




## Tourism Resilience in CALABARZON Region Philippines

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### ABSTRACT

This research explores the tourism resilience of Resort Hotels in Region IV – A or CALABARZON which comprises 6 provinces namely, Cavite, Laguna, Batangas, Rizal and Quezon. This region is one of the tourism hot spots in Philippines and it is also susceptible to disasters like volcanic eruption, earthquake, flooding of its coastal areas and one of the most affected areas in Philippines next to National Capital Region by COVID-19 pandemic. According to the CALABARZON Regional Development Plan 2023-2028 prepared by the National Economic Development Authority (NEDA), the escalating losses and damages incurred because of disasters underscore the imperative of fostering resilience within this region. It is important to measure the resilience of tourism enterprises as it is vital in determining their capability and capacity to cope up and recover from the socio-economic impacts caused by these disasters. A total of 101 Department of Tourism (DOT) accredited accommodation establishments have participated in the study which were represented by their respective managers. The researcher measured the tourism resilience index of resort hotel industry of Region IV A (CALABARZON) using six (6) indicators namely, business operational resilience, disaster preparedness, marketing, workforce, use of national and local resources, and resource access and knowledge adopted from Tourism Resilience Index developed by Mississippi Alabama Sea Grand (MASGP) and National Oceanic and Atmospheric Administration of US Department of Commerce (NOAA). Moreover, comparison on the tourism resilience assessment of resort hotels when grouped according to their enterprise profile and managers profile was further analyzed.

### RESUMO

Esta investigación explora la resiliencia turística de los hoteles turísticos en la Región IV, un Calabarzon que comprende 6 provincias, a saber, Cavite, Laguna, Batangas, Rizal y Quezon. Esta región es uno de los puntos de turismo en Filipinas y también es susceptible a desastres como la erupción volcánica, el terremoto, la inundación de sus áreas costeras y una de las áreas más afectadas en Filipinas junto a la región de la capital nacional por la pandemia covid-19. Según el Plan de Desarrollo Regional de Calabarzon 2023-2028 preparado por la Autoridad Nacional de Desarrollo Económico (NEDA), las pérdidas y daños crecientes incurridos debido a los desastres subrayan el imperativo de fomentar la resistencia dentro de esta región. Es importante medir la resiliencia de las empresas turísticas, ya que es vital para determinar su capacidad y capacidad para hacer frente y recuperarse de los impactos socioeconómicos causados por estos desastres. Un total de 101 establecimientos de alojamiento acreditados del Departamento de Turismo (DOT) han participado en el estudio representados por sus respectivos gerentes. El investigador midió el índice de resiliencia turística de la industria hotelera de resort de la Región IV A (Calabarzon) utilizando seis (6) indicadores, a saber, resiliencia operativa empresarial, preparación para desastres, marketing, fuerza laboral, uso de recursos nacionales y locales, y el acceso y conocimiento de los recursos adoptados adoptados A partir del índice de resiliencia turística desarrollado por Mississippi Alabama Sea Grand (MASGP) y la Administración Nacional Oceánica y Atmosférica del Departamento de Comercio de los Estados Unidos (NOAA). Además, la comparación de la evaluación de resiliencia turística de los hoteles del resort cuando se agrupa de acuerdo con su perfil empresarial y perfil de gerentes se analizó más a fondo.

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## Introduction

Tourism is one of the world's most economically vital industries but also one of the most susceptible to natural disasters. This is because tourism is dependent on other interrelated industries, and it is also located in many places prone to hazards. CRED (2020) states that 396 natural disasters occurred worldwide in 2019. These disasters generated \$130 billion in economic damage and affected 95 million people, although the economic losses to tourism are unknown now. According to CRED (2020), forty percent of all-natural disasters occurred in Asia. The risks posed by natural disasters are increasing due to climate change. According to a report by the United Nations Office for Disaster Risk Reduction (UNDRR)(2020), natural catastrophes dramatically increased from 2000 to 2019, resulting in damages to the global economy of \$2.97 trillion. This rise is primarily attributable to natural catastrophes influenced by climate, such as floods, storms, and droughts (UNDRR 2020). The development of beaches, flood plains, and other high-risk locations and the increase in the local population contribute to an increased likelihood of natural disasters. The tourism industry faced several severe issues as a result of COVID-19 as well. The global tourism industry has been hit particularly hard by the pandemic caused by the 2020 COVID-19 virus.

The CALABARZON Region continues to serve as the primary center of industrial activity in the Philippines, characterized by its numerous economic zones and a significant presence of micro, small, and medium companies (MSMEs). Furthermore, the region remains a compelling investment destination owing to its substantial population, abundant agricultural produce and raw minerals, and strategic location, which includes its proximity to the National Capital Region (NCR). Before the onset of the pandemic, the productive sectors, namely the industry and services sectors, exhibited sustained growth and prosperity. The progress of the regional economy was impeded by a series of events, including the COVID-19 pandemic, the eruption of the Taal Volcano, severe typhoons, and the outbreak of African Swine Fever (ASF). According to the CALABARZON Regional Development Plan 2023-2028 prepared by the National Economic Development Authority (NEDA), the escalating losses and damages incurred due to disasters underscore the imperative of fostering resilience within the region. In addition to natural disasters, the region is also susceptible to the impacts of climate change, which have a considerable influence on several production sectors. It is imperative to implement appropriate interventions to mitigate and reduce the risks associated with climate change to bolster the resilience of both industry and service sectors in CALABARZON (NEDA Region IV-A, 2023).

This research evaluates the tourism resilience of resort hotels in Region IV–A or CALABARZON, which comprises six provinces: Cavite, Laguna, Batangas, Rizal, and Quezon. The respondents of this research are the managers of Accredited resort hotels in CALABARZON. Tourism resilience is measured using the six indicators from the Tourism Resilience Index developed by the Mississippi Alabama Sea Grand (MASGP) and the National

Oceanic and Atmospheric Administration of the US Department of Commerce (NOAA) in 2015, which includes business operational resilience, disaster preparedness, marketing, workforce, use of national and local resources and, resource access and knowledge. The tourist Resilience Index, sometimes TRI, is a self-assessment instrument developed for executives and businesses in the tourist industry. It is a straightforward and low-cost tool for determining whether or not individual tourist enterprises and the tourism industry as a whole in a particular location are ready to continue business as usual during and after the occurrence of a disaster.

### ***Tourism Resilience***

Academic literature interprets resilience differently. Businesses with resilience can endure, adapt, and grow in the face of adversity (Cheer & Lew, 2018). This defines the company's adaptability to major changes. Cochrane (2010) defines system resilience as the ability to absorb disturbance and reconstruct during change to sustain function, structure, identity, and feedback. Resilience is a system's ability to tolerate external or endogenous stress while maintaining basic functions. UNDRR defines it similarly: A system, organization, or civilization is resilient when it can quickly resist, absorb, accommodate, and recover from threats, notably by retaining and restoring its basic structures and functions (UNDRR, 2012). These definitions show resilience absorbs, restores, and grows. The destination can absorb a crisis without collapsing or losing long-term functionality, restore tourism functions swiftly and efficiently, and exploit the crisis to grow, becoming more competent and robust.

