

# The future of tourism in light of increasing natural disasters

Gde Indra Bhaskara, Viachaslau Filimonau, Ni Made Sofia Wijaya and Ida Ayu Suryasih

Gde Indra Bhaskara is based at the Udayana University, Bukit Jimbaran, Indonesia.  
Viachaslau Filimonau is based at the Bournemouth University, Poole, UK.  
Ni Made Sofia Wijaya and Ida Ayu Suryasih both are based at the Udayana University, Bukit Jimbaran, Indonesia.

## Abstract

**Purpose** – *This paper aims to highlight the need to better understand the determinants of adopting (more) collaborative, integrated approaches in strategic destination management plans and operational business procedures which is to improve destination and business resilience towards the growing frequency, increasing number and accelerating impacts of natural disasters around the world.*

**Design/methodology/approach** – *The paper reviews literature on the topic of tourism planning, development and management in light of natural disasters.*

**Findings** – *The paper pinpoints a number of factors that hamper the adoption of a (better) integrated and (more) collaborative framework of disaster and destination management among tourism stakeholders. It further proposes how these factors can at least partially be addressed and highlights the role of scholarly research in this endeavour.*

**Originality/value** – *The paper highlights the determinants of adopting more integrated and collaborative approaches to managing natural disasters by individual tourism businesses and entire tourist destinations and proposes how these can be harnessed.*

**Keywords** *Destination management, Disaster management, Natural disasters, Stakeholder collaboration, Business resilience*

**Paper type** *Trends paper*

## Introduction

Globally, the annual number of officially recorded natural disasters is growing rapidly (Ritchie and Roser, 2019). Although the term “natural disasters” may erroneously suggest that all disasters are caused by natural events, the majority are in fact driven by the course of human action. Indeed, the ever-increasing anthropogenic contribution to climate change has accelerated the number, magnitude and frequency of extreme weather events with their well-documented disastrous consequences for regional and local socio-ecological systems (Hallegatte, 2016).

Although natural disasters impose significant damage on all economic sectors, the tourism industry is particularly vulnerable to their impacts (Ritchie, 2004). Not only natural disasters terminate business operations of specific tourism enterprises (Nguyen *et al.*, 2017), but they also, by creating the so-called cascading effects, destroy the critical infrastructure of entire tourist destinations (Pescaroli and Alexander, 2016). This disrupts tourism supply chains that are extensive and fragile (Becken and Hughey, 2013). Most importantly, this interrupts tourism demand by reducing tourist flows, thus making a lasting negative effect on the destination and the tourism industry within (Granville *et al.*, 2016).

The challenge of natural disasters is particularly pronounced in island destinations. Their (often small) size and (relative) remoteness hinder the post-disaster recovery and hamper the re-establishment of tourism demand and supply (Hall, 2012). For example, the Caribbean destinations traditionally take a long time to recover from natural disasters

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because their small island economies cannot sustain the damage inflicted while the remote location restricts the immediate provision of (inter)national assistance (Seraphin, 2018).

To aid tourism policymakers and industry professionals in managing disasters, extensive scholarly research has been undertaken to-date on the determinants of effective adaptation (see, for example, Kajan and Saarinen, 2013), prerequisites of building and managing the adaptive (institutional and organisational) capacity (Orchiston, 2013) and factors of enhancing the socio-ecological resilience of entire destinations and the tourism businesses within (Bec *et al.*, 2016). Within this research agenda, the importance of better integrating the principles of disaster management into the organisational policies of specific tourism enterprises and the institutional procedures of entire destinations has been repeatedly emphasised (Ritchie, 2004). Numerous managerial models have been developed to aid tourism stakeholders in this integration (see, for instance, Becken *et al.*, 2014; Faulkner, 2001; Hystad and Keller, 2008). The literature review, however, shows limited industry uptake of these models, which begs a question of the determinants of the successful application of (more) collaborative, integrated approaches in strategic destination management plans and operational business procedures. This paper aims to highlight the key determinants and propose how these should be at least partially harnessed in the future via stakeholder action and scholarly research.

### Key determinants

First, the institutional resources of destinations and the organisational capabilities of the tourism enterprises hosted within are often limited, which results in the destination's, but especially businesses', resistance to invest in disaster management and/or to collaborate with other tourism stakeholders towards better disaster preparedness. Consequently, integrated disaster management policies, standards, plans and procedures are only adopted by a small number of tourism businesses, mostly those represented by large-in-size and/or chain- and/or international brand-affiliated enterprises (Jiang and Ritchie, 2017). Given that most tourism businesses are small-to-medium in size, it can be concluded that the bulk of the industry tends to rely on rather simplistic, informal practices and procedures in tackling natural disasters. The lack of formalised, integrated policies and standards suggests that the industry may be unable to effectively react to disasters when these strike, thus exposing itself to the impacts and delaying the recovery (Filimonau and De Coteau, 2019).

