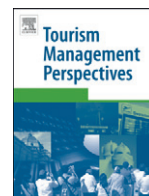




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Case study

Tourism crises and island destinations: Experiences in Penang, Malaysia

Zahed Ghaderi ^{a,*}, Ahmad Puad Mat Som ^a, Joan C. Henderson ^{b,1}^a School of Housing, Building and Planning, University Sains Malaysia, 11800 Pulau Pinang, Malaysia^b Nanyang Business School, Nanyang Technological University, Singapore

ARTICLE INFO

Article history:

Received 19 March 2012

Accepted 21 March 2012

Keywords:

Crisis management

Penang

Tourism crises

ABSTRACT

Crisis management and tourism is attracting increasing attention as an industry practice and subject of academic enquiry, not least in South East Asia which has been affected by a number of severe crises in recent years. However, organisations are not always well prepared and response strategies can be deficient. The paper discusses issues of tourism crisis management with specific reference to the popular Malaysian destination of Penang. Findings are based on qualitative research consisting of semi-structured interviews with industry leaders from assorted sectors. Tourism in Penang emerges as vulnerable to regional and global events which act as a trigger for tourism crises, demanding a response in which various strategies are employed. The destination is also seen to recover fairly quickly from experiences of crises, but a well designed and formulated tourism crisis management plan under the stewardship of the public sector is necessary to mitigate further damage in the future.

© 2012 Elsevier Ltd. All rights reserved.

1. Introduction

Since the late 1990s, the tourism industry in the South East Asian region has been subjected to several crises accompanied by substantial falls in inbound tourism. The loss of business, albeit temporary, posed severe challenges for the public and private sectors, raising questions about their ability to manage crises and readiness for future eventualities. This paper investigates tourism crises and their impacts in the Malaysian state of Penang which is one of the country's most popular destinations. Semi-structured interviews were conducted with key industry players from a range of businesses in which questions were asked about the degree of exposure to crises, the most common types experienced, consequences and coping strategies. Although there is an expanding volume of research on tourism crisis management, the field is relatively new and few studies have investigated the effects of tourism crises in Malaysia as a whole and Penang in particular. The current exercise is intended to help fill this gap and enhance understanding of the dynamics of tourism crises and their management within a South East Asian framework. After a brief introduction to the study area, the literature is reviewed and findings are then presented before a final conclusion which highlights the main points.

2. Tourism in Malaysia and Penang

Tourism has been an important industry in Malaysia for a number of years (Khalifah & Tahir, 1997; Musa, 2000) and international arrivals reached 24.6 million and 24.7 million respectively in 2010 and 2011, compared to 10.5 million in 2003 (Tourism Malaysia, 2012a). Table 1 shows international tourist arrivals to Malaysia and revenues received from 1998 until 2011.

Growth rates have averaged around 5% since 2007, but slowed in 2011 due to adverse economic conditions globally. Malaysia's popularity can be attributed to a rich natural and cultural heritage and the diversity of attractions in the different states which make up the federation. One of the most visited states is Penang which recorded just under six million hotel guests in 2010, almost equally divided between domestic and foreign (Tourism Malaysia, 2012b). See Table 2 which shows international and domestic tourist arrivals to Penang.

The state comprises the island of Penang and a narrow strip of land on the mainland to which it is connected by bridge. It has a long history as a destination dating back to colonial days when it was governed by the British and known as the Pearl of the Orient (Hooi, 2006). Present day visitors are drawn primarily by its modern beach resorts as well as inland forests, ethnic cultures and heritage sites. The main city is Georgetown which is one of the designated historic cities of the Straits of Malacca and a UNESCO World Heritage Site.

The federal government in Kuala Lumpur has actively pursued a policy of tourism development and state officials awarded responsibility for promoting and developing the industry in Penang to the Penang Development Council (PDC) in 1972. The PDC works with the central Ministry of Tourism (MOTOUR) and the Malaysian Tourism

* Corresponding author. Tel.: +60 174580726 (mobile).

E-mail addresses: zahedghaderi@yahoo.com (Z. Ghaderi), puad@usm.my, puadusm@gmail.com (A.P. Mat Som), ahenderson@ntu.edu.sg (J.C. Henderson).¹ Tel.: +65 6790 6116.

Table 1
Shows the international tourist arrivals and receipts to Malaysia.