Recent research describes resilience, which helps people and organizations withstand crises and uncertainty (Conz & Magnani, 2020). Resilience is planning for and recovering from major disruptions or financial instabilities, according to Sinha and Ola (2021). Organizations can also endure unexpected crises with resilience. It is the ability to anticipate, adapt, and recover from natural or financial disasters (Duchek, Raetze & Scheuch, 2020). Processual resilience is studied by Conz and Magnani (2020). They recommend using organizing skills during a calamity. Companies must build these skills before, during, and after emergencies. Williams, Gruber, Sutcliffe, Shepherd and Zhao (2017) believe that organizational resilience arises from effective recovery from unanticipated business environment changes.

### ***Business and Operational Resilience***

Hotel tourism resilience could also include economic capacity concerns (Brown, Orchiston, Rovins & Feldmann-Jensen, 2018), which includes strategic financial planning, technological investment, income diversification, and stakeholder collaboration. This holistic approach helps hotels manage financial risks and adjust to problems. For financial stability and resilience, stringent financial controls and spending monitoring are essential (Jamaliah &

Powell, 2018). Controlling financial expenditures helps hotels optimize resources, reduce waste, and maintain cash flow during tough times. Hotel resilience requires a competitive and improved tourism experience (Fyall & Garrod, 2019). High-quality services, personalized experiences, and technology help hotels attract and keep consumers, differentiate themselves in the market, and establish a loyal customer base for long-term sustainability. Integrative product variety helps hotels meet client preferences, manage demand swings, and survive shocks (Njoroge, Ratter, Atieno & Mugabe, 2018). Hotels can respond to changing demand patterns and lessen market dependence by diversifying (Dayour, Adongo & Kimbu, 2020a, 2020b). Diversifying income streams, markets, and services helps hotels increase revenue and reduce dependence. Diversification helps hotels adjust to market changes and mitigate market risks.

### ***Disaster Preparedness Plan***

Hotel disaster preparedness prioritizes guest and worker health, safety, and life (Zhai & Shi, 2021). Evacuation plans, safety exercises, and risk reduction and emergency response procedures are included. Hotel disaster preparedness entails regulating tourism growth and human activities to prevent damage (Holladay & Powell, 2016). Sustainable tourist planning, zoning rules, and responsible tourism that respects local communities and ecosystems can achieve this. Hotel disaster preparedness covers guest and employee safety and sanitation (Li, Zhong, Zhang & Hua, 2021). This includes sanitation, hygiene, PPE, and health standards during and after a disaster. Disaster planning incorporates sustainability and climate change (Fyall & Garrod, 2019). Hotels reduce their environmental impact, save resources, and promote destination sustainability. Hotels evaluate their disturbance tolerance (Jamaliah & Powell, 2018) and build disaster mitigation plans. This entails identifying risks, mitigating disruptions, and creating emergency plans for business continuity. Hotels also follow government environmental rules (Mahadew & Appadoo, 2018). Environmental management, disaster preparedness, and risk reduction permits, licenses, and certifications are required.

### ***Marketing***

Building resilience requires information sharing through collaboration (Mair, Ritchie & Walters, 2016). Hotels can share best practices, lessons learned, and new ideas with stakeholders. By building long-term partnerships between hotels, tour operators, and other stakeholders, collaboration and relationship marketing can boost resilience. Hotels can share experiences and develop strategies to adapt to changing market conditions and consumer preferences by working together. To achieve tourism resilience, hotels and other tourism stakeholders must collaborate (Orchiston, Prayag & Brown, 2016). Collaboration fosters information sharing, trust, and mutual support, helping hotels handle crises and market shifts. Hotels can promote collaboration through regular communication, cooperative planning, and

industry forums or alliances. Resilience requires involving local communities, government institutions, and NGOs (Brown et al., 2017). Hotels can meet destination and community demands by including stakeholders in decision-making. Sustainable tourism destinations require communal management of natural and cultural resources, which stakeholder involvement helps.

### ***Workforce***

Human capital is key to tourist resilience (van der Veecken, Calgaro, Klint, Law, Jiang, de Lacy & Dominey-Howes, 2016). Developing and sustaining a trained and knowledgeable workforce requires public-private collaboration. Together, these sectors can identify the skills and training needed to address industrial concerns. Public-private collaborations can help assist tourist employment stability and career advancement. Tourism businesses must build employee and organisation resilience to survive disasters (Prayag, 2018). Create a culture of adaptability, flexibility, and innovation. Hotels may prepare for unexpected events and maintain good service levels by allowing staff to take ownership of their roles and creating a supportive workplace. Employees need psychological resilience to handle difficult and unpredictable events (Prayag et al., 2019). Hotels should provide mental health and resiliency programs for personnel. This can involve counseling, stress management workshops, and open communication and support. Social and human capital are essential for resilience (Fyall & Garrod, 2019). Social capital is trust, cooperation, and relationships between employees, management, and external stakeholders. Hotels may improve crisis response by building strong relationships and collaboration. Human capital, however, is the organization's employees' knowledge, skills, and capacities. Hotels may prepare their staff for challenges and changes by investing in employee development and training. Tourism resilience is increased by thorough employee training programs that span several skills and abilities (Orhan, 2021). Skills like crisis management, customer service, communication, and problem-solving.

### ***Use of National and Local Resources***

For resilience, business owners must be social and community-oriented (Steiner & Atterton, 2015). The hotel should incorporate the local community's social and cultural components into its operations. Hotels may strengthen community relationships, acquire support, and boost destination resilience by doing so. Tourism resilience depends on stakeholders, including owners and operators, participating in government planning (Pyke, Jiang & De Lacy, 2018). Private sector viewpoints and skills can improve government planning. Collaboration can help create tourist industry-resilient policies and strategies. Tourism companies should work with community organisations, non-profits, and local businesses (Chong & Balasingam, 2019). Collaboration can generate ownership and shared responsibility

for destination resilience. Working together, hotels and local parties can create community- and tourism-beneficial programs. Tourism resilience requires community empowerment and involvement (Ngo, Lohmann & Hales, 2020). Hotels may give the community a say in tourism regulations and bring local businesses and individuals into the tourism supply chain. This method can create a more resilient and sustainable tourism industry that benefits the community. During natural calamities or pandemics, social coping behavior helps tourism survive (Cahyanto, Kingsbury, Widodo, Puspita, Harnadi, 2021). Hotels should work with the community to create coping strategies and support structures to recover from disasters. This could involve resource sharing, mutual aid, and community action to solve obstacles and maintain tourism.

### ***Resource Access and Knowledge***

Hotel personnel, visitors, and the community can learn about conservation and sustainability through environmental education (Mahadew & Appadoo, 2018). This can help hotels and destinations survive. Tourism resilience depends on ethical and responsible tourism practices such as respecting local culture, safeguarding natural resources, and minimising negative consequences (Ruhanen, Moyle & Moyle, 2019). This maintains good relations with the community and ensures industry longevity. Locally rooted enterprise promotes economic distribution and ownership (Nuñez & Musteen, 2020). Locally rooted enterprises care more about destination sustainability and resilience. Utilizing local supply chains and supporting local firms can boost business and community economic resilience (Steiner & Atterton, 2015).

