



# Tourism resilience in the context of integrated destination and disaster management (DM<sup>2</sup>)

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## Abstract

The disaster management principles should be integrated into the destination management plans to enhance resilience of tourist destinations to natural disasters. The success of such integration depends on the extent of tourism stakeholder collaboration, but this topic remains understudied, especially in the Caribbean. This paper evaluates tourism resilience in Grenada. It finds that local tourism stakeholders are well aware of the potential damage natural disasters can inflict on the destination but fail to develop effective measures to build destination-wide and organizational resilience. The paper proposes an action framework to aid tourism stakeholders in Grenada to more effectively plan for disasters.

## KEYWORDS

destination management, disaster management, resilience, stakeholder collaboration, the Caribbean

## 1 | INTRODUCTION

Although the detrimental impacts of natural disasters on the tourism industry are well recognized, there is a paucity of studies that consider disaster management in the context of destination management (Mair, Ritchie, & Walters, 2016). Although extant research has evaluated the destination's vulnerability to natural disasters, there is a dearth of understanding of how local tourism stakeholders in these destinations collaborate, if at all, towards the goal of effective disaster management (Nguyen, Imamura, & Luchi, 2017). Better understanding of the determinants of effective collaboration between industry professionals and policy-makers (PMs) at a destination level can assist the tourism industries and their host destinations in better managing future occurrences of disasters, thus building organizational and institutional resilience (Pyke, Law, Jiang, & De Lacy, 2018).

The topic of disaster resilience is highly relevant for the Caribbean tourism industry. This is because tourism represents a major economic driver in the Caribbean (Daye, Chambers, & Roberts, 2008), but the

region is vulnerable to natural disasters, which can impede tourism development in its destinations (Becken, Mahon, Rennie, & Shakeela, 2014). For example, it is estimated that the 2017 hurricanes damaged tourism infrastructure of Caribbean destinations to the amount of approximately 300% of their national gross domestic product (Caribbean Development Bank-CDB, 2018). This has triggered a debate on how to build disaster resilience within the Caribbean from the viewpoint of safeguarding its vulnerable tourism industry (Wilkinson, Twigg, & Few, 2018). Since then, tourism stakeholders in the Caribbean have been called to better understand the potential impacts of natural disasters on tourism enterprises and their host destinations and develop disaster resilience strategies via symbiotic planning, stakeholder engagement, and integrated support (Mackay & Spencer, 2017). This notwithstanding, Caribbean tourism has been reactive to disaster management plans and procedures (Wilkinson et al., 2018). To enhance disaster resilience of specific Caribbean destinations and

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the tourism industries within, tourism stakeholders should more actively embrace disaster management practices and closely integrate them into the destination management agenda (Becken et al., 2014). The literature on building resilience of tourism enterprises to natural disasters in the context of destination management is still in its infancy and focusses on the countries in Southeast Asia given that these represent the emerging markets of tourist supply and demand (Hamzah & Hampton, 2013). The Caribbean destinations have not been comprehensively researched despite their proximity to the established tourism consumption markets of Europe and North America. This study partially fills this knowledge gap by evaluating the ability of tourism industry practitioners and destination PMs to build organizational and destination-wide resilience to natural disasters in Grenada, a “hotspot” of Western tourist demand within the Caribbean.

## 2 | LITERATURE REVIEW

### 2.1 | Hazards, disasters, and crises

Natural hazards are common occurrences, and tourism is among those economic sectors that are most vulnerable to their impacts (Brown, Rovins, Feldmann-Jensen, Orchiston, & Johnston, 2017). In this regard, vulnerability refers to “the extent to which a community, system or asset is susceptible to the damaging effects of a particular hazard” (Becken & Khazai, 2017, p. 97). In the context of destination management (DM1), the physical location of a destination determines the type of hazards it is vulnerable to and the extent of damage this hazard can inflict. By definition, hazards hold the potential to cause harm; when this harm is associated with risk and vulnerabilities, hazards are referred to as disasters (Coppola, 2015).

Global Facility for Disaster Reduction and Recovery (2017) defines a disaster as an extreme, often sudden, event that causes damage to critical infrastructure and requires assistance for recovery. The damage imposed by a disaster may lead to another disaster, thus creating cascading effects (Pescaroli & Alexander, 2015) that are of particular relevance to tourism. For example, in Dominica, following hurricane Maria (extreme event), the destination experienced a series of unexpected events, such as storms and landslides (cascading effects), causing infrastructural damage to hotels, ports of entry, and communication services (critical infrastructure), some of which stemmed from inadequate building structures (vulnerabilities) to withstand disasters. The loss of critical infrastructure inhibited visitation to Dominica resulting in further cascading effects for the tourism industry (Gross, 2018). Adequate preparedness and management of vulnerabilities in critical infrastructure at a destination are therefore important in reducing these cascading effects, thus emphasizing the role of disaster management (DM2).

It is important to note that, in tourism, the term “disaster” has for long been used together with the term “crisis.” Despite the history of interchangeable use, both terms have explicit differences. In his seminal work, Faulkner (2001, p. 136) argued that “a situation where the root cause of an event is, to some extent, self-inflicted through

### Highlights

- Examines resilience in the context of integrated destination and disaster management.
- Explores the role of stakeholder collaboration in building resilient organizations and destinations.
- Focusses on Grenada, a popular Caribbean destination vulnerable to disasters.
- Finds stakeholder collaboration to be limited, which endangers resilience to disasters.
- Proposes an action framework to aid in more collaborative planning for disasters.

such problems as inept management structures and practices or a failure to adapt to change” should be referred to as a crisis. This definition suggests that crises are usually prompted by internal or man-made actions, such as erroneous corporate decisions, whereas external, nature-caused, forces trigger disasters. Importantly, the concept of cascading effects links crises to disasters (Pescaroli & Alexander, 2015) given that external impacts (disasters) may prompt negative internal effects (crises) in the case of poor preparedness. Although there is a significant portion of tourism literature on crisis management in the context of tourism enterprises (see, for example, Blackman & Ritchie, 2008; Hall, 2010; Ritchie, Dorrell, Miller, & Miller, 2004), the topic of explicit DM2 in tourism is less established.

### 2.2 | Managing disasters in the context of managing destinations

#### 2.2.1 | Disaster-related research in tourism

The disruptive nature, inevitability, and unpredictability of disasters have manifold implications for the tourism industry. First, disasters destroy the tourism infrastructure at destinations, thus restricting their ability to receive tourists in the immediate aftermath (Huang & Min, 2002). Second, disasters impact transit routes and source markets, by changing consumer perception of destinations as being safe (Prideaux, Laws, & Faulkner, 2003). Media intensify this impact, thus creating a “ripple effect,” which spreads the detrimental impact of disasters geographically and across economic sectors (Handmer & Dovers, 2007). Importantly, in the context of tourism, the ripple effect hinders destination’s recovery as negative consumer perception of a disaster-affected destination hampers injection of foreign exchange, thus increasing the amount of time needed for the destination to recover (Ritchie, 2004). This explains why the “response” and “recovery” stages of disasters have been popular in tourism research to date (Mair et al., 2016).

The research agenda on DM2 in tourism dates back to the 1990s, which covered tourism involvement in disaster planning (Murphy & Bayley, 1989), disaster recovery and the media (Milo & Yoder, 1991),

**TABLE 1** The scope of academic studies on destination management (DM1) and disaster management (DM2) in tourism (2001–2018)