International tourist arrivals and receipts to Malaysia		
Year	Arrivals/million	Receipts/MYR billion
1998	5.5	8.6
1999	7.9	12.3
2000	10.2	17.3
2001	12.7	24.2
2002	13.2	25.8
2003	10.5	21.3
2004	15.7	29.7
2005	16.4	32.0
2006	17.45	36.3
2007	20.9	46.1
2008	22.0	49.6
2009	23.6	53.4
2010	24.6	56.5
2011	24.7	58.3

Source: Tourism Malaysia, 2012.

Promotion Board (MTPB), related government agencies and private enterprises to market Penang as a premier holiday destination (Ishak, Aziz, & Mohamed, 2004). However, tourism in Malaysia and Penang has been regularly and negatively affected by a series of crises which have struck the industry in the past two decades. These include the 1997 Asian financial crisis, the 2004 Indian Ocean tsunami; regional conflicts, the threat and incidents of terrorism and the 2003 SARS (Severe Acute Respiratory Syndrome) epidemic and subsequent outbreaks of Avian influenza (bird flu) and H1N1 (swine flu). In certain cases, these resulted in sharp declines in international tourist arrivals throughout South East Asia and threatened the sustainability of some tourism businesses and destinations.

3. Tourism crises: definitions and typologies

Crisis is derived from the Greek word *Krisis* which means differentiation or decision (Glaesser, 2003) and is applied in various contexts (Laws & Prideaux, 2005). There is no universally accepted definition, but most analysts agree that a business crisis is an unexpected event or occurrence which has the capacity to disrupt everyday operations and which requires action from managers (Faulkner, 2001; Laws, Prideaux, & Chon, 2007; Santana, 2004). Appropriate steps can minimise any damage and enable a return to the status quo, but the worst crises may threaten the survival of the entity in the critical situation. In other incidences, fundamental change may occur. With regard to tourism, it is often the destination which is hit by crisis and the country as a whole may be implicated so that a response by relevant bodies is demanded at a national level.

Disaster and crisis are terms which are sometimes used interchangeably (Kim & Lee, 1998) and one can evolve into the other within the tourism arena (Faulkner, 2001; Ritchie, 2008). At the same time, they are distinct (Drabek, 1995; Hills, 1998) and Faulkner (2001) observes that disasters usually owe their origin to external

Table 2
Shows domestic and international tourist arrivals to Penang from 2005 to 2010.

Year	Tourist				Overall Total
	Local		International		
	Total	%	Total	%	
2005	2,267,532	52	2,084,377	48	4,351,909
2006	2,562,978	54	2,152,256	46	4,688,504
2007	2,787,260	53	2,399,351	47	5,186,611
2008	3,496,293	55	2,811,175	45	6,307,468
2009	2,982,687	50.5	2,977,642	49.5	5,960,329
2010	2,942,544	49.1	3,048,320	50.9	5,990,864

Source: Ministry of Tourism Malaysia (2011).

factors, exemplified by extreme weather. Organisational crises are the product of institutional stresses, perhaps provoked or exacerbated by outside happenings. Crises are therefore by implication more amenable to control than disasters and some can be avoided. Emergency is another term which is regularly employed, but refers to a less serious and therefore more easily managed development or threat. For the purposes of this exercise, a tourism crisis is defined as an event of sufficient magnitude to give rise to circumstances in which the routine functioning of the tourism industry is severely upset.

A number of researchers have devised typologies of crises which can be helpful in management decision and policy making (Evans & Elphick, 2005). Various classifications pertain to business crises and are based upon measures such as underlying reasons, gravity, form and scale (Booth, 1993; Meyers & Holusha, 1986; Mitroff, Shrivastava, & Udawadia, 1987). Seymour and Moore (2000) identify cobra and python crises, the first erupts suddenly while the second creeps up on an organisation. Writing specifically about tourism, Glaesser (2003) applies time pressure criteria to describe potential, latent and acute crises. Other categorisations relate to scope and magnitude (Laws & Prideaux, 2005) and cause (Henderson, 2007). Triggers are numerous and can be considered under the broad headings of economic, political, socio-cultural, environment, technological and commercial which act internally and externally. It seems that the tourism industry is especially prone to crises and Faulkner and Russell (1997) maintain that it exemplifies chaos theory whereby even apparently stable structures and processes exist on the edge of chaos. Occurrences that might be judged minor have the power to precipitate instability and uncertainty which endangers whole systems. All industries can, however, be deemed to be vulnerable to crisis and, according to Fink (1986), any organisation not in crisis is in a pre-crisis mode.