Second, many tourism stakeholders seem to clearly differentiate between disaster preparedness and post-disaster recovery with only a handful of tourism organisations and destinations adopting an integrated, comprehensive outlook. Traditionally, there has been more stakeholder interest in the post-disaster recovery stage which is in part because of its more "tangible" nature (Khazai *et al.*, 2018). Indeed, the actual damage inflicted by a natural disaster is apparent to business managers and destination management professionals while the benefits of preparing for this disaster (which has not happened yet, but may well do in the future) are less explicit albeit requiring substantial managerial dedication and allocation of often limited (financial and human) resources (Ritchie, 2004).

Third, tourism stakeholders seem to underestimate the value of cross-boundary and inter-company collaboration to build/enhance resilience to natural disasters (Nguyen *et al.*, 2017). While some destinations and tourism enterprises strive to collaborate towards this aim, this collaboration is often ad hoc and grounded on the "good will" and personal charisma of particular individuals, rather than on sustained corporate and/or country's commitment (Nguyen *et al.*, 2018). Further, such collaboration is often either too informal as to that it is limited to inter-personal agreements between specific stakeholders (for example, in the case of two tourism businesses) or too formal as to that it is restricted to mere declarations of intentions with no meaningful actions behind (for instance, in the case of two neighbouring destinations). Concurrently, for genuine collaboration to succeed, it is

paramount to develop rapport and trust by stakeholders and establish good relationships amongst them (Jiang and Ritchie, 2017).

Finally, the geography of existing research on the prospects of integrating disaster management procedures into destination management and organisational practices of specific tourism businesses is limited to a handful of destinations and natural disaster types (Filimonau and De Coteau, 2019). This questions the extent to which such integration can work in different political and socio-economic contexts and when considering the other types and/or categories of natural disasters. Further factors, such as national culture of tourism stakeholders and/or political relations between neighbouring countries, may play a role in the (un)willingness of destination managers and industry professionals to adopt (more) collaborative, integrated approaches in their management and planning. For example, although India and Pakistan are prone to certain types of natural disasters, the ongoing political tension between the two countries may hinder institutional and organisational collaboration towards (better) destination and disaster resilience.

### Future vision

To build/enhance business resilience towards disasters, improve destination's preparedness to disasters and accelerate organisational/destination-wide recovery, there is a need for tourism stakeholders operating in the disaster-prone destinations, such as islands, to adopt a more comprehensive, integrated managerial framework. This framework should take advantage of the models of disaster management developed through past academic research and be enhanced with good practices and case studies of their empirical application. Furthermore, such integrated framework should, as the very least, pay equal attention to disaster preparedness and recovery, without leaning towards a more "tangible" recovery stage. It is further argued that, whenever possible, more emphasis should be given to the preparedness stage following the basic principle of sustainable development and ethical management promoting prevention over cure.

Collaboration is a cornerstone of effective management and, to succeed in the adoption of a (better) integrated framework of disaster and destination management in tourism, there is a need to facilitate genuine collaborative work across borders (destination-level collaboration) and specific organisations (tourism business-level collaboration). Such collaboration should take the form of tourism stakeholders sharing knowledge and exchanging good practices and case studies in disaster preparedness and recovery. Most importantly, however, is that such cross-boundary and inter-company collaboration should have a compulsory element of "tangibility". For example, destinations and the tourism businesses within should agree to allocate certain, relative to destination/business size, shares of (monetary) resources to a common pool which is mutually managed and can be used, upon securing consent from all stakeholders involved, to finance projects related to disaster preparedness and recovery. This pool could be used as an emergency reserve, thus providing the participating stakeholders with the reassurance of everyone's commitment and enabling speedy recovery if/when a natural disaster hits.

Finally, academia should aid in the industry's uptake of (better) integrated and (more) collaborative frameworks of disaster and destination management by conducting cutting-edge research on assessing the vulnerability of popular tourist destinations to (different types of) natural disasters and assessing the (environmental and socio-economic) magnitude of their impacts. The findings of such research can inform management and policymaking, thus encouraging tourism stakeholders to invest into the adoption of integrated managerial frameworks. Scholarly research is further required to test the feasibility of integrated managerial frameworks in various political and socio-economic contexts, including the role of such important internal and external factors as national culture and political relations. This is to identify the appropriate "gate-keepers" and to establish the most effective ways for their engagement. Finally, scholarly research should

identify good practices and case studies in disaster preparedness and recovery with their subsequent dissemination to the tourism stakeholders concerned.