## **Development**

### ***Research Design***

This study used a quantitative research design. This approach involved collecting and analyzing data to measure and quantify various resilience-related factors. Quantitative research allowed for objective measurement of different variables associated with tourism resilience. Using standardized measurements and scales, researchers gathered data on the six (6) tourism resilience indicators: business operational resilience, disaster preparedness, marketing, workforce, use of national and local resources, and resource access and knowledge. These objective measurements facilitated comparisons and analyses, enabling a comprehensive assessment of the tourism resilience index. The researcher used the tourism resilience index questionnaire to gather data from various resort hotels in CALABARZON. The researcher used descriptive statistics to summarize and present the data, providing a clear picture of the different dimensions of tourism resilience. Furthermore, inferential statistics was utilized to determine significant differences and test hypotheses about the resilience levels of resort hotels.

### ***Participants***

There are one hundred thirty-one (131) Department of Tourism (DOT) Accredited resort hotels in Region IV-A (Cavite, Laguna, Batangas, Rizal, and Quezon) as of May 12, 2021, based on the official list provided by DOT Region IV-A (CALABARZON). Cochran's formula was used to determine the sample size based on the total population of resort hotels in CALABARZON using a 5% margin of error and 95% confidence level. The sampling technique used is purposive sampling technique; the researcher sent the online survey link to the Human Resources Department/ Administration Office of all the 131 DOT-accredited resort hotels through their respective official email addresses, and the HR Managers/Administration helped in disseminating the online survey link to their respective managers. One hundred one resort hotels represented by their managers responded and answered the survey.

The research respondents included middle and top-level managers of accredited resort hotels in CALABARZON. The respondents are hotel supervisors, managers, human resources managers, directors, general managers, and owners. The managers accomplished the Tourism Resilience Index: Business Self-Assessment Tool. The resort managers (owners/directors/managers/supervisors) were chosen to become respondents for the tourism resilience because they are involved in the planning, decision-making process, daily business operation, and leadership of their respective establishments, which are classified as primary tourism enterprises by the Department of Tourism (DOT).

### ***Measures***

The survey instrument has two parts: Profile ( Enterprise and Managerl) and Tourism Resilience Index Self-Assessment Tool. The tourism resilience index questionnaire is adopted from Swann, LaDon, Tracie Sempier, Colette Boehm, Chandra Wright, and Jody Thompson (2015). Tourism Resilience Index: A business self-assessment. MASGP-15-007-02. This is a standard tool to measure tourism resilience developed for tourism industry leaders and businesses. The Tourism Resilience Index (TRI) was designed with extensive input from industry professionals. The Mississippi-Alabama Development Team led an industry Steering Committee in identifying resilience indicators. Each signal is written as a "yes" or "no" question that may be answered using current company and local industry conditions. A point system was employed for each indicator to calculate an overall score. The TRI was categorized into broad areas based on these indicators: business and operational resilience, disaster preparedness, marketing, workforce, use of national and local resources, and resource access and knowledge. The index was then put to the test by both significant and small enterprises in the tourism industry. The tourism resilience index was based on the 2015 TRI established by the Gulf of Mexico, the National Oceanic and Atmospheric Administration, and Mississippi-Alabama Sea Grant business executives.

## **Procedures**

The survey questionnaires were distributed online using Google Forms to managers of resort hotels in CALABARZON from August 2021 – April 2022. The researcher formally emailed the resort hotels' HR/Management/Admin to inform them of the nature and objectives of the research and asked permission to survey their respective managers. Attached in the email is an online survey link on the tourism resilience survey questionnaire answered by the managers. In addition, an endorsement letter from the Office of the Regional Director of the Department of Tourism Region IV A to conduct the survey was also attached to the email sent to these resort hotels. These online links were forwarded to managers through the assistance of their Human Resource /Office Administration. Upon completion, the answers were automatically recorded and saved in the online database.

The data gathering and retrieval during the period of the survey had been very challenging because of the Covid 19 pandemic, where most resort hotels in CALABARZON were either closed or operating in a limited capacity due to travel restrictions, community quarantine, and very strict health and safety protocols. Some managers were in work-from-home arrangements, so the researcher had to follow up on the accomplishment and completion of the survey heavily on email and messenger applications. It was challenging to get respondents because some managers are not reporting from work and, in addition, would require internet connectivity to access the Google form and participate in the survey.

Table 1 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of Business Operational Resilience. The resort hotels show a high level of resilience in their business operation and got the highest scores in the following areas of marketing plan (0.96), operational plan (.95) and financial plan (.95). The areas of improvements are in the areas of industrial analysis (.66), business leadership and staff succession plan (.68), maximizing profitability with current equipment/technology (.70), updated business plan (.73) and customer analysis (.76)



**Results****Table 1**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Business Operational Resilience

<b>Indicator: Business Operation Resilience</b>	<b>Mean Score</b>	<b>SD</b>
1. A statement of the mission	0.85	0.34
2. A summary of the company profile, including its organizational structure, products or services, location, management, and insurance coverage	0.94	0.24
3. Analysis of the industry (distinguishes between essential and non-essential operations and activities of the company)	0.66	0.47
4. An examination of the clientele, including consumer demographics, target markets, and the requirements of prospective clients	0.76	0.42
5. A marketing plan that details the product's design, as well as its pricing, distribution, and promotional strategies	0.96	0.20
6. The plan of operations (including the buildings, equipment, and physical necessities)	0.95	0.21
7. A financial plan that includes a statement of cash flow, a prediction of income for the next three years, a summary of the organization's financial needs, financial statements, and a profit-and-loss statement.	0.95	0.21
8. Have you made any changes or updates to your written business strategy in the past year?	0.73	0.44
9. Do you have a strategy in place for communicating with your staff members internally?	0.83	0.37
10. Does your plan for internal employee communications address both employees who speak English and staff who do not speak English?	0.82	0.38
11. Does the equipment and technology that you already have allow you to make the most profit?	0.70	0.45
12. Do you have appropriate access to local or regional suppliers and/or contractors who supply dependable and adequate products and services (such as food, gasoline, ice, maintenance, housekeeping, and linens), whether they be local or regional?	0.93	0.25
13. Do you have a plan in place for the leadership and employment of your company's future employees?	0.68	0.46
<b>Total</b>	<b>10.76</b>	
<b>Resilience Level (Verbal Interpretation)</b>		<b>High</b>

*Note: For Business Operation Plan - 6 or fewer (LOW) 7 to 9 (MEDIUM) 10 or more (HIGH)*

Table 2 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of the Disaster Preparedness Plan. The resort hotels show a medium level of resilience in business preparedness. They got the highest scores in having emergency contact information (.99), mobile communications (.95), and having adequate coverage on business insurance (.94). The areas for improvement have MOUs or contracts in place with businesses during disasters (.45), having MOUs or contracts with service providers in place

during and after disasters (.55), have testing/training/tabletop exercises for impact analysis and scenarios (.61), and employees who are cross-trained to help in recovery (.64).