4. Managing tourism crises

A review of the literature suggests that tourism crisis management is still relatively new as an industry practice and field of academic enquiry, even though it has been a recognised business and management research topic since the early 1970s (Keown-McMullan, 1997). For the commercial world in general, crisis management is the 'art of removing much of the risk and uncertainty to allow you to achieve more control over your destiny' (Fink, 1986, p. 15). Managers need to envisage the evolution of a crisis as a series of steps covering signal detection, prevention, preparation, containment, damage limitation and recovery (Pauchant & Mitroff, 1992). They should be proactive, not reactive, by seeking to predict crisis situations and getting ready for different scenarios as well as learning lessons from experiences of crises which can inform future policies for coping (Mitroff, Pauchant, Finney, & Pearson, 1989). Authors writing about tourism crisis management echo these ideas and Santana (2004, p. 308) depicts it as an 'ongoing and extensive effort that organisations put in place in an attempt to understand and prevent crisis and to effectively manage those that occur, taking into account in each and every step of their planning and training activities, the interest of their stakeholders'. Glaesser (2003) speaks of devising strategies, processes and measures to avoid and deal with crises while Henderson (2007) describes managing the cycle of crisis from readiness through to resolution with the main objective of minimising damage.

It is clearly difficult to anticipate and manage many tourism crises, taking into account the complex and multi-faceted nature of the industry (Faulkner, 2001; Prideaux, Laws, & Faulkner, 2003), and endeavours to do so can generate conflict and dissonance (Tse, 2006). The character and dynamics of tourism crises also pose challenges for researchers and Faulkner (2001) highlights the lack of systematic research, especially into the consequences of disasters. He calls for more work to be done to assist the tourism industry and destinations

recover when disaster strikes. Nevertheless, the body of literature is expanding in parallel with the number of actual crises (Hall, 2010) and especially those linked to terrorism attacks which appear increasingly prevalent. Several authors examine the relationship between terrorism and tourism (Aziz, 1995; Goodrich, 2002; Hall, 2002; Henderson, 2002; Mc Kercher & Hui, 2004; Pizam & Smith, 2000) while the repercussions of epidemics of human and animal-transmitted diseases (Chien, 2003; Kuo, Chen, Tseng, Ju, & Huang, 2007; McAleer, Huang, Kuo, Chen, & Chang, 2009; Page, Yeoman, Munro, Connell, & Walker, 2006; Wilder-Smith, 2006) and economic and financial turbulence (Leiper & Hing, 1998; Pine, Chan, & Leung, 1998; Prideaux & Witt, 2000) have also received attention. Tourism crises from around the world are discussed by researchers, with many Asian illustrations, but analyses of Malaysia remain comparatively few in number (de Sausmarez, 2003; Lean & Smyth, 2009).

5. Research methodology

As stated in the introduction, this paper seeks to illuminate attitudes towards tourism crises and ways of dealing with them from the perspective of senior industry managers based in Penang. A qualitative research methodology was considered most suitable for the purpose, involving semi-structured face-to-face interviews in which a set of pre-determined questions were asked. Such an approach allowed comparisons amongst the responses of participants and afforded the chance to digress and probe further when appropriate. Issues raised were the types of tourism crises that had struck the businesses, outcomes, industry reactions and crisis management strategies. A total of twelve key persons judged to be industry leaders were interviewed and the sample was selected using the purposeful snowball method. According to this method, personal links were used to identify suitably knowledgeable respondents. The sample size for this study was determined by using the criterion of 'saturation', as defined by Patten (2007, p.152): "at the point at which several additional participants fail to respond with new information that leads to the identification of additional themes, the researcher might conclude that the data collection process has become saturated". The managers represented hotels, official tourism departments, airlines, tour operators and travel agents. Material collected was subject to qualitative thematic analysis which is a means of identifying, describing and reporting the content of data and emergent patterns. It aims to uncover the themes which are prevalent within a text at different levels and is a well established tool in qualitative research. Results thereby discerned are outlined in the next section which features direct quotations to support the findings.

