

The Recovery of a Tourist Destination After a Natural Disaster

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ABSTRACT

Natural disasters are one of the possible crises encountered by tourism destinations. Generally, natural calamities are difficult to predict or control, and in recent decades, the frequency of hazardous occurrences has grown, affecting all industries related to tourism.

The image and reputation of a tourism destination are quite vulnerable to disastrous events such as tsunamis, earthquakes, or volcano eruptions. In fact, natural disasters can significantly damage tourist sights, infrastructure, and tourists' positive perception of destinations, causing concerns about safety issues and weakening their wish to have a holiday in the affected places. One of the main changes in tourists' behaviour after a disaster includes the increasing number of cancellations. The major concerns of tourists are the health and safety risk involved in visiting a travel destination where a natural disaster has occurred, along with social risks and the risk of the unsatisfied expectations of the travel experience, which provoke travellers to cancel their trips. Thus, a negative image of the tourist destination may lead to the loss of tourist revenue and harm the local tourism sector to various degrees.

Even though tourism is vulnerable to natural disasters, the sector is typically poorly prepared for these kinds of events and usually takes only a passive position. It has a lack of such aspects as awareness, appropriate planning, adversity to risk, financial and knowledge resources as well as responsibility for dealing with disastrous events. This list might also include the insufficient scale of the organisations involved and a failure in the perception of the industry cohesion due to businesses being privately owned. However, the possibility of devastating consequences of natural disasters should stimulate the tourism industry to consider crisis planning and take a proactive approach in attempts to regulate and solve emergency situations effectively. Moreover, strategic management could mitigate some negative consequences and make an essential contribution to destination development.

The aim of this research is to explore how tourism destinations can cope with natural disaster consequences. This dissertation employs secondary research exclusively, which is the analysis of data collected from various sources including books, articles, official statistics, and reports. The research uses the qualitative multiple case study method to

observe the correlations within the information through a thematic analysis, which is a widespread method and the main component of analytical induction. Three cases were chosen for this work: the Maldives, Phuket in Thailand, and Christchurch, in New Zealand. These destinations are reviewed through crisis management models, which are commonly described in the academic literature, to determine effective actions within the tourism sector in pre-and post-disaster periods. Besides, the research analyses available official data to identify the amount of time required for the afflicted destination to restore tourist arrivals. Finally, the dissertation investigates previous research and publicly available information on Internet resources to determine how the tourism industry in the affected areas changes after disaster events.

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LIST OF ACRONYMS

CCT	Christchurch and Canterbury Tourism
CDEM Groups	Civil Defence Emergency Management Groups
FESTA	Festival of Transitional Architecture
GDP	Gross Domestic Product
GPP	Gross Regional and Provincial Product
MOT	the Ministry of Tourism
MTPB	Maldives Tourism Promotion Board
NTOs	National Tourism Organizations
PATA	the Pacific Asia Travel Association
RPV	Revenue per Visitor
TAT	the Tourism Authority of Thailand
TDMF	Faulkner's 2001 Tourism Disaster Management Framework
TNZ	Tourism New Zealand
UNWTO	United Nations World Tourism Organization
VFR	Visiting Friends and Relatives
WTTC	World Travel and Tourism Council

ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed by Elena Moshakova

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Chapter One: Introduction

1.1 Tourism industry

Nowadays, tourism is a substantial economic industry in the majority of countries in the world. As defined by Tribe (2009), tourism includes activities of individuals travelling to different areas outside their regular environment and staying there for less than a year for business, leisure, and other purposes unrelated to the involvement in paid employment in the place visited.

Tourism is a significant contributor to the global economy. The World Travel and Tourism Council reports that in 2018, the sector of tourism accounted for 10.4% of the global Gross Domestic Product (GDP) and over 319 million jobs equating to 10% of overall employment (WTTC, 2020). Balance-of-payments statistics from the WTO show that as part of international trade, tourism represented 27.2% of global commercial services exports and 6.5% of world exports in 2018, amounting to 32% and 50% of service exports of the developing and the least developed countries, respectively (Barkas et al., 2020). It is of note that in the last decade, economic growth in the tourism industry outstripped world economy GDP growth. World travel exports, including tourists' expenditures on various goods and services during their visit abroad, rose by 7% in 2018 (Barkas et al., 2020).

Not only does the tourist sector generate income for a country but also stimulates growth and economic development. Tourism creates employment, promoting local entrepreneurship and skills development. Moreover, the industry simultaneously encourages economic activity in directly and indirectly correlated sectors, for instance, in construction, real estate, retail trade, and others. The tourism sector also stimulates international services commerce, producing advantageous secondary effects in cultural diffusion, cross-border synergies and cooperation between enterprises, and international investment (Barkas et al., 2020).

1.2 Natural disasters and tourism

The tourism sector is especially vulnerable to natural disasters since it heavily depends on operating infrastructure, visitor mobility as well as tourists' risk perceptions. The

occurrence of disaster events has been increasing in recent years (Pforr & Hosie, 2008; Wu & Shimizu, 2020). Over the past two decades, the significant influence on tourism caused by natural hazards has been observed in countries including Japan, China, Australia, New Zealand, and the USA. The damage from natural disasters can be catastrophic, particularly for the countries which rely heavily on tourism, including the Maldives, the Caribbean, and the Seychelles islands (Wu & Shimizu, 2020).

Several definitions of a disaster and natural disaster have been proposed. According to Estevão and Costa (2020), a disaster is a sudden or progressive, natural or man-made event which severely impacts the area, forcing the afflicted community to take exceptional measures. Prideaux et al. (2003) describe a disaster as an unforeseeable catastrophic change which, as a rule, can only be reacted to after the incident either by implementing existing emergency plans or with a reactive response. Mair et al. (2016) claim that natural disasters are a humanitarian catastrophe triggered by nature, which affects society through destroying infrastructure and, sometimes, killing people.

Estevão & Costa (2020) observe that such disasters as floods, forest fires, and earthquakes are considered to be the most impactful for tourism as they are not usually susceptible to accurate prediction. These natural hazards may occur randomly and rapidly causing major human distress as well as considerable physical harm and economic damage. Besides, these kinds of disasters often provoke a domino effect for the local tourism industry, which implies consequences extending beyond the immediate locality of the disaster, affecting other regions of the country and its economic development.

1.3 Consequences of natural disasters

Natural disasters can cause substantial wide-ranging damage to a destination. Evidently, the economy of an afflicted area suffers considerably. According to WTTC (2019), the overall economic damage in the world caused by natural disaster events grew by 684%, from 19 billion US\$ in 1970 to 149 billion US\$ in 2016. For example, Japan, which is particularly prone to large earthquakes, was affected by 18 earthquakes between 1980 and 2009, which caused total damage of over 31,5 billion US\$. In the same period, in the UK and Spain, the countries with a low quake propensity, the average assessed damage caused by minor earthquakes amounted to 16 US\$ million and 19 US\$ million,

respectively. And in the Italian city, L'Aquila, a rare massive earthquake in April 2009 caused damage of 2.5 billion US\$ (Neumayer et al., 2014).

Moreover, natural calamities cause rising levels of unemployment in the affected destination. To illustrate, after the Indian Ocean tsunami in December 2004, hotels in Phuket province, Thailand, were occupied at 5-10% of their capacity in the following two months. As a result, about 20,000 tourism-related employees lost their jobs immediately after the catastrophe. The decline of the tourist industry also affects related sectors and, therefore, an increasing number of people lose their jobs (Ichinosawa, 2006).

Natural catastrophes cause noticeable damage to infrastructure including houses, schools, hospitals, factories, telecommunications, transportation, sewer systems, power and water supplies (Genç, 2019; Morrish, 2008). For example, the Indian Ocean tsunami in 2004 ruined 157,393 buildings and 897 villages in India (Blažin et al., 2014). Regarding the tourism industry, numerous accommodation facilities, restaurants, and other tourism amenities require restoration after a disaster event (Genç, 2019). As an illustration, after the 2004 tsunami, 59 out of 242 hotels were affected in southern Thailand to such an extent that it took over six months to be restored, and in the Maldives, around 30% of hotel beds were damaged and out of use for months following the disaster (Blažin et al., 2014). Another example, the earthquake in Christchurch, New Zealand in 2011 decreased the number of hotel and backpacker beds by about 70% and 50%, respectively (Wilson, 2016).

Another aspect is the psychosocial impacts caused by natural disasters. The communities affected by disaster events can experience a considerable decline in the quality of life with long-term psychosocial consequences. These often involve psychophysiological effects, such as tics and fatigue, and cognitive dysfunctions including confusion, attention deficits, and impaired concentration (Hall & Prayag, 2020). Signs of emotional disorders, i.e., grief, anxiety, and depression, as well as negatively affected behavioural patterns such as substance abuse, ritualistic behaviour, appetite, and sleep changes are also common. Psychosocial resilience and recovery of the residents as well as an emotional attachment to a place influence tourism recovery in the afflicted region. Psychological resilience allows local people to positively adapt to an altered reality and recover after stress faster. Hence, residents' mental resilience and

visitors' emotional attachment to a place contribute to the psychosocial rehabilitation that is significant for tourism recovery in a suffered destination (Hall & Prayag, 2020).

Finally, the reputation of the place may suffer due to the social and economic damage caused as a secondary long-term impact of natural disasters (Ichinosawa, 2006). The tourism sector is a service industry and the nature of the product it provides is an experience (Pine & Gilmore, 2011). This makes it difficult for tourists to assess the attractiveness of the destination as their travel decisions are mainly based on the image and perception of a place rather than reality (Wu & Shimizu, 2020). Chew and Jahari (2014) note that a travel destination image is a mental picture that an individual has about a particular place including its tourism infrastructure and cultural, social, and natural attributes. The destination image is, to a large extent, determined by the physical characteristics of a place, which attract travellers to visit and offer a positive tourist experience. It is evident that destinations which have a positive image are most likely to be selected and included in the process of making decisions. The occurrence of a natural disaster might increase the level of the perceived risk of travelling even if the destination did not actually receive severe physical damage. Risk perception is a highly influential element in tourists' choice behaviour. Moreover, it can have a substantial impact on the destination image because a hazardous incident can alter the already existing knowledge that people may have about the place (Wu & Shimizu, 2020). To illustrate, Huang et al. (2008) mention that after the earthquake in Taiwan in 1999, negative media reports about the event caused a considerable decrease in the tourist influx during the post-disaster period. The volume of international arrivals decreased by 15% from September to December 1999 compared with the same period in the previous year, and the quantity of visitors to the 230 main tourist attractions declined by 27%. Another example is the case of Phuket, where hotel reconstruction took nine months, while the occupancy rate only started to increase 20 months after the 2004 Tsunami (Tang et al., 2019).

1.4 The objective of the study

This dissertation examines the ways in which tourism destinations can overcome the consequences of natural disasters. The study reviews crisis management models which are common in the academic literature and tries to apply them to the selected cases to identify the beneficial actions within the tourism industry in both pre- and post-disaster

periods in the regions. The work analyses available official statistics to identify the amount of time required for an affected destination to return the tourist influx back to normal and the marketing means that can reduce the recovery period. Finally, the dissertation reviews previous research as well as articles and data available on the Internet to determine whether the tourism sector in the afflicted regions changed after a calamity and whether these changes were similar within different cases. The main purpose of the study is to explore post-disaster tourism destinations by addressing the following research questions:

1. How long does it take to regain the reputation of a destination and restore tourist numbers?
2. What management strategies are beneficial for the pre-and post-disaster periods?
3. How does the tourism sector change after natural disasters?

1.5 Structure of the dissertation

The remaining part of this dissertation is divided into five chapters: literature review, methodology, findings, discussion, and conclusion. A brief summary of each chapter proceeds as follows:

Chapter 2: Literature Review. This chapter provides an extensive critical literature review of the research questions. It begins with a discussion of the main approaches to crisis management, then it examines the image of a tourism destination and the role of marketing in the post-disaster period. Finally, the research explores major changes in tourism after a natural catastrophe.

Chapter 3: Methodology. This chapter describes the methodology used for the research. It involves descriptions of secondary research, the qualitative method, a case study approach, the methods of data collection, and thematic analysis.

Chapter 4. Findings. This chapter provides findings related to case studies presented in separate sections. Each section begins with tourism statistic data and then reviews the

disaster response in the destinations through Faulkner's 2001 Tourism Disaster Management Framework. Finally, the sections explore the changes in the tourism industry caused by natural disasters.

Chapter 5. Discussion. This chapter discusses the main findings, suggesting hypotheses and answering the research questions. The information regarding the cases is analysed in order to discover common patterns.

Chapter 6. Conclusion. This chapter gives a summary of the research, outlines answers to the research questions, discusses the limitations of this work, and provides recommendations for future research.

Chapter Two: Literature Review

2.1 Introduction

The first part of this chapter discusses disaster management strategies and describes two main tourism crisis management models (PPRR Crisis Model and Faulkner's 2001 Framework) used within the context of coping with natural disasters. Then, the chapter explains the significance of image for tourism destinations in the post-disaster stage and provides several marketing tools to restore the afflicted destinations' reputations faster. The third part examines changes in the tourism industry after a disaster, including dark tourism and the implementation of proactive measures.

2.2 Disaster management strategies

Post-disaster management has different approaches and priorities in different countries as there are widely contrasting views and understandings in various countries, with distinct differences between economically developed and developing countries (Kaklauskas et al., 2009).

In the tourism industry, crisis management planning involves preparing for occurrences which the organisations have usually not previously experienced. There are two main approaches to crisis management: proactive and reactive. The proactive stage takes place before a potential crisis and implies careful monitoring which allows recognition

of the impending catastrophe and makes attempts to effectively mitigate the consequences. The reactive approach includes crisis management subsequent to the actual event that has occurred. This stage involves government aid packages, the advancement of domestic tourism, the promotion of particular niche products, and the development of new types of tourism. Since containing damage is the priority for the organisation to rapidly return to a state of stability, a proactive approach is arguably more efficient than the reactive approach often evident in tourism (Pforr & Hosie, 2008).

Successful post-disaster management strategies should be compatible with the catastrophe level and economic, regulatory, social, cultural, environmental, institutional, and technological circumstances in the country. A diverse array of strategies can be implemented, considering that the combination of influencing aspects and relative emphasis on a certain factor or several factors depends on local conditions. Thus, the most effective post-disaster strategy of one country cannot be copied and used in another country. Strategies could only be modified to a disaster situation and all the above-mentioned circumstances in the destination (Kaklauskas et al., 2009).

This section will review a few crisis models which may be suitable for tourism destinations in order to successfully alleviate the consequences of a natural disaster.