Source	Regional focus	Type of disasters		Focus on the following stage of disaster's life cycle		Focus of analysis					
		Natural	Man-made	Predisaster	Postdisaster	DE	TDM	TDRR	SC	TF	DM
Seraphin (2018)	Caribbean	Hurricanes	–	–	–	✓	–	–	–	–	✓
Schmude, Zavarah, Schwaiger, and Karl (2018)	Dominica	Various	–	–	✓	✓	–	–	–	–	–
Khazai, Mahdavian, and Platt (2018)	Philippines	Earthquakes; cyclones	–	–	✓	–	✓	–	–	–	–
Nguyen et al. (2017); Nguyen, Imamura, and Luchi (2018)	Japan	Tsunami Earthquakes	– –	✓ ✓	– –	– –	✓ –	– –	– ✓	– –	– –
Jiang and Ritchie (2017)	Australia	Cyclones	–	–	✓	–	✓	–	✓	–	–
Nguyen, Imamura, and Luchi (2016)	Coastal tourism	Various	–	✓	–	–	✓	–	–	–	–
Mair et al. (2016)	Global	Various	–	✓	✓	–	✓	–	–	–	–
Hughey and Becken (2016)	New Zealand	Various	–	✓	–	–	–	✓	–	–	–
Gurtner (2016)	Bali (Indonesia)	–	Terrorism	–	✓	–	✓	–	–	–	–
Granville, Mehta, and Pike (2016)	Global	Various	–	✓	✓	–	✓	–	–	✓	–
Ghaderi, Som, and Henderson (2015)	Thailand	Floods	–	–	✓	✓	–	–	–	–	–
Becken et al. (2014)	Caribbean, South Pacific, Indian Ocean	Various	–	✓	–	–	–	✓	–	✓	–
Becken and Hughey	New Zealand	–	–	✓	✓	–	–	✓	–	–	–
Orchiston (2013)	–	Earthquakes	–	✓	–	–	✓	–	–	–	–
Yang, Wang, and Chen (2011)	China	–	–	–	✓	–	✓	–	–	–	–
Sydnor-Bouso, Stafford, Tews, and Adler (2011)	USA	Various	–	–	✓	✓	–	–	–	–	–
Tsai and Chen (2010, 2011)	Taiwan	–	–	✓	–	–	–	✓	–	–	–
		Earthquakes	–	✓	–	–	–	✓	–	–	–
Xu and Grunewald (2009)	China	–	–	✓	–	–	✓	–	–	✓	–
Ritchie (2008)	Global	Various	–	✓	–	–	✓	–	–	–	–
Pearlman and Melnik (2008)	USA	Hurricanes	–	–	–	–	✓	–	–	–	✓
Hystad and Keller (2008)	Canada	Forest fires	–	–	✓	–	✓	–	✓	✓	–
Cioccio and Michael (2007)	Australia	–	–	✓	✓	–	✓	–	–	–	–
Hystad and Keller (2006)	Canada	–	–	✓	✓	–	✓	–	–	–	–
Méheux and Parker (2006)	Vanuatu	Various	–	✓	–	✓	–	–	–	–	–
Ritchie (2004)	Global	Various	–	✓	–	–	✓	–	–	–	–
Huan, Beaman, and Shelby (2004)	Taiwan	Earthquakes	–	✓	–	✓	✓	–	–	✓	–
Prideaux (2004)	Australia	Various	–	–	✓	–	✓	–	–	✓	–
Miller and Ritchie (2003)	UK	Foot and mouth disease	–	–	✓	–	✓	–	–	✓	–
Huang and Min (2002)	Taiwan	Earthquakes	–	–	✓	–	✓	–	–	–	–
Faulkner and Vikulov (2001)	Australia	Floods	–	✓	–	–	✓	–	–	✓	–
Faulkner (2001)	Global	Various	–	✓	✓	–	✓	–	–	✓	–

Note. The literature was categorized based on its focus on DE, TDM, TDRR, SC, TF, and DM.

Abbreviations: DE, documented and prospective disaster effects on the destination; DM, analysis of DM1 strategies and procedures in the context of DM2; SC, stakeholder collaboration towards effective DM2 in the context of DM1; TDM, tourism disaster management plans put by destinations in place; TDRR, tourism disaster risk reduction plans put by destinations in place; TF, tourism frameworks developed to facilitate DM2 in the context of DM1 plans adopted by specific destinations.

planning and mitigation (Pottorff & Neal, 1994), tourism disaster planning strategies (Drabek, 1995), and crisis management process and planning (Young & Montgomery, 1997). In the early 2000s, Faulkner (2001) and Ritchie (2004) summarized past research to develop the managerial frameworks to guide the industry professionals on how to manage disasters before, during, and after they occur. These frameworks were subsequently utilized to understand the industry's response to the different types of disasters and to establish the determinants of their effective management in the context of specific destinations.

Table 1 takes stock of extant studies on DM2 in tourism. It shows that, despite the progress made to date, the scope of research remains limited. First, there is a distinct focus on the predisaster ( $n = 14$ ) or postdisaster ( $n = 11$ ) stage of DM2 with only a few ( $n = 5$ ) studies addressing both. Further, research has focussed on natural disasters within destinations in Asia, North America, and Oceania with only three studies referencing the Caribbean. Closer analysis reveals that only one of these three studies examined the predisaster stage. This calls for more research on the impact of disasters on the tourism industry in the Caribbean, specifically from the viewpoint of predisaster planning and preparedness (Ritchie, 2004).

## 2.2.2 | Integrated destination and disaster management (DM<sup>2</sup>)

Managing disasters is paramount for sustained tourism development at a destination, and the literature has called for more interdisciplinary research on DM2 to understand its implications for DM1 (Ritchie, 2004) from the perspective of building resilience of the local tourism industries and facilitating effective management of changing circumstances (Jiang & Ritchie, 2017). The more amplified the impacts from these changing circumstances, the greater chances exist for tourism industries to design proactive responses to similar future situations (Hartman, 2018). This can positively impact the overall resilience of the destination and the tourism businesses (TBs) it hosts (Sheppard & Williams, 2016). As Faulkner (2001) put it, the likelihood and expectation that a destination's performance will be impacted by disasters are sufficient to start developing DM2 strategies by tourism stakeholders.

Thus, DM2 represents an important management process (Hystad & Keller, 2008), which, if handled correctly, can reduce the negative consequences of disasters (Sydnor-Bouso et al., 2011). For the tourism industry, DM2 involves three essential steps: (a) developing planning and preparedness activities (predisaster stage); (b) responding to and managing the effects of the disaster (postdisaster stage—immediate); and (c) restoring to an improved state (postdisaster stage—long term; Ritchie, 2009). The process is non-linear and requires flexibility and commitment from stakeholders for it to succeed (Ritchie, 2004). Indeed, preventing the disaster from onset is ideal but not always possible due to the number of vulnerabilities present at a destination and/or within its TBs. This pinpoints the importance of developing preparedness measures at the predisaster stage (Miller & Ritchie, 2003) and ensuring stakeholder collaboration aiming to manage the effects of disasters (Brown et al., 2017) including the negative impact on the consumer perception of a destination (Hystad & Keller, 2008).

The postdisaster stages offer a learning opportunity for destinations and the tourism enterprises within (Wilkinson et al., 2018) and provide a medium to redefine the destination through (re-) development (Seraphin, 2018). Importantly, aiming to return to the predisaster state is unrealistic and prevents the destination and its tourism industry from developing approaches to reduce the impacts from future disasters (Faulkner & Vikulov, 2001). This redefining idea is in line with chaos theory (Russell & Faulkner, 1999), which proposes that the chaos resulting from a disaster can inspire innovation (Prideaux et al., 2003). For this innovation to happen, disasters need to be managed, with management frameworks developed at the stages of predisaster planning and preparedness (Ritchie, 2009).

Despite the growth in research on DM2 in tourism and the repeated calls for the adoption of more proactive, strategic planning approaches to managing disasters by tourism enterprises (Ritchie, 2004), most studies have taken a reactive stance on examining disasters by emphasizing the response and recovery activities undertaken by tourism stakeholders as opposed to the planning and preparedness operations (Khazai et al., 2018; Mair et al., 2016; Ritchie, 2008). Albeit surprising, this is understandable for the tourism industry, as a substantial number of TBs do not have written disaster plans or have disaster plans that are outdated (Hystad & Keller, 2008; Novelli, Burgess, Jones, & Ritchie, 2018; Sydnor-Bouso et al., 2011). Some tourism enterprises perceive the cost of developing and implementing strategic plans on DM2 as exceeding the benefits (Nguyen et al., 2017). Contingency planning remains a challenge for specific TBs and entire destinations (Faulkner & Vikulov, 2001), and although there is growing business awareness of disasters globally, this awareness fails to translate into the development of long-term strategic thinking and corporate measures that could assist in reducing their negative impacts (Mojtahedi & Oo, 2017).

Developing strategic DM2 plans contributes significantly to how the disaster is handled before, during, and after (Faulkner, 2001; Mair et al., 2016; Ritchie, 2008) whereas their absence increases the exposure of the tourism industry to the challenge of economic instability (Granville et al., 2016). Faulkner (2001), Ritchie (2004), and Khazai et al. (2018) argued that the impacts from potential disasters can be reduced or even avoided if proactive DM2 plans are put in place as these indicate resource availability and highlight the prime areas for intervention when the disaster occurs. The speed of disaster recovery is therefore determined by efficient preparedness plans and activities (Oloruntoba, Sridharan, & Davison, 2018). Notably, preparing for disasters at a destination level should equally involve TBs and PMs (Nguyen et al., 2018), underlining the value in understanding each stakeholder's responsibility (Hystad & Keller, 2008) and the importance of team coordination, consultation, and commitment to planning and preparedness (Faulkner, 2001). The following section will therefore address the role of stakeholder collaboration in DM2 for DM1 (DM<sup>2</sup>).

