Guests’ Perception on the Integration of Disaster Risk Reduction and Management in Hotel Planning: The Case of Manila Bay Area Hotels

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Abstract: The Philippines, being situated in the Pacific Rim, is a country that is in the path of seasonal typhoons and monsoon rains which eventually lead to floods, storm surges, storms, and other calamities. Due to the country’s vulnerability to natural hazards, disaster risk reduction and management laws were enacted, the primary law of which is the ‘Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010’, which signifies a paradigmatic shift from a reactive to preventive approach in disaster management. This study investigated guests’ perception on the integration of DRRM to hotel planning and whether guests would prefer to book in hotels with a DRRM plan or not. The methodology used is a combination of quantitative and qualitative research approaches. Survey questionnaires that aimed to seek information on perceptions of guests were utilized. In order to effectively find out the association of the different variables in this research, the Cross tabulation method was utilized. The findings revealed that safety is considered to be a very important hotel attribute for guests. The level of awareness of the concept of DRRM does not affect whether guests would choose to book in a hotel or not; the more relevant factor is their view of how safe a hotel is. For majority, higher star rating hotels are safer than lower star rating hotels. The integration of DRRM to hotel planning was deemed important by the guests, hence, they would likely prefer to book in hotels with a DRRM plan than in hotels which did not have one, with majority of them willing to pay additional costs to their booking in order to ensure safety in the hotel. The results of the study may serve as a guide for policy formulation and initiatives that are directed towards the implementation of DRRM in the tourism industry.

Keywords: Disaster risk reduction and management, hotel safety, guests’ perception of safety, natural disasters


Introduction

The Philippines, being situated in the Pacific Rim, is a country that is in the path of seasonal typhoons and monsoon rains which eventually lead to floods, storm surges, storms, and other calamities (Capistrano, 1998). Moreover, its archipelagic nature renders the country very susceptible to typhoons, with an average of 20 tropical cyclones hitting the country each year.

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The geographical location of the Philippines can be said to be one which makes the country vulnerable to natural hazards such as volcanic eruptions, earthquakes, typhoons and tsunamis among others.

In recent years, there has been an increasing frequency of extreme events (e.g. intensity of tropical cyclones and extremes in temperature and weather) in the country that has been attributed to climate change, and which have already been observed to impact adversely on lives, health and well being, environment and the economy of the country (SNC, 2010). Projections for 2020 to 2050 indicate that the Philippines shall continue to experience these extreme events. In particular, the country's coastal areas are highly vulnerable. With the combined effects of continued temperature increases, changes in rainfall and accelerated sea level rise, and tropical cyclone occurrences including the associated storm surges that expose coastal communities to higher levels of threat to life and property, it has been advanced that impact and vulnerability assessment as well as adaptation planning for the coastal areas are of high priority (PAGASA, 2011).

In the light of the geographical location of the country, which makes it particularly prone to disasters, and with the unpredictability of the intensity and character of natural disasters due to climate change, the need for a proactive stance is extremely necessary.

In the Philippines, there have been a number of notable disasters that have affected the hotel and tourism industry, among which include the flooding of a five star hotel in Manila due to a storm surge that caused damages to the physical property in 2009, and tourists being stranded in Palawan due to a super typhoon that damaged 90% of houses, hotels and other establishments in 2013.

A big percentage of tourists in the country, both international and domestic travelers, book in accommodation establishments. In 2010, it was recorded that 54.9 million tourists stayed in hotels and other types of accommodation (DOT, 2011). The importance of safe travel and the need to ensure the safety and well being of tourists throughout their visit, including their stay in accommodation establishments is very crucial in order to protect tourists and to create quality guest experience. As they are major stakeholders of tourism activity in the country, incorporating information from the point of view of guests of accommodation establishments, and tourists in general, is henceforth seen as vital in order to come up with a comprehensive disaster and risk reduction management program.

Understanding guests’ perception is needed in coming up with risk reduction and management strategies. Risk is a social construct that may have varied interpretations by different people. Hence, if risk is to be effectively managed, the social aspects of risk interpretation must be recognized. Being sensitive to people’s perception of the problem and understanding their levels of vulnerability is key to coping with risk (Young, 1997). The significance of taking into account people’s perception on risks is also pointed out by Eiser, Bostrom, Borton, et.al. (2012) who advocate that understanding how people interpret risks and choose actions based on their interpretations is vital in coming up with a strategy for disaster reduction.