2.2.1 The PPRR Crisis Management Model (Hosie & Smith, 2004)

As Pforr and Hosie (2008) noted, numerous Western organisations adopt a four-phase model PPRR (prevention, preparation, response, recovery) represented in Figure 1. It is an iterative model designed to provide continuing opportunities for learning how to efficiently manage disaster situations. The prevention, preparation, response, and recovery components of the paradigm depict a sequence of events and may be used in many tourism areas including companies and infrastructure. The sequence starts with the 'preparation' phase; however, many crisis events occur unpredictably and require immediate implementation of the 'response' stage since the 'preparation stage' is inadequate in those cases. The 'preparation', 'response', and 'recovery' components of the model are inter-related and have a critical relationship to the purpose of 'learning' which is an axiomatic and important recurrent aspect of the PPRR model. The learning process provides the means for stimulating processes and achieving outcomes for the organisation. In order to develop a more qualified approach, organisations have to

efficiently prepare, plan, and perform particularly for natural disaster threats, through risk assessment and evaluation of the crisis consequences. The PPRR Crisis Management Model can be suitable not only for the tourism sector but also for other local firms and facilities, national infrastructure (e.g. distributors of electrical power), and government organisations including police and military services (Hosie & Smith, 2004).



Figure 1. *The PPRR Crisis Management Model (Hosie & Smith, 2004).*

2.2.2 Faulkner's 2001 Tourism Disaster Management Framework

Faulkner's 2001 Tourism Disaster Management Framework (TDMF) (Table 1) is considered to be among the most appropriate crisis management models in tourism. This framework includes the six phases described below.

1. **Pre-event Phase.** During this stage, actions are taken to achieve the prevention and minimisation of disasters. It involves such elements as developing disaster contingency plans and conducting potential disasters and their probability assessment studies as well as undertaking measures to educate industry stakeholders, personnel, customers, and the local community (Faulkner, 2001; Pforr & Hosie, 2008).
2. **Prodromal Phase.** In this stage, it is obvious that a catastrophe is impending, but has not yet hit. For natural disasters, this time frame might be quite short and leave no time to prepare. The phase involves the activation of contingency plans and warning systems prepared at the previous stage, the establishment of

command centres, and securing facilities (Faulkner, 2001; Huang et al., 2008; Pforr & Hosie, 2008).

3. **Emergency Phase.** This is when the first effects of a disaster have been felt and particular actions have to be taken in order to rescue people and property (Huang et al., 2008). The phase includes rescue procedures, medical services, emergency accommodation, food supplies, monitoring, and communications systems (Faulkner, 2001).
4. **Intermediate Phase.** At this point, people's short-term needs must be addressed, and the focus of activity is the restoration of essential services. Other elements of this stage include damage audit, media communication strategies, clean-up, and restoration. Regarding tourism, in this phase, the aim is to restrict the transforming of negative effects in the specific areas and promptly prevent the spread of stigma from the affected place to other areas (Faulkner, 2001; Huang et al., 2008).
5. **Long-Term or Recovery Phase.** This stage with a long-term perspective is the continuation of the Intermediate phase. It involves repairing damaged infrastructure, rehabilitation of the environment in the disturbed areas, counselling victims, restoration of businesses, development of investment policies, debriefing to review the disaster strategies in the following stage (Faulkner, 2001; Pforr & Hosie, 2008). In the tourism industry, special efforts should be taken to return the key tourist markets to the destination. These might include intensive marketing campaigns, re-confirmation of pre-booked conventions and tours, and arrangement of familiarization trips (Huang et al., 2008).
6. **Resolution Phase.** This is the final stage where a place returns to normality or acquires a new improved state. During this phase, a crisis management policy is assessed and upgraded if necessary (Huang et al., 2008; Pforr & Hosie, 2008).

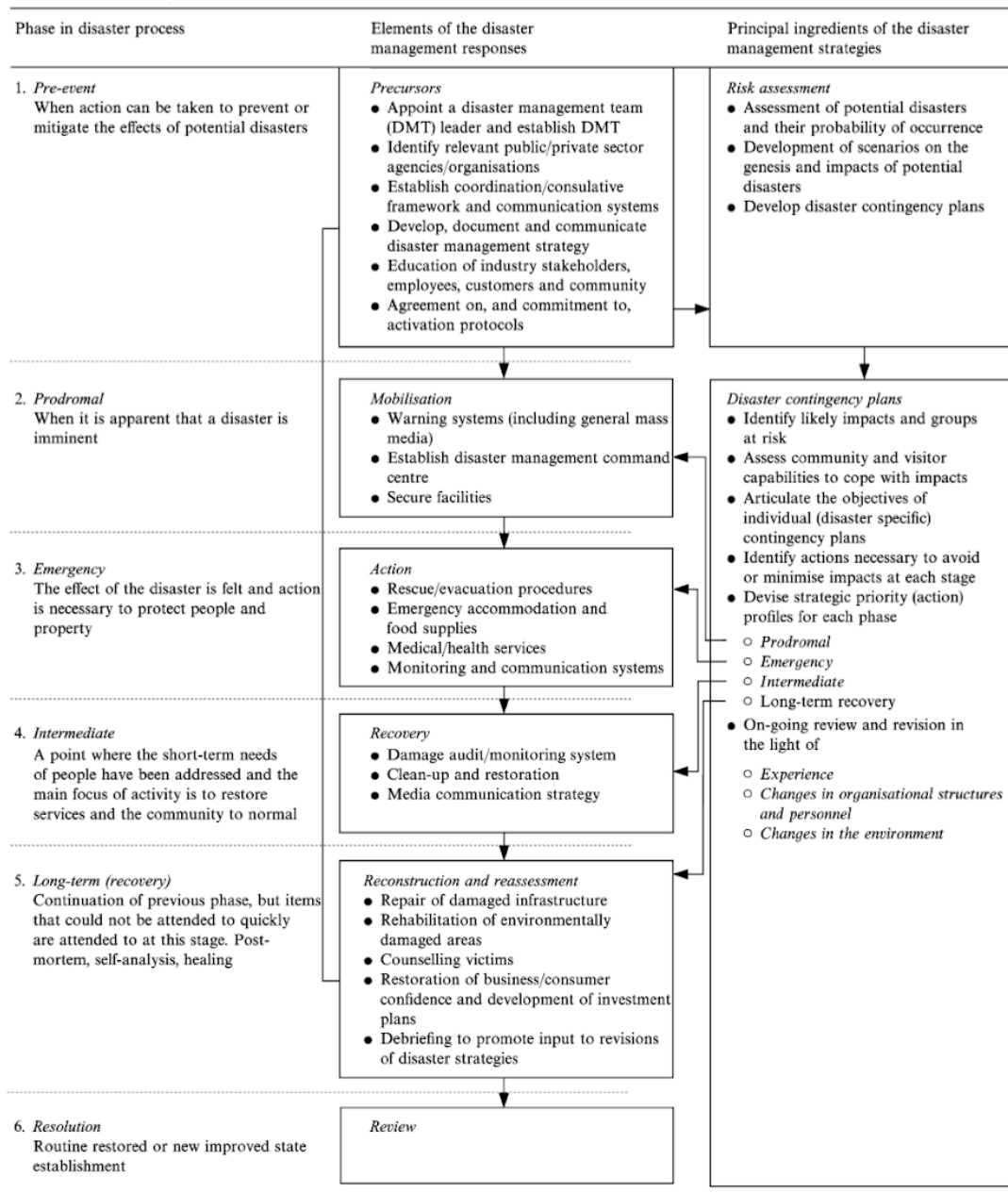


Table 1. *Faulkner's 2001 Tourism Disaster Management Framework (Faulkner, 2001).*

Overall, Faulkner's Tourism Disaster Management Framework is a suitable schema to analyze complex crisis management stages in both natural and man-made catastrophes in tourism. This model has a great operational capability, inbuilt flexibility, and adaptability to particular kinds of disasters (Prideaux, 2004).

Based on the discussed management models for mitigating the consequences of a natural disaster, it can be concluded that a proactive approach, providing preparedness, has a significant role in all of the reviewed schemes. This section will discuss two main elements of the preparation stage: contingency plans and the establishment of an early warning system.

2.2.2.1 Contingency planning

Contingency planning can be defined as the pre-emptive analyses of specific crisis scenarios. Its goal is to develop and assess various options to have them available as a course of action. This planning type might be known as ‘emergency planning’ or ‘alternative planning’. Contingency planning for potential crisis events provides organisations with a significant head-start which allows them to be confident about their decisions when being under pressure and in complicated situations (Glaesser, 2006). As noted by Ritchie (2008), contingency plans have to be created in advance of the natural disaster and, combined with risk assessment and analysis, may be useful to target vulnerable areas and groups of a tourist destination.

These plans can define specific actions needed in each phase of the calamity lifecycle and design a tactical strategy, which might be reviewed to reflect the experience and organisational or environmental changes. The result of the emergency planning includes action plans, usually in the form of files which have been compiled for various situations, following a particular scheme. These files include all the information necessary for the situation, control lists, and contact details for the decision-makers, both internal and external, and critical personnel (Glaesser, 2006).

According to the “Handbook on Natural Disaster Reduction in Tourist Areas” published by WTO in 1998, contingency planning for the tourism industry may include five areas as follows: personnel coordination, protecting and assisting guests and employees, coordination of transport, emergency shelter arrangement, and press communication.

1. Personnel coordination implies that employees should know their roles, duties, and responsibilities in the case of a disaster, and tourist resort managers should understand what staff they need.
2. Protecting and assisting visitors and employees means having disaster checklists in guest rooms, for example, earthquake or fire information. In cases when it is obvious that a hazard will strike, managers or personnel can provide information packages related to the disaster event.

3. Coordination of transport suggests that the tourist industry must be able to supply information on transportation or travel assistance during the catastrophe. Tourists, being less familiar with the area, will turn to tourism managers or operators for information on the condition of transport infrastructure including road, airport, and rail facilities.
4. Emergency shelter arrangement implies that large resorts and tourist attractions such as museums might serve as temporary emergency shelters before or after a catastrophe. Logistic planning of space, sanitary facilities, food and blankets supply have to be established and prepared in advance of any disaster.
5. Press communication means that tourist resorts or sectoral groups should prepare a mass media communication and advertising strategy prior to a catastrophe. After a disaster, the media will require accurate information related to the event and a contact list of the key individuals to speak to, including representatives of the Disaster Management Team (Ritchie, 2008).

In summary, contingency planning is an essential tool in the preparation stage. To some extent, planning defines specific response actions and designs tactical strategies, which in difficult complex situations, allows managers to be certain about their decisions.

2.2.2.2 Early warning system

One of the proactive measures recommended for the tourism industry in the countries threatened by natural disasters could be implementing a warning system. Early warning is one of the essential factors of disaster risk mitigation, which can save peoples' lives and protect livelihoods and achievements of national development. The warning system has been recognised as an efficient means to reduce vulnerability, improve preparedness and natural hazard response (Briceno, 2007). Although the warning system is mentioned as a part of a prodromal phase, it has to be lobbied for and developed as an element of a pre-event stage (Wilks et al., 2006).

An effective warning system requires a solid technical basis, thorough knowledge about risks as well as public education and awareness which are crucial in crisis situations. The warning system has to be people-centered, which includes having clear messages, distribution systems reaching those at risk, and knowledgeable and practiced responses.

Numerous sectors, such as scientific, technology, business, tourism, education, health, and agriculture, have to be involved in the process (De León et al., 2006).

Rittichainuwat (2006) also argued that installing a warning system is a waste of resources if the public does not know about it, and there is no education provided on how the alarm system operates. Instructing people is necessary and could involve rehearsals, signs, and leaflets to inform both locals and visitors about the disaster warning system. In addition, it is essential to devise various options because when the communication system relies on computers, or satellites, any breakdown, accidentally or by the catastrophe itself, can disable the network (Wilks et al., 2006).

Even though the implementation of early warning systems appears to be expensive, in the long-term perspective, it helps to reduce a disproportionate amount of disaster losses (Briceno, 2007). For example, in Sri Lanka, almost 35,000 people died because of the 2004 tsunami. Regarding this case, De León et al. (2006) stated that although there had been enough time to warn the coastal population, the absence of a warning system, the lack of public awareness of tsunamis, and insufficient warning response training prevented the administration and locals from taking proper measures that would have considerably reduced the number of casualties.

To conclude, tourist destinations' reactions to crises vary depending on the individual circumstances since crises are different and organisations differ from each other. Besides, crises can occur unexpectedly and the involved usually have to confront the emergency situation without any formal guidelines, necessary preparation, or previous experience. However, a schematic model of crisis management may provide a beneficial starting position for managers to evaluate the involved risks and to define the roles and duties of the different stakeholders (Evans & Elphick, 2005; Pforr & Hosie, 2008). The disaster management policy avoids confusion and the repetition of actions, which leads to a more effective response, whereas the establishment of a protocol to determine the responses needed can potentially reduce panic and stress among people involved (Faulkner, 2001). For organisations, it is certainly necessary to appropriately adapt the model to match their specific circumstances to be assured that clear and reliable crisis management processes take place. Even though a model is a useful means for identifying and classifying issues, it is imperative to recognise the limitations of

emergency planning and maintain the flexibility of the response when applying a model (Evans & Elphick, 2005).

2.3 Destination image recovery

The main question after a disaster in a tourist destination is how long will visitor numbers take to return to normal (Carlsen & Hughes, 2008). The recovery rate of the affected destination depends on many aspects including the scale of the damage, the destination's financial resources, the government's appropriate planning, involvement of the private sector and people's awareness, etc. (de Sausmarez, 2005; Estevão & Costa, 2020).

The tourism industry is often unable to recover after a disaster quickly, compared to other businesses, since a destination's attractiveness is mostly based on its image, which can be tarnished because of a disaster (Mair et al., 2016). A tourism destination's image has a significant impact on the traveller's decision-making process, which clearly indicates its importance as a crucial selection factor. Connotations invoked by the image are mainly associated with the tourist's expectations of the experience at a destination. Indeed, travellers can visualise the experience based on either positive or negative feelings about a certain destination before purchasing a travel product (Lehto et al., 2008). A destination's image also depends on the efficiency of its tourism facilities restoration and on the effective announcing of a marketing message about re-opening of the destination (de Sausmarez, 2005). For example, effective advertising encouraged Americans to resume mass travelling only a month after the 9/11 terrorist attacks in the USA in 2001 (Mair et al., 2016).

One of the major factors in recovering after a natural disaster is maintaining a flow of news and accurate information. The government ought to cooperate with both national and international legislative bodies in providing tourists with information about the real situation after a disastrous event. In doing so, it is important to ensure a balance between positive and negative news. In order for the media to be able to present accurate data about the afflicted areas, the tourism administration should provide the mass media with consecutive and relevant information about the post-disaster recovery. In its turn, mass media should also be to some extent responsible for the ramifications of

exaggerated warnings and news which can create a negative image of the riskiness of travelling to a certain destination (Rittichainuwat, 2006).

2.3.1 Marketing

Marketing is key to assisting in the recovery of a tourism destination after a natural hazard. According to Mair et al. (2016), the main goals of post-disaster marketing include changing people's misperceptions about the disastrous event and recovering confidence in the destination. In the post-disaster period, a destination may turn the mass media exposure to a beneficial effect and take advantage of free publicity.

Tourism authorities can use the media combined with the Internet to impart balanced up-to-date information on the situation (de Sausmarez, 2005). Media monitoring as part of the marketing is a critical element of the post-disaster recovery plan, which allows destinations to neutralise any negative publicity and protect their reputation (Mair et al., 2016).

There are numerous marketing instruments that could be effective in recovering the image of the suffered destination. Three marketing tools, which are considered to be most used in the post-disaster period, are described below.