## 2.3 | Stakeholder collaboration in DM<sup>2</sup>

From the DM<sup>2</sup> perspective, stakeholders include individuals or groups who perceive themselves as affected by disasters or involved in the

process of managing disasters (Mojtahedi & Oo, 2017), connected to tourism development initiatives before, during, and after disasters (Waligo, Clarke, & Hawkins, 2013), and those with the intent and ability to be involved in tourism disaster planning (Hystad & Keller, 2008). Stakeholder collaboration in DM<sup>2</sup> is important as it can aid in mitigating, planning, recovering (Jiang & Ritchie, 2017; Olorunfoba et al., 2018), and even coping (Gray & Wood, 1991) with the disaster effects through comanagement (Waugh & Streib, 2006) and wider engagement on actions (Granville et al., 2016). It can induce secondary partnership (Innes & Booher, 1999) and cooptation (Jiang & Ritchie, 2017) with subgroups of stakeholders for more effective DM<sup>2</sup>. Collaboration helps building trust (McComb, Boyd, & Boluk, 2016) and provides access to shared resources that are of prime importance postdisaster (Jiang & Ritchie, 2017). It can further promote favourable agreements and equal opportunities for all stakeholders to influence decisions related to postdisaster preparedness and recovery (Nguyen et al., 2017). Lastly, collaboration can alter the reactive nature of TBs in the context of DM<sup>2</sup> by prompting them to become more proactive when dealing with disasters as responsibilities are shifted from management to a more inclusive approach with other stakeholders (Morakabati, Page, & Fletcher, 2017).

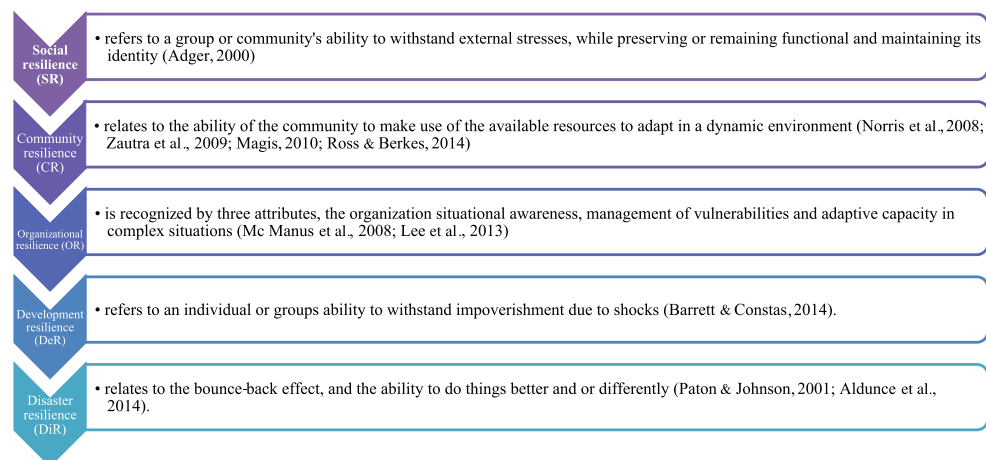
Despite the benefits of stakeholder collaboration in the context of DM<sup>2</sup>, it is often inhibited (McComb et al., 2016) due to the complex nature of the process and ineffective communication (Saito & Ruhanen, 2017). Furthermore, collaboration can be challenged by the imbalance of power (Frame, Thomas, & Day, 2004) stemming from multistakeholder collaborative entities comprising larger and smaller enterprises with varying levels of resources. Lastly, collaboration is restrained by the occurrence of “freeloaders” or stakeholders who collaborate simply to receive benefits but do not provide any support in return (Jamal & Getz, 1995). In summary, there is a clear need for collaboration between tourism stakeholders for effective DM<sup>2</sup> as it initiates synergy and builds organizational and destination-wide resilience (Jiang & Ritchie, 2017; Nguyen et al., 2016, 2017). These concepts are introduced next.

## 2.4 | Resilience

Resilience originates from Latin *resilio* translated as “to spring back” (Klein, Nicholls, & Thomalla, 2003), thus implying a level of elasticity. The theoretical concept of resilience has its origin in the study of ecology and engineering (Berbés-Blázquez & Scott, 2017), where it references the speed of the system to return to a normal state after a disturbance. The concept was further applied in management studies aiming to explain the ability of different socio-economic systems to endure various degrees of changing conditions (Hall, Prayag, & Amore, 2018). Figure 1 categorizes the main types of resilience as covered in management-related academic literature.

The concept of resilience in tourism has been examined from the perspective of community tourism planning (Becken, 2013; Holladay & Powell, 2013, 2016; Ruiz-Ballesteros, 2011), tourism in protected areas (Espiner & Becken, 2014; Strickland-Munro, Allison, & Moore, 2010), employment (Sydnor-Bousso et al., 2011), environmental governance (Luthe & Wyss, 2014; Sheppard, 2017), business sustainability (Biggs, Hall, & Stoeckl, 2012; Orchiston, 2013), and business vulnerability (Calgaro, Lloyd, & Dominey-Howes, 2014; Guo, Zhang, Zhang, & Zheng, 2018; Sheppard & Williams, 2016). Further, the literature discussed the value of sustainable tourism versus tourism resilience (Lew, 2014) calling to unify both approaches (Cheer & Lew, 2017; Pechlaner & Innerhofer, 2018; Walker & Salt, 2006), add resilience as a new dimension of sustainability (Carpenter, Walker, Anderies, & Abel, 2001; Espiner, Orchiston, & Higham, 2017; Strickland-Munro et al., 2010), and even suggesting to completely replace the concept of sustainability with the concept of resilience (Butler, 2018).

The tourism literature related to destination resilience has attempted to apply the concept to strengthen tourism development in specific destinations with the works by McKercher (1999), Farrell and Twining-Ward (2004, 2005), and Cochrane (2010) being pioneering in this regard. Destination resilience in the specific context of DM<sup>2</sup> remains understudied (Jopp, DeLacy, & Mair, 2010), but Hall et al. (2018) highlight growing scholarly interest in linking



**FIGURE 1** Types of resilience as conceptualized in academic literature [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

these concepts. Here, resilience emphasizes a destination's ability (DM1) to adapt, learn, and self-organize following disasters (DM2; Carpenter et al., 2001; Carpenter, Westley, & Turner, 2005; Folke, 2006; Lew, 2014; Walker, Holling, Carpenter, & Kinzig, 2004), thus offering an integrated management vision (DM<sup>2</sup>). Extant research on destination resilience in the context of DM<sup>2</sup> has shown that, as destinations are varied in structure and resources as well as in the extent of disastrous events, the speed at which destinations recover depends on their capacity to adapt to the external disturbance (Cochrane, 2010). Further, two distinct dimensions of destination resilience in DM<sup>2</sup> have been distinguished: macrodimension and microdimension (Hall et al., 2018). The macrodimension references the social-ecological aspects of destination resilience, giving a destination-wide view of the tourism systems and how they adapt to disasters (Orchiston, Prayag, & Brown, 2016), whereas the microdimension focusses on the individual networks within the larger system, covering areas such as business-specific resilience (Biggs et al., 2012; Luthe & Wyss, 2014).

Importantly, extant research has indicated that destination resilience depends on the resilience of all subsystems within the destination (Hall et al., 2018), such as TBs and PMs, and should incorporate proper planning and sharing of resources via stakeholder collaboration (Buultjens, Ratnayake, & Gnanapala, 2017). Stakeholder collaboration thus represents a cornerstone of building resilient destinations. For instance, the negative effects of limited tourism stakeholders' engagement have prevented destination's recovery following the "Harrietteville fire" (Pyke, De Lacy, Law, & Jiang, 2016). For tourism stakeholders to collaborate with the goal of building disaster resilience at a destination level, they should build their own, internal resilience (Lee, Vargo, & Seville, 2013). This is known as organizational resilience (OR in Figure 1) of TBs in the context of destinations dealing with natural disasters (destination-wide resilience or DiR in Figure 1) as these are seen as interdependent (Pechlaner & Innerhofer, 2018). Building overall resilience at a destination level relies on human efforts that encompass collaborative effects between the destination managers/policy-makers (PMs) and TBs in handling disasters (Comfort, Oh, & Ertan, 2009). The organizational resilience is therefore discussed next.