With the underlying principle that inputs from guests’ are significant in coming up with programs that shall address the need to ensure the safety and well being of tourists, the study sought to analyze the guests’ perception on the integration of DRRM to hotel’s management planning. Specifically, the study aimed to determine guests’ perception on the importance of safety in a hotel they book in. Furthermore, the study also sought to analyze whether guests perceive the integration of DRRM to hotel’s management planning as important or not, and if this would influence their preference to book in a hotel.
Review of Literature

Natural Hazards and the Need for Disaster Risk Reduction and Management

Natural hazards are physical phenomena that are naturally occurring and are caused by either fast or slow emerging events that can be biological (e.g., disease, infections, animal infestation), geophysical (earthquake, volcanic eruption, landslides), climatological (e.g., extremes in temperature, heat/cold wave, wildfire), meteorological (storm, tropical cyclone), and hydrological (e.g., floods, storm surge, coastal flood, landslide) (IFRCRCS, 2010).

Disasters, especially caused by natural hazards, are phenomena that cannot be prevented. A disaster is defined as “a serious disruption of the functioning of society, causing widespread human, material, or environmental losses which exceed the ability of the affected people to cope using its own resources.” (Asian Disaster Reduction Center, 2014)

With proper environmental plans, design standards and good evacuation plan, risks such as loss of life and damage to property can be mitigated (World Confederation for Physical Therapy, 2013). Disaster Management is defined as: “The organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters” (IFRCRCS, 2013).

The country’s vulnerability to disasters led to the passage of disaster risk reduction and management laws (Senate of the Philippines, 2013). National Disaster Risk Reduction and Management (DRRM) is concerned with the set of policies, movements and plans which aims to decrease disaster risks by understanding associated hazards, assessing vulnerabilities and evaluating risks (Fresnoza, 2013).

The primary law that deals with disaster risk reduction and management is Republic Act No. 1012 or the ‘Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010’. It addresses people’s constitutional rights to life and property by addressing the reason for unpreparedness during the occurrence of disaster. The Act provides for a National DRRM Framework which signifies a paradigmatic shift from reactive to preventive approach in disaster management and covers four areas: Prevention and Mitigation, Preparedness, Response, and Rehabilitation and Recovery ((NDRRMC, 2010; NDRRMC, 2011).

One of the most vulnerable tourism businesses to climate change are hotels because of their fixed assets (Hall, Ozanne and Su, 2013). Given this, the American Hotel and Lodging Association, a United States’ lodging industry organization, released a protective measures guide for their accommodation industry in 2010. The importance of proper planning and risk assessment to ensure effective risk disaster management is highlighted in the book (American Hotel and Lodging Association, 2010).

In the Philippines, with a recognition of the significance of ensuring safety and security of tourists, several policies and guidelines have been issued by the state through the Department Tourism (DOT). DOT Memorandum Circular No. 2006-09, otherwise known as ‘Adoption of Safety and Security Measures in Hotels, Resorts and Other Similar Accommodation Establishments’, is a mandate by the DOT that ensures both domestic and international tourists will have a safe, convenient and enjoyable travel. The guidelines highlight the duties of security personnel, hotel managers and owners in order to provide guests with safe and secure environment during their stay in hotels and other similar types accommodation (DOT Memorandum Circular No. 2006-09, 2006). Also, in the National Tourism Standards for...
Hotels which specifies requirements for hotels and similar accommodation establishments, the practices and systems with regard to natural disaster response is listed as one of the major dimensions for accreditation and classification into a particular star rating (DOT, 2012).

Tourists’ Perception of Safety in Accommodations

Several research studies identified safety and security as one of the most important travel considerations for tourists (Chakraborty and Rittichainuwat, 2011); and that safety concerns strongly influence tourists’ decision-making processes (Abrantes, Dolnicar, Kastenholz, and Seabra, 2012).