2.3.1.1 Market segmentation

Target marketing is an important management strategy in the tourism industry (Jang et al., 2004). Marketing segmentation is a mechanism which divides diverse broad markets into smaller target segments of the market. Segments might vary and may be built on socio-demographics, geography, psychographics, and behavioural segmentation. There are three potentially beneficial target markets for post-disaster tourism destinations.

1. Loyal visitors. A noteworthy fact is that a disaster occurrence does not always impact the perspectives and behaviours of tourists who show loyalty towards a travel destination. People who had often visited an area which was affected by a catastrophic event are more likely to return to this destination than infrequent visitors. Having an attachment to the destination, these loyal clients may be motivated to come back to help with recovery efforts. Thus, loyal or repeat visitors become the first and essential target segment for post-disaster destination marketing organisations (Mair et al., 2016).

2. People living in remote regions. Another significant finding noted by Mair et al. (2016) is that those living a farther distance from the afflicted destination had more positive images than people living closer to the destination, which shows that distance is a considerable factor in image formation. Besides, proximity can impact tourists' perceptions of the effects of natural disasters.
3. Risk-averse tourists. As mentioned by Lehto et al. (2008), tourists have different degrees of risk perception with some of them being more risk-averse than others. For instance, adventure travellers can feel the excitement looking at the advertisement picture of a risky holiday situation, whereas other tourists might have feelings of fear. Besides, Mair et al. (2016) note that travellers from different countries react differently to natural hazards, supposing that the identification of risk-averse nationalities can help to clarify the target tourist market for efficient post-disaster recovery campaigns.

The expected result of market segmentation is a significant competitive advantage regarding customizing a product, pricing, promotion, and placement (Backer & Ritchie, 2017). Similarly, Jang et al. (2004) claim that the selection of a target market is a crucial stage in the development of a marketing strategy, the main goals of which are to maximise marketing effectiveness, efficiently use limited budgets and marketing resources, and obtain significant economic benefits.

2.3.1.2 Familiarisation trips

One of the useful instruments of marketing strategies in the post-crisis period is familiarisation trips (Glaesser, 2006). Familiarisation trips can be identified as an advertising effort where professionals in the tourism industry, such as tour operators and agents, travel writers, news reporters, and meeting planners are invited to free tours of the destination to improve its image and increase the number of bookings in the region. The main purpose of familiarisation trips is to provide tourism middlemen with personal experience of the benefits that potential visitors can have at the destination (Kourkouridis et al., 2017). According to Glaesser (2006), these trips are always effective when it is difficult to communicate changes in the product as with occurrences that cause a downturn in demand because of an anticipated security situation. Moreover, familiarisation trips can help overcome the reluctance of agents to book business and are expected to attract more tourists to the area (Anintya et al., 2020; Rittichainuwat,

2006). In addition, Anintya et al. (2020) highlight that familiarisation trips have lower costs compared to foreign mass media advertising abroad.

2.3.1.3 Discounting

Another tool for promoting tourism in disaster-affected destinations is a discounting price policy. In general, the objective of the price policy is setting prices for products and services of a company's activity. It has a strategic role and considers that price essentially impacts the consumer's opinion about the product. In crisis management, operative pricing can minimise the effect of negative events on demand. Within the price policy, discounting means reduction of the specified price which, for different criteria including quantities, functions, and points in time, can be focused on the retailers' levels and on consumers from a loyalty perspective (Glaesser, 2006).

Although it seems that reduced prices might be necessary to attract tourists back, the discounting strategy is a contentious question with disagreements over the relative benefits of lowering and holding prices (Henderson, 2007). Glaesser (2006) notes that in tourism, usually, cautious use of price policy instruments is recommended. Since the tourism industry is becoming increasingly reliant on the value of the experience and it is difficult to correct a cheap image at later stages, short-term loss of profit is preferable over long-term concerns and ruining the strategy of experience value.

2.4 Changes in the tourism industry after a natural disaster

During a post-disaster period, considerable attention is devoted to rebuilding the image of a destination as a safe place and then to restoring the "pre-disaster" tourist markets and products (Tucker et al., 2017). However, an emerging body of research emphasises the importance of diversification of markets and products, which might include creating new segments of the markets and new attractions based on the disaster event (Rittichainuwat, 2008; Tucker et al., 2017; Yan et al., 2016).

2.4.1 Phenomenon of dark tourism

Tourism reactions in post-disaster areas could be highly variable. As Tucker et al. (2017) note, although tourists usually avoid visiting a post-disaster destination even after the reconstruction, in some cases, natural hazards can actually stimulate increases or changes in the local tourist market. One of the changes might be the emergence of 'disaster tourism' which is a subset of 'dark tourism'. The definition of dark tourism

involves travelling to places associated with death, tragedy, disaster, scenes of violence and crimes against humanity, suffering the macabre, and anything unpleasant (Iliev, 2020; Rittichainuwat, 2008). A considerable travel motivation for dark tourism is curiosity, which can be defined as a desire to learn new information and the associated search for a new experience. Accordingly, curiosity about extraordinary disasters stimulates people around the globe to travel to dark sites (Markey & Loewenstein, 2014; Rittichainuwat, 2008). For example, the Italian city L'Aquila happened to become a disaster tourist destination immediately after a severe earthquake in 2009. The place could be characterised as a 'ghost town', where tourists experienced feelings of being spooked and frightened since the city had an uneasy and silent atmosphere (Hall & Prayag, 2020).

The phenomenon of disaster tourism is becoming increasingly common in post-disaster areas. The ability to create a new post-disaster product such as dark tourism emphasises the flexibility of the tourism industry as well as the connection between tourism and an issue of post-disaster recovery (Tucker et al., 2017).

2.4.2 Proactive approach to crisis management

One of the changes in the tourism industry after the occurrence of a disaster could be the implementation of a proactive approach within disaster crisis management. For instance, it was found by Mair et al. (2016) that a sequence of earthquakes in Taiwan forced local hoteliers to create disaster-management strategies. Another example is the establishment of the National Disaster Management Agency (BNPB) in Indonesia after the 2004 Indian Ocean tsunami in order to minimise disaster risks and mitigate their effects on human lives. BNPB leads and collaborates with other similar agencies to maximise the capacity of overall disaster response of the country (Chatfield & Brajawidagda, 2013). Following the National Disaster Management Plan / 2010-2014 (BNPB, 2010) the BNPB has three main missions as follows: (i) protecting the nation from disasters by implementing risk-reducing measures; (ii) establishing a reliable system of disaster management; (iii) conducting disaster management in an integrated, comprehensive, planned and coordinated manner.

Chapter Three: Methodology

3.1. Introduction

This chapter describes the methodological approach underlying the research design and methods that are used to collect and analyse data. The first section of the chapter is a short overview of the philosophical position of the study. Next, the chapter provides definitions of the secondary research and the qualitative method chosen for the study, followed by an explanation of the case study method with a description of selected cases within the research. Finally, it reviews the methods of secondary data collection and thematic analysis.

3.2. Research philosophy

The methodology, as a combination of methods to conduct research, has to be in accordance with a particular ontological and epistemological base. Depending on ontological and epistemological perspectives, various research approaches can be used (Grix, 2004). Ontology is a branch of philosophy which studies such concepts as being, existence, and reality (Smith, 2003). Epistemology is another branch of philosophy, which seeks to explain the meaning of ‘knowing’ and consider the criteria for deciding what kind of knowledge is adequate and legitimate (Gray, 2004).

This research is based on relativism from an ontological perspective. Relativism implies that people perceive the reality of this world in different ways. Therefore, within this philosophy, reality is considered to be dynamic, and numerous realities vary depending on the person and the context (Crotty, 1998). In contrast to realism, which claims that the world operates within laws of nature and exists independent from human perception, relativism holds that it is human consciousness which makes sense of the whole of existence (Gray, 2004; Grey, 2014).

Within epistemological philosophy, this research integrates constructivism which suggests that every person has their unique experience and that all approaches to make sense of the world are valid and valuable. Constructivists seek to evaluate, explain or foresee the patterns of phenomena through a complex process of collecting and analysing data, testing ideas, and cognitive thinking (Crotty, 1998).

The combination of ontology and epistemology form a philosophical base underlying the interpretivist paradigm which is applied in this research. This paradigm arises from constructivism, which is linked with the concept of co-existence and relations between people's consciousness and the world. Every researcher understands knowledge from their own perspective, resulting in various interpretations of a phenomenon (Scotland, 2012). This research is based on a qualitative method with secondary data collection and uses the principles of the interpretivist paradigm to answer the research questions of this study. Thus, qualitative information gathered following interpretative methods is particularly important to create new authentic knowledge (Scotland, 2012).

3.3. Research methodology

3.3.1 Secondary research

This dissertation will exclusively employ secondary research, which implies collecting and revising already analysed data to present interpretations, knowledge, or conclusions different from, or additional to, those originally presented (Curtis & Curtis, 2011; Gray 2004). In comparison to primary analysis, which initially collects and transforms raw data, secondary research reuses and revisits other study projects' primary research (Curtis & Curtis, 2011). Secondary data analysis allows gaining a comprehensive and thorough understanding of literature to create a more sophisticated perspective on the phenomenon studied, present new research findings and implications, assess the quality and availability of materials existing, and suggest what is left to be examined (Curtis & Curtis, 2011; Stewart & Kamins, 1993).

The major advantage of secondary research relates to cost and time. Generally, the use of secondary data is far less expensive than conducting primary research. Besides, consulting secondary sources is a practical alternative when answers to the questions are needed quickly (Stewart & Kamins, 1993). It is of note that the secondary analysis method is considered to be useful in studies related to tourism planning and development (Xiao & Smith, 2006). Moreover, as noted by Veal (2018), government agencies gather and organise a significant quantity of tourism data which are potential sources to retrieve and analyse information from to report more beneficial findings.

3.3.2 Qualitative method

Within this research, the qualitative method is used to observe correlations in the information. The qualitative research method is a non-numerical analysis and interpretation of available data with a view to discovering the underlying patterns and meanings of a phenomenon (Babbie, 2015). The qualitative research method can be applied to gather in-depth insights into an issue or produce new ideas for a study and is usually used in social sciences and humanities (Rosenblatt & Fischer, 1993). In contrast, quantitative research is a numerical representation of observations, aiming to describe and explain the explored phenomena (Babbie, 2015). This type of research is based on a deductive approach that seeks to confirm previously formulated hypotheses with empirical data, whereas in qualitative research, theories and hypotheses emerge from gathered observations. The data in quantitative research is collected through such methods as polls or surveys, the results of which are generalised across observed groups (Corbetta, 2003). Qualitative research involves such data collection methods as in-depth interviews, focus groups, observations, and textual or visual analysis (Gill et al., 2008).

The qualitative research design involves its purposeful use to describe, explain, and interpret the data collected (Williams, 2007). During the analysis process, the researcher selects pieces of relevant information and combines them to create tendencies, patterns, sequences, and orders (May, 2011). Williams (2007) noted that qualitative methods are less structured in terms of descriptions since they develop new theories. The main advantage of this method is its flexibility, which allows analysts to consider both how the meaning is constructed and how new meanings can be developed and used (May, 2011). Since this research uses an observation approach based on secondary data, the qualitative research method is chosen for this study. Moreover, the subject of post-disaster tourism destinations is complex, broad, and dependent on various circumstances; thus, the qualitative approach is suitable for this case because it provides an in-depth exploration of the selected topic from various points of view.

3.4 Case study method

Since the aim of this research is to analyse tourism destinations which have suffered from natural disasters, the multiple case study method was chosen. There are multiple definitions of this method. For example, Berg (2009) defines the case study approach as

a systematic investigation of an event or several related events with the particular purpose of describing or explaining the phenomenon. Another definition given by Bogdan and Biklen (2003, p.54) is “a detailed examination of one setting, or a single subject, a single depository of documents, or one particular event”. This method examines a contemporary real-life case or multiple cases over a period of time, through in-depth, detailed data collection involving numerous sources of information and provides case themes and descriptions (Gustafsson, 2017). The method is considered to be perfect when ‘why’ or ‘how’ questions are being asked concerning a number of contemporary events which the researcher cannot control (Gray, 2004).

Since this research includes three cases, it is a multiple case study. Within this approach, the researcher can analyse data both in every situation and across all situations. Multiple case study research allows the researcher to either foresee contrasting results for the expected reasons or predict similar outcomes in the studies. This way, the author is able to clarify if the results are valuable or not. Moreover, when comparing and contrasting cases with each other, the researcher can make a contribution to the scientific literature by providing contrasts and similarities found. The evidence produced from this study method is considered to be solid and reliable. Another advantageous aspect of a multiple case study is the creation of a more plausible theory as the suggestions are strongly grounded in several pieces of empirical evidence. Hence, multiple cases allow an extensive exploration of the research questions and theory evolution (Gustafsson, 2017).

3.4.1 Case selection

Case selection is the primary task of a researcher as when choosing cases, one also establishes an agenda for examining those cases. The case selection criteria have to be related to the purpose of the research, its object, and the issue to be clarified. The criteria information also defines if the research might provide the case study with meaningful data (Seawright & Gerring, 2008). The case selection of this research is based on the following criteria:

- All selected cases are popular tourism destinations which have suffered from major natural disasters.

- The minimum period after a disaster in each chosen destination is five years, which allows evaluating the effectiveness of response measures and changes in tourism from a long-term perspective.
- The selected destinations are different types of populated geographical areas such as a country, a region, and a city, which allows exploring how response measures can differ at different scales: at national, regional, and city levels.
- Since this research is based on secondary data analysis, all cases need to have been previously investigated by other researchers, and various sources of data about these cases must be available.

Considering these criteria, three cases were chosen for this research: the province of Phuket in Thailand, the Maldives, and the city of Christchurch in New Zealand. Two of these cases, Phuket and the Maldives, are popular tourist destinations that both suffered from the Indian Ocean tsunami in 2004, which allows assessing how different regions overcame the crisis caused by the same calamity over the same period of time. Both Thailand and the Maldives are developing countries. As for the third selected case, Christchurch is a popular tourist city in the developed country of New Zealand, which was affected by a major earthquake in 2011. Detailed descriptions of the cases are presented below.

3.4.1.1 The case of Phuket

The Indian Ocean tsunami in December 2004 was one of the most devastating natural disasters in modern history. The tsunami hit eight countries in Asia and Africa, including Thailand, Malaysia, India, the Maldives, and Sri Lanka, causing over 270,000 deaths, miles of decimated coastline, and billions of dollars in losses from damage to the tourism industry (Henderson, 2007; Lehto et al., 2008).

Phuket is a province in the south of Thailand comprising the Phuket Island and several small islands in the Andaman Sea (Maga & Nicolau, 2020). The region includes three districts which are divided into 17 subdistricts and 103 villages. The population of the province is around 400,000 people. Phuket is one of the major contributors to Thailand's economy (Jitt-Aer, 2018), whose GPP (Gross Regional and Provincial Product) is the third-highest index among the country's provinces. The economy of

Phuket heavily depends on the tourism industry (Tang et al., 2019). The island of Phuket is a significant tourism destination also known as the second international gateway of the country. The area was popular among both European and Asian tourists. The average number of incoming tourists per month was 300,000 people. Since 2001, Phuket had accounted for around a third of the overall inbound tourists, whose numbers had annually exceeded 10 million in the pre-disaster years (Henderson, 2007; Maga & Nicolau, 2020).