## Conclusion

The future tourism industry will be increasingly vulnerable to natural disasters. To reduce this vulnerability and build/enhance resilience to natural disasters, tourism stakeholders should aim at adopting (more) collaborative and (better) integrated frameworks of disaster and destination management. The success of this adoption will depend on the willingness and readiness of tourism stakeholders to collaborate across specific businesses, but also entire destinations, striving to address, inter alia, such critical factors of success as the traditional industry's conservatism/resistance to change, limited intra-company resource availability and cross-boundary political tensions and/or priorities. Academic research is required to demonstrate the benefits of such collaboration and showcase the opportunities offered by the adoption of the integrated managerial frameworks to all tourism stakeholders.

## References

- Bec, A., McLennan, C.I. and Moyle, B.D. (2016), "Community resilience to long-term tourism decline and rejuvenation: a literature review and conceptual model", *Current Issues in Tourism*, Vol. 19 No. 5, pp. 431-457.
- Becken, S. and Hughey, K.F.D. (2013), "Linking tourism into emergency management structures to enhance disaster risk reduction", *Tourism Management*, Vol. 36, pp. 77-85.
- Becken, S., Mahon, R., Rennie, H.G. and Shakeela, A. (2014), "The tourism disaster vulnerability framework: an application to tourism in small island destinations", *Natural Hazards*, Vol. 71 No. 1, pp. 955-972.
- Faulkner, B. (2001), "Towards a framework for tourism disaster management", *Tourism Management*, Vol. 22 No. 2, pp. 135-147.
- Filimonau, V. and De Coteau, D. (2019), "Tourism resilience in the context of integrated destination and disaster management (DM2)", *International Journal of Tourism Research*, available at: <https://doi.org/10.1002/jtr.2329>
- Granville, F., Mehta, A. and Pike, S. (2016), "Destinations, disasters and public relations: stakeholder engagement in multi-phase disaster management", *Journal of Hospitality and Tourism Management*, Vol. 28, pp. 73-79.
- Hall, C.M. (2012), "Island islandness, vulnerability and resilience", *Tourism Recreation Research*, Vol. 37 No. 2, pp. 177-181.
- Hallegatte, S. (2016), *Natural Disasters and Climate Change*, Springer, Cham.
- Hystad, P.W. and Keller, P.C. (2008), "Towards a destination tourism disaster management framework: long-term lessons from a Forest fires disaster", *Tourism Management*, Vol. 29, pp. 151-162.
- Jiang, Y. and Ritchie, B.W. (2017), "Disaster collaboration in tourism: motives, impediments and success factors", *Journal of Hospitality and Tourism Management*, Vol. 31, pp. 70-82.
- Kajan, E. and Saarinen, J. (2013), "Tourism, climate change and adaptation: a review", *Current Issues in Tourism*, Vol. 16 No. 2, pp. 167-195.
- Khazai, B., Mahdavian, F. and Platt, S. (2018), "Tourism recovery scorecard (TOURS)-benchmarking and monitoring progress on disaster recovery in tourism destinations", *International Journal of Disaster Risk Reduction*, Vol. 27, pp. 75-84.
- Nguyen, D.N., Imamura, F. and Luchi, K. (2017), "Public-private collaboration for disaster risk management: a case study of hotels in Matsushima, Japan", *Tourism Management*, Vol. 61, pp. 129-140.
- Nguyen, D.N., Imamura, F. and Luchi, K. (2018), "Barriers towards hotel disaster preparedness: case studies of post-2011 Tsunami, Japan", *International Journal of Disaster Risk Reduction*, Vol. 28, pp. 585-594.

Orchiston, C. (2013), "Tourism business preparedness, resilience and disaster planning in a region of high seismic risk: the case of the Southern Alps, New Zealand", *Current Issues in Tourism*, Vol. 16 No. 5, pp. 477-494.

Pescaroli, G. and Alexander, D. (2016), "Critical infrastructure, panarchies and the vulnerability paths of cascading disasters", *Natural Hazards*, Vol. 82 No. 1, pp. 175-192.

Ritchie, B.W. (2004), "Chaos, crises and disasters: a strategic approach to crisis management in the tourism industry", *Tourism Management*, Vol. 25 No. 6, pp. 669-683.

Ritchie, H. and Roser, M. (2019), "Natural disasters", available at: <https://ourworldindata.org/natural-disasters> (accessed 23 October 2019).

Seraphin, H. (2018), "Natural disaster and destination management: the case of the Caribbean and hurricane Irma", *Current Issues in Tourism*, Vol. 22 No. 1, pp. 21-28.

### Corresponding author

Viachaslau Filimonau can be contacted at: [vfilimonau@bournemouth.ac.uk](mailto:vfilimonau@bournemouth.ac.uk)

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