Guests find safety important regardless of the type of accommodation they stay in (Weaver and Oh, 1993). For instance, guests who stay at mid-priced hotels perceive safety measures as important as those guests staying at luxury and upscale hotels which tend to invest more on safety measures than other types of accommodations (Taylor and Enz, 2002). Backpackers, in addition, choose to stay at hostels because of safety reasons (Davies, Nash, and Thyne, 2006).

Tourists’ perception of safety may differ in the level of importance based on their purpose of travel: business and leisure. Leisure tourists, when choosing a destination, take into account not only pricing but personal safety as well (Chakraborty and Rittchainawat, 2011). In another study, the same authors found out that tourists who travel abroad considered personal safety as a higher priority more than price as a destination attribute (Chakraborty and Rittchainawat, 2009).

On the other hand, while business tourists are less seasonal and less sensitive to price than leisure tourists, they still do not overlook safety and security in choosing a destination (Withiam, 1998). It was pointed out in one study that frequent-travel business tourists consider safety and security in hotel selection (Knutson, 1988).

Safety is not only the concern of tourists but also of travel intermediaries, such as meeting planners and tour operators (Holcomb and Pizam, 2006). Tour operators are responsible for their clients’ safety (Cavlek, 2002); therefore, they choose safe accommodation for their clients. Also, corporations do not trade off safety with discounts due to liability for their employees’ safety and they do not send their employees to places that are risky (Henderson, 2007).

Methodology

Conceptual Framework

Figure 1 shows the conceptual framework of the study. Manila Bay Area hotels are considered prone to natural disasters because of their proximity to a large body of water. In this framework, the guests’ level of awareness of the concept of Disaster Risk Reduction and Management (DRRM) is linked with both their perception of importance of safety in a hotel and their perception of importance of integrating a DRRM to hotel’s management planning, eventually influencing guests’ preference of booking in a hotel.

Research Design

A combination of quantitative and qualitative methods was utilized. Quantitative-type items in the survey questionnaire were evaluated using cross tabulation and comparison of mean
scores. Cross tabulation, also known as contingency table analysis, is a method that is used to determine whether variables are statistically independent or if they are associated (Michael, 2014).

Moreover, through open ended questions in the survey questionnaire and follow up interviews, detailed descriptions of experiences and perspectives were obtained from the respondents, deepening the level of data analysis. Convenience sampling was resorted to owing to difficulty in getting guests who are on vacation to respond to a survey questionnaire. Out of 110 questionnaires distributed, only 101 (92%) were considered valid.

**Research Instruments**

A survey questionnaire which consisted of 14 items that sought to obtain information on guests’ perception regarding DRRM in a hotel’s planning was developed, using the National Disaster Risk Reduction and Management Framework as a guide. The framework covers four priority areas: Prevention and Mitigation, Preparedness, Response, and Rehabilitation and Recovery. In preparing the survey questionnaire, these terminologies were translated into more common terms as Before (Prevention and Mitigation), During (Response) and After a Disaster (Rehabilitation and Recovery) to ensure better understanding by the guests. Questions on the importance of safety, level of awareness of DRRM and importance of its integration in hotels’ planning sought to determine the degree of intensity wherein respondents indicated their level of agreement/disagreement on a 5 point Likert scale.
Follow up questions and interviews with guests were undertaken in order to obtain more in depth information and to clarify the responses to the questionnaire. They were asked to elaborate on how they perceived safety in the last hotel they stayed in and whether they feel safer whenever they are booked in higher star rating hotels than in lower star rating hotels. Eighty seven out of the one hundred and one (87/101) respondents showed willingness to participate in the study, hence more in depth information was obtained from 86.14% of the respondents.

To supplement primary data obtained through the survey, secondary sources such as legal documents, journals, case studies and news articles were utilized.

Research Locale

Metro Manila is the Philippines’ political, economic, social, educational, cultural and recreational hub, and serves as a premier gateway to the different islands and attractions of the country. As of 2011, there are twenty-one (21) accredited hotels by the Department of Tourism in the Manila area (Department of Tourism, 2011), in which seventeen (17) are situated along Manila Bay. Hotels in this area are considered highly vulnerable to natural hazards such as floods and storm surge because of their proximity to a large body of water, the West Philippine Sea. In 2011, a storm surge caused by a strong typhoon destroyed the seawalls of Manila Bay, damaging surrounding establishments including a five star hotel and several food and beverage establishments. The study sought to obtain information from guests who have checked in any of the hotels situated along the Manila Bay and up to 400 meters away from it.

