 years old (65.22%), having bachelor degree for education (57.14%) and are categorized as high spending power tourists with 71.83% are having 1,000 – 3,500 US \$ for income. For their travel pattern, it is found that they likely come with a small group number, about 3-5 person (78.87%), and 63.38% are staying for quite long time (1-2 weeks). The peak of their visit is on summer holiday, on July and August. Tourist travel motivation indicated that most of them are likely to enjoy the freshness and aesthetic of natural tropical landscape (66.20%) and mountainous landscape (46.48%). Recreation and spending holiday are their internal motivation to visit Indonesia (75.57%). The demographics and travel pattern of the respondents is mention in Table 1.

Table 1. Demographics and travel pattern

Nationality	Saudi Arabia		Riyadh		Bahrain	
	93.75 %		4.69%		1.56 %	
Religion	Islam			Non Islam		
	100 %			0.00		
Address	Mecca	Jeddah	Dammam	Riyadh	Taif	Muscat
	21.43 %	28.57 %	10.71 %	21.43%	7.14 %	10.71 %
Age	<17 years old	17 – 25 years old	26 – 35 years old	36 – 45 years old	46 – 55 years old	> 56 years old
	2.90 %	21.74 %	39.13%	26.09 %	7.25 %	2.90 %

Education	High school	Bachelor	Master	Doctor	Others	
	14.29 %	57.14%	17.14%	8.57%	2.86%	
Income	<500 USD	500 – 1,000 USD	1,001 – 2,000 USD	2,001–3,500 USD	3,501 – 5,000 USD	> 5,000 USD
	12.68 %	8.45%	25.35%	22.54%	23.94 %	7.04 %
Length of stay	<1 week		1-2 weeks		> 2 weeks	
	7.04%		63.38%		29.58%	
Number of person	<3 person		3-5 person		> 5 person	
	35.21 %		43.66%		19.72 %	

Regarding the risk perception (Table 2), most of the Middle Eastern tourists are not having enough information on proneness level of the destination. The attractiveness of tropical landscape of Indonesia has attracted the tourist to visit the destination. They thought that Indonesia is not a prone destination (Mean = 2.56). In this case, we have to highlight that proneness is different with disaster happened. Most of the tourists do not have enough information regarding disaster proneness of Indonesia. The rare frequent of disaster in the destination has influence their preference that Indonesia has no warning for disaster. While the promotion of Indonesia's tourism never socialized about this kind of hazard, as the content of Indonesia's promotion is about the naturalness, nature and culture diversity and its authenticity. Therefore, they likely to feel secure while visiting nature destination in Indonesia (Mean = 4.09). In one side, this kind of perception could be a strong potential as market target. The good perception on the destination will positively influenced their decision to visit. In another side, if their expectation do not same with the face reality, it could be disappointing [11].

However, despite of having few information regarding destination proneness, they always well preparing their traveling plan (Mean = 4.42). Some researchers found that careful planning is indicating the feeling of secure and a well prepare process. The well prepare process before travelling, will decrease risk and escalate self-secure [8]. Unfortunately, most of the respondents do not understand some clue of disaster portent (Mean = 2.53), and do not have proper knowledge related with disaster and rescue technique (Mean = 2.63). This phenomenon should overcome by the readiness of mitigation system on the destination. The specific information and knowledge about local hazard, avoided area, forbidden behaviour will educate tourists to be more aware on their safety. Thus, signage about what do they should do in case the disaster is happened, also play an important role in bridging tourists understanding and knowledge on the mitigation system [4,9,12]

Table 2. Risk perception of Middle Eastern tourists

Risk Perception	N	Mean	Std. Deviation
Indonesia is a prone destination (land slide, earth quake, eruption)	71	2.56	1.39
Tourists should have knowledge on destination proneness	71	3.39	1.58
Are you familiar with disaster portent?	71	2.53	1.55
Do you well understand about self-rescue technic in case of disaster?	71	2.63	1.48
Do you prepare well enough all the safety equipment while you were travelling?	71	4.42	1.87
Do you feel secure while visiting nature-based destination in Indonesia?	71	4.09	2.04

Another variable to be analysed in this research is decision to visit, as an important indicator in determining the influence of tourists' risk perception. It is found that among Middle Eastern tourist, Indonesia has a good reputation as tourism destination country (Mean = 5.08). The characteristic of Middle Eastern tourist behavior believes more on worth of mouth rather on other media of promotion. The good experience of previous tourists has play an important role in putting up other Middle Eastern

to visit Indonesia and also become a strong stimulator, as enhancement of kinship and social interaction are very important to them (Michael, et al. 2011; UNWTO 2012). Therefore, their willingness to re-visit some nature destinations in Indonesia is strong (Mean = 4.77). Other criterion of decision to visit is the willingness to persuade other to visit the destination. In this study, the respondents are likely to inform the beauty of Indonesia (Mean = 4.94), according to what they had experienced before.

Table 3. Decision to visit Indonesia of Middle Eastern tourists

Decision to visit	N	Mean	Std. Deviation
Are you willing to re-visit some nature destination in Indonesia?	71	4.77	1.77
Do you think that Indonesia have a good reputation as tourism destination country?	71	5.08	1.59
Are you willing to inform others (friends and relatives) about Indonesia as tourism destination country?	71	4.94	1.70

The influence of tourists risk perception on the destination to decision to visit analysed in this research. From the constant of the model it is indicated that the better their understanding on risk perception, the more it is influenced their decision to visit. However, their perception on Indonesia as an attractive tourist destination is quite high, since the model indicates that without any knowledge on destination proneness and preparedness, they attend to visit Indonesia for 2.011 point. This model has described 14.7% (R square) of the total factors that influence visit intention.