## 2.5 | Organizational resilience in the context of DM<sup>2</sup>

As disasters endanger the existence of TBs within a destination (Linnenluecke, Griffiths, & Winn, 2012), it is important that the tourism stakeholders build organizational resilience to disasters (Hall et al., 2018) and allocate resources and capabilities for business continuity (Sydnor-Bouso et al., 2011). Organizational resilience is defined as a "multidimensional, sociotechnical phenomenon that addresses how people, as individuals or groups, manage uncertainty" (Lee et al., 2013, p. 29) and relates to an organization's ability to anticipate, manage, respond (Auerswald & van Opstal, 2009), cope, adapt, and take advantages of opportunities (Orchiston et al., 2016) without affecting the operations of the organization (Tyrrell & Johnston, 2008). Resilient organizations are more likely to possess a level

of tolerance (Sawalha, 2015), preparedness, sensing, agility (Starr, Newfrock, & Delurey, 2004), and able to preserve a robust work environment (Seville et al., 2006), while preparing for and adjusting to changes during and following a disaster (McManus, Seville, Vargo, & Brunson, 2008).

In the context of DM<sup>2</sup>, Sawalha (2015) categorized organizations into three types based on their interpretation of organizational resilience. First, organizations may reactively consider organizational resilience as the way they are impacted by past disasters (Auerswald & van Opstal, 2009). According to Hall et al. (2018), this reactive vision prevails within the tourism industry. Second, organizations may see resilience in light of risk management and plan appropriate measures to adequately respond to risky/potentially disastrous events (Fiskel, 2006). Third, organizations may have an inclusive view of organizational resilience in that they understand both the proactive (risk management and related planning) and reactive (adjusting/adapting and surviving events as they occur) approaches (Sawalha, 2015). This classification is similar to Lee et al.'s (2013) planned and adaptive dimensions of organizational resilience, where planned resilience deals with the implementation of preparedness strategies, such as business continuity and risk management predisaster, whereas adaptive resilience focusses on the business strategies required to survive postdisaster.

Aside from integrating it into corporate vision, organizational resilience is important for the day-to-day operations of tourism stakeholders in light of DM<sup>2</sup> (Prayag & Orchiston, 2016). Tourism organizations operating in a destination should be aware of their roles and (in)abilities (Specht, 2008) and how these can be capitalized upon for effective stakeholder collaboration aiming to minimize the detrimental effect of disasters (Lee et al., 2013). For instance, a tourism organization that identifies poor knowledge of staff in areas of DM2 can provide training to improve employee abilities, thus developing organizational resilience, hence alluding to the need of organizations to "translate the concept of resilience into tangible working constructs that are practical and effective in the short and long term" (McManus et al., 2008, p. 81). Importantly, building organizational resilience in the context of DM<sup>2</sup> requires tourism stakeholders to invest in appropriate planning, but this can be challenging due to the lack of measurable return and quantifiable benefits (Lee et al., 2013; Stephenson, Vargo, & Seville, 2010). Table 2 outlines the determinants of building organizational resilience in the context of DM<sup>2</sup> as identified in the tourism literature. Adaptability (10), collaboration (8), innovation (7), and human resources (6) have been recognized as the main factors. This confirms the importance of people, processes, and networks as suggested by Hall et al. (2018) for building organizational resilience of tourism enterprises in light of DM<sup>2</sup>.

In summary, the literature identified that proactive, collaborative approaches to DM2 can contribute to building resilience of entire destinations and TBs within. Figure 2 presents the framework of such collaborative DM<sup>2</sup> graphically. The feasibility of this framework will be examined empirically via a case study of a Caribbean destination, which is overreliant on tourism and, concurrently, vulnerable to disasters, Grenada. This destination is introduced next.



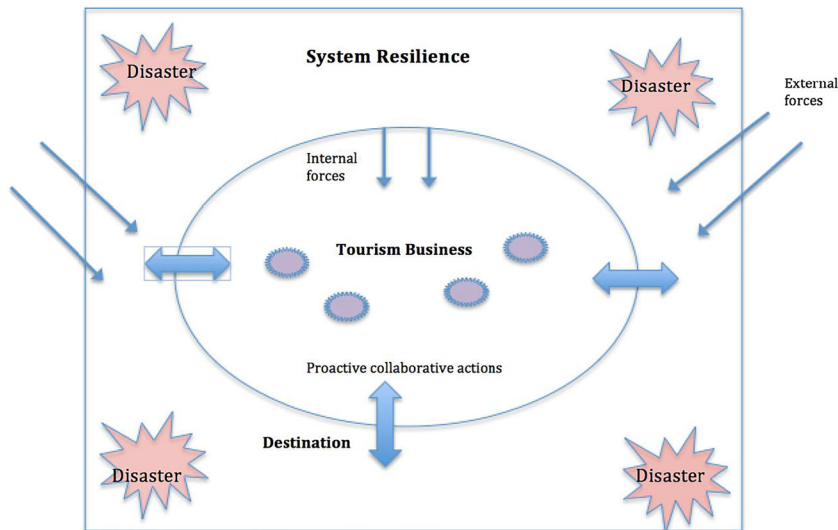
**TABLE 2** Factors contributing to building organizational resilience as identified in the management literature

Source	Financial resources	Human resources	Collaboration	Innovation	Planning	Culture	Situation awareness	Adaptability
Hall et al. (2018)	✓	✓		✓				✓
Brown et al. (2017)						✓		✓
Mojtahedi and Oo (2017)			✓					
Orchiston et al. (2016)			✓	✓	✓	✓		
Prayag and Orchiston (2016)								
Dahles and Susitowati (2015)				✓				✓
Mafabi, Munene, and Ahiauzu (2015)		✓						✓
McLennan, Moyle, Ruhanen, and Ritchie (2013)			✓	✓				✓
Lee et al. (2013)			✓	✓	✓	✓	✓	✓
Nilakant, Walker, Rochford, and van Heugten (2013)		✓	✓					
Biggs et al. (2012)	✓	✓	✓					
Biggs (2011)	✓	✓						
Linnenluecke and Griffiths (2010)								✓
McManus et al. (2008)			✓	✓	✓	✓	✓	✓
Specht (2008)		✓	✓				✓	
Hollnagel, Paries, Wood, and Leveson (2006)							✓	✓
Scott and Law (2006)				✓				✓
Seville et al. (2006)								
Starr et al. (2004)					✓			

**TABLE 2** Factors contributing to building organizational resilience as identified in the management literature

Source	Communication	Flexibility	Organization's structure	DM2 strategies	Management strategies	Learning	Agility	Strong leadership	Management of vulnerabilities	Survival
Hall et al. (2018)					✓					✓
Brown et al. (2017)		✓								
Mojtahedi and Oo (2017)			✓							
Orchiston et al. (2016)										
Pravag and Orchiston (2016)			✓							
Dahles and Susilowati (2015)										✓
Mafabi, Munene, and Ahiauzu (2015)		✓			✓					✓
McLennan, Moyle, Ruhanen, and Ritchie (2013)					✓		✓			
Lee et al. (2013)								✓		✓
Nilakant, Walker, Rochford, and van Heugten (2013)										✓
Biggs et al. (2012)										
Biggs (2011)			✓							
Linnenluecke and Griffiths (2010)		✓		✓						
McManus et al. (2008)									✓	
Specht (2008)	✓	✓		✓						
Hollnagel, Paries, Wood, and Leveson (2006)	✓									✓
Scott and Law (2006)										✓
Seville et al. (2006)			✓		✓					✓
Starr et al. (2004)	✓				✓					





**FIGURE 2** The framework of collaborative DM<sup>2</sup> to build disaster resilience [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

## 2.6 | Tourism in Grenada and its resilience in the context of DM<sup>2</sup>

Grenada is a destination in the south-eastern Caribbean whose economy is highly dependent on tourism. Tourism contributes with approximately 23.3% to the country's gross domestic product and, with a share of 21.4%, provides the largest source of national employment (World Travel and Tourism Council, 2018). The destination's tourism industry incorporates 170 licenced TBs, with the majority representing hotels (70 or 41%) and tour operators (59 or 35%).