**Table 2**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Disaster Preparedness Plan

<b>Indicator: Disaster Preparedness Plan</b>	<b>Mean Score</b>	<b>SD</b>
14. Information on who to contact in case of an emergency for your staff	0.99	0.10
15. A plan for either evacuating, reentering, or sheltering in place	0.74	0.43
16. A plan to ensure the continuity of operations, including necessary personnel, services, and equipment; alternative reporting locations; reopening; and access to critical documents	0.73	0.44
17. Agreements and contracts with relevant parties, including suppliers and contractors, for essential operations	0.77	0.41
18. Mobile communications that are fully charged and ready to use in the case of an emergency (include satellite phones, two-way radios, and backup mobile phone battery packs)	0.95	0.21
19. A plan for communicating with the staff on the inside.	0.87	0.33
20. A communications plan for the media, customers, and the general public, including established statements and vehicles for communicating those messages	0.67	0.46
21. Do you have a program that consists of testing, training, and tabletop exercise (impact analysis and scenario planning)?	0.61	0.48
22. Do you have staff that are cross-trained in responsibilities that are outside of their typical job duties in order to aid with recovery (for example, a waitress at a restaurant who is responsible for external communications in order to keep customers updated on the condition of the business, or managers who are taught to be a media spokesperson)?	0.64	0.48
23. Do you have an employee that is specifically appointed and trained to serve as a spokesman, in order to manage any questions from the general public and the media?	0.77	0.41
24. Do you have any Memorandums of Understanding (MOUs) or contracts with service providers that you can execute during and after natural disasters (for example, security, generators, debris disposal, and clean-up services)?	0.55	0.48
25. Do you have memorandums of understanding or contracts in place with other local businesses that you can carry out in the event of a disaster (rebooking with other local hotels)?	0.45	0.48
26. Do you have a minimum of three (3) months' worth of operational capital set up for unexpected expenses?	0.89	0.31
27. Does your company have insurance that provides enough coverage for the occurrences listed here, including flood, wind, theft, liability, fire, catastrophic loss, and loss of income?	0.94	0.23
28. Has any of the key personnel in your company had direct experience with catastrophe recovery in the past ten years?	0.75	0.42
<b>Total</b>	<b>11.32</b>	
<b>Resilience Level (Verbal Interpretation)</b>	<b>Medium</b>	

Note: For Disaster Preparedness - 7 or fewer (LOW) 8 to 11 (MEDIUM) 12 or more (HIGH)

Table 3 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of Marketing. The resort hotels show medium level of resilience in their marketing and got the highest scores on utilizing different messaging vehicles to communicate to customers and the public (.97), having diverse customer base (.85), offering packages of products and services with other business organization (.84) and participating in tourism/destination marketing organization (.80). The areas of improvements are being a member of local or regional chamber of commerce (.34), providing diverse secondary attractions and/or activities (.42), membership on a regional or national professional industry association (.46) and membership on a professional local industry association (.48).

**Table 3**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Marketing

<b>Indicator: Marketing</b>	<b>Mean Score</b>	<b>SD</b>
29. Do you have a detailed marketing plan that details your scenario and the market, as well as your goals, plans, and techniques, as well as a timeline?	0.79	0.40
30. In order to connect with clients and the general public, do you make use of a variety of different messaging vehicles, such as advertising, public relations, your website, email marketing, text messaging, and various social networking platforms?	0.97	0.15
31. Are you a member of the chamber of commerce in either your local or regional area?	0.34	0.46
32. Do you participate in a local professional industry association in which you are a member?	0.46	0.49
33. Are you a member of a local, state, or national professional body for your industry (a hospitality association, for example)?	0.48	0.49
34. Do you have any affiliation with a tourism or destination marketing organization (whether it be on a state, regional, or national level)?	0.80	0.39
35. Do you have a varied consumer base that includes customers from the local, regional, national, and international levels?	0.85	0.34
36. Does your company offer a variety of additional attractions and/or activities (for example, wildlife tours and bicycle trails, recreational fishing and sunset cruises, or sunset cruises and fishing)?	0.42	0.49
37. In order to increase the number of options for local business, do you offer bundles of your goods or services in collaboration with other companies or organizations?	0.84	0.35
<b>Total</b>	<b>5.96</b>	
<b>Resilience Level (Verbal Interpretation)</b>		<b>Medium</b>

*Note: For Marketing - 4 or fewer (LOW) 5 to 6 (MEDIUM) 7 or more (HIGH)*

Table 4 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of Workforce. The resort hotels show a medium level of resilience in their Workforce and got the highest scores on participating in regularly scheduled health and safety training (.97), providing employee incentives (.95) and having enough staff for routine operations in regular working conditions (.94). The areas for improvements are actively recruiting new employees (.37), identifying outside volunteers (.51), having procedures in working with non-employees during disasters (.51) and providing resources for employees to prepare for their personal safety (.60).

**Table 4**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Workforce

<b>Indicator: Workforce</b>	<b>Mean Score</b>	<b>SD</b>
38. Do you have enough employees to run routine business operations in normal working conditions?	0.94	0.24
39. Do you make an effort to hire new staff members and participate in job fairs?	0.37	0.47
40. Do you have access to a workforce that has been appropriately trained?	0.86	0.33
41. Do the personnel at your company have access to dependable transportation to get to and from work?	0.93	0.25
42. Do you offer employee perks such as flexible working hours, the ability to accommodate students' class schedules, housing stipends, medical insurance, and contributions to retirement plans?	0.95	0.21
43. Have you found non-employees who are willing to labor during and after a natural disaster who would like to offer their time?	0.51	0.49
44. Do you have policies in place that will guide you through the process of collaborating with non-employees during times of emergency (such as utilities or volunteers)?	0.51	0.49
45. Do you make it possible for your staff members to take part in routinely scheduled health and safety training that is tailored to your company (for example, first aid/CPR training, OSHA training, HAZWOPER training, and mental health services)?	0.97	0.15
46. Do you offer your employees access to tools that can help them get ready for their own personal safety (knowledge on family evacuation plans, for example)?	0.60	0.48
<b>Total</b>	<b>6.65</b>	
<b>Resilience Level (Verbal Interpretation)</b>		<b>Medium</b>

Note: For Workforce - 4 or fewer (LOW) 5 to 6 (MEDIUM) 7 or more (HIGH)

Table 5 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of the Use of National and Local Resources. The resort hotels show a medium level of resilience in the use of national and local resources and got the highest score in identifying the appropriate public or private resources to obtain up-to-date disaster

information (.92). The areas of improvement are having access to local flood maps and flood zones (.44), and coordinating with re-entry and reopening with local officials (.67).