Findings

• Guests’ Awareness of the Concept of Disaster Risk Reduction and Management
  More than half of the respondents (72 out of 101) said that they are aware of the concept of DRRM. Their level of awareness has a mean of 3.74. This means although they have an idea of what DRRM is, they still are not well versed in the said concept.

• Guests’ Perception of Importance of Safety in the Hotel
  On a scale of 1 to 5, 1 being Least Important and 5 being Most Important, 100% of the respondents answered that safety and security is important in their booking in a hotel with a mean score of 4.82. This only strengthens the recent studies about how important safety is for tourists in choosing a hotel to book in.

• Guests’ Perception of Safety Depending on the Hotel’s Star Rating
  During the guests’ last stay in any Manila Bay area hotel, 98 (98%) of them perceived the hotel as a safe place to stay in. One reason for this is that some of them stayed in a five-star hotel. Among the reasons given include the following: accommodating hotel staff who helped them with their needs throughout their stay, presence of safety and security systems such as CCTV’s and security guards in the area. Additional reasons given include presence of identifiable escape routes, location of the nearest stairwells and emergency exits are well pointed on the notice disseminated inside the hotel and presence of adequate and well-trained staff.

Almost all (98%) of the respondents perceive that they are safer when staying in higher-star rating hotels than lower-star rating hotels. Their main reasons for this include: their high
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expectations for already established hotel brands, the presence of different safety facilities that other lower star rating hotels do not have, the set of standards or procedures that they follow during the occurrence of natural disasters, the thought that they would not be classified as high star rating hotels if they did not pass the safety criterion, the good construction of the hotel’s structure, expectation that the hotel provides them right value for money in terms of safety and security since higher star rating hotels ask for higher booking price, presence of more strategic emergency plans than lower star rating hotels, and the visibility of escape or exit rules and the signs of what to do in case of emergency situations.

The remaining two (2%) respondents answered that they do not feel safer in higher star rating hotels than in lower star rating hotels because of the following reasons: the thought that high and low star rating hotels have the same knowledge when it comes to safety and management awareness education; and that buildings normally follow standards during construction as set by the government.

- **Guests’ Willingness to Pay Additional Cost to Ensure Safety Vis-a-vis Importance Rating of Pricing to Booking in a Hotel**
  
  Of the 101 respondents, 75 are willing to pay additional cost to the hotel rates to ensure that the hotel that they will stay in will be prepared during the occurrence of any natural disaster. Most of them, i.e. 53 (71%) are willing to pay a 5-10% additional cost. 13 (17%) respondents are willing to pay an 11-15% increase, 5 (7%) are willing to pay a 16-20% increase, 1 (1%) is willing to pay an additional of 21-30%, and 3 (4%) are willing to pay above 30% additional cost for their hotel booking.

- **Guest’s Perception of the Importance of DRRM Standards Before, During and After the Occurrence of a Disaster**
  
  In the three stages of the occurrence of a disaster, 100% of the respondents said that it is important for hotels to have a set of standards and procedures to ensure that everyone in the hotel is safe. On a scale of 1 to 5, 1 being least important and 5 being most important, the mean for both the Before and During stages is 4.82 while the After stage has a slightly lower mean of 4.78. This only means that tourists give more consideration to the preparedness and response stages than in the recovery stage.

- **Guests’ Preference to Book in a Hotel with a DRRM Plan Vis-a-vis the Level of Awareness of Guests on the Concept of DRRM**
  
  The four respondents who do not prefer hotels that are prepared for the occurrence of natural disasters are actually aware of the concept of DRRM. Majority of the respondents (97%) whether they are aware of the concept of DRRM or not, prefer to book in a hotel with a DRRM Plan. The 33% of the respondents who are not aware of the concept of DRRM, claim they still prefer to book in hotels that are prepared for the occurrence of natural disasters, in other words, hotels that integrate a DRRM plan in their management planning.