6. Research findings and discussion

6.1. Crises that impacted tourism business

According to respondents, tourism in Penang had been affected by various regional and global crises which had become crises for the tourism industry. These could be classified in terms of health (SARS, H1N1, Avian influenza), natural disasters (tsunami, Indonesian and Icelandic volcanic eruptions, climate change), terrorism and political instability (Bali bombings, unrest in Thailand, Iraq war, 2001 attacks in the USA) and economics (global downturn, fuel costs). Originating largely outside of Malaysia, these crises were a matter of grave concern to the tourism industry and confirm the statement by Laws and Prideaux (2005, p. 3) that 'there is scope for a crisis that has a local or regional origin to have impacts that reach far beyond the geographic boundaries of the local area or the region.' The spectrum and types of crises confronted indicates that the tourism industry on the island is not immune to exogenous shocks and is highly dependent on existing and perceived levels of international safety and security. Crises in nearby and occasionally distant locations had a

ripple effect which permeated the industry in Penang in a manner previously observed by Lean and Smyth (2009).

Regarding crises that had the greatest effect, there were divergences in opinion amongst respondents. Natural disasters and diseases were identified by representatives of hotels catering mainly to the leisure market, resorts and airlines while tour operators, travel agents and hotels serving corporate clients cited adverse economic conditions and escalating fuel costs. The manager of a hotel with a largely business clientele said that the 'global financial crisis was very bad for us; it hit us twice in 12–16 months' and an airline manager explained that 'one of the most significant factors is the crisis of fuel which affects the bottom line of airlines. Nearly 35% of airlines costs are from fuel. Whenever there are shocks in the oil market, panic will also happen to airlines equally due to many reasons.' The force of the impacts was partly determined by dependency on certain source markets and reflective of the volatility of tourist demand which fluctuates with changing economic, social, political and environmental circumstances. Susceptibility has a geographic dimension and a tour operator spoke about how 'some tour packages consist of many countries and they have been cancelled or postponed because of crises. For example, when there is a package that involves Singapore–Malaysia–Thailand, if there is a crisis in one of these countries, the whole package may be cancelled.'

The consequences of the crises for business operations included cancellation and postponement of travel, declining tourist volumes, erosion of customer confidence and reduced incomes and profits. Hotel occupancies and airline load factors fell, corresponding to a general pattern whereby tourists alter their plans because of budgetary constraints and risks to personal safety and security at destinations (Mansfeld, 2006; Rittichainuwat & Chakraborty, 2009). A hotel manager recalled that 'we always have 60%–65% occupancy rate, but during SARS our occupancy rate was down to 40%–45%. We lost our half market share, but in proportion we suffered less than Bangkok, Bali, Phuket, Singapore.' As the middle men in the distribution channel (Evans, 2000), tour operators and travel agents were also exposed to assorted hazards in ways which emphasised the inter-dependency of the various sectors and countries of arrival and departure. Air travel is also an intermediary good and demand is influenced by many factors (Rhoades & Reynolds, 2007), but especially economics. Troubled economic times favoured budget carriers because of their more affordable prices, compared to scheduled airlines which lost a considerable amount of revenue as travel patterns changed. The national carrier was forced to revise its schedules and close loss making routes because of 'some slow down or decrease in demand at least for a short time. For example, in the case of Zurich, we used to bring travellers from Zurich to Malaysia, but we stopped this route because of the global financial crisis.'

Although crises are disruptive events with the capacity to jeopardise the functioning and sustainability of the tourism industry, they can yield benefits for those involved. In tourism, as in other fields, crises are a source of commercial opportunities. People do not necessarily cease travelling, but may travel in different ways and fears about visiting a particular place can render alternatives more attractive. Such an effect was apparent in Penang and one respondent commented that 'certainly, those two crises, a coup in Thailand and Bali bombing, drove more business into destinations such as Penang, Langkawi and Kuala Lumpur. In the last minute, tourists will decide not to travel to unsafe countries. Malaysia is relatively stable and safe destination.' Another advantage of undergoing crises was organisational learning and improved preparedness to tackle future disruption, an actual and desired outcome which has been acknowledged by many analysts (Cassedy, 1991; Evans & Elphick, 2005; Henderson, 2002; Miller & Ritchie, 2003; Sonmez, Apostopoulos, & Tarlow, 1999).

6.2. Industry responses to crises

The enterprises represented by those interviewed responded to the various crises by implementing a range of measures which

exhibited some similarities irrespective of organisation size and sector. The most common strategies were shifting attention from long haul to regional and medium haul inbound markets and endeavouring to cultivate domestic tourism. Managers of hotels, travel agents and tour operators and destination marketers all sought new sources of visitors, depending on the crisis. One hotel employee spoke of looking at *'other safer international markets such as Middle East, Japanese market and so on, particularly within Arab countries and certainly, Iran'* in light of economic turmoil in the Western world.