Historically, Grenada has been affected by a wide range of disasters. To minimize their detrimental effect on the island's economy, a dedicated institutional framework was recently developed (Straker, 2018). According to this framework, DM<sup>2</sup> in Grenada is a responsibility of an umbrella ministry, the Ministry of Climate Resilience, which incorporates the Ministries for Land, Environment, Fisheries, Disaster Management and Information. It can be noticed from this composition that the Ministry of Tourism (known nationally as the Ministry of Tourism, Civil Aviation and Culture) is not listed under the umbrella ministry. This is surprising given the overreliance of Grenada on tourism and the potential detrimental effect disasters may inflict on its tourism-dependent economy.

Due to the restricted documenting capacity of national archives, no precise list of past disasters that affected Grenada alongside their specific impacts on the destination's tourism industry was possible to locate. This notwithstanding, personal communication held with tourism organizations in Grenada confirmed the significant detrimental effects of disasters on the destination as a whole as well as on its tourism industries. The need for proactive DM<sup>2</sup> in the context of DM<sup>1</sup> to enhance Grenada's preparedness and build its disaster resilience via improved organizational resilience was further emphasized. To this end, this study will examine the perception of organizations (TBs) and the destination (PMs) of their ability and capacity to build (destination-wide and organizational) resilience via stakeholder

collaboration in the context of integrated destination and disaster management (DM<sup>2</sup>) in Grenada.

## 3 | RESEARCH DESIGN

The topic of destination-wide and organizational resilience in the context of DM<sup>2</sup> in Grenada has never been studied, which highlights the exploratory nature of this project. Bryman (1984) suggests that the qualitative research paradigm is best suited for exploratory studies as it aids in shedding light on "the processes that drive behaviour and the experience of life" (Newby, 2014, p. 96). Qualitative research directs comprehensive understanding of the topic and offers scope to develop new research agenda through revealing the unknown (Jones, 2015). This is achieved as participants introduce new themes and ideas that provide added value to the study (Kuada, 2012). Qualitative research focusses on meanings and attitudes (Veal, 2006); it uncovers understandings expressed by participants to build theoretical explanations (Tharenou, Donohue, & Cooper, 2007). This approach is notable in understanding the ability of the tourism stakeholders in Grenada to build destination-wide and organizational resilience as they provide their opinions and experiences of DM<sup>2</sup>. This is in line with the inductive reasoning approach, which enables progression from specific observation to the development of general knowledge and theory (Walliman, 2006).

Semistructured interviews with tourism stakeholders in Grenada were employed for data collection. These enabled participants to voice thoughts and experiences freely, which also included previously unanticipated issues (Jones, 2015). Additionally, semistructured interviews offered the necessary flexibility and varied options for exploring topics that are novel, sensitive, and/or of great societal importance (Walliman, 2006), such as resilience in the context of DM<sup>2</sup>.

The interview schedule was designed to include the initial themes found in the literature. The design process considered the types of informants invited to participate in the study, that is, destination PMs and TBs. These operate at different levels due to their specific business responsibilities necessitating two separate interview schedules in which, despite some overlap, certain questions were specifically designed for the type of participant. The interview schedule operated five sets of questions, and the rationale behind its design, alongside the initial themes used, is provided in Table 3.

Purposive sampling was used to recruit willing participants. The sampled population included destination PMs and TBs in Grenada who had experience of dealing with DM2 in their operations. Among the private sector participants, representations from the main tourism sectors in Grenada (hotels and tour operators) were sought. The size of the sample ( $n = 16$ ) was determined by the saturation effect, and Table 4 lists the study participants with accompanying information on their gender, role, and relevance in the tourism industry and/or destination management.

Data were collected over 4 weeks in July to August 2018. Interviews were completed at the participants' work environment and lasted, on average, between 30 and 60 min. They were digitally recorded and subsequently transcribed. Interviews were not

**TABLE 3** Themes and underpinned sources used to develop interview schedule

Themes	Rationale	Underpinning source
Disasters in Grenada's tourism industry	To understand participant's knowledge and experiences of disasters that can and have impacted the tourism industry in Grenada	Becken et al. (2014); Faulkner (2001); Mahon, Becken, and Rennie (2013); Nguyen et al. (2017)
Predisaster planning and postdisaster recovery	To determine the predisaster and postdisaster management approaches/strategies taken by participants, if any	Faulkner (2001); Hystad and Keller (2008); Kachali et al. (2012); Khazai et al. (2018); Oloruntoba et al. (2018); Ritchie (2008)
Collaborating to manage disasters	To understand the importance and challenges of collaboration between policy-makers and tourism businesses in the context of DM <sup>2</sup>	Frame et al. (2004); Jiang and Ritchie (2017); Nguyen et al. (2017)
Building destination (DiR) and organizational resilience (OR)	To determine participants knowledge of resilience and to explore the ability of the policy-makers and tourism businesses to build resilience in the context of DM <sup>2</sup>	Lee et al. (2013); McManus et al. (2008); Sawalha (2015); Seville et al. (2006); Specht (2008)

incentivized. Thematic analysis was applied to the data collected as prescribed by Walliman (2006). The coding procedure outlined in Braun and Clarke (2006) was followed to create codes and subcodes based on the derived themes (Table 5).

## 4 | FINDINGS AND ANALYSIS

### 4.1 | Disasters in Grenada's tourism industry

#### 4.1.1 | Knowledge and perceptions of disasters

The interviews revealed two principal types of disastrous events known to the participants as holding a potential impact on the tourism industry in Grenada: natural and man-made. The emphasis was given to natural disasters, such as hurricanes, sea surges, floods, earthquakes, and tsunami (Table 5). This is in line with United Nations Office for Disaster Risk Reduction (2013) whose assessment suggests that the tourism industry in Grenada is most vulnerable to natural disasters. Further, the above categorization is a representative of previous academic research, which identified these natural hazards as the most common to affect the Caribbean and the island destinations within (Becken et al., 2014; Collymore, 2011; Mahon et al., 2013).

In referencing various natural hazards, a few participants identified climate change and its impacts on the industry. All participants agreed that climate change would affect tourism in Grenada via changes in rainfall, sea level rise resulting in coastal erosion, and increased intensity of hurricanes and storms. This is supported by Mackay and Spencer's (2017) assertion of the inescapable linkages between tourism and climate change and the long-term threat climate change imposes on the survival of the Caribbean as a tourist destination. Despite a general consensus on this issue, some TBs believed that the impacts associated with climate change would only affect the industry in the future. Further, whereas some participants identified climate change as essential to increasing exposure of hazards to tourism in Grenada, some felt that such disastrous events as coastal erosion due to sea level rise were not connected to climate change but rather occurred naturally. The interviews with the PMs revealed their concern of tourism industry's unawareness of the problem and, as a result, poor business preparedness to face the consequences when the climate change-induced disastrous events strike. This dubious view on the issue of climate change matches Becken et al.'s (2014) findings. This highlights the need for tourism PMs in Grenada to work closely with the tourism industries with a view of raising corporate awareness of the global challenge of climate change and its implications for the long-term business sustainability.

#### 4.1.2 | Effects of disasters

Despite their devastating nature, disasters can exert both negative and positive effects on the tourism industry. Business interruption was identified as the main negative effect of disasters in the context of Grenada by both PMs and TBs (Table 5). Issues reported included staff

**TABLE 4** Interview participants (n = 16)

Stakeholders	Participant ID	Gender	Participant's role in the tourism organization	Disaster management experience
				Limited (<2 years)
Policy-maker (PM)	PM1	F	Executive director	Extensive
	PM2	M	Operations manager	Moderate
	PM3	F	Environmental officer	Limited
	PM4	M	Senior environmental officer	Limited
	PM5	F	Manager	Limited
	PM6	M	Chief implementation officer	Extensive
	PM7	M	National disaster coordinator	Extensive
Tourism business (TB)	TB1	M	Owner	Extensive
	TB2	M	Owner	Moderate
	TB3	M	General manager	Moderate
	TB4	M	General manager	Extensive
	TB5	F	Manager	Limited
	TB6	F	Manager	Extensive
	TB7	F	Assistant general manager	Extensive
	TB8	F	Co-owner and manager	Extensive
	TB9	F	Manager	Extensive

Abbreviations: F, female; M, male.

layoff, revenue reduction, drop in visitor arrivals, and the negative perception of the business due to the property being damaged and postdisaster representation of the destination in the media. This is in line with previous studies as identified by the effects previous disasters had on the tourism industry in the Caribbean (Schmude et al., 2018; Seraphin, 2018), Asia (Ghaderi et al., 2015; Huan et al., 2004; Huang & Min, 2002), North America (Sydnor-Bousoo et al., 2011), and Oceania (Méheux & Parker, 2006) further demonstrating the susceptibility and fragile nature of the tourism industry. Losses and damages represented another significant share of the responses with these being closely linked to business interruption because of the destination's inability to receive visitors in the disaster's aftermath. The challenges experienced are well explained by TB4:

*Although the hotel was closed during Ivan and there was minimal damage, and the hotel was able to bounce back quickly, the island on a whole was thoroughly flattened and that affected our tourism hugely. People who had want to come to Grenada when they hear, "oh no!" they were flattened by hurricane and they're still recovering, so even though the hotel was minimally damaged, they were ready to receive guests, suppliers weren't ready to supply us, people had a negative perception of coming to Grenada, well, not everybody, but because Ivan had taken the whole island a long time to recover and get back to pre-Ivan numbers and figures, agents wouldn't want to send their clients to a country that is recovering from a hurricane, so numbers dropped, occupancy dropped and it takes a long time to build back a hit like that.*

The positive outcome of disasters was seen by the majority of TBs and PMs in the potential to rebuild better, to learn, and to reinvent (Table 5). This is supported by Choularton (2001) who labelled disasters as a mixture of effects and further noted that these effects can exhibit positive results for organizations such as learning. Disasters present an opportunity for growth among destinations as they reveal the extant vulnerabilities and outline scope for improvement to assist in better preparedness, thus building long-term resilience and managing risks (Wilkinson et al., 2018). Lastly, chaos theory advocates the positive outcome of disasters in creating opportunities for redevelopment (Prideaux et al., 2003). Ritchie (2004) argues that disaster-induced change prompts business growth and management and should therefore be embraced within the tourism industry. Many participants showed how they learned from the past disasters by rebuilding and redeveloping their disaster plans:

*Every time you have an opportunity to learn something and add to your arsenal, it strengthens you for when the next activity or disaster occurs. It also helps you to sometimes discover the talents of your team, build and establish network with local, sometimes regional and international, connections that can have other value to it, right. (TB3)*

*We coin it in the disaster language to say "a disaster is too much of a good thing to go to waste." In other words, you see the good you could get out of the bad. There're lots of opportunities and it's how creative you're. There's something what you call disaster tourism and some people will think about locking the*

**TABLE 5** Coding structure and themes, codes, and subcodes

Themes	Codes	Subcodes	Private sector	Public sector
Disasters in Grenada's tourism industry	Types of disasters	Natural disasters	9 (100%)	7 (100%)
		Man-made disasters	4 (44%)	1 (17%)
	Negative disaster effects	Business interruption	6 (67%)	7 (100%)
		Moderate loss and damage	3 (33%)	—
		Major loss and damage	2 (22%)	—
		Potential to build back better	6 (67%)	5 (71%)
	Positive disaster effects	Learning from experience/prepare better	4 (44%)	2 (29%)
		Opportunity to reinvent oneself	4 (44%)	2 (29%)
		Encourage teamwork and network building	2 (22%)	1 (14%)
		Raises awareness of vulnerabilities	—	2 (29%)
Predisaster planning and postdisaster recovery	Actions to prepare for disasters	Safeguarding actions	9 (100%)	5 (71%)
		Staff involvement	6 (67%)	1 (14%)
		Development and review of disaster plans	5 (56%)	5 (71%)
		Collaboration	3 (33%)	6 (86%)
		Preventative actions	3 (33%)	1 (14%)
		Communication	3 (33%)	1 (14%)
	Disaster recovery actions	Repair and reconstruction	7 (75%)	1 (14%)
		Assess damages and file for insurance	6 (67%)	—
		Attend to employees/local needs	4 (44%)	3 (43%)
		Attend to guest needs	2 (22%)	1 (14%)
		No structured recovery plan	2 (22%)	—
		Communication and marketing plan	1 (11%)	1 (14%)
		Collaboration	1 (11%)	2 (29%)
	How prepared you are compared with the destination	Preparedness needs to match to be relevant	3 (33%)	N.A.
		Better prepared	2 (22%)	N.A.
		Less prepared	2 (22%)	N.A.
		Match destination's preparedness	1 (11%)	N.A.
			1 (11%)	N.A.
	Collaborating to manage disasters	Level of collaboration	Very little collaboration	6 (67%)
Moderate collaboration			1 (11%)	2 (29%)
Extensive collaboration			1 (11%)	6 (86%)
No collaboration			1 (11%)	—
Interested in more collaboration			4 (44%)	1 (14%)
Building destination (DiR) and organizational resilience (OR)	Understanding resilience	Ability to bounce back and recover quickly	5 (56%)	4 (57%)
		Ability to resist and withstand	2 (22%)	5 (71%)
		Ability to adapt, be flexible, and sustain self	2 (22%)	2 (29%)
		Ability to cope and meet any challenges	1 (11%)	2 (29%)
		How vulnerable you are to external threats	—	1 (14%)
	Understanding DiR and OR	Coping and overcoming challenges	5 (56%)	4 (57%)
		Preparedness and planning	5 (56%)	1 (14%)
		Access to resources	4 (44%)	2 (29%)
		Raising awareness/change mindsets	1 (11%)	2 (29%)
		Having a vision	1 (11%)	1 (14%)
		Collaboration/cooperation	—	2 (29%)
	Role in building DiR and OR	Leadership/being innovative	5 (56%)	—
		Raise awareness and provide knowledge	4 (44%)	5 (71%)
		Be prepared	4 (44%)	—
		Advocacy	—	2 (29%)
	Contributing factors in building DiR and OR	Share resources	—	1 (14%)
		Awareness	6 (67%)	—
		Access to resources	5 (56%)	1 (14%)
		Collaboration/government support	4 (44%)	5 (71%)
		DM2 plans and management strategies	4 (44%)	1 (14%)
		Adaptability and agility	—	2 (29%)
		Learning	2 (22%)	—
		Organization: location, size, and structure	2 (22%)	—
Communication	1 (11%)	—		

Note. The figures highlight the number of quotes assigned to each subcode. Red colour denotes the most popular subcodes.

Abbreviation: N.A., not applicable.

*destination to tourist and that might be for their own benefit, and others may think about opening it up as quickly as possible so others can come who haven't had those experiences, you channel it in a particular way so that they can come to get their own experience and in coming to see certain things it can open doors for people to help you source what you need for recovery. So, yeah, it definitely creates opportunities. The people who are at the helm, they must be creative and adaptive enough to look for the opportunities when they present themselves. (PM3)*

## 4.2 | Predisaster planning and postdisaster recovery

### 4.2.1 | DM2 in the tourism industry

Safeguarding actions such as having the right insurance coverage, performing regular disaster drills, and having proper storage were identified as important to the preparedness and planning stages of DM2 among all TBs and the majority of PMs (Table 5). Staff involvement played an important role in planning for disasters by TBs. Lastly, the majority claimed to have written disaster strategies and/or plans in which actions were prescribed as the ones to follow in the event of disaster occurrence. These findings compliment the literature on DM2, which emphasizes the need for these actions to better plan and thus positively influence the postdisaster recovery process (Faulkner, 2001), which, without preparation, can become uncontrollable (Ritchie, 2004).

However, it was established that many participants neglected such planning strategies during past disasters. Similar lack of preparedness planning was identified among tourism companies in Canada (Hystad & Keller, 2008) where businesses appeared unwilling to develop plans ahead of disasters. A number of reasons were provided to explain the lack of planning strategies, including business size and cost (Nguyen et al., 2017) and even the complacency mentality, that is, "this can't happen here." United Nations Office for Disaster Risk Reduction (2015) suggests that the tourism organizations are capable of dealing with low-impact events but, in the case of (more severe) events that require active planning, the capability of the industry is low. Thus, implementing managerial frameworks that guide the operation of the tourism organization and the destination in which it operates prior, during, and postdisaster is necessary to control the extent of disaster effects (Ritchie, 2004) as these impact the business longevity of TBs, which is of significant concern (Becken et al., 2014):

*But for Hurricane Ivan it was really-really hard and it was a wakeup call for us because every time we say a hurricane is coming we say, well God is a Grenadian and it wouldn't come but, when it did hit, I don't think we were prepared and now that we're; after the hurricane we have put everything in place, so if a hurricane comes now we're prepared. (TB5)*