**Table 5**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Use of National and Local Resource

<b>Indicator: Use of National and Local Resources</b>	<b>Mean Score</b>	<b>SD</b>
47. Do you take part in any post-disaster damage assessments, such as a polling program or survey, that are designed to evaluate the scope of the damage caused by a disaster and the level of progress made toward recovery?	0.72	0.43
48. Have you located the necessary public or private resources in your city or county to acquire up-to-date disaster information (such as the local emergency management hotline, the website, and the phone number of the tourism bureau)?	0.92	0.26
49. Do you organize or take part in any catastrophe drills with your employees that are sponsored by the local emergency management agency (EMA), or do you participate in these drills yourself?	0.71	0.43
50. Have you consulted with the local authorities regarding the reopening or reentry plan for your business?	0.67	0.46
51. Do you have access to the local Flood Insurance Rate Maps or floodplain maps, and are you aware of where your business falls within the flood zone?	0.44	0.49
<b>Total</b>	<b>3.47</b>	
<b>Resilience Level (Verbal Interpretation)</b>	<b>Medium</b>	

*Note: For Use of National and Local Resource - 2 or fewer (LOW) 2 (MEDIUM) 4 or more (HIGH)*

Table 6 presents the assessment of the tourism resilience of resort hotels in CALABARZON in terms of Resource Access and Knowledge. The resort hotels show a medium level of resilience in their resource access and knowledge and got the highest scores on providing sustainable use and tips to customers (.97) and employing sustainable operations practices (.95). The area for improvement is supporting local efforts on natural resource sustainability (.77)

**Table 6**

Assessment on the Tourism Resilience of Resort Hotels in Terms of Resource Access and Knowledge

<b>Indicator: Resource Access and Knowledge</b>	<b>Mean Score</b>	<b>SD</b>
52. Do you support that local efforts should be made to ensure the sustainability of natural resources (such as the conservation and restoration of habitats, the prevention of erosion, and the management of stormwater)?	0.77	0.42
53. Do you implement environmentally responsible business practices such as local sourcing, recycling, and the use of energy-saving or "green" technology?	0.95	0.21
54. Do you offer your clients advice on how to make "sustainable use" of your products and services (such as reusing towels at lodging establishments or just supplying water if it is specifically requested at restaurants)?	0.97	0.16
<b>Total</b>	<b>2.69</b>	
<b>Resilience Level (Verbal Interpretation)</b>	<b>Medium</b>	

*Note: For Resource Access and Knowledge (LOW) 2 (MEDIUM) 3 (HIGH)*

Table 7 presents that there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their establishment's form of business organization in one of the indicators: business and operational resilience ( $p=.032$ ). There is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their establishment's type of ownership in one of the indicators: business and operational resilience ( $p=.018$ ). Moreover, there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their establishment's number of employees among the following indicators: business and operational resilience ( $p=.005$ ), business preparedness plan ( $.000$ ), marketing ( $p=.001$ ), and resource access and knowledge ( $p=.016$ ). Lastly, there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their establishment's type of DOT Accreditation among the following indicators: business and operational resilience ( $p=.011$ ), disaster preparedness plan ( $.001$ ), and marketing ( $p=.007$ ).

**Table 7**

Kruskal – Wallis H – Test: Comparison of the Tourism Resilience Index of Resort Hotels in CALABARZON when grouped according to Enterprise Profile

<b>Indicators</b>	<b>p-value</b>						
	<b>Years of Operation</b>	<b>Capitalization</b>	<b>Form of Business Organization</b>	<b>Type of Ownership</b>	<b>No. of Employees</b>	<b>DOT Accreditation</b>	<b>Location</b>
<b>Business and Operation Resilience</b>	.394	.064	.032	.018	.005	.011	.906
<b>Disaster Preparedness Plan</b>	.623	.235	.261	.152	.000	.001	.519
<b>Marketing</b>	.579	.300	.314	.644	.001	.007	.511
<b>Workforce</b>	.273	.731	.558	.698	.182	.276	.558
<b>Use of National and Local Resources</b>	.508	.968	.545	.916	.056	.139	.500
<b>Resource Access and Knowledge</b>	.413	.289	.783	.657	.016	.580	.170

Table 8 presents that there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their sex in one of the indicators: marketing ( $p=.032$ ). Moreover, there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their years in service in one of the indicators: marketing ( $p=.028$ ). Lastly, there is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their department among the following indicators: disaster preparedness plan ( $p=.001$ ) and workforce ( $p=.019$ ).

**Table 8**

Kruskal – Wallis H – Test: Comparison of the Tourism Resilience Index of Resort Hotels in CALABARZON when grouped according to Managers Profile

Indicators	p-value						
	Job Title	Age	Sex	Education	Employment Status	Years in Service	Department
<b>Business and Operation Resilience</b>	.112	.778	.676	.272	.102	.322	.116
<b>Disaster Preparedness Plan</b>	.104	.343	.352	.641	.126	.157	.001
<b>Marketing</b>	.643	.761	.032	.066	.091	.028	.058
<b>Workforce</b>	.151	.670	.294	.657	.204	.128	.019
<b>Use of National and Local Resources</b>	.487	.723	.685	.819	.269	.194	.239
<b>Resource Access and Knowledge</b>	.370	.581	.969	.418	.728	.386	.155

### Final Considerations/ Conclusions

#### *Level of Tourism Resilience of Resort Hotels in CALABARZON*

The tourism resilience index of resort hotels in CALABARZON was measured HIGH in Business Operational Resilience and scored MEDIUM in Disaster Preparedness Plan, Marketing, Workforce, Use of National and Local Resources, and Resource Access and Knowledge. On the other hand, resort hotels in CALABARZON areas for improvement are the following: Business leadership and staff succession plan and Industry analysis (Business Operation Resilience); Having MOUs or contracts with Local Businesses (Disaster Preparedness); Providing diverse attractions and membership to chamber of commerce (Marketing); Active recruitment of new employees (Workforce); Having access to local flood maps and consultation with local authorities (Use of National and Local Resource); and Supporting local efforts on natural resource sustainability (Resource Access and Knowledge).



Leadership and staff succession plans are crucial for hotels' tourism resilience as they ensure a continuous supply of capable leaders and skilled staff within the organization. A well-developed succession plan allows hotels to handle unforeseen disruptions and maintain operational stability. This enables them to adapt and recover quickly from crises, ultimately enhancing their ability to withstand challenges and maintain their position in the market. Strong and consistent leadership guides organizations through challenging times (Cochrane, 2010). By setting a positive example and fostering a supportive environment, leaders can inspire employee loyalty, trust, and commitment, which are vital for resilience.

Disaster management plans, strategies, and activities can be achieved efficiently with the help of MOAs and MOUs with various stakeholders. Memorandum of Agreements (MOAs) and Memorandum of Understanding (MOUs) with local businesses can significantly enhance the disaster preparedness of hotels. These agreements allow hotels to establish partnerships and collaborations with local businesses, such as suppliers, emergency services, and neighboring establishments. Through these agreements, hotels can access additional resources, support, and expertise during times of disaster, thereby enhancing their ability to respond effectively, mitigate risks, and maintain operations in the face of a crisis. Moreover, memorandum of Agreements (MOAs) and Memorandum of Understanding (MOUs) with service providers can significantly impact the disaster preparedness of hotels. These agreements allow hotels to partner with service providers such as insurance companies, IT support, and recovery firms. By collaborating with these providers, hotels can ensure the availability of essential services, quick response in times of crisis, and efficient recovery, ultimately strengthening their ability to weather disasters and maintain operations. Insurance and technology are needed for resilience (White & O'Hare, 2014). Technology improves operational efficiency, visitor experiences, and crisis decision-making, while insurance protects against hazards (Ghaderi, Som & Henderson, 2015).