Tourism authorities also prioritised their market segments, distinguishing between primary and secondary; whenever there was a crisis involving the former, for example the recession in much of Europe, they would turn to other markets which were less affected. An interviewee from the government confirmed that the *'UK, Australia, Singapore, Indonesia, China and so on, were Malaysian traditional tourist market, but we are gearing up to focus on Middle East market, (Saudi Arabia, Syria, Iran, Oman, UAE), India in South East Asia, Japan and South Korea in North Asia, Hong Kong and Taiwan in East Asia, South Africa in Africa continent.'* Fellow Association of South East Asian Nation (ASEAN) members were also an ongoing target. Considerable importance was attached to enticing more visitors from the Middle East who were especially welcome because they are estimated to stay twice as long as tourists from other parts of the world and spend nearly three-times as much. Malaysia has a particular appeal to Arabs because about two-thirds of its population are followers of Islam so that Muslims can be assured of being able to meet the strict dictates of their religion. In addition to working in nations where Muslim citizens predominate, marketers were active in countries with sizeable minority Muslim populations. Officials also advertised existing niche products more aggressively such as the homestay programme Malaysia My Second Home for long stay visitors, healthcare and education tourism. Advertising campaigns were directed at specific groups such as young executives, retirees, families and students.

Another strategy adopted by hotels, airlines and government organisations was the promotion of domestic tourism. The tactic had been initially used during the Asian financial crisis of 1997 when Malaysians were urged to visit and spend money at destinations within the country (de Sausmarez, 2003; Musa, 2000). Heightened domestic activity serves as a buffer in times of contracting international arrivals, offsetting losses and protecting jobs and services which might otherwise be lost (UNWTO, 2010). Demand is usually steadier and many respondents shared the view expressed by an hotelier that *'in any crisis, we will try to see whether we could gain some benefits. During crisis, we tried to boost our domestic tourism. When there is a crisis, we rely on local tourists.'* Another spoke of diverting *'our marketing strategy towards domestic tourism because this market was quite stable and it reduced our dependency on foreign tourists.'* In contrast, tour operators and travel agents were interested in exploiting the potential of overseas tourism by Malaysians. Foreign travel was seen to generate higher revenues than domestic and a manager said that *'to be very honest with you, when we had such crises, we did actually a lot of outbound to other countries as well in order to survive.'*

Additional tools and techniques to deal with crises were discounting and intensified marketing. Cost savings and greater efficiency were pursued, amongst them staff redundancies, and airlines engaged in fuel hedging because, according to a manager, *'in every energy crisis, we had hedging fuel, because fuel is very vital for survival and when the oil price will go up, airlines will buy fuel in advance for their future needs.'* There was a degree of product diversification designed to attract special interest markets and sometimes compensate for problems with established offerings caused by the crisis. For example, the state authorities sought to encourage cultural and heritage tourism in the aftermath of the Indian Ocean tsunami which damaged some of Penang's beaches. An

official stated that *'we have all diversity of products, but we need to focus on our heritage and preserve it. We have heritage, culture, heritage architecture and eco heritage. Therefore, we need to focus on sustainability and preserve these heritages for the future generations. Our beaches are polluted and over carrying capacity.'* The natural disaster was thus an occasion for reflection and reassessment, although there was little sign of any serious efforts to address the environmental degradation which had accompanied resort development along stretches of the coastline.

Despite the challenges posed, there was a widespread belief that tourism in Penang had recovered fairly quickly from each crisis encountered. Respondents quoted a recovery period of a week to six months, with the exception of one hotel manager who was less optimistic. Aspects of crisis impacts may thus be transitory as proposed by commentators discussing destinations generally (Sonmez & Graefe, 1998). With specific reference to Malaysia, studies that have been completed (de Sausmarez, 2003; Lean & Smyth, 2009) conclude that the harm caused to tourism arrivals by the Asian financial crisis, Avian influenza epidemic and terrorist outrages was only temporary and followed by resumption of long term growth. Whether the speed at which normality or near-normality was restored can be attributed to the effectiveness of response strategies in Penang is a matter for debate. Many respondents had mixed feelings about the public sector's success in handling assorted crises and some asserted that government agencies had not done enough. Others had more positive views and spoke about how authorities had recognised the vital need to support the industry and initiated publicity drives. Guidelines had been drawn up and attempts made to ease the financial pressures on businesses and boost investment. One interviewee agreed that *'like in any industry, the government both at federal and state levels helped us. They were trying to provide the necessary infrastructure during natural disasters to rebuild the industry and increase marketing exposure.'*