Table 4. The regression of tourists' risk perception on their decision to visit

Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	T
1	(Constant)	2.011	.403		4.995
	Decision to visit	.269	.078	.384	3.453

a. Dependent Variable: Tourists' risk perception

Table 5. Model summary of Middle Eastern tourist decision to visit

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.384 ^a	.147	.135	1.00521

a. Predictors: (Constant), Decision to visit

b. Dependent Variable: Knowledge on disaster prone

5. Conclusion

The fast growth of tourism sector in Indonesia has driving the government to set a high target of international tourists' visit, including for the Middle Eastern tourists whose being targeting for 5 million tourists in 2019. According to the result, the destination preparation becomes one thing that government need to pay attention for, because the tourist decision to visit is influenced by their perception on the destination. Tourist perception is built by their experience and knowledge, therefore it is very crucial to share the proper and open information about the destination in the promotion program, and in parallel with that, the destination readiness on infrastructure and mitigation system are also developed.

Especially for nature-based destination, which has its specific sensitivity and proneness, the mitigation system is not a management option, but should be an obligation.

Even though the Middle Eastern tourist perception on risk is low, but they still have a high willingness to visit Indonesia. Their trust on Indonesia has leading them to put their decision in enjoying tropical landscape in Indonesia. The proper on site information through interpretation media will be very effective in enriching their knowledge regarding the destination's proneness and strengths. Information about safety procedures and the way to evacuate in case any disasters happened, are also very important, as they still has no insight about the mitigation procedure in a tropical landscape. The more familiar we are with the destination, the more the risk will be easy to reduce.

References

- [1] Highfield, W. E., Peacock, W. G., & Van Zandt, S. (2014). *Mitigation planning: Why hazard exposure, structural vulnerability, and social vulnerability matter*. Journal of Planning Education and Research, 34 (3), 287–300
- [2] Holloway, J. C. (2004). *Marketing for Tourism*. Fourth, *Marketing for Tourism*. Fourth. Prentice Hall. doi: 10.1007/978-1-349-21946-9.
- [3] Hudson, S. (2008). *Tourism and Hospitality Marketing: A Global Perspective*. First edition. Sage.
- [4] Hughes, M., & Saunders, A. M. (2005). *Interpretation, activity participation, and environmental attitudes of visitors to Penguin Island, Western Australia*. Society and Natural Resources, 18, 611– 624.
- [5] Kim, J et al. (2016). J. *Amenity or hazard? The effects of landslide hazard on property value in Woomyeon Nature Park area, Korea* Landscape and Urban Planning 157 (2017) 523–53
- [6] Korczynski, M. (2002). 'Service work : the customer- oriented bureaucracy', in *Human Resource Management in Service Work*, pp. 58–83.
- [7] Kozak, M., Crotts, J. C. and Law, R. (2007) 'The impact of the perception of risk on international travellers', *International Journal of Tourism Research*, 9(4), pp. 233–242. doi: 10.1002/jtr.607.
- [8] Law, R. (2006) 'The perceived impact of risks on travel decisions', *International Journal of Tourism Research*, 8(4), pp. 289–300. doi: 10.1002/jtr.576.
- [9] Madin, E., & Fenton, D. M. (2004). *Environmental interpretation in the Great Barrier Reef Marine Park: an assessment of programme effectiveness*. Journal of Sustainable Tourism, 12, 121–137.
- [10] Michael, I., Armstrong, A., Badran, B., & King, B. (2011). *Dubai outbound tourism : An exploratory study of Emiratis and expatriates*. Journal of Vacation Marketing, 17(1), 83–91.
- [11] Michalko, G., Irimias, A., & Timothy, D.J. (2015). *Dissapointment in tourism : Perspective on tourism destination management*. Tourism Management Perspective. 16 (2015), 85–91.
- [12] Powell, R. B., & Ham, S. H. (2008). *Can ecotourism interpretation really lead to proconservation knowledge, attitudes and behaviour? Evidence from the Galapagos Islands*. Journal of Sustainable Tourism, 16, 467–489.
- [13] Ritchie, J. R Brent & Crouch, G. L. (2003) *The Competitive Destination: A Sustainable Tourism Perspective*. CABI Publishing.
- [14] Schwaighofer, V. (2014) *Tourist Destination Images and Local Culture*. Springer Gabler.
- [15] Smith, K. (2013). *Environmental hazards: assessing risk and reducing disaster*. New York, NY: Routledge.
- [16] Tasci, A. D. A. and Boylu, Y. (2010) 'Cultural comparison of tourists' safety perception in relation to trip satisfaction', *International Journal of Tourism Research*, 12(2), pp. 179–192. doi: 10.1002/jtr.745.
- [17] Trumbo, C., Lueck, M., Marlatt, H., Peek, L., (2011). The effect of proximity to Hurricanes Katrina and Rita on subsequent Hurricane outlook and optimistic bias. *Risk Analysis* 31 (12), 1907–1918 A reference

- [18] UNWTO. (2012). The Middle East outbound travel market with special insight into the image of Europe as a destination. Report by the UNWTO: Spain.
- [19] Visit Britain (2010). UEA market and trade profile. Report by visit Britain, UK.
- [20] Wisner, B., Blaikie, P., Cannon, T., Davis, I., (2004). At risk. Natural hazards, people's vulnerability and disasters. Second edition. Taylor and Francis Group. London and New York. 470 p.