Providing diverse secondary attractions and activities can have a significant positive impact on the tourism resilience of hotels. By offering a range of secondary attractions and activities, hotels can enhance their appeal to a wider audience and attract guests with varying interests. This helps to diversify their revenue streams, reduce dependency on seasonal or specific market segments, and improve their ability to withstand fluctuations in demand, ultimately enhancing their overall resilience in a competitive tourism market. Consumer and partner values increase tourism resilience (Dyachenko, Humenna, Zelenko & Ngabonziza, 2021). Responsible tourist hotels can attract like-minded partners and clients. Hotels can adapt to market demands because common values provide purpose and vision.

Tourism resilience increases through collaborative planning, marketing, and resource sharing (Bichler, Petry & Peters, 2021). Hotels innovate and adapt to market changes by sharing expertise and resources. Efficiency and cost-effectiveness from inter-organizational

metrics help hotels compete and decrease costs. Tourism stakeholders working together can improve destination marketing and resilience (Ngo et al., 2020). Hotels and local entrepreneurs can promote tourism and competitiveness by promoting the location, sharing marketing costs, and using each other's consumers. Social dialogues between municipal authorities, businesses, and the community build resilience (Dyachenko et al., 2021). Open and inclusive dialogues help hotels make decisions, address community concerns, and support the destination's sustainable development goals. Social interactions foster collaboration, trust, and shared responsibility for sustainable tourism and resilience. Associative work, stakeholder cohesion, cooperation, coordination, information sharing, collaboration, relationship marketing, stakeholder involvement, marketing collaboration, and social links increase hotel tourist resilience.

Actively recruiting employees plays a crucial role in the tourism resilience of hotels. By attracting and selecting skilled and qualified individuals, hotels can ensure they have a competent workforce capable of providing exceptional customer service and responding effectively to challenges. Engaged and dedicated employees contribute to guest satisfaction, positive reviews, and repeat business, ultimately boosting the resilience of the hotel in a competitive tourism industry. Tourist resilience depends on human capital (van der Veecken et al., 2016). Public-private collaboration is essential for training and retaining skilled workers. These sectors can identify industrial issues' skills and training by working together. Tourism businesses must strengthen employee and organizational resilience to overcome calamities (Prayag, 2018). Encourage adaptability, flexibility, and inventiveness. Allowing personnel to take responsibility and fostering a supportive workplace can help hotels prepare for unexpected situations and give outstanding service.

Identifying appropriate public and private resources can access additional support in times of crisis or disaster, such as emergency response services, financial assistance, or logistical support. This proactive approach enhances the hotel's ability to prepare, respond, and recover from disruptions, ultimately strengthening its overall resilience in the tourism industry. Tourism resilience requires owners and operators to participate in government planning (Pyke et al., 2018). Comprehensive and successful government planning can integrate private sector ideas and capabilities. Collaboration can establish tourist industry-resilient policies and strategies. Tourism corporations should collaborate with local enterprises, non-profits, and communities (Chong & Balasingam, 2019). Collaboration fosters destination resilience, ownership, and shared responsibility. Hotels and local groups can promote community tourism. Ngo et al. (2020) say tourism resilience involves community empowerment and involvement. Hotels may let locals influence tourism rules and supply chains. This strategy can make tourism more resilient and sustainable for the town. Social coping helps tourism survive natural disasters and pandemics (Cahyanto et al., 2021). Hotels and the community should build coping methods and support networks to help people recover.

Resource sharing, mutual aid, and community action could alleviate problems and maintain tourism.

Supporting local efforts on natural resource sustainability is achieved by actively engaging in sustainable practices; hotels can contribute to the preservation of local resources and ecosystems, attracting environmentally conscious tourists and enhancing the destination's long-term viability. Additionally, collaborating with local stakeholders and promoting sustainable initiatives fosters positive community relationships, enhances the hotel's reputation, and strengthens its resilience by aligning with the growing demand for sustainable tourism experiences. Tourism resilience entails supporting responsible tour operators, teaching tourists sustainable habits, and promoting respectful local community interactions (Choi, Song, Kim & Lee, 2017). Hotel staff, customers, and the community can learn about conservation and sustainability through environmental education (Mahadew & Appadoo, 2018). Respecting local culture, protecting natural resources, and limiting negative impacts are essential to tourist resilience (Ruhanen et al., 2019). This keeps local relations good and ensures industry survival—hotels and the local community benefit from diversifying and eco-sustainable livelihoods (Powell, Green, Holladay, Karafte, Duda & Ngyuyen, 2018). Promoting local enterprise enhances economic distribution and ownership (Nuñez & Musteen, 2020). Local entrepreneurs worry more about destination sustainability and resiliency. Supporting local enterprises and supply chains can increase business and community economic resilience (Steiner & Atterton, 2015).

### ***Comparison on the Assessment of Tourism Resilience when grouped according to Enterprise Profile***

There is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their establishment's forms of business organization in one of the indicators: business and operational resilience. The form of business organization can significantly impact the business operation resilience of tourism enterprises like resort hotels. Different forms of business organization, such as sole proprietorship, partnership, and corporation, have distinct characteristics that can influence the ability of tourism enterprises to withstand and recover from disruptions. Business organizations in tourism enterprises like resort hotels can influence operational resilience through financial resources, decision-making structures, access and expertise, risk management capabilities, and collective ownership. Each business organization has its advantages and challenges, and understanding their unique characteristics is crucial in assessing the resilience of tourism enterprises.

In addition, there is a significant difference when grouped according to their establishment's type of ownership in one of the indicators: business and operational resilience. Different ownership and management structures, such as independent hotels, hotel chains, and property management companies, can influence how hotels respond to and recover from disruptions. Independent hotels are typically privately owned and operated. They have the advantage of flexibility and autonomy in decision-making, allowing them to respond quickly to market changes and adapt their operations as needed. However, resources compared to larger hotel chains or management may affect their ability to invest in advanced technology, implement comprehensive risk management strategies, or access financial support during a crisis, making them potentially more vulnerable to disruptions.