6.3. Tourism crisis management

There were two different perspectives when respondents were asked about their former and current crisis management or contingency planning. It appeared that state organisations did not have any plans or pre-determined guidelines. According to an official, *'I never heard of it before. We just are trying to come out with this five-year plan and secondary ten year-plans for the state's tourism. I admit that we had not looked into tourism crisis management plan and no budget has been allocated to it.'* Past responses had been made largely on an ad hoc basis, sometimes without a complete appreciation of the problems faced. The lack of preparedness, suggesting an assumption of invulnerability and a somewhat inflexible attitude, is surprising given the increasing awareness of the significance of crisis management. However, the finding is similar to that of Prideaux et al. (2003) who reported that governments rarely have written plans and often do not want to dwell on the possibility of incidents of crisis.

Unlike government agencies, private businesses had given thought to crisis management planning and possible benefits that they could attain from crisis situations. Managers in the hotel and airline sectors acknowledged that they had documented plans which had been applied during each crisis, one representative of the former describing how *'we have crisis management plan at hotel level. We have various crisis manuals focusing on different phenomena such as terrorism, diseases, protest, etc. For example, in the case of the tsunami that hit Penang, we had a manual here, how to cope with tsunami, first warning, second warning and after that we had to prepare ourselves. We have meetings once in month, we share our information, and we all think about Penang as a destination not just for our business.'* Tour operators and travel agents professed to have unwritten plans, the contents of which were conveyed verbally to their employees. Airlines had also drawn up contingency plans to deal with uncertainties of various

types and a manager noted 'because we have been through the multitude of crises, we have fuel crisis management plan. For example, in every crisis, we had to hedge fuel cost. It is very important for crisis management. More importantly, we also embark on a renewal programme, trying to get newer aircraft with the latest technology and fuel-efficient. In order to reduce costs, we also undertake a business transformation programme for the airline business.'

A critical aspect of crisis management is communications and there was a consensus that the media plays an important role since it has the power to shape the public's understanding of events and destination conditions as well as the performance of those with responsibility for managing the crisis. News disseminated by the media has an effect on attitudes, particularly if information is sought and opinions are being formed for the first time (Glaesser, 2003). Respondents concurred that accurate media coverage was essential, but that negative stories had often tarnished the image of the destination and impeded the recovery process. Almost all respondents believed that the media exaggerated the extent and harmful outcomes of crises and neglected the post-crisis period, failing to help rebuild tourist confidence by circulating positive stories. This is a universal phenomenon and there are many instances where media coverage has exacerbated and perhaps prolonged a destination crisis, although reports in the aftermath of the 2004 tsunami did refer to the manner in which tourists were contributing to recovery through charitable donations and by returning to stricken destinations (Beeton, 2006).

7. Conclusion

Penang has therefore been struck by a range of regionally and globally inspired crises encompassing economic downturn, natural disasters, disease epidemics, terrorist attacks, political instability and volatile energy costs. The list reflects the vulnerability of the tourism industry to events in the external environment and the ensuing fluctuations in tourist demand. Incidents discussed in this paper reveal how happenings in distant countries can affect tourism operations in another, illustrated by the consequences of the volcanic eruptions in Iceland in 2010 which caused massive disruption to air travel around the world. At the same time, the tourism industry and demand from tourists has demonstrated great resilience as recovery from crisis appears to be fairly quick with a return to the status quo after a relatively short period. Nevertheless, the findings indicate the need for close cooperation and coordination amongst the numerous stakeholders in the industry, both public and private. Well designed and executed tourism crisis management plans under the stewardship of official agencies are vital to minimise risks and mitigate the damaging impacts of the crises that will inevitably occur in the future.