In December 2004, the island was affected by the Indian Ocean tsunami and suffered from some of the worst consequences of the disaster. Overall, 20% of the island's hotels were severely damaged. In January 2005, Phuket experienced a 27% decline in inbound flights and an 85% drop in international tourists (Henderson, 2007). According to Rittichainuwat (2006), because of the calamity, governments of many European countries including Norway, Sweden, and Denmark, issued recommendations to their residents to avoid travelling to the areas that suffered from the Indian Ocean tsunami. Immediately after the disaster, the hotel occupancy rate decreased to 10%, and even 8 months later, it was only at 40%. Besides, 500 tourism organisations, employing more than 3000 people, collapsed over the months following the disaster (Henderson, 2007).

3.4.1.2 The case of the Maldives

The Maldives is a Small Island Developing State in South Asia, surrounded by the Indian Ocean. It is situated southwest of India and Sri Lanka, around 700 km. from the continent of Asia (Kench, 2009). The population of the Maldives is 350,000 people. Over the past 35 years, the country has witnessed the rapid growth of its tourist industry (Sathiendrakumar et al., 2021; Zubair et al., 2011). The tourism industry directly accounts for 25% of the country's GDP. In fact, 87 out of the 1190 islands of the Maldives are tourist resorts, which were annually visited by 1 million tourists.

In December 2004, the Maldives was severely impacted by the Indian Ocean tsunami. The human cost included 82 people dead, 26 missing and 1313 injured. The overall estimated impact of the tsunami made up US\$160.8 million worth of damage (Carlsen, 2006). The natural disaster severely impacted the tourism industry. Before the tsunami, between 1999 and 2003, tourism in the Maldives contributed around 30% of Gross Domestic Product and around 40% of total tax revenue. Inbound tourism had gradually improved foreign exchange earnings in the country since 1983 when this income was

US\$13.4 million in comparison to US\$149 million in 2003. The number of international tourists rose from about 42,000 in 1980 to nearly 600,000 in 2004; with an annual increase rate of more than 9% over the 24-year period (Carlsen & Hughes, 2008).

After the 2004 tsunami, there was a 36.4% decline in tourist arrivals from January to July 2005, compared to the same period of the previous year; accordingly, the Asia Development Bank predicted a reduction in Gross Domestic Product from 7.6% to 1%. The effect on the tourism infrastructure was significant. Malé International Airport was closed for two days after the disaster. In the following months, 19 resorts out of 87 were closed because of damage, which reduced the bed capacity in the country by 22% of the pre-disaster rate of almost 16,500 beds (Carlsen, 2006).

3.4.1.3 The case of Christchurch, New Zealand

Christchurch is the second largest city in the country of New Zealand with a population of around 340,000 people. The city is located in the Canterbury region of the South Island which is famous for its rugged coastlines, beautiful mountains, and national parks (Orchiston & Higham, 2016). Having an international airport, Christchurch is an important gateway to New Zealand's South Island and is known as the tourist centre of the South Island (Wilson, 2016). It has a creative urban city centre and provides a large range of accommodation (over 150 hotels), transport, and visitor services (Fitch Solutions, 2020; 100% Pure New Zealand, n.d.). The city contributed about 16% of the overall national tourism activity before the earthquakes (Orchiston & Higham, 2016).

In the September of 2010 and February of 2011, Christchurch suffered from major earthquakes, followed by thousands of aftershocks. The February quake was centred near the centre of the city and caused severe damage and 185 deaths. A considerable number of architectural and historical buildings collapsed, including the iconic Anglican cathedral. Within 24 hours of the event, the whole city centre of Christchurch was cordoned off as a 'Red Zone' which, although decreased in size with time, remained in place for two years. Twenty-three hotels were in the 'Red Zone' and could only be used by emergency personnel (Orchiston & Higham, 2016; Tucker et al., 2017). During the state of emergency, and for a certain time after it, tourists were asked not to come to the city. In addition, the quakes forced the closure of many local tourism attractions and the cancellation of several scheduled events such as the Rugby World Cup 2011. Inevitably, the earthquakes in Christchurch caused an immediate and considerable decrease in the

number of incoming tourists. Overall, it was estimated that the city sustained direct losses of NZ\$235 million in visitor spending over the 18 months after the February calamity. Nevertheless, almost two years after the disaster, the city was included in the list of the top 10 world destinations to visit by a major travel guidebook, Lonely Planet, 2013, despite the level of devastation and the fact that at that time, the ‘rebuild’ efforts had barely started (Tucker et al., 2017).

3.5 Data collection

Data collection for the research comprised various sources of information which have been collected and archived. These sources involve official statistics, government reports, archived data sets, industry studies, as well as books, journal articles, and social media (Curtis & Curtis, 2011; Stewart & Kamins, 1993). The data have mostly been acquired from the following sources: (i) academic articles, (ii) books and book chapters, (iii) different reports of tourism organisations including the World Travel and Tourism Council (WTTC) and the United Nations World Tourism Organization (UNWTO), (iv) government reports and statistics, (v) non-government and private research reports and articles, (vi) media resources related to the research questions, and (vii) theses.

3.6 Data analysis method

For the data analysis, this research used thematic analysis, which is a widespread method and the main component of analytical induction (Curtis & Curtis, 2011). Braun and Clarke (2006) define thematic analysis as a common method for identifying, analysing, and reporting themes within qualitative data obtained from interviews, focus groups, secondary sources, or observations (Saldana, 2009).

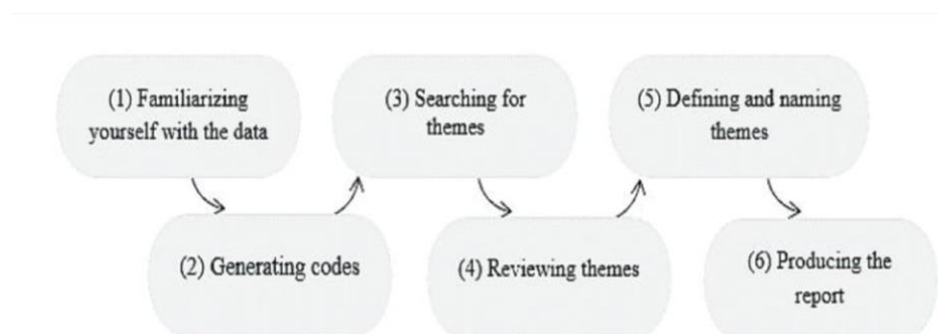


Figure 2. *Phases of Thematic Analysis (Braun & Clarke, 2013).*

According to Braun and Clarke (2013), thematic analysis consists of six phases (Figure 2), which are described as follows:

1. Familiarisation with the data. When making an analysis, it is vital for researchers to immerse themselves in the data. As a rule, immersion implies an active repeated reading of the material searching for the meanings, patterns, and more (Braun & Clarke, 2006).
2. Generating initial codes. This phase involves the creation of initial codes (words or phrases) from the data. Codes demonstrate features interesting for a researcher, including semantic or latent content, and refer to the main segment of the raw data that can be relevant to answer research questions (Braun & Clarke, 2013; Boyatzis, 1998).
3. Searching for themes. This stage implies sorting different codes into possible themes and collating relevant extracts of coded data within the classified themes. Here, a researcher analyses identified codes and considers how various codes could be combined to develop an overarching theme (Braun & Clarke, 2006).
4. Reviewing themes. This phase involves the further refinement of the themes identified when a researcher can combine, separate, or remove them. Within themes, data should cohere meaningfully, whereas, between themes, there ought to be clear distinctions (Braun & Clarke, 2006).
5. Defining and naming themes. This stage involves identifying the ‘core’ of each theme and the themes overall and determining the aspect of the information captured in each theme (Braun & Clarke, 2006).
6. Producing the report. This phase includes the final review and writing the report. It is essential that the final report provides an interesting, concise, coherent, logical, and non-repetitive story told by the data – within and across the themes (Braun & Clarke, 2013).

This approach enables practitioners to systematically use a wide range of different kinds of information, which improves their accuracy in understanding and interpreting the observations on people, organisations, situations, and events (Boyatzis, 1998). As noted by Braun and Clarke (2013), thematic analysis has many advantages compared to other methods, including flexibility and suitability for inexperienced researchers since it is a relatively quick and easy approach to learn and apply. Thematic analysis can effectively summarise key points of a significant amount of data as well as emphasise similarities and differences within data sets. Considering these benefits and the fact that thematic analysis is a popular method in tourism research (Ritchie et al., 2005), this analysis approach was chosen for this study as the most suitable.

The analysis of this research included five of the six stages of thematic analysis described above, excluding the fifth phase “Defining and naming themes” due to insufficient data and time. Below are three of the stages in which themes were generated. The first step of the analysis process is re-reading the academic literature with the aim of identifying words and phrases which frequently appear in the reviewed text. Then, these words are classified as initial codes, for example, this study found such codes as ‘preparation’, ‘plans’, ‘reaction plan’, ‘image’, ‘marketing strategy’, and ‘income loss’. The second step involves grouping codes with similar ideas together and creating the initial themes based on these groups. For instance, the codes ‘price change’ and ‘price promotion’ were combined into a theme ‘the establishment of the price policy for the post-disaster period’. Finally, after some time, the initially generated themes were reviewed in order to create their final versions which would adequately reflect the relevant issues of a post-disaster tourism destination. During these phases, certain themes, such as ‘government support’, were removed from the list due to insufficient data, while other themes were combined or separated. For example, the themes ‘risk-averse tourists’, ‘loyal tourists’ and ‘desire to help’ were united as ‘the creation of new target markets. Table 2 provides an illustration of the process of generating themes.

Initial codes	Initial themes	Reviewed themes
Preparation Preparing	Preparation phase	Pro-active measures

Preparedness		
Proactive Pre-event Before the crisis	Period before crisis	
Contingency planning Emergency planning Alternative planning Crisis scenarios Plans Action plans	Contingency planning	Contingency planning
Image Reputation Image recovery Destination's attractiveness	Importance of image	The importance of image
Marketing Advertisement Promotion Decision-making process Marketing message Positive news Accurate information Mass media Media monitoring Communication strategy	Role of marketing	The impact of marketing on the image of a destination
Misperceptions Negative publicity Negative news	Negative image of a post-disaster destination	

Price change Price policy Price reduction Discounting	Discounting as a marketing tool	Discounting policy in the post-disaster period
Income loss Cheap image	Negative side of discounting policy	

Table 2. *The process of theme generation.*

Chapter Four: Findings

4.1. Introduction

This chapter is divided into three sections, each dedicated to one case study: Phuket, the Maldives, and Christchurch. Each section begins with providing tourism-related data of the region, including the number of visitors and tourism revenues, in order to assess a post-disaster recovery period of a destination. Next, Faulkner's (2001) Tourism Disaster Management Framework (TDMF) is applied to examine the response actions in the affected places. The final sections examine whether the tourism industry in the case study areas experienced changes after natural disasters.

4.2. Phuket

4.2.1 Phuket tourism industry data

The statistics provided by the Tourism Authority of Thailand (Figure 3) show that, due to the 2004 tsunami, the total number of visitors to Phuket considerably dropped from 4,793,252 in 2004 to 2,510,276 in 2005. During this downturn, the number of Thai tourists remained almost at the same level with a slight decrease of 107,000, whereas the number of international visitors plunged from 3,497,599 to 1,321,655. However, in 2006, the number of visitors improved, accounting for 4,449,324 people, where the shares of domestic and international tourists made up 1,616,45 and 2,882,779 respectively. In the following year, the data indicates an upward trend totalling 5,005,653 visitors (Nidhiprabha, 2007; TAT Intelligence Center, n.d.)

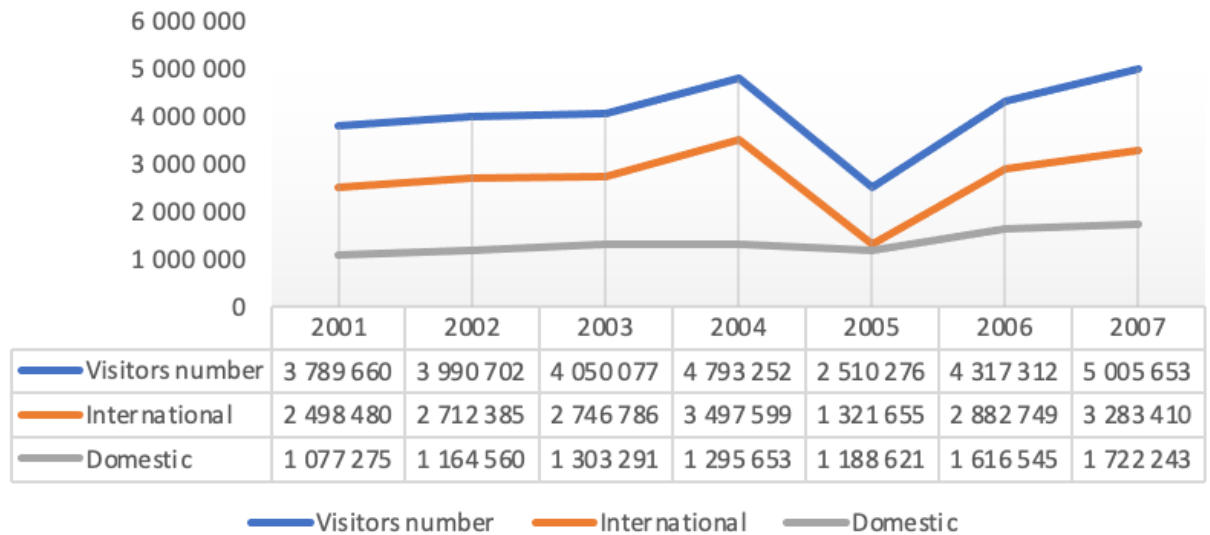


Figure 3. The annual number of tourists in Phuket from 2001 to 2007 (TAT Intelligence Center, n.d.).

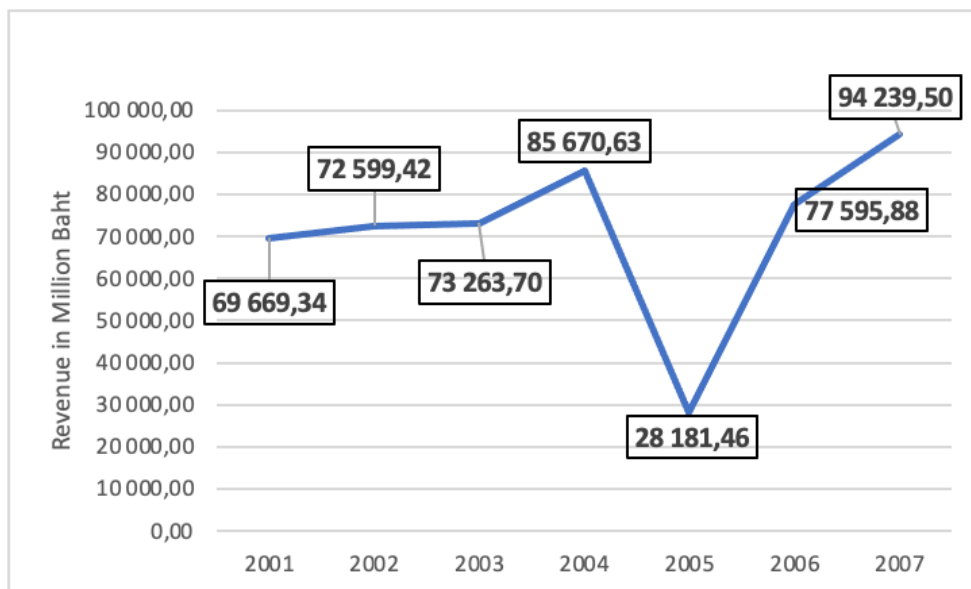


Figure 4. Tourism Revenue of Phuket (TAT Intelligence Center, n.d.).