- **Guests’ Preference to Book in a Hotel with a DRRM Plan Vis-a-vis Importance Rating for Hotels to have a Set of Standards that Should be Conducted in the Occurrence of a Natural Disaster**
  
  In the 101 respondents surveyed, only 4 (4%) do not prefer prepared hotels or hotels with a DRRM plan. All respondents have a high regard for importance for hotels to have a set of standards that should be conducted before the occurrence of a natural disaster. On the other hand, the 97% respondents who voted that they prefer to book in a hotel that is
prepared for natural disasters also have high importance ratings for hotels to have DRRM plan before and during the occurrence of a natural disaster. Although the importance rating for hotels to have a DRRM plan after the occurrence of natural disasters is slightly behind the other two importance ratings (before and during stages), it still denotes that respondents perceive that having a DRRM plan for hotels after a disaster is still very important.

**Summary of Findings**

The data collected in this study explores the different linkages of the variables being studied such as guests’ level of awareness of the concept of DRRM, their perception of importance of safety in hotels, their perception of importance of integration of DRRM to hotel planning, and their connection with the tourists’ preference to book in hotels with a DRRM plan.

The guests’ level of awareness of the concept of DRRM does not have a direct correlation with their booking in a hotel because although they are not aware of it, they still would want to book in a hotel as long as they perceive it as a safe place to stay in. Hotel guests have high regard for safety in choosing a hotel to book in. Because of this fact, although they are price-sensitive, majority are willing to pay the hotel more than what they are currently paying because they want to feel safe and secured. Apart from this, they feel safer when staying in higher star rating hotels because they believe that they are supposed to be handled with care because of the high price that they pay the hotel. It can also be noted that there is a discrepancy between the guests’ perception of importance of safety measures depending on the stage of the disaster. The ‘before’ and ‘during stages’ of a disaster are deemed to be the most important phases that hotel should have safety measures for, and with the ‘after stage’ only considered of less priority.

**Conclusion**

Natural disasters are occurrences that cannot be prevented, however, proper management may reduce their impacts to the tourism industry. This study will be beneficial not only in micro but in a macro scale as well. This study may persuade hotel owners and operators to integrate a DRRM plan in their respective hotels with the knowledge that potential guests would feel safer and more secure if they book in a hotel with a DRRM plan, hence perceiving it as an important hotel attribute. By implementing a DRRM plan in hotels, guests will feel safer, regardless of a hotel’s star rating. Also, the hotel staff will know what to do during the different phases of the occurrence of a natural disaster, which will lessen the panic of the guests staying in the hotel. Furthermore, this study may help raise awareness regarding DRRM since the concept is not that prevalently known to the public yet.

There has been an unprecedented growth of tourism in the country with a recorded 3.9 million international tourist arrivals in 2011, up by 11% from the previous year, and an estimated over 21 million domestic travelers. A growth trend in international arrivals and domestic traveler volume is also seen in the forthcoming years (DOT, 2011). Recognizing the significance of tourism on the country’s economic growth, tourism is considered as one of the priority industries by the state. With the bright prospects of the Philippine tourism industry, increasing tourism competitiveness as an urgent requirement to ensure the continued growth of the industry can be enhanced through an assurance of the safety and well being of tourists.
through an institutionalized disaster management program that incorporates information from the point of view of guests of accommodation establishments, and tourists in general.

The study focused on Manila Bay Area hotels, hence guests targeted for the survey were only from the 17 properties situated in the area and accredited by the Department of Tourism. Difficulty in getting guests on vacation to respond to surveys resulted in the participation of willing guests after some coaxing and repeated requests. Future studies can aim to obtain the participation of more respondents in order to obtain a bigger sample size. Moreover, future research on DRRM can focus on its implementation during the pre, emergency and post disaster stages by hotels of different star ratings in order to assess and compare the safety measures employed. The findings may consequently serve as guidelines for further refinement of the DRRM policies and how these can be made more relevant to the Philippine tourism industry.

References


Second National Communication on Climate Change (2010) Philippine SNC Project (Project # 00037339), Enabling Activity for the Prepartion of the Philippines’ Second National Communication on Climate Change to the UNFCCC.