References

- Aziz, H. (1995). Understanding terrorist attacks on tourists in Egypt. *Tourism Management*, 16(2), 91–95.
- Beeton, S. (2006). *Community development through tourism*. Collingwood: Land Links.
- Booth, S. A. (1993). *Crisis management strategy: Competition and change in modern enterprises*. London: Routledge.
- Cassedy, K. (1991). *Crisis management planning in the travel and tourism industry: A study of three destination cases and a crisis management planning manual*. San Francisco: Pacific Asia Travel Association (PATA).
- Chien, G. (2003). The impact of the Severe Acute Respiratory Syndrome on hotels: A case study of Hong Kong. *International Journal of Hospitality Management*, 22(3), 327–332.
- de Sausmarez, N. (2003). Malaysia's response to the Asian financial crisis: Implications for tourism and sectoral crisis management. *Journal of Travel and Tourism Marketing*, 15(4), 217–231.
- Drabek, T. E. (1995). Disaster responses within the tourist industry. *International Journal of Mass Emergencies and Disasters*, 13(1), 7–23.
- Evans, N. (2000). Tour operator. In J. Jafari (Ed.), *Encyclopaedia of tourism* (pp. 584–585). London: Routledge.
- Evans, N., & Elphick, S. (2005). Models of crisis management: An evaluation of their value for strategic planning in the international travel industry. *International Journal of Tourism Research*, 7(3), 135–150.
- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22(2), 135–147.
- Faulkner, B., & Russell, R. (1997). Chaos and complexity in tourism: In search of a new perspective. *Pacific Tourism Review*, 1(2), 93–102.
- Fink, S. (1986). *Crisis management planning for the inevitable*. New York: American Management Association.
- Glaesser, D. (2003). *Crisis management in the tourism industry*. Burlington, MA.: Butterworth-Heinemann.
- Goodrich, J. N. (2002). September 11, 2001 attack on America. A record of the immediate impacts and reactions in the USA travel and tourism industry. *Tourism Management*, 23(6), 573–580.
- Hall, C. M. (2002). Travel safety, terrorism and the media: The significance of the issue-attention cycle. *Current Issues in Tourism*, 5, 458–466.
- Hall, C. M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, 13(5), 401–417.
- Henderson, J. C. (2002). Terrorism and tourism: Managing the consequences of the Bali bombings. *Journal of Travel & Tourism Marketing*, 15(1), 41–58.
- Henderson, J. C. (2007). *Managing tourism crises: Causes, consequences and management*. Oxford: Butterworth-Heinemann.
- Hills, A. (1998). Seduced by recovery: The consequences of misunderstanding disaster. *Journal of Contingencies and Crisis Management*, 6(3), 162–170.
- Hooi, T. V. (2006). The performance of tourism industry in Penang. *Penang Economic Monthly*, 8(10).
- Ishak, R., Aziz, A., & Mohamed, N. (2004). Disaster management plan for the state of Penang. *NCD Malaysia*, 3(2), 23–33.
- Keown-McMullan, C. (1997). Crisis: When does a molehill become a mountain? *Disaster Prevention and Management*, 6(1), 4–10.
- Khalifah, Z., & Tahir, S. (1997). Malaysia: Tourism in perspective. In F. Go, & C. L. Jenkins (Eds.), *Tourism and economic development in Asia and Australasia* (pp. 176–196). London: Cassel.
- Kim, P. S., & Lee, J. E. (1998). Emergency management in Korea and its future directions. *Journal of Contingencies and Crisis Management*, 6(4), 189–201.
- Kuo, H., Chen, C., Tseng, W., Ju, L., & Huang, B. (2007). Assessing impacts of SARS and Avian flu on international tourism demand to Asia. *Tourism Management*, 29, 917–928.
- Laws, E., & Prideaux, B. (2005). Crisis management: A suggested typology. *Journal of Travel and Tourism Marketing*, 19(2/3), 1–8.
- Laws, E., Prideaux, B., & Chon, K. (Eds.). (2007). *Crisis management in tourism*. Wallingford: CAB International.
- Lean, H. H., & Smyth, R. (2009). Asian financial crisis, Avian flu and terrorist threats: Are shocks to Malaysian tourist arrivals permanent or transitory? *Asia Pacific Journal of Tourism Research*, 14(3), 301–321.
- Leiper, N., & Hing, N. (1998). Trends in Asia-Pacific tourism in 1997–98: From optimism to uncertainty. *International Journal of Contemporary Hospitality Management*, 10(7), 245–251.
- Mansfeld, Y. (2006). The role of security information in tourism crisis management: The missing link. In A. Pizam, & Y. Mansfeld (Eds.), *Tourism, security and safety: From theory to practice* (pp. 271–290). Burlington, MA: Butterworth-Heinemann.
- McAleer, M., Huang, B. W., Kuo, H. L., Chen, C. C., & Chang, C. L. (2009). An econometric analysis of SARS and avian flu on international tourist arrivals to Asia. *Environmental Modeling and Software*, 25, 100–106.
- McKercher, B., & Hui, L. L. (2004). Tourism, economic uncertainty, terrorism and outbound tourism from Hong Kong. *Journal of Travel and Tourism Marketing*, 15(2/3), 99–115.
- Meyers, G. C., & Holusha, J. (1986). *When it hits the fan: Managing the nine crises of business*. Boston: Houghton Mifflin Company.
- Miller, G. A., & Ritchie, B. W. (2003). A farming crisis or a tourism disaster? An analysis of the foot and mouth disease in the UK. *Current Issues in Tourism*, 6(2), 150–171.
- Ministry of Tourism Malaysia (2011). *Malaysian hotel guest by state: Penang*. Retrieved 14 October, 2011, from http://www.tourism.gov.my/tourismmalaysia_corpx/rpt4_hotelguest.cfm?rpt=4
- Mitroff, I., Pauchant, T., Finney, M., & Pearson, C. (1989). Do (some) organizations cause their own crisis? The cultural profiles of crisis-prone vs. crisis-prepared organizations. *Industrial Crisis Quarterly*, 3, 269–283.
- Mitroff, I., Shrivastava, P., & Udvardi, F. E. (1987). Effective crisis management. *The Academy of Management Executive*, 1(3), 283–292.
- Musa, G. (2000). Tourism in Malaysia. In C. M. Hall, & S. Page (Eds.), *Tourism in South and Southeast Asia: Issues and cases* (pp. 144–156). Oxford: Butterworth-Heinemann.
- Page, S., Yeoman, I., Munro, C., Connell, J., & Walker, L. (2006). A case study of best practice: Visit Scotland's prepared response to an influenza pandemic. *Tourism Management*, 27(3), 361–393.
- Patten, M. L. (2007). *Understanding research methods: An overview of the essentials*. California: Pyrczak Publishing.
- Pauchant, T. C., & Mitroff, I. (1992). *Transforming the crisis-prone organisation: Preventing individual, organisational and environmental tragedies*. San Francisco: Jossey-Bass.
- Pine, R., Chan, A., & Leung, P. (1998). The current and future impact of Asia's economic downturn on the region's hospitality industry. *International Journal of Contemporary Hospitality Management*, 10(7), 252–256.
- Pizam, A., & Smith, G. (2000). Tourism and terrorism: A quantitative analysis of major terrorist acts and their impact on tourism destinations. *Tourism Economics*, 6, 123–138.
- Prideaux, B., Laws, E., & Faulkner, B. (2003). Events in Indonesia: Exploring the limits to formal tourism trends forecasting methods in complex crisis situations. *Tourism Management*, 24, 475–487.