Similarly, Phuket's annual revenue from tourism activity (Figure 4) plummeted after the natural disaster from 85,670.63 mil. baht (3,777.22 mil. NZD) in 2004 to 28,181.46 mil. baht (1,242.52 mil NZD) in 2005. Then in 2006, the income rapidly increased to 77,595.88 mil. baht (3,421.20 mil. NZD), and in 2007, it totalled 94,239.5 mil. baht (4,155.02 mil. NZD), reaching even a higher figure than prior to the tsunami (TAT Intelligence Center, n.d.).

4.2.2 Phuket tourism through Faulkner's 2001 Tourism Disaster Management Framework

4.2.2.1 Pre-event and Prodromal Phases in Phuket tourism disaster management

It was discovered that the Government of Thailand was not prepared for a significant disaster such as the 2004 Indian Ocean tsunami. The main reason was a common belief that tsunamis would never happen in the region (Pettit et al., 2014). There were no installed early disaster warning systems or mapping of disaster-prone zones and evacuation areas. Besides, there were a number of specific problems, mainly related to the central organisational structures. These involved a lack of experience in major crisis management, inadequate data processing capabilities, and poor systems of communication and decision making. The issues at the local level were telecommunication inadequacies and a scarcity of rescue equipment (Panya Consultants Co., Ltd., & Thailand, 2005).

4.2.2.2 Emergency and Intermediate Phases in Phuket tourism disaster management

Within this stage, the authorities of Phuket quickly formed medical, military, police teams and mobilised victim assistance. During the week after the tsunami, established procedures and databases with the relevant contact details were widely spread to inform and lead stakeholders through appropriate steps. Translators and volunteers were available at such facilities as the airport, coordination centres, medical institutions, and makeshift morgues (Gurtner, 2007; Nidhiprabha, 2007).

An emergency operations centre was created in the unaffected Phuket City to coordinate and centralise official responses. Victims, residents, volunteers, foreign humanitarian aid workers, businesses, and media representatives were directed to the location. First aid, food, water, and temporary accommodation were provided quickly for those displaced. The Provincial Hall became the centre of emergency assistance, performing the following functions: (i) foreign embassies services to help search operations and issue temporary identity documentation; (ii) providing communication facilities including free international phone calls and Internet access; (iii) running stalls with interpreters, water, food, and donations; (iv) travel assistance to offer flights to Bangkok free of charge; (v) having a non-official notice area available for reporting dead and missing (Gurtner, 2007; 2014).

Local roads in Phuket were repaired promptly after the tsunami to allow aid delivery to the afflicted areas. Electricity distributing systems and telephone communications in the region were also quickly restored within several days. Distribution of donated aid and supplies was made via the Department of Disaster Prevention and Mitigation. Supplies which had been sent to the airport in Phuket were transported and delivered by the national army. The administration of Phuket was responsible for clearing debris along the length of the beaches to give tourists confidence in their safety (Nidhiprabha, 2007).

Regarding the tourism industry on the island, within two days of the tsunami, the local association of hotels produced a thorough report on the operational status of all the providers of accommodation in the affected region. With the cooperation of the government, businesses, volunteers, and private contractors, heavy equipment for cleaning beaches was delivered as soon as possible. Thus, within days, the majority of the main Phuket beaches were cleared and saw tourists, umbrella sun loungers, and Jet Ski operators returning, even though in significantly reduced numbers (Gurtner, 2007).

Other tourism stakeholders including associated businesses and suppliers devoted considerable efforts to the restoration and recovery of the affected area (Henderson, 2007). Within a few days, several stores at the beachfront were reopened as well as nearby restaurants, bars, and entertainment venues. Despite the considerable damage and expenses incurred by suffering proprietors, most of the personnel were retained in order to help with cleaning-up activities and cater for the remaining tourists' needs (Gurtner, 2014).

4.2.2.3 Long-term Phase in Phuket tourism disaster management

At this phase, the key priorities of the Tourism Authority of Thailand (TAT) were the rehabilitation of the impacted services and returning consumer confidence. Accordingly, various promotion measures were provided. An alternative image of the destination, demonstrating the rapid reconstruction efforts and the community spirit and resilience, was actively spread on the Internet. Public appeals for tourists to return were supported by the sponsored invitations from various celebrities, foreign dignitaries, travel agents, and journalists as well as by hosting large-scale international events and conventions, and extensive advertising showcasing the real conditions in the post-tsunami region. There was a consistent request for tourists to support local industry by coming back to affected tourist centres (Gurtner, 2007).

Moreover, TAT, the Association of Domestic Travel, and local airlines started offering low-price holiday packages, which included round-trip air travel, two-night accommodation with breakfast, and transfers between an airport and a hotel, priced from 3,200 baht (141 NZD) to 5,500 baht (242 NZD). The idea of this campaign implied that discounting was needed to attract visitors to the affected regions. However, a study showed that tourists were indifferent to a low-priced entertainment package. Instead, travellers were attracted to the value of Phuket Island, its natural environment, and local people. This pattern was confirmed by hotel managers, who claimed that the low-priced tours were not primarily the reason for the visits of their guests (Tavitiyaman & Qu, 2013; Rittichainuwat, 2006).

Furthermore, TAT arranged familiarisation trips for international and domestic news journalists and travel writers and encouraged the exhibition, convention, meeting, and incentive groups to have meetings in the tsunami-affected regions (Sangpikul & Kim, 2009). In addition, to promote domestic tourism, duty-free shopping was introduced for Thai residents staying at least one night in Phuket. As a result of their aggressive marketing campaign, Phuket was given the “Star of Travel Award for Best Destination in Southeast Asia” at the Moscow International Tourist and Travel Exhibition (Rittichainuwat, 2006).

4.2.2.4 Resolution Phase in Phuket tourism disaster management

Findings indicated that the most essential improvement in this stage was the inclusion of the Indian Ocean in the Pacific Ocean Tsunami Warning System in 2005. At a national level, the Ministry of the Interior with the Department of Disaster Prevention and Mitigation overhauled all the aspects of responding to emergencies and made necessary improvements. These developments included the construction of fixed towers for sounding of emergency sirens; installation of improved systems of information dissemination and responsibility chains; establishment of systems to warn coastal areas’ communities of their increasing vulnerability to potential tsunamis; and the installation of directional signs indicating the routes of escape to higher ground (Petit et al., 2014).

Moreover, in December 2006, a buoy “Deep Ocean Assessment and Report of Tsunami” worth 5 million US dollars was installed in the Andaman Sea, about 1,000 kilometres to the west of Phuket. The buoy detects waves of tsunami and sends signals

to warning centres in the region. After receiving the signal, the National Disaster Warning Center is supposed to raise the alert among the population of Thailand (Nidhiprabha, 2007).

4.2.3 Changes in the Phuket tourism industry

4.2.3.1 Dark tourism in Phuket

In post-disaster areas, the phenomenon of dark tourism tends to become common. According to Iliev (2020), dark tourism is any type of tourism associated with death, disaster, tragedy, or suffering. It also can be defined as visiting places where tragic events or historically significant deaths have occurred, and which continue to affect people's lives. The tourism industry witnessed the transformation of disaster sites from death and tragedy into attractions, with the construction and visits of dark sites designed to preserve memory, represented in museums and monuments which provide a significant historic memorial to victims of the dramatic events and history for the general public (Rittichainuwat, 2008).

In Phuket, after the 2004 tsunami, two tsunami monuments were built: Tsunami Memorial Park at Kamala beach (Figure 5) and Tsunami Memorial at Patong beach (Figure 6), thus, turning the island into a dark tourism destination. According to Rittichainuwat (2008), most tourists coming to the monuments in the first two years after the catastrophe were disaster victims' relatives. In particular, Japanese tourists came to Kamala beach to commemorate their deceased relatives. Besides, a tsunami memorial ceremony 'Light Up Phuket' (Figure 7), attended by hundreds of people, has annually been held on Patong beach since the disaster event. At this memorial service, people place lit candles into the sand to honour the memory of the thousands of victims who died in the 2004 Indian Ocean tsunami. The event also presents an exhibition on tsunami disasters and information about how to prepare for another possible tsunami in the future (The Phuket News, 2019; Thongtub, 2017). Hence, after the 2004 Indian Ocean tsunami, Phuket became a dark tourism destination attracting numerous people to the place of the tragic event.

Apart from memorial tourism, for some travellers, curiosity was a considerable motivation to visit Phuket after the 2004 tsunami to see the impacts of the disaster (Mair et al., 2016). However, this tendency could only be recognised among domestic tourists,

which was underpinned by Rittichainuwat's research (2008), which found that motivation factors to visit Phuket after the Indian Ocean tsunami were different for Thai and European tourists. For instance, Thai visitors wanted to help the recovery of the destination and were curious to see the damage, changes, and improvements after the disaster. Ten out of 12 domestic tourists indicated having a feeling that they should see a post-tsunami site, and this could be their once-in-a-lifetime opportunity. Thai tourists also mentioned that numerous media reports demonstrating the considerable scale of the catastrophe damage made them want to see its consequences and the improvements that had already been made. Regarding Europeans, they were mostly attracted by the good climate, beauty of nature, a relaxing atmosphere, interesting culture, friendliness of the locals, value for money, high quality of resorts and hotels, service-minded people, and food variety.



Figure 5. *Tsunami Memorial Park at Kamala beach (Holidify, n.d.).*



Figure 6. *Tsunami Memorial at Patong beach (Travel blog, n.d.).*



Figure 7. *Tsunami Memorial Ceremony 'Light Up Phuket' (The Phuket News, 2019).*

4.2.3.2 Proactive approach to crisis management in the Phuket tourism industry

Within this section, it is important to re-mention such a positive change in tourism as the implementation of measures that prevent or mitigate the consequences of potential natural disasters, which have previously been thoroughly described in section 4.2.2.4, "Resolution Phase in Phuket tourism disaster management". This list of measures includes the inclusion of the Indian Ocean in the Pacific Ocean Tsunami Warning System and the installation of the buoy, "Deep Ocean Assessment and Report of Tsunami". It also includes the construction of fixed towers for emergency sirens, the installation of evacuation plans, and improved systems of information dissemination.

4.3 The Maldives

4.3.1 The Maldives tourism industry data

The findings show (Figure 8) that in the pre-disaster period, the number of tourists in the Maldives gradually grew from 484,680 in 2002 to 616,716 in 2004. After the tsunami, the number substantially fell to 395,320 tourists. However, in the following year, the index returned to the pre-disaster period value reaching 601,923 tourists (Ministry of Tourism & Civil Aviation, 2007).

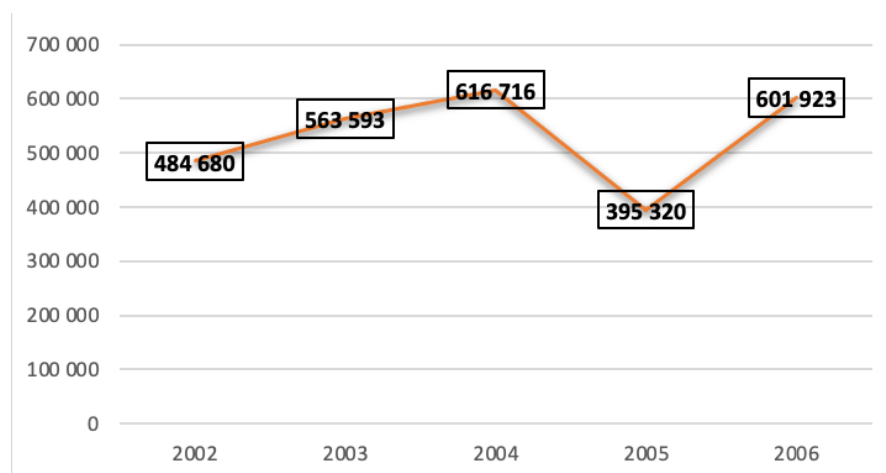


Figure 8. *The annual number of tourists in the Maldives from 2002 to 2006 (Ministry of Tourism & Civil Aviation, 2007).*

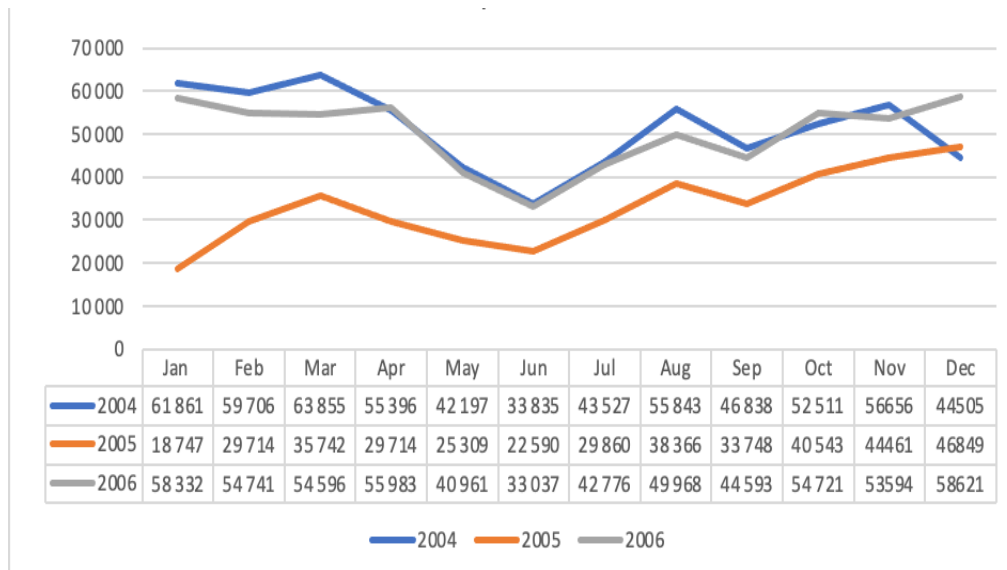


Figure 9. *The number of tourist arrivals by month in the Maldives between 2004 and 2006 (Ministry of Tourism & Civil Aviation, 2007).*

Figure 9 demonstrates the differences in tourist arrivals by month from 2004 to 2006. It is clear from the graph that the overall number of tourist arrivals in 2006 was very close to pre-tsunami levels in 2004 with a decrease from about 60,000 to 35,000 in the first half of the year and a following gradual increase. However, the 2006 index reached 58,621 tourists in December, surpassing the number of visitors in 2004 by 14,116 visitors. Evidently, over the whole year of 2005, the number of visitor arrivals was lower than in the other presented years. Although the index in 2005 had a rapid increase from 18,747 to 35,742 during the first three months, later it followed the common pattern with specific fluctuations, however, being around 15,000 - 20,000 tourists lower than in the other years. It is of note that the number of tourist arrivals in December of 2005 (46,849 tourists) was slightly higher than in December 2004 (Ministry of Tourism & Civil Aviation, 2007).