Practical examples of tourism-specific organizational strategies and managerial frameworks in the context of DM2 are identified in Faulkner (2001) and Ritchie et al. (2004). Although the probes established poor familiarity of participants with these strategic frameworks, a number of PMs pinpointed collaboration as an integral element of their planning process (Table 5). Interestingly, TBs did not see collaboration as being important despite the literature noting how it can speed business postdisaster recovery and highlighting the value of collaborative actions as being more realistic and effective than solitary (Cioccio & Michael, 2007):

*From a policy perspective, I think that we're making it our duty to find time to be part of the (disaster management) at the national level so that we know what is happening in real time. We've also created our own little network with the stakeholders that we have, so once information comes through, we send it off to them immediately so that they can plan themselves, to get themselves ready. But I do not think many organisations do the same ... . (PM4)*

The ability to effectively recover emerges foremost at the stage of planning for disasters (Mair et al., 2016). Participants noted that the recovery actions were based on the extent of the impacts incurred. Repairing and reconstructing the business and assessing the damages suffered were identified by the majority of TBs as essential for the recovery process (Table 5). This confirms Faulkner's (2001) intermediate/recovery stage of the managerial framework, which outlines the need for damage audit, restoration action, and (redesign of) communication strategy. The literature argues that the way TBs recover is also dependent on the business location, its size, and the related availability of in-house resources (Kachali et al., 2012). Additionally, of importance to TBs was the ability to attend to staff and guest needs (Table 5). Participants stated that their employees were paramount to maintain the strength of the business and its ability to recover following disasters. A few TBs noted that taking care of the needs of their staff, such as by providing shelter, was foremost on their minds following a disaster. In some cases, the guests came second on the list of business priorities. This is an interesting finding that can be justified by the limited pool of human resources available to TBs in Grenada given that it is an island. This further explains why media often report stories of guest dissatisfaction with how tourism organizations treat them following a disaster. Assigning equal importance to taking care of guests and staff is therefore a necessary prerequisite of prompt postdisaster recovery.

### 4.2.2 | Level of preparedness

When TBs were probed on the level of their preparedness for the upcoming hurricane season and how this compared with the destination-wide extent of preparedness, mixed responses were received (Table 5). Some businesses felt that they were better prepared; some perceived that their preparedness matched the destination, whereas some felt that they could manage in the face of a



disaster but believed that they were less prepared than the destination. In this regard, some TBs noted the importance for both the destination and the business to match (Table 5) in order to reduce the business setbacks. Becken and Hughey (2013) designed a template that links the tourism industry into the emergency management operations, thus effectively providing an opportunity for the TBs and PMs to be an active part of the DM<sup>2</sup> process. This template can assist with a smooth recovery process as each stakeholder is involved in achieving the same goal of (destination-wide and organizational) recovery. Although this specific template was unknown to participants, a number of TBs and PMs elaborated upon the need for all stakeholders to collaborate towards the fulfilment of a mutual goal of recovery:

*That's a funny question because, as proactive as I want to be, for instance, if we split up our boats during a disaster and if we have employees in different areas and if we offer a whole range of different services, that only helps us if the destination is still able to receive visitors. So, if the destination is not resilient enough and our infrastructure is not resilient enough to have hotels that are open, to have water that is running and to have a sewer system that is working, to have, you know, light and power operating, if that stuff is all shut down and we can't accept visitors, it doesn't matter how resilient our business is, so we're ultimately dependent on the destination's preparedness. (TB7)*

### 4.3 | Collaborating to manage disasters

The majority of TBs stated that they engaged in very little collaboration with other TBs and PMs in the context of DM<sup>2</sup> (Table 5). Although participants were aware of the benefits of collaboration in light of disasters as highlighted in the literature (Gray & Wood, 1991; Jiang & Ritchie, 2017; Waugh & Streib, 2006), they neglected to partake in such actions outside of general marketing and promotion activities. The prime reasons given for noncollaboration included the perceived limited value of joint efforts and the challenges in allocating scarce in-house resources to coordinate collaborative actions, which confirms Frame et al. (2004), McComb et al. (2016), and Saito and Ruhanen (2017). Interestingly, many TBs stated their interest in more collaboration as they recognized its importance for effective disaster preparedness and recovery. It is therefore important for Grenadian PMs to provide opportunities for TB-to-TB as well as TB-to-PM collaboration. This can be achieved via dedicated, networking workshops on disaster preparedness and recovery offering opportunities to build stakeholder capacity to act jointly in face of future disasters. Importantly, the majority of PMs claimed to engage in extensive collaboration in the context of DM<sup>2</sup> with this being albeit limited to PM-to-PM collaboration (Table 5). The reality for Grenadian PMs is in that, without continued support and sustained assistance from other tourism stakeholders, most notably the industry, their own collaborative efforts may be insufficient for effective disaster planning and

recovery. This is because of the close interconnectedness and even overdependence of the TBs and PMs in the context of DM<sup>2</sup> as highlighted earlier:

*Well, for our company, not sure if we have had that collaboration with other stakeholders but I think it's something that we should look into and, because we're in the tourism business, we're all interlinked, some are into the guesthouse and some are into the food aspect of it, so I think that is something that we could look into and to getting into collaborating with the other stakeholders. (TB8)*

## 4.4 | Building destination and organizational resilience

### 4.4.1 | Knowledge of resilience

Participants revealed good understanding of the term resilience. The most frequently cited definitions described resilience as the ability of business-specific and destination-wide systems "to bounce back" and "resist and withstand" (Table 5). More variation was found in the definitions provided by participants for destination-wide resilience and organizational resilience. The majority identified coping and overcoming challenges alongside preparedness and planning as the core features of these concepts (Table 5). A number of participants emphasized the role of resource availability and accessibility in building destination-wide resilience and organizational resilience. This included not only human and financial resources but also access to the critical infrastructure, which is in line with Hall et al. (2018) and Pescaroli and Alexander (2015). Interestingly, resource accessibility implies the need for collaboration given that tourism organizations have limited resources and would therefore benefit from their sharing; however, collaboration as a cornerstone of destination-wide resilience and organizational resilience was only mentioned by a handful of PMs, whereas it went completely unnoticed by the TBs. Again, this underlined the importance of networking workshops that Grenadian PMs could organize to link the industry and showcase the benefits of collaboration for effective destination-wide resilience and organizational resilience.

### 4.4.2 | Role in building resilience

The majority of the TBs felt that their role in building resilience involved providing leadership and being an innovator (Table 5). Leaders are individuals who shape and manage the in-group activities and influence the actions of employees to achieve the organization's goals (Beech & Chadwick, 2006). Participants believed that it was their responsibility to be knowledgeable and action-oriented in terms of measures required to manage disasters and, in that way, employees would follow the actions of the leader. In fact, it was felt that extra employees were needed during times of disasters in order to overcome the shock.

The tourism literature on innovation reflects the engagement of businesses to introduce new practices, services, or methods of conducting business that improves on previous operations and adds value (Gomezelj, 2016). This is essential for TBs following a disaster as it provides an opportunity for the industry to diversify its offering to cater to the changes in the external environment. Innovative actions can be developed within any facet of the tourism industry that underwent the impact of disasters and target: products, processes, management practices, logistics practices, and institutional values (Hjalager, 2002). This is further emphasized by Seraphin (2018) who suggests that the Caribbean TBs can develop "special interest tourism" to capitalize upon the annual hurricane season, with this innovative approach prompting business engagement in new tourist markets and redefining destination image. This, however, signals a clear need for collaboration of PMs and TBs. The majority of participants were aware of their role as innovators postdisaster, but only a few mentioned the potential of postdisaster recovery to engage with new markets and upgrade the critical infrastructure of the business and the host destination.

The majority of the PMs noted that their key role involved raising business awareness of disasters and providing knowledge on how the detrimental impacts of these could be minimized (Table 5). This awareness role can be linked to the importance of having a communication and marketing plan as part of the planning and recovery phase of a disaster. This is in line with Cochrane (2010) who argued that raising awareness and actively controlling the market, external forces in this case, through communication and marketing actions could build resilient destinations.