- Prideaux, B., & Witt, S. F. (2000). The impact of the Asian financial crisis on Australian tourism. *Asia Pacific Journal of Tourism Research*, 5(1), 1–7.
- Rhoades, D. L., & Reynolds, R. (2007). The perfect storm: Turbulence and crisis in the global airline industry. *Crisis management in tourism* (pp. 252–266). Wallingford: CABI.
- Ritchie, B. (2008). Tourism disaster planning and management: From response and recovery to reduction and readiness. *Current Issues in Tourism*, 11(4), 315–348.
- Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3), 410–418.
- Santana, G. (2004). Crisis management and tourism: Beyond the rhetoric. *Journal of Travel and Tourism Marketing*, 15(4), 299–321.
- Seymour, M., & Moore, S. (2000). *Effective crisis management: Worldwide principles and practice*. London: Cassell.
- Sonmez, S. F., Apostopoulos, Y., & Tarlow, P. (1999). Tourism in crisis: Managing the effects of terrorism. *Journal of Travel Research*, 38(1), 13–18.
- Sonmez, S., & Graefe, A. R. (1998). Influence of terrorism risk on foreign tourism decisions. *Annals of Tourism Research*, 25(2), 416–456.
- Tourism Malaysia (2012). *Malaysia charts 24.7 million tourists in 2011*. Media Release, 10 February.
- Tourism Malaysia (2012). *Malaysia hotel guests by state January-December 2010*. Retrieved 29 February, 2012, from http://corporate.tourism.gov.my/research.asp?page=facts_figures
- Tse, S. (2006). Crisis management in tourism. In D. Buhalis, & C. Costa (Eds.), *Tourism management dynamics: Trends, management and tools* (pp. 28–38). London: Butterworth-Heinemann.
- UNWTO (2010). *World tourism barometer*. Madrid: World Tourism Organization.
- Wilder-Smith, A. (2006). The Severe Acute Respiratory Syndrome: Impact on travel and tourism. *Travel Medicine and Infectious Diseases*, 4, 53–60.