	2002	2003	2004	2005	2006	2007
Revenue (million rufiyaa)	883.15	899.65	921.47	911.80	1,834.80	2,525.07
Revenue (million NZD)	77.63	79.09	81	80.16	161.30	221.98
GDP	30.9	32.7	32.3	22.7	27.4	27.9

Table 3. *Tourism Revenue and GDP rate in the Maldives between 2002 and 2006*
(Ministry of Tourism & Civil Aviation, 2007; Ministry of Tourism, Arts & Culture, 2009).

The data presented in Table 3 indicate that, despite the decline in the number of tourists in 2005 (Figure 11), the Maldives tourism industry income did not change considerably - the reduction was only 9.67 mil. rufiyaa (0.85 mil. NZD). Notably, a dramatic increase in the revenue can be observed in 2006 and 2007, reaching 1,834.80 mil. rufiyaa (161.30mil. NZD) and 2,525.07 mil. rufiyaa (221.98mil. NZD), respectively. Regarding the GDP, its rate accounted for slightly over 30% during the 3-year period before the tsunami, however, after the catastrophe, the index rapidly decreased to 22.7% in 2005. In the following two years after the hazard, the GDP grew to about 27%, although it did not reach the pre-disaster rate of over 30% (Ministry of Tourism & Civil Aviation, 2007; Ministry of Tourism, Arts & Culture, 2009).

4.3.2 The Maldives tourism through Faulkner's 2001 Tourism Disaster Management Framework

4.3.2.1 Pre-event and Prodromal Phases in the Maldives tourism disaster management

The findings indicated that the Maldives had not contemplated the possibility of a natural disaster and were unprepared for the 2004 tsunami. There was no early warning system developed in the country before the tsunami and no prior warnings were given to National Tourism Organizations (NTOs). Therefore, the information about the tsunami was only broadcast on television after the disaster had actually struck (Niyaz, 2015; Suppasri et al., 2015).

In terms of contingency planning, documented crisis management plans were not developed prior to the disaster either within the government or the private sector. Accordingly, no action was taken until the emergency stage (Niyaz, 2015).

4.3.2.2 Emergency Phase in the Maldives tourism disaster management

Within this stage, the major objective was to provide evacuation of people. Besides, tourism organisations conducted a preliminary assessment of casualties among tourists and personnel and the resorts' overall structural damage. The gathered data were disseminated through television, radio, the Internet, e-mail, telephone, fax, and via communication systems in water transport and offices in located nearby inhabited islands (Niyaz, 2015; Suppasri et al., 2015).

Moreover, a special help desk of the Ministry of Tourism (MOT) was established to provide assistance to tourists in distress at the Malé International Airport. This desk provided free phone calls to families and the use of Internet cafés. Also, this support service was involved in such aspects as body repatriations, cooperation with travel companies and hospitals (Niyaz, 2015).

4.3.2.3 Intermediate Phase in the Maldives tourism disaster management

An important measure taken by the MOT in this phase was the establishment of communication with diplomatic representatives. Letters that explained the situation in the Maldives tourism were sent to embassies of all concerned governments of major tourism source markets as the majority of them had passed travel advisories and bans on visiting the Maldives. As a result of this coordination from December 29, travel bans were gradually eased by the respective overseas offices (Niyaz, 2015).

Another initiative for the Maldives tourism promotion was to invite journalists, news reporters, and the main magazines' writers from the traditional markets into the country to demonstrate its products and give a clear message that the destination was safe (WTO, 2005). A month after the disaster, the Maldives Tourism Promotion Board (MTPB) allocated US\$1.5 million to finance initiatives to stop cancellations and facilitate joint marketing. A major effort was taken to separate the Maldives from other worse affected destinations through contacting the travel trade directly, negotiating with airline companies, hosting media representatives and lifting foreign government warnings about travelling to the Maldives. The key message sent to the mentioned

groups was that tourism in the Maldives was operational and the majority of the country's resorts were unaffected (Carlsen & Hughes, 2008; World Bank-ADB-UN System, 2005).

4.3.2.4 Long-term Phase in the Maldives tourism disaster management

The results showed that the protection of the Maldives' reputation as a recreation, relaxation, and rejuvenation destination, was the aim in the long-term stage. It was found that MTPB in collaboration with the private sector implemented the following measures (Carlsen & Hughes, 2008; Niyaz, 2015):

- participation in 14 international tourism promotional fairs and trade shows in 12 countries in 2005
- arrangement of 350 familiarisation trips
- providing aggressive marketing around European countries, using television, magazines, and billboards
- conducting joint promotional campaigns with Kuoni and Thomas Cook companies
- interviewing both arriving and departing visitors
- monitoring and participating in internet discussion forums
- making a 'short' documentary film about the 'post-tsunami tourism industry' and distributing it to concerned parties
- continuing to use the promotional slogan "Maldives: The Sunny Side of Life", instead of adopting a new one

MTPB and other tourism organisations involved made a considerable effort to do promotion and hold numerous consultations with participants of the tourism industry. As a result of the effective marketing, by the end of 2005 tourist arrivals started to grow so that by mid-2006 the numbers of arrivals had returned to pre-tsunami levels (Carlsen & Hughes, 2008).

4.3.2.5 Resolution Phase in the Maldives tourism disaster management

It was observed that after the tsunami, the Maldives Government implemented numerous preventive measures in order to respond to potential catastrophes in the future:

- The development of a Disaster Management Plan for the Tourism Sector with the support of the United Nations Development Program.
- The establishment of a Tourism Emergency Operation Centre for the efficient reaction to tourism industry disasters (Pforr & Hosie, 2008).
- The establishment of a Disaster Response Team on each island (National Disaster Management Authority, n.d.).
- Integrating resorts into the 2007- 2008 evacuation plan of the National Disaster Management Centre.
- Preparation of a Strategic National Action Plan for disaster risk minimisation.

Furthermore, after the disaster, The Meteorology Department acquired equipment for a multi-hazard Early Warning System. It increased the capacities for prediction and personnel training in the use of such equipment. A National Early Warning System plan was developed which involved colour codes for different phases of alert and protocols of warning dissemination (Niyaz, 2015).

4.3.3 Changes in the Maldives tourism industry

4.3.3.1 Proactive approach to crisis management in the Maldives tourism industry

The only identified change that the Maldives experienced after the 2004 tsunami was the implementation of proactive measures to crisis management described in section 4.2.2.5, "Resolution Phase in the Maldives tourism disaster management". A short list of those includes the development of a National Early Warning System, Disaster Management Plan, and a Tourism Emergency Operation Centre. It also comprises integrating resorts into the 2007-2008 evacuation plan and acquiring new equipment for a multi-hazard Early Warning System.

4.4 Christchurch

4.4.1 Christchurch tourism industry data

As shown in Figure 10, after the earthquakes, from January to February 2011, the number of international guest nights in Canterbury sank by 44% relative to the average monthly rate of demand for tourist accommodation. In the following months, the index gradually recovered to minus 24% in February 2012. It is of note that from February to March 2012, the demand rate soared achieving a positive rate of 6%. Regarding the data

on international guest nights in New Zealand, the number fluctuated at around 1% during the presented period, peaking at 34% in September 2011 (Simmons & Sleeman, 2012).

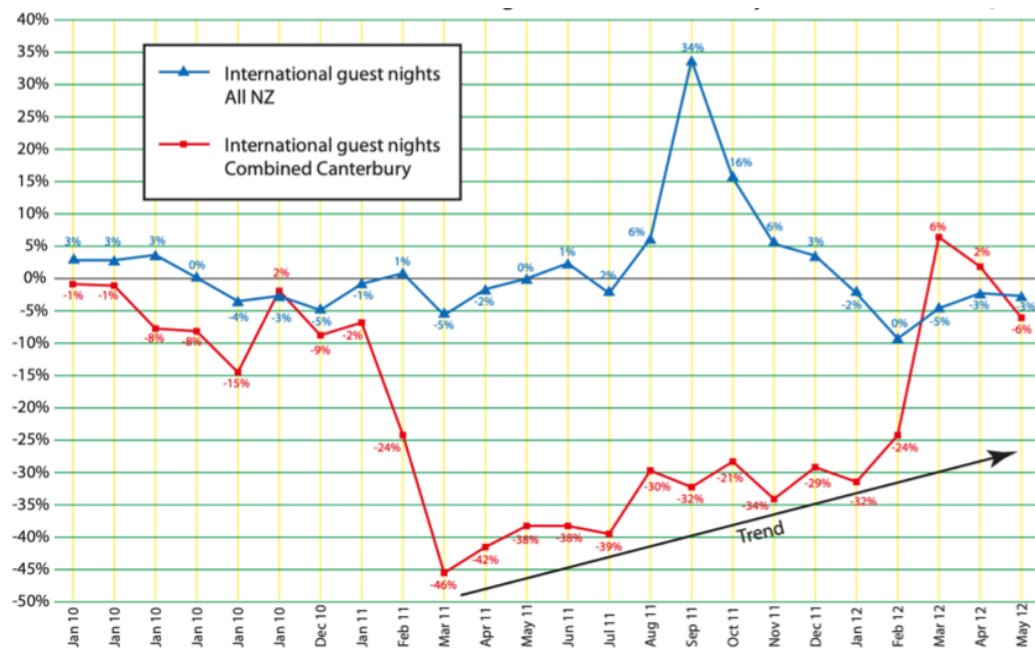


Figure 10. *International guest nights in New Zealand and the Canterbury region (Simmons & Sleeman, 2012).*

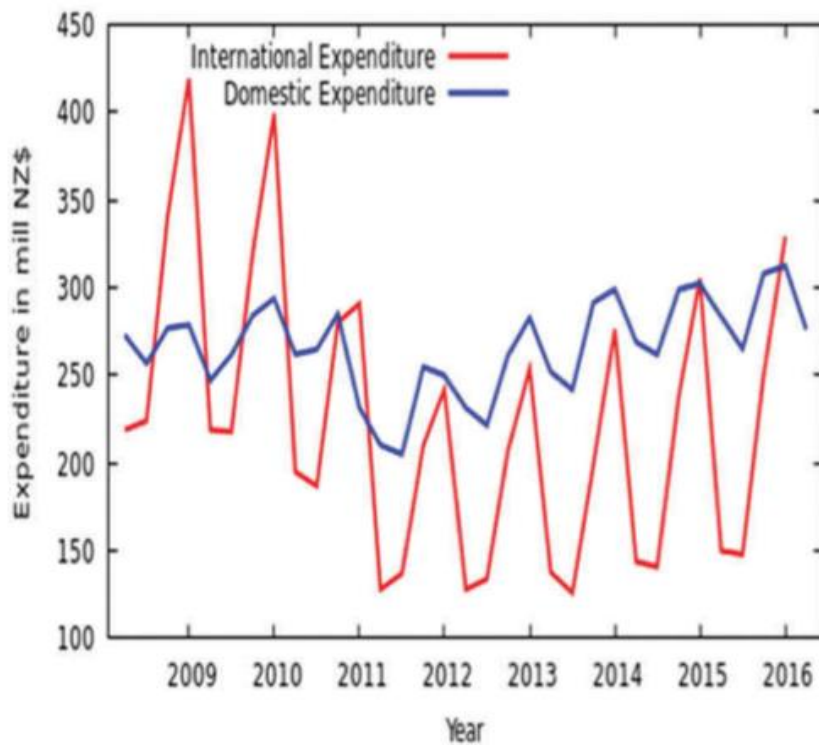


Figure 11. *Tourist Expenditure in Christchurch (Prayag et al., 2019).*

Figure 11 shows decreasing international and domestic visitor expenditure figures until 2012 and the following gradual growth of both indicators. It is clear that domestic tourism expenditure was less affected by the earthquake than international tourism spending. Whereas domestic tourist expenditure had already recovered to the over pre-earthquake level by 2015, international visitor spending was still lagging behind the domestic expenditure index and was significantly lower than the pre-earthquake figure (Prayag et al., 2019).

4.4.2 Christchurch tourism through Faulkner's 2001 Tourism Disaster Management Framework

4.4.2.1 Pre-event and Prodromal Phases in Christchurch tourism disaster management

In preparation for potential crises including natural disasters, in 2002 New Zealand replaced the Civil Defence Act 1983 with The Civil Defence Emergency Management Act 2002. The new act was a framework including the 4 Rs to build the nation's resilience: Reduction, Readiness, Response, and Recovery. Within this concept, New Zealand could prepare for, manage, and recover from national, regional, and local crisis

emergencies. The Act required local authorities to form Civil Defence Emergency Management Groups (CDEM Groups), which had to consult with communities when developing plans and strategies for managing civil defense emergencies (Ministry of Civil Defence & Emergency Management, n.d).

Another point is that New Zealand had the latest 2010 version of the National Seismic Hazard Model which estimated the magnitude of an earthquake that may be anticipated according to a user-specified probability and time period (GNS Science, n.d.). However, in February 2011, the earthquake was not detected due to previously unknown malfunctions (Crowley & Elliott, 2012).

Besides, the Government of New Zealand enforces by law strict building codes and regulations for housing in earthquake-prone areas and provides resources for comprehensive earthquake emergency preparedness in schools (Crowley & Elliott, 2012).

Apart from that, findings showed that knowledge of the crisis acquired from the earthquake in September 2010 allowed the process of dealing with that disaster to unofficially become a crisis response template in Christchurch in 2011 (Orchiston & Higham, 2016).

4.4.2.2 Emergency Phase in Christchurch tourism disaster management

Several factors contributed to the efficient emergency response to the disaster. The airport, seaport, hospital, and the Police and Fire Communication Centre were operational. Most roads to the city were passable so that emergency services could immediately respond (McLean et al., 2012).

During the first days after the earthquake, the main focus was on search and rescue operations in the city centre. Within 12 hours of the occurrence, the central city was surrounded by a cordon, and by the next evening, it was only occupied by personnel of the emergency services. An engineering evaluation was made shortly after the catastrophe (McLean et al., 2012).

The morning after the disaster, “the Minister of Civil Defence declared a state of National Emergency covering Christchurch City under the CDEM Act” (McLean et al.,

2012, p. 31). It was also decided that the CDEM Director should go to Christchurch to control the emergency situation as National Controller.

4.4.2.3 Intermediate Phase in Christchurch tourism disaster management

At this stage, the Ministry of Economic Development in collaboration with tourism organisations requested knowledge on disaster recovery in tourism from officials in New Orleans, which had experienced Hurricane Katrina in 2005, and invited a guest speaker to present a seminar at a meeting on tourism response to the disaster, held a month after the earthquake (Orchiston & Higham, 2016). Workshops and roadshows with regional operators were also arranged for discussion and planning the tourism recovery in Canterbury (Bhat & Gaur, 2012).