Moreover, when grouped according to their establishment's number of employees, there is a significant difference among the following indicators: business and operational resilience, disaster preparedness plan, marketing, and resource access and knowledge. In terms of a disaster preparedness plan, a larger number of employees can enhance the hotel's emergency response capabilities during a disaster. With more staff members available, hotels can efficiently manage tasks such as evacuations, securing the premises, providing first aid, and coordinating with authorities. In terms of marketing, hotels with more employees may have more capacity to undertake marketing activities. They can assign dedicated resources to develop and execute marketing strategies, including advertising campaigns, social media management, and public relations efforts. Moreover, hotels often collaborate with a wide range of stakeholders, including local businesses, tourism organizations, government agencies, and community groups. The number of employees influences the hotel's ability to engage and collaborate with these stakeholders. More employees provide additional resources for managing relationships, participating in networking events, attending meetings, and coordinating efforts with external partners during recovery and rebuilding. Lastly, in terms of resource access and knowledge, the number of employees can influence the level of awareness and engagement related to sustainability practices. In larger hotels, a diverse range of employees may have varying levels of understanding and commitment to sustainability. By providing adequate training, education, and regular communication, hotels can create a culture of sustainability and motivate employees to actively participate in sustainable practices such as reducing energy usage, adopting eco-friendly policies, and implementing waste management programs.

Lastly, there is a significant difference when grouped according to their establishment's type of DOT Accreditation among the following indicators: business and operational resilience, disaster preparedness plan, and marketing. Regarding business operational resilience, accreditation programs often require hotels to meet specific standards and guidelines related to operational practices. These standards include emergency preparedness, crisis management, and business continuity planning. Regarding disaster preparedness plans,

accreditation programs often involve input from industry experts who contribute their knowledge and experience in disaster preparedness. These experts help shape the accreditation criteria and requirements related to emergency management. Lastly, in terms of marketing, accreditation programs establish specific standards that hotels must meet to obtain accreditation. Achieving accreditation demonstrates a commitment to quality, safety, and preparedness. This enhanced reputation can positively affect marketing efforts, reassuring potential guests and stakeholders that the hotel is well-prepared to handle emergencies.

### ***Comparison on the Assessment of Tourism Resilience when grouped according to Managers Profile***

There is a significant difference in the assessment of managers on the tourism resilience of resort hotels in CALABARZON when grouped according to their sex in one of the indicators: marketing. Regarding marketing, hotel managers' personal biases and beliefs about gender roles and capabilities can influence their perception of resilience. If a male manager holds stereotypical beliefs that men are more assertive and better equipped to handle crises, their perception of organizational resilience may align with these beliefs. Similarly, if a female manager believes women are more skilled in communication and relationship building, their perception may focus on collaboration and stakeholder engagement as resilience indicators.

Moreover, there is a significant difference when grouped according to their years in service in one of the indicators: marketing. In terms of marketing, managers with longer tenures in the industry may have accumulated more experience in marketing and collaboration strategies. They have witnessed and dealt with various challenges and crises, giving them a deeper understanding of navigating challenging situations successfully. Their extensive experience can shape their perception of organizational resilience and contribute to their ability to assess the effectiveness of marketing and collaboration efforts.

Lastly, there is a significant difference when grouped according to their department among the following indicators: disaster preparedness plan, marketing, and workforce. Regarding disaster preparedness plans, hotel managers working in operational departments such as front desk, housekeeping, or food and beverage have a frontline perspective on the daily operation of the hotel. These managers directly interact with guests, handle emergencies, and oversee the implementation of standard operating procedures. Their experience in dealing with day-to-day challenges may give them a practical understanding of potential risks and the effectiveness of disaster preparedness plans.

Regarding the workforce, managers in the operational departments such as the front desk, housekeeping, and food and beverage have firsthand experience with the workforce's effectiveness and efficiency in delivering services to guests and maintaining operations. Their perception of tourism resilience may be shaped by the workforce's ability to handle fluctuations

in demand, maintain service quality during crises, and quickly adapt to new protocols and procedures.

## REFERENCES

- Bichler, B. F., Petry, T., & Peters, M. (2021). We did everything we could: How employees' made sense of COVID-19 in the tourism and hospitality industry. *Current Issues in Tourism.*, 1–17. <https://doi.org/10.1080/13683500.2021.1985974>
- Brown, N., Orchiston, C., Rovins, J., & Feldmann-Jensen, S. (2018). An integrative framework for investigating disaster resilience within the hotel sector. *Journal of Hospitality and Tourism Management*, 36,67–75. <https://doi.org/10.1016/j.jhtm.2018.07.004>
- Brown, N., Rovins, J., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2017). Exploring disaster resilience within the hotel sector: A systematic review of literature. *International Journal of Disaster Risk Reduction*, 22, 362–37 <https://doi.org/10.1016/j.ijdr.2017.02.005>
- Cahyanto, I., Kingsbury, A. J., Widodo, E., Puspita, N. Y., & Harnadi, A. (2021). Coping as a community: Recovery experiences of a tourismreliant area following a tsunami in Indonesia. *International Journal of Tourism Research.*, 23, 928–941. <https://doi.org/10.1002/jtr.2454>
- Cheer, J.M. and Lew, A.A. (2018). Understanding tourism resilience. In: Lew, A. A. and Cheer, J. M.(Eds.). *Tourism resilience and adaptation to environmental change: Definitions and frameworks*. New York: Routledge.
- Choi, Y. E., Song, K., Kim, M., & Lee, J. (2017). Transformation planning for resilient wildlife habitats in ecotourism systems.*Sustainability*, 9, 487. <https://doi.org/10.3390/su9040487>
- Chong, K. Y., & Balasingam, A. S. (2019). Tourism sustainability: Economic benefits and strategies for preservation and conservation of heritage sites in Southeast Asia. *Tourism Review*, 74, 268–279. <https://doi.org/10.1108/TR-11-2017-0182>
- Cochrane, J. (2010). The sphere of tourism resilience. *Tourism Recreation Research*, 35, 173–185. <https://doi.org/10.1080/02508281.2010.11081632>
- Conz, E., & Magnani, G. (2020). A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research. *European Management Journal*, 38(3), 400–412. <https://doi.org/10.1016/j.emj.2019.12.004>
- CRED (Centre for Research on the Epidemiology of Disasters). 2020. “CRED Crunch 58 - Disaster Year in Review (2019).” Brussels: CRED.*Disasters: An Overview of the Last 20 Years (2000-2019)*. Geneva: UNDRR.
- Dayour, F., Adongo, C. A., Amuquandoh, F. E., & Adam, I. (2020b). Managing the COVID-19 crisis: coping and post-recovery strategies for hospitality and tourism businesses in