#### 4.4.3 | Contributing factors in building resilience

The majority of the TBs identified awareness of their vulnerabilities, their individual situation, and the potential hazards that can impact their business as key to building organizational resilience (Table 5). McManus et al. (2008) classify this as a business situational awareness and emphasize the need for this awareness to occur among the tourism industry professionals before they can build resilience. For the TBs, having this level of awareness provides opportunities for the business to stay competitive, while being able to manage the vulnerabilities and plan for the potential hazards. This links into Ritchie (2004) who posits that the TBs and PMs should conduct environmental and organizational scanning at the prevention and planning stages of DM2. Raised stakeholder awareness of the internal competencies and external forces increases the organizational ability to effectively adapt to the rapidly changing situations generated by disasters (Lee et al., 2013; Vargo & Stephenson, 2010). An incorrect analysis of the business situation will produce the opposite effect, hence the importance of the factor. The interviews demonstrated that the TBs exhibited good situational awareness through the preparedness and recovery actions they identified. These included understanding the need to collaborate and engage in safeguarding actions and securing insurance cover in light of potential disasters. These actions

correspond to McManus et al. (2008) factors and indicators of relative overall resilience.

Additionally, access to the right resources (Table 5), be it human or financial, was reported by the TBs as essential in building organizational resilience. This is in line with Hall et al. (2018) who showcased the importance of human capital for building destination-wide resilience and organizational resilience. As Nilakant et al. (2013) put it, a facet of a resilient organization is its ability to understand and cater to its employee needs.

The majority of the PMs and a large number of the TBs further noted that, in building destination-wide resilience and organizational resilience, there needs to be extensive collaboration and support from the government (Table 5). Essential to achieving a resilient destination is the fusion of stakeholders (Seville et al., 2006) who can engage effectively in the planning and management of disasters. Hall et al. (2018) argue that the destination's resilience depends on the resilience of the overall system, including the TBs, its employees, and the local communities within which these businesses operate. This is further supported by Ruiz-Ballesteros (2011) who recognized the importance of collaboration through learning as the TBs and PMs are able to share knowledge and resources. According to participants, in Grenada, this can be observed among the PMs in the context of climate change. The Grenadian PMs collaborate to reduce the negative effect of climate change on the destination and its businesses, and this collaboration provides knowledge and access to resources they would not have had without the collaboration. Effectively, this can assist in developing new products and upgrading old ones (Orchiston et al., 2016).

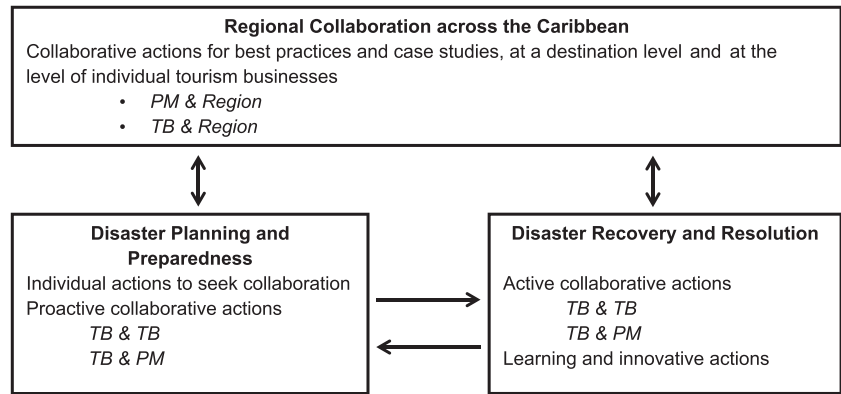
Despite yet limited collaboration towards enhanced destination-wide resilience and organizational resilience among the TBs, the interviews revealed high business awareness of the benefits of such actions as a number of participants identified the need and interest in collaborating more with the fellow TBs and PMs in light of DM<sup>2</sup> (Table 5). Such collaboration can foster a clear vision for the industry, which is in agreement with Buultjens et al. (2017). The quote below highlights well the interest in collaborating more with the tourism industry in Grenada:

*I think building destination resilience, there has to be a marrying of the agencies, we must be able to work together, we can't stay apart or far apart and expect things to happen. That is one of the things that must happen, we must both see it from the tourism sector side and from the disaster management side ... . we must be able to also see that our responsibility complements each other in that sense and unless we don't see it that way I don't think we would be able to create a resilient destination. (PM6)*

#### 4.5 | Summary

The study revealed good stakeholder awareness of disasters that can impose a lasting detrimental effect on the tourism industry in Grenada.





**FIGURE 3** An action framework for building destination-wide and organizational resilience in the Caribbean tourism

Despite this good awareness, stakeholder preparedness to withstand disasters was assessed as limited. The main shortcoming of preparedness was identified in the lack of stakeholder collaboration. Concurrently, the need to collaborate was well recognized by the TBs and PMs alike who further expressed a desire to join efforts in light of potential disasters.

Building on the findings of this study, Figure 3 proposes an action framework to facilitate stakeholder collaboration in Grenada and to build destination-wide resilience and organizational resilience in the context of DM<sup>2</sup>. The action framework should be underpinned by TB-to-TB and TB-to-PM collaborations at the disaster planning and preparedness stage when proactive contacts should be made at not only the individual but also corporate level. The stakeholder contacts made at this stage will enable collaboration in the phase of disaster recovery and resolution of its consequences. Importantly, in this phase, the stakeholders will learn from disasters and utilize this knowledge to design innovative actions that will aid them in planning for future disasters. Lastly, stakeholder collaboration is necessary not only at the local Grenadian level, but also at the level of the entire Caribbean region. This is because the resources of the Caribbean destinations and the national tourism industries within are limited, implying the need to utilize them with care and share them in the case of disasters affecting one destination more than the other. Best practices in disaster planning, preparedness, recovery, and resolution should be identified and subsequently disseminated across the Caribbean to build resilience at the level of entire destinations and the tourism industries within.

## 5 | CONCLUSIONS

The study evaluated the ability of TBs and PMs to build destination-wide and organizational resilience to disasters in Grenada, a popular Caribbean destination that is vulnerable to natural hazards. Similar to the findings of past studies conducted in other geographical contexts (Hall et al., 2018; Hjalager, 2002; Pescaroli & Alexander, 2015), this project found that the Grenadian tourism stakeholders had good knowledge of the benefits of being resilient and had the ability to build disaster resilience. This notwithstanding, the study identified that the lack of collaboration between tourism stakeholders prevented them

from more effective planning for and recovering from disasters. This is, again, in line with past research undertaken on this topic outside the Caribbean (Gray & Wood, 1991; Jiang & Ritchie, 2017; Waugh & Streib, 2006), thus demonstrating that the issue of limited stakeholder collaboration in light of disaster resilience is truly universal and knows no geographical boundaries.

The study proposed an action framework to aid tourism stakeholders in Grenada in building disaster resilience. This framework suggests that TBs in Grenada should develop more focussed, strategic disaster management plans that emphasize the value of disaster preparedness, thus reinforcing organizational resilience in the case of disaster occurrence. The framework further calls for TBs to design business continuity plans that incorporate learning from disasters and promote innovative, resilience-focussed recovery actions. Lastly, the framework proposes that TBs should engage more actively and proactively in extensive collaborative actions with other TBs and PMs in Grenada as well as across the wider Caribbean region, which is similar to the systemic vision for building destination resilience as proposed by Hall et al. (2018). This is due to the interdependence of all tourism stakeholders in Grenada and limited resources availability. More effective stakeholder collaboration will enable identification of best practices and case studies in DM<sup>2</sup>, thus prompting colearning and enhancing organizational and destination-wide resilience.

The study showcased the important role of tourism PMs in Grenada in pursuing the goal of building disaster resilience, which is in line with the propositions made by Orchiston et al. (2016). To this end, they need to ensure that the national disaster management strategies and plans incorporate the needs of the TBs and provide support in gaining industry access to (human and financial) resources predisaster and especially postdisaster. The PMs should further engage in extensive collaborative actions with the TBs, in particular leading on organizing capacity-building, networking, and knowledge-sharing workshops. Lastly, the PMs should collaborate at the wider regional level and, as part of this collaboration, aim to identify, share, and implement best practices in disaster resilience from across the Caribbean into the Grenadian tourism industry.

Although the study shed light on tourism disaster resilience in Grenada, its qualitative nature inhibits the generalizability of its outcome. Hence, future research should aim to utilize this study's findings to design a sector-wide business survey. Such a survey would provide a

more robust understanding of the determinants of disaster resilience in the context of DM<sup>2</sup> in Grenada. Next, given the limited resources of tourism enterprises and the importance of access to finance for them, future research should focus on the economic aspect of building disaster resilience for the tourism industry in Grenada and the destination as a whole. It should in particular examine the role of public-private partnerships in building disaster resilient infrastructure in Grenada. Lastly, comparative studies on disaster resilience of TBs and entire destinations within the wider Caribbean region would enhance understanding of the determinants of effective disaster planning and recovery and reveal examples of best practice that could be adopted more broadly.

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