In addition, the tasks for national tourism organisations included removing or altering links to Christchurch in online advertisements, communication with the travel trade, and providing crisis information updates on their websites. These involved data on the status of the local airport, damage caused to particular hotels and other tourism infrastructure (Orchiston & Higham, 2016).

4.4.2.4 Long-term Phase in Christchurch tourism disaster management

In the case of Christchurch, a distinctive feature of the recovery marketing strategy of national tourism organisations was ‘de-marketing’ which implied the absence of marketing efforts for six months after the February 2011 earthquake (Rossello et al., 2020). In fact, the Canterbury region had previously experienced an earthquake in September 2010, after which the national tourist marketing organisation, “Tourism New Zealand” (TNZ), was involved in a significant recovery marketing campaign which, however, was immediately discontinued after another quake in February 2011. It was evident that promoting the affected destination at that point would be inappropriate because of the severity of damage done to the city, and the significant risk to the safety of visitors from the consequences of the earthquake and ongoing aftershocks (Orchiston & Higham, 2016; Ritchie & Jiang, 2019).

Within the ‘de-marketing’ approach, Tourism New Zealand introduced the following measures. First, images of Christchurch were removed from all the international marketing material. Second, TNZ withdrew existing advertisements from news websites and purchased Christchurch earthquake-related keyword searches to distract Internet

browsers from negative images and promote the search for positive content about New Zealand. Third, for potential inbound tourists, the marketing company developed alternative travel itineraries that excluded Christchurch. However, whereas active marketing efforts ceased, intensive communication continued through international and local networks to keep key stakeholders informed of the actual situation in Christchurch (Orchiston & Higham, 2016; Ritchie & Jiang, 2019).

After the period of de-marketing, the main focus of the tourism industry shifted towards informing foreign networks about the rapidly improving situation in Christchurch. The aim was to distribute positive information about the affected city to demonstrate the destination's progress towards its renewal. For example, the national tourist company "Christchurch and Canterbury Tourism" (CCT) invited travel journalists to visit Christchurch to slowly improve the city's image. Besides, the organisation monitored the efficiency of marketing efforts by analysing arrivals data and measuring changes in perception of awareness and satisfaction of Christchurch, using the quarterly reports of the Visitor Insights Programme. This stage also involved lobbying the aviation industry to increase the number of flights to Christchurch and influencing international travel agencies to bring the tourist city back into promotional materials for travel brochures (Orchiston & Higham, 2016).

In September 2011, CCT and TNZ started a collaborative marketing campaign, 'South Island Road Trips', to promote the South Island among Australians. Within this campaign, Christchurch only acted as a transport hub destination receiving transit visitors since the city itself was still unsuitable to host visitors. The second major marketing campaign 'Christchurch Re-imagined' was launched by CCT 18 months after the earthquake. It focused on the revival and renewal of the city, using the Internet and social media including Facebook and Twitter. 'Christchurch Re-imagined' was the first marketing effort when national tourism organisations promoted Christchurch separately from the South Island (Orchiston & Higham, 2016; Tucker et al., 2017).

In 2012, Christchurch hosted a new festival, Luxcity, in the inner-city, which was also known as the Festival of Transitional Architecture (FESTA). The creativity and inventiveness shown in the installations gave a positive feeling of renewal and vibrancy in the city center (Brand et al., 2019).

In addition, independent of national tourism organisations, the private tourism sector provided various trips around and in the cordoned zone, and different temporary tourist attractions were built to bring visitors to Christchurch (Cropp, 2011; Stewart, 2013; Tucker et al., 2017; Wesener, 2015), which are described in sections 4.4.3.1 “Dark tourism” and 4.4.3.2 “Infrastructural changes”.

4.4.2.5 Resolution phase in Christchurch tourism disaster management

In 2016, the Government of New Zealand introduced The Civil Defence Emergency Management Amendment Act 2016, which allows for more efficient recovery from small to large emergencies. The Amendment Act established legislation for recovery management, by giving the recovery managers a mandate and by enforcing the requirement for a recovery plan. Besides, the new Act supported a smooth transition from the response to the initial recovery stage, by providing a transition notification mechanism making emergency powers, designed to help the recovery phase, available to recovery managers for a particular period of time (Civil Defense, n.d.a; b).

The second point of the resolution stage is crisis planning by private tourism companies. According to Orchiston et al. (2012), the use of emergency and crisis planning and business continuity plans increased after both earthquakes in 2010 and 2011. The results showed that prior to September 2010, 24% of tourism companies in the city had emergency plans and 26% of tourism organisations had continuity plans. However, after the February disaster, the numbers rose to 37% and 34%, respectively (Orchiston et al., 2012).

Furthermore, the Canterbury Earthquake Recovery Learning and Legacy Programme was developed in the Department of the Prime Minister and Cabinet, which operated between 2016 and 2018. It brought together collaborative learning to help leaders and local communities involved in the post-disaster recovery and complicated challenges. The essential part of this programme was the website “EQ Recovery Learning” with around 300 public documents about restoration tools and lessons, including experiences and insights from the earthquakes in the Canterbury region, shared by various organisations and groups during the recovery (Department of the Prime Minister and Cabinet, 2020).

4.4.3 Changes in the Christchurch tourism industry

4.4.3.1 Dark tourism in Christchurch

The findings showed that after the earthquake in Christchurch in February 2011, the city became, to a certain extent, a dark tourism destination. Later that year, a number of tourism operators in New Zealand started to offer post-quake tours around the cordoned zone, including walking, bus, and segway tours, as well as helicopter and light aircraft rides (Cropp, 2011). All of them were advertised as an opportunity to view post-disaster devastation (Tucker et al., 2017). The first public tours within the Red Zone were offered by the transportation company ‘Red Bus’, which won the tender with the Earthquake Recovery Authority of Canterbury to arrange tours in the cordoned area which was otherwise inaccessible for the general public. These tours were popular among international visitors, as well as domestic tourists from other regions of the country, and notably among many former Christchurch residents, who used the opportunity to see the damage inside the area. Visitors could get close-up views of the ruined Christchurch Cathedral and Cathedral Square, previously the centre of tourism and business activity in the city. For over two years, Red Bus tours took over 37,000 passengers into the cordoned zone of Christchurch (Tucker et al., 2017).

Christchurch is included as a ‘quake city’ in the list of world dark tourism sites on the website ‘darktourism.com’. The website offers visits to the main dark tourism attraction of the city, the exhibition called “Quake City”, which opened in 2013 as a branch of Christchurch’s cultural museum. The exposition contains large photos and screens showing the earthquake traces as well as models of destroyed architectural monuments. Amongst the displays, there is the spire of the collapsed Christchurch Cathedral and the clocks from the ruined train station. The “Quake City” museum also has a practical simulator explaining the phenomenon of ‘liquefaction’, the process when the earthquake vibrations loosen sandy or water-saturated soil, transforming it into a substance similar to quicksand (Quake city, n.d ; www.dark-tourism.com, n.d.).

4.4.3.2 Infrastructural changes in Christchurch

One of the changes within the tourism industry in Christchurch after the earthquake was infrastructural development. Planning for the reconstruction of the city began almost instantly after the February earthquake and led to the creation of a comprehensive planning system outlining the long-term vision of development goals. Two placemaking

companies, 'Gap Filler' and 'Greening the Rubble' were launched for the Christchurch rebuild. The former promoted experimental and creative urban design projects, involving local architects and designers; the latter focused on ecologically sustainable landscape developments including temporary gardens and public parks (Wesener, 2015). In the years following the earthquake, several temporary placemaking projects were undertaken. For example, Gap Filler's Pallet Pavilion, built from 3000 painted blue pallets, was located in central Christchurch. Designed as 'a secret garden', the pavilion hosted live music concerts and various community events, however, it was dismantled in April 2014. Another project, Greening the Rubble's "relocatable park" was a temporary public garden, initially located at a demolition site in Riccarton suburb, aimed to provide more biodiversity to the city (Stewart, 2013; Wesener, 2015). These projects positively influenced the community's resilience, providing pleasant experiences and positive emotions, strengthening social capital, and creating opportunities for innovation and experimentation (Wesener, 2015).

The restoration of Christchurch started primarily with the recovery of the retail segment, which resulted in the creation of the mall, 'Re:START', in the central city (Figure 12). The opening of the mall in October 2011 was timed to mark Canterbury's Cup and Show Week, becoming a turning point generally for the city and particularly for tourism. In the summer of 2011–2012, when the tourist industry in Christchurch began to grow again, Re:START acted as a tourist 'hub'. By 2014, the mall had expanded twice and become an important part of tourism in Christchurch (Tucker et al., 2017).



Figure 12. *Re:START mall (Gates & Harvey, 2012).*

Among the first public buildings developed as part of the post-disaster reconstruction of Christchurch was the Transitional Cathedral (Figure 13) built from cardboard materials and known as the “cardboard cathedral”. It was designed for 50 years of operation as a temporary house for the congregation of the Anglican Cathedral, and a venue for exhibitions, concerts, and other local events. This cathedral became a popular site among both locals and tourists, as a life-affirming symbol after the catastrophe (Barrie, 2013; New Zealand Story, n.d.).



Figure 13. *Transitional Cathedral (Yarwood, n.d.).*

Within the tourism infrastructure, the new city centre plan included a wider range of accommodation facilities, a conference centre, sports, health and welfare precincts. In 2013, several major hotel chains were reopened in the central area of the city, and by 2015, following developments had witnessed a 36% increase in the quantity of available rooms (Orchiston & Higham, 2016).

4.4.3.3 Proactive approach to crisis management in Christchurch tourism industry

Within this section, it is important to re-mention the implementation of proactive measures to mitigate the consequences of possible natural disasters, which were described in section 4.4.2.5, "Resolution phase in Christchurch tourism disaster management". A list of these measures includes the Civil Defence Emergency

Management Amendment Act 2016, the Canterbury Earthquake Recovery Learning and Legacy Programme, and increased emergency planning among private businesses.

Chapter Five: Discussion

5.1. Introduction

The chapter discusses the main findings from the three case studies described in the previous chapter. The following sections are aimed to answer the research questions. The found information about the cases is compared in order to reveal common patterns within three key sections: recovery period, disaster management, and changes in the tourism industry.

5.2 Disaster management

5.2.1 Proactive measures

The findings within the research indicate that the Maldives and Phuket did not have tsunami contingency plans or early warning systems in place. However, these destinations had response plans developed for smaller events that occasionally occur in the regions, such as windstorms, floods, heavy rain, mudslides, and prolonged dry periods (Niyaz, 2015; Petit et al., 2014), which, to some extent, were helpful during the emergency phase after the 2004 tsunami. Regarding Christchurch, there is no clear information about formal contingency planning in the city before the disaster, although the findings of this study indicate that the previous experience of the 2010 earthquake became an unofficial template for the disaster response in February 2011. The key tourism stakeholders claim that having previously suffered from a natural disaster, they were able to react faster and know better what actions to take, for example, which communication channels should be used and how (Orchiston & Higham, 2016).

It is of note that in 1998, the chairman of the Committee for the National Disaster Warning Administration in Thailand, Smith Dharmasaroja made a prediction about the threat of a tsunami to the country and advised the implementation of the warning system, but at the time, the government severely criticised him for scaring tourists and ignored his suggestions (Rittichainuwat, 2006). However, research shows that the installation of a tsunami warning system in a country can improve tourists' motivation

to visit the place. According to the data from the survey, nine months after the tsunami, 20% of participants highlighted an inadequate tsunami warning system as one of the reasons not to come to the affected areas (Rittichainuwat, 2006).

Regarding the proactive actions in Christchurch, the fact is that New Zealand had one of the most advanced and sophisticated seismic hazard models; yet the earthquake that happened in 2011 had not been detected due to previously unknown malfunctions (Crowley & Elliott, 2012). That context proves the statement of De León et al. (2006) that an effective early hazard warning system needs a strong technical basis and should be constantly improved to reflect new circumstances and technical innovations.

In summary, the emergency planning developed for small-scale crises or based on recent experience was extremely useful and decisive during the disaster occurrence. Accordingly, the findings indicated the importance of developing contingency plans prior to a catastrophe, which would provide a specific course of action during the crisis. Moreover, none of the observed cases had a prodromal phase due to lack of a warning signal of the threat. Contrary to expectations, this study does not confirm the significance of the installation of early warning systems, which could even be considered a waste of resources. However, the findings must be interpreted with caution since the research is limited to only three cases with only one of them having a hazard system, which does not provide an objective observation.

5.2.2 Reactive measures

During the emergency phase, all the observed destinations demonstrated a satisfactory response, even considering inadequate emergency planning. In all cases, the priority at that stage was saving peoples' lives; therefore, medical, military, and police services were mobilised to take effective rescue measures. Tourists were provided with all the essential services including temporary accommodation, translation support, free Internet, and phone calls to their relatives. The following actions were mostly aimed at the restoration of the destination's infrastructure and image. The first step in recovering the image of the destination included communication with the embassies of the concerned countries to explain the real situation, which was distorted in mass media, as well as withdrawing travel advisories and easing the bans. The next measure was presenting a realistic picture of active reconstruction efforts in the afflicted place and

providing updated information on the crisis effects on the destination on the various Internet resources.

To recover the destination's image in the long term, aggressive marketing was applied in all research cases to encourage tourists to visit the affected place, although depending on the severity of the damage, large-scale marketing strategies in the destinations were launched in different periods of time after the catastrophes. For example, the Maldives, experiencing minimal damage among the observed cases, started taking promotional efforts around one month after the tsunami. In contrast, Christchurch had a six-month de-marketing period and was not directly advertised by national organisations for 18 months after the earthquake due to the serious damage and possible risks of aftershocks. The pattern observed correlates with the answer to the first research question about the duration of the recovery period. Although it was identified that a destination needs a year and a half on average to restore the number of visitors, it is important to add that this statement is correct on the condition that aggressive marketing efforts are made.

Marketing strategies used in the examined cases involved multiple instruments to efficiently promote a region afflicted by a natural hazard as a renewed and safe travel destination. For instance, familiarisation trips were actively provided by all the reviewed destinations. According to Glaesser (2006), these trips were designed and planned to inform the public and change people's misperceptions and were targeted at leading journalists and tour operators, especially in Asian countries. Thus, the Maldives organised 350 familiarisation trips in the post-tsunami period. Likewise, CCT, the national tourism company in New Zealand, issued invitations for travel journalists to visit Christchurch after the six-month period of de-marketing.

Moreover, the current study discovered that hosting various events is an effective marketing ploy for destinations that suffered from natural disasters. To illustrate, Christchurch hosted a new festival, Luxcity, in October 2012, which presented the city's renewal after the series of earthquakes in 2010 and 2011. This event attracted the greatest number of people (about 30,000) into the central city since the quake in 2011 and later became a biennial festival in Christchurch (Bennett, 2013; Give a little, n.d.). Similarly, in 2005, Thailand held 4122 International Convention and Meeting Events, 347 of which were in Phuket. These events, taking place around the whole country,

were visited by 486,338 people in the year following the 2004 tsunami (Sangpikul & Kim, 2009).