- Ghana. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/JHTI-08-2020-0150>
- Dayour, F., Adongo, C., & Kimbu, A. (2020a). Insurance uptake among small and medium-sized tourism and hospitality enterprises in a resource-scarce environment. *Tourism Management Perspectives*, 34, 100674. <https://doi.org/10.1016/j.tmp.2020.100674>
- Department of Tourism (DOT). <https://beta.tourism.gov.ph>
- Duchek, S. (2019). Organizational resilience: A capability-based conceptualization. *Business Research*, 13, 215–246.
- Duchek, S., Raetze, S., & Scheuch, I. (2020). The role of diversity in organisational resilience: A theoretical framework. *Business Research*, 13(2), 387–423. <https://doi.org/10.1007/s40685-019-0084-8>
- Dyachenko, Y., Humenna, O., Zelenko, O., & Ngabonziza, B. (2021). Role of creativity, innovations, digital and cognitive technologies for marketing of family, small and medium tourism businesses in regional economic development during and after Coronavirus pandemic. *Almatourism-Journal of Tourism, Culture and Territorial Development*, 12(23), 199–219. <https://doi.org/10.6092/issn.2036-5195/12330>
- Fyall, A., & Garrod, B. (2019). Destination management: A perspective article. *Tourism Review*, 75, 165–169. <https://doi.org/10.1108/TR-07-2019-0311>
- Ghaderi, Z., Som, A. P. M., & Henderson, J. (2015). When disaster strikes: The Thai floods of 2011 and tourism industry response and resilience. *Asia Pacific Journal of Tourism Research*, 20, 399–415. <https://doi.org/10.1080/10941665.2014.889726>
- Holladay, P., & Powell, R. (2016). Social-ecological resilience and stakeholders: A qualitative inquiry into community-based tourism in the Commonwealth of Dominica. *Caribbean Studies*, 44, 3–28. <https://doi.org/10.1353/crb.2016.0000>
- Jamaliah, M., & Powell, R. (2018). Ecotourism resilience to climate change in Dana Biosphere Reserve, Jordan. *Journal of Sustainable Tourism*, 26, 519–536. <https://doi.org/10.1080/09669582.2017.1360893>
- climate change? *Marine Policy*. <https://doi.org/10.1016/j.marpol.2019.103636>
- Li, B., Zhong, Y., Zhang, T., & Hua, N. (2021). Transcending the COVID-19 crisis: Business resilience and innovation of the restaurant industry in China. *Journal of Hospitality and Tourism Management*, 49, 44–53. <https://doi.org/10.1016/j.jhtm.2021.08.024>
- Mahadew, R., & Appadoo, K. A. (2018). Tourism and climate change in Mauritius: Assessing the adaptation and mitigation plans and prospects. *Tourism Review*, 74, 204–215. <https://doi.org/10.1108/TR-12-2017-0203>
- Mair, J., Ritchie, B., & Walters, G. (2016). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: A narrative review. *Current Issues in Tourism*, 19, 1–26. <https://doi.org/10.1080/13683500.2014.932758>

- NEDA Region IV-A (2023). CALABARZON Regional Development Plan 2023-2028. [www.calabarzon.neda.gov.ph](http://www.calabarzon.neda.gov.ph)
- Ngo, T., Lohmann, G., & Hales, R. (2020). Integrating the third way and third space approaches in a post-colonial world: Marketing strategies for the business sustainability of community-based tourism enterprises in Vietnam. *Current Issues in Tourism*, 23(15), 1914–1932. <https://doi.org/10.1080/13683500.2019.1694494>
- Njoroge J, Ratter BMW, Atieno L, Mugabe I.(2018). Employing the enhanced regional tourism sustainable adaptation framework with a case study of climate change vulnerability in Mombasa, Kenya. *Tourism and Hospitality Research* 20:56-71. 10.1177/2F1467358418791353
- Nuñez, S. M., & Musteen, M. (2020). Learning perspective on sustainable entrepreneurship in a regional context. *Journal of Small Business and Enterprise Development*. <https://doi.org/10.1108/JSBED-03-2020-0071/full/html>
- Orchiston, C., Prayag, G., & Brown, C. (2016). Organizational resilience in the tourism sector. *Annals of Tourism Research*, 56, 128–163. <https://doi.org/10.1016/j.annals.2015.11.002>
- Orhan, E. (2021). Disaster management of hotels: Empirical results from the lodging industry. *Anatolia.*, 1–17. <https://doi.org/10.1080/13032917.2021.1967174>
- Prayag, G. (2018). Symbiotic relationship or not? Understanding resilience and crisis management in tourism. *Tourism Management Perspectives*, 25, 133–135. <https://doi.org/10.1016/j.tmp.2017.11.012>
- Prayag, G., Chowdhury, M., Spector, S., & Orchiston, C. (2018). Organizational resilience and financial performance. *Annals of Tourism Research*, 73(July), 193–196. <https://doi.org/10.1016/j.annals.2018.06.006>
- Prayag, G., Spector, S., Orchiston, C., & Chowdhury, M. (2019). Psychological resilience, organizational resilience and life satisfaction in tourism firms: insights from the Canterbury earthquakes. *Current Issues in Tourism*, 23, 1216–1233. <https://doi.org/10.1080/13683500.2019.1607832>
- Powell, R. B., Green, T. F., Holladay, P. J., Krafte, K. E., Duda, M., Nguyen, et al. (2018). Examining community resilience to assist in sustainable tourism development planning in Dong Van Karst Plateau Geopark, Vietnam. *Tourism Planning & Development*, 15, 436–457. <https://doi.org/10.1080/21568316.2017.1338202>
- Puri, M., Karanth, K., & Thapa, B. (2019). Trends and pathways for ecotourism research in India. *Journal of Ecotourism*, 18, 122–141. <https://doi.org/10.1080/14724049.2018.1474885>
- Pyke, J., Law, A., Jiang, M., & De Lacy, T. (2018). Learning from the locals: The role of stakeholder engagement in building tourism and community resilience. *Journal of*



- Ruhanen, L., Moyle, C., & Moyle, B. (2019). New directions in sustainable tourism research. *Tourism Review*, 74, 138–149. <https://doi.org/10.1108/TR-12-2017-0196>
- Sinha, R., & Ola, A. (2021). Enhancing business community disaster resilience. A structured literature review of the role of dynamic capabilities. *Continuity and Resilience Review*, 3(2), 132–148. <https://doi.org/10.1108/CRR-03-2021-0009>
- Steiner, A., & Atterton, J. (2015). Exploring the contribution of rural enterprises to local resilience. *Journal of Rural Studies*, 40, 30–45. <https://doi.org/10.1016/j.jrurstud.2015.05.004>
- UNDRR (2012). Disaster risk and resilience: UN system task team on the post 2015 UN development agenda. Retrieved from: [https://www.un.org/en/development/desa/policy/untaskteam\\_undf/thinkpieces/3\\_disaster\\_risk\\_resilience.pdf](https://www.un.org/en/development/desa/policy/untaskteam_undf/thinkpieces/3_disaster_risk_resilience.pdf)
- UNDRR. (United Nations Office for Disaster Risk Reduction) (2020). The Human Cost of
- van der Veeken, S., Calgaro, E., Klint, L. M., Law, A., Jiang, M., de Lacy, T., & Dominey-Howes, D. (2016). Tourism destinations' vulnerability to climate change: Nature-based tourism in Vava'u, the Kingdom of Tonga. *Tourism and Hospitality Research*, 16, 50–71. <https://doi.org/10.1177/1467358415611068>
- Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733–769. <https://doi.org/10.5465/annals.2015.0134>
- Zhai, Y., & Shi, P. (2021). The evolutionary characteristics, driving mechanism, and optimization path of China's tourism support policies under COVID-19: A quantitative analysis based on policy texts. *Current Issues in Tourism*, 7, 1–6. <https://doi.org/10.1080/13683500.2021.1972942>