Despite the fact that in the literature review, a discounting price policy seemed to be an essential marketing tool for a post-disaster period, research findings in this dissertation were unexpected and suggest that discounting is not always an advantageous strategy, particularly, when there is no marketing information indicating the need to reduce prices (Rittichainuwat, 2006). Although it cannot be excluded that some individual companies in the investigated destinations provided discounting within their businesses, only Phuket showed clear evidence of having a large-scale price reduction policy. However, hotel executives in Phuket mentioned that the discounting strategy was not their approach to restore business; they rather relied on aggressive marketing campaigns with travel companies abroad, Internet advertising, and credible word-of-mouth, supported by loyal hotel guests who returned to the destination after the tsunami. The chairman of the Phuket Chamber of Commerce, Khun Eiam Thavornvongwongse, commented that low-cost tour packages might be needed during the first months after the disaster, when the rate of occupancy was extremely low, whereas six months later, the launching of the low-priced package tours was not effective when a number of hotels had closed, and personnel had been made redundant. He also noted that since November 2005, several hotels on Phuket Island had been overbooked due to aggressive marketing practices, including roadshows and the support of travel companies and loyal customers but not because of the low-cost package tours (Rittichainuwat, 2006). In such circumstances, implementing a discounting policy appeared to be unreasonable.

To summarise the section, reactive measures can be divided into three categories: short, medium and long-term initiatives, which correlate with emergency, intermediate, and recovery phases within Faulkner's 2001 crisis model. The short-term response focuses on saving peoples' lives, and the medium-term measures include the restoration of the place, communication with other countries, and promotion of a positive image of the destination on the Internet. The long-term stage mostly involves aggressive marketing aiming at the image recovery and the return of tourists to the afflicted destination.

5.3 Recovery period

The findings of this research show that the recovery period after a natural disaster takes on average a year and a half. It can be observed that, for example, the number of tourists in the Maldives matched its pre-tsunami levels 16 months after the catastrophe.

Similarly, a year after the tsunami, Phuket had almost recovered its pre-tsunami visitor numbers and even surpassed them a year later.

Although the recovery period in Phuket and the Maldives lasted almost the same amount of time, there was a considerable difference in the destinations' revenue per visitor (RPV). In Phuket, the ratio between each visitors' value during the pre-tsunami year and the year after the catastrophe was 1 to 0.7; however, a year later, the ratio levelled out as the post-disaster index recovered. In contrast, in the Maldives, the pre-tsunami RPV rate in relation to the indexes of one year and two years after the disaster was 1 to 1.5 and 1 to 2, respectively. This could be explained by the fact that the Maldives implemented a well-funded and coordinated marketing strategy which alleviated the effects of the disaster on tourism. Besides, the findings show that this destination did not strongly rely on a price reduction policy during the recovery phase as the immediate discounting strategy could cause revenue shortfalls, aggravating cancellations losses and restricting the industry to lower rates and margins (Carlsen & Hughes, 2008).

It is worth emphasising the difference between the patterns of the international and domestic tourist markets. Two cases, Phuket and Christchurch, have proved that the domestic market is less affected by the consequences of a disaster and have a quicker recovery of visitor numbers in comparison with the overseas tourist market. For example, the international tourist market of Phuket did not fully recover in the two-year period after the tsunami, while the number of domestic tourists, having experienced a marginal post-disaster decrease followed by growth, even exceeded its pre-tsunami level by around a quarter a year after the disaster. This pattern in the domestic market positively influenced the overall tourist number in the region. Regarding the case of Christchurch, the amount of international tourist expenditure did not reach its pre-quake level even five years after the earthquake, whereas the rate of domestic visitor expenditure recovered within two years of the disaster. There are two possible reasons for this trend in Christchurch: the severity of the damage caused to the city and safety

issues (Orchiston & Higham, 2016). Firstly, the weak recovery of the international tourist market might be attributed mainly to a slow pace of rebuilding of the facilities that are specifically more targeted at foreign tourists, such as attractions and international hotels (Prayag et al., 2019). The second reason is the de-marketing period that national tourism organisations of Christchurch had for at least six months after the catastrophe and did not promote Christchurch directly for 18 months. Considering the identified tendency of the domestic market being less affected by a natural disaster than the overseas tourist market, a possible explanation for this pattern may be the fact that domestic travellers are usually more aware of safety and security conditions in the afflicted place (Rittichainuwat, 2008). Thus, they potentially have fewer misperceptions causing the fear of visiting a post-disaster destination in contrast to international tourists.

5.4 Changes in the tourism industry

5.4.1 Proactive approach to tourism crisis management

Within this research, all cases demonstrated a positive change after catastrophic events, such as the implementation or improvement of the proactive approach to cope with potential natural disasters in the future. Notably, these changes in the Maldives and Thailand were more significant than in New Zealand. A possible explanation for this observation is that before the earthquake, New Zealand had already implemented a number of preventative measures including one of the most advanced seismic hazard warning models. Given that, after the disaster, the country's government made several additional improvements in the approach, such as the amendment of the Civil Defence Emergency Management Act and the development of a temporary Recovery Learning and Legacy Programme to raise national awareness of the Canterbury earthquakes in 2010 and 2011.

In comparison, the Maldives and Thailand had not been prepared for such a large-scale natural disaster; however, after the catastrophe, both governments made commitments to develop new Acts and national emergency plans and implement an early warning system. According to Birkland et al. (2006), it is challenging to implement warning and information systems in tourism regions since multiple languages are spoken in these areas and tourists are not often familiar with the local territory. Accordingly, the

implementation of proactive actions required considerable effort in these Asian countries.

5.4.2 Dark tourism

Two of the observed cases, Phuket and Christchurch, became, to some extent, dark tourism destinations. Dark tourism implies visitation of the places associated with death and tragic events including natural disasters (Iliev, 2020). Despite the fact that Phuket has monuments which could be considered dark tourism attractions, and some tourists visited the island to see the damage caused by the tsunami, the destination was never advertised as a dark tourism destination. In fact, the tsunami monuments were used by the local government for memorial ceremonies for the relatives of tsunami victims, and there was no agreement on whether opening these sites as tourism attractions was appropriate even a few years after the catastrophe while tsunami survivors and victims' relatives were still attending religious ceremonies. This also concerned ethical issues about whether the relatives of victims were sensitive to the cemetery being commercialised into a tourism site. Thus, the authorities and tourist service providers were unwilling to promote the tsunami memorials for mass tourism (Rittichainuwat, 2008). In addition, at the time of writing, no information was found to prove the practice of dark tourism in Phuket over the last decade. It can be suggested that the main purpose of the destination's tourism marketing was to return an image of a paradise place instead of creating a reputation of a dark tourism destination. Indeed, within several years after the tsunami, people lost their curiosity to see the disaster damage.

In contrast, after the earthquake in Christchurch, tourism entrepreneurs actively promoted dark tourism activities such as post-quake walking and bus tours around and inside the cordoned zone as well as helicopter tours (Cropp, 2011; Tucker et al., 2017). These tourism activities, however, were only popular among domestic tourists and especially among former residents of the city, who were motivated by curiosity to see how the place where they used to live had changed after the disaster. Although Christchurch offered various dark tourism attractions after the earthquake, today, there is only one museum devoted to the hazardous event that occurred 10 years ago. Hence, it can be assumed that the promotion of the destination affected by a natural disaster as a dark travel site is mostly a temporary strategy used to support the tourism industry during the crisis while the main message to encourage people to travel to such destinations may be the persuasion that it is an experience of a lifetime.

5.4.3 Infrastructural changes

Among the reviewed cases, only the city of Christchurch witnessed noticeable infrastructural improvements after the natural disaster. These changes included the implementation of numerous innovative and creative placemaking projects, which transformed the city into an attractive destination with urban regeneration and established green spaces. One of the developments was the Transitional Cathedral, built from cardboard materials, representing the life-affirming symbol after the catastrophe, which became a popular site among both locals and tourists (Barrie, 2013; New Zealand Story, n.d.). Other projects included creating temporary gardens and public parks. For example, Greening the Rubble's "relocatable park" and Gap Filler's Pallet Pavilion, which hosted various community events (Wesener, 2015). Next, Re:START mall was built eight months after the earthquake and soon became an important tourist attraction in Christchurch (Tucker et al., 2017). Apart from that, the renewed city centre included a range of new accommodation, sports, health and welfare amenities (Orchiston & Higham, 2016).

The explanation for such considerable infrastructural changes could be the city authorities' responsive approach to the circumstances, in which they decided to 'use the opportunity' to change the central area from scratch (Tucker et al., 2017). Besides, hospitality entrepreneurs actively adapted to the post-earthquake conditions by constructing and modifying infrastructure in the disaster-prone environment (Faisal et al., 2020). Thus, a number of creative and innovative placemaking projects were developed and promoted, becoming important places of the city and popular tourist attractions.

Chapter Six: Conclusion

6.1 Introduction

This chapter provides a summary of the dissertation. At the beginning, it outlines the main subject of the work, followed by the answers to research questions. Further, research limitations and recommendations for future research are discussed.

6.2 Summary

Nowadays, tourism is one of the major industries in the world, but, at the same time, it is one of the most vulnerable to natural disasters. Catastrophic natural events can severely damage a tourist destination's infrastructure and its image, causing safety concerns and discouraging people from travelling to the affected place. In addition, it can take years for a destination to overcome the negative publicity after a calamity and for businesses to achieve pre-disaster economic levels.

Although tourism is vulnerable to natural disasters, the industry is, as a rule, poorly prepared for these hazards and has a passive position. It was identified that the sector typically lacks in several aspects including appropriate planning, financial and knowledge resources, and responsibility for coping with disastrous events. However, the risk of catastrophe should encourage the tourism sector to implement a proactive approach to effectively regulate and solve emergency situations. In that, adequate crisis management could mitigate certain negative consequences of a disaster and significantly contribute to the following development of a destination.

The purpose of this dissertation was to explore how tourism destinations overcome the consequences of natural disasters. For the research, three case studies were selected: Phuket, the Maldives, and Christchurch. Three research questions were addressed to explore post-disaster tourism destinations, the answers to which are given in the following section.

6.3. Answering the research questions

This dissertation examined the ways in which tourism destinations can overcome the consequences of natural disasters. The main purpose of the study was to explore post-disaster tourism destinations by addressing the following research questions:

1. How long does it take to regain the reputation of a destination and restore tourist numbers?
2. What management strategies are beneficial for the pre-and post-disaster periods?
3. How does the tourism sector change after natural disasters?

This section revisits the answers to the mentioned research questions in the stated order, summarising the specific findings which have been revealed during the process of the research.

6.3.1 How long does it take to regain the reputation of a destination and restore tourist numbers?

The dissertation found that a destination which was afflicted by a natural disaster is able to restore its tourist numbers within a year and a half, on average, after the occurrence of a calamity, provided that intensive marketing campaigns are applied. It is important to note that, despite the restoration of the overall tourist numbers, the recovery of the affected destinations' image in the perception of international tourists requires a longer period of time than the identified average. As a rule, during this period, the less impacted domestic visitor market can support the tourism industry.

6.3.2 What management strategies are beneficial for the pre-and post-disaster periods?

Several crisis management models are common in the tourism sector, which are suitable for dealing with natural disasters, including the PPRR Crisis Management Model and Faulkner's 2001 Tourism Disaster Management Framework. This research reviewed cases within Faulkner's model since it is the most comprehensive and has phases correlating with other schemes' stages. Regardless of the chosen crisis model, all crisis-related actions can be classified into two types: proactive (pre-disaster) and reactive (post-disaster) measures.

In terms of proactive management, two key measures were identified: contingency planning and installation of an early hazard warning system. This work found that the preparation of emergency plans is an effective initiative at both national and private levels. The findings showed that even plans prepared for smaller crisis events were useful during a major catastrophe. Thus, every tourism destination can be advised to develop comprehensive contingency plans for crises of different scales, which should be regularly reviewed. As for early warning systems, the research cases did not demonstrate the effectiveness of this measure since they either did not have such a system in place, or it was not developed enough. However, after the disasters, all the

observed countries installed or improved warning systems, which could be an indirect sign that an early warning system is an important and effective tool in the pre-disaster period.

Regarding reactive measures, they can be divided into short, medium and long-term categories. The short-term measures are mostly focused on saving peoples' lives, while the medium-term actions involve the physical restoration of the place, promotion of a destination's positive image, and communication with the concerned countries' embassies. The long-term procedures are based on aggressive marketing to recover the image of the destination and return tourist influx to normal. Within the post-disaster marketing, findings revealed the two most effective instruments: arranging familiarisation trips for representatives of the travel industry and hosting various large-scale public events.

6.3.3 How does the tourism sector change after natural disasters?

It was identified that the scale of post-disaster changes depends on the authorities' attitude and the community's willingness to create new placemaking projects.

Regardless of whether a destination changes its physical characteristics after the occurrence of a natural disaster or not, a positive trend was observed for implementation or improvement of proactive measures to handle a possible hazard in the future in a more effective way.

Apart from that, the occurrence of a major natural disaster creates an opportunity for the destination to establish a niche of dark tourism. According to the findings of this research, after a catastrophe, many people, especially domestic visitors, are curious to come to the affected place to see the damage. Hence, dark tourism may be a temporary type of local tourism which attracts more tourists during the post-disaster period.

6.4 Limitations of the research

Several limitations were recognised in this research. The main limitation was related to the methods of collecting data. This study was based on data from secondary sources. The initial purposes of collecting this information were other than this study's objective and were defined by the interests of other researchers. Hence, within this study, there was no control over data collection processes and the quality of the data. Besides, since

no questionnaires were distributed, or interviews conducted, it was impossible to reveal and assess the opinions of residents and local tourism organisations.

Moreover, this research was done within a relatively short period and remotely from the cases explored. As a matter of fact, there can be some archive data such as local magazines and company reports kept in local libraries in the case destinations, which are not available online and, thus, could not be observed for this research.

Furthermore, this research was limited to only three specific case studies. The generalisation of results to all the other disaster-prone tourism regions can be inappropriate since the post-disaster response of a destination depends on various factors including economic, political, and social background. Besides, it is challenging to make general conclusions and suggest particular recommendations based on three case studies. Hence, the findings of this research may not be relevant and useful within circumstances other than observed in the cases selected for this work.

Finally, since the available statistical data reviewed within the cases were presented by different indicators, their comparison might be inaccurate. Besides, the statistics in some sources were inconsistent because certain numerical data, for example, economic indexes, may be exaggerated.

6.5 Recommendations for future research

This research can be further detailed and expanded through future investigations of tourism destinations affected by natural disasters. In-depth, on-site research using primary data collection is recommended for further research. Several topics that could be explored include the residents' points of view on the changes witnessed by the destination after a disaster within a long-term perspective, the influence of the Internet resources, especially social media, on tourists' motivation to visit affected places.

Moreover, other study cases should be explored in addition to the destinations reviewed in this research in order to confirm or deny its findings. It is especially recommended to explore the regions which frequently suffer from natural disasters and have a developed proactive approach, for example, Japan. Such studies would be able to assess how the

preparedness level impacts the consequences and focus on a detailed analysis of proactive measures that are valuable during the pre-event stage.

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