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EXPLORING CRISIS MANAGEMENT THEORIES TO STRENGTHEN TOURISM RESILIENCE WITHIN WILDLIFE RESERVES IN MPUMALANGA, SOUTH AFRICA

Nontsikelelo Octavia MASINA[1*], Portia Pearl Siyanda SIFOLO [1], Samantha Claire BOUWER [1]

[1] Tshwane University of Technology, Department of Tourism Management, Pretoria, South Africa; nokgomo@gmail.com (N.O.M.); SifoloPS@tut.ac.za (P.P.S.S.); e-mail: BouwerS@tut.ac.za (S.C.B);

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Abstract: Wildlife tourism is the cornerstone of the economy of the province of Mpumalanga, South Africa, serving as a crucial economic and conservation pillar that supports biodiversity protection and rural livelihoods. However, wildlife tourism has been affected by natural and manmade crises that have tested the resilience of the tourism sector in the Mpumalanga region. The focus of this study is on crisis management for the Mpumalanga Tourism and Parks Agency (MTPA) managed wildlife tourism sites. The study aims to explore the application of robust crisis management theories, including preventive measures and response plans, to safeguard both tourists and the tourism sector as a whole, analyse how these theories have been applied in practice across various wildlife contexts, and synthesise best practices and gaps in the existing literature to inform future crisis resilience strategies in the wildlife tourism sector. The theories considered in the study are resilience, crisis communication, community-based natural resource management, and stakeholder theories. This study employs a desktop research methodology to explore and synthesise existing theories and documented practices used in wildlife tourism crisis management. Drawing on secondary data and global case contextual analysis of 20 publications, which assisted in generating insights through the systematic review and analysis of secondary data sources to build a theoretical understanding. Using the research onion framework by Saunders, a qualitative, interpretive research approach was employed to investigate how theories can be applied to crisis management in wildlife tourism sites. The results of the study highlight the lack of a formalised, site-specific crisis management plan; a lack of adaptive scenario planning and dedicated risk assessment practices, which already exist but are reactive rather than proactive; limited local community involvement; and stakeholder coordination that is often dependent on personal networks rather than institutional frameworks. The interpretation of these results points to a gap between theoretical best practices and operational reality, further highlighting that theories are understood conceptually but not integrated into an overarching crisis management system. The MTPA-managed wildlife tourism sites would benefit from formalised multistakeholder crisis platforms to ensure cohesive, timely responses from stakeholders.

Keywords: tourism resilience, crisis management, crisis management theories, wildlife tourism, wildlife tourism crisis management

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INTRODUCTION

Wildlife tourism is positioned to support and act as an intermediary between conservation and socioeconomic goals (Tichaawa & Lekgau, 2024, p. 1782). This sector is among the largest forms of tourism in Sub-Saharan Africa, with various reports indicating that wildlife tourism is a dominant factor in international arrivals to the region (Jones et al., 2023; Lekgau & Tichaawa, 2022). Wildlife tourism is a cornerstone of South African tourism, thanks to its unique and diverse landscapes, flora, and fauna (Kelso & Giddy, 2023:1910). Mpumalanga is a region that hosts some of the world-renowned and the country's most iconic wildlife tourism destinations, including portions of the famous Kruger National Park (KNP), the Blyde River Canyon, and several smaller provincial reserves managed by the Mpumalanga Tourism and Parks Agency (MTPA) (Mpumalanga Tourism Growth Strategy, 2025). The development of tourism has a significant impact on the environment and local communities (Kupi, 2025:1758). Kelso & Giddy (2023:1910) assert that wildlife tourism is a large contributor to Mpumalanga's socio-economic and environmental landscape.

It is both a vital economic driver and a cultural symbol in Mpumalanga, drawing thousands of domestic and international visitors to iconic parks and reserves. Moreover, wildlife tourism is a crucial economic and conservation pillar for Mpumalanga, supporting biodiversity protection and rural livelihoods (KNP Annual Report, 2023). The overall tourism contribution to Mpumalanga is estimated at over R30 billion annually, accounting for nearly 6% of the province's Growth Domestic Product (GDP) (KNP Annual Report, 2023).

Despite its ecological and economic importance, the MTPA faces several strategic challenges, such as wildlife poaching, particularly rhino poaching, underfunding, and aging infrastructure, which hinder effective park management and pleasant visitor experiences, community tensions over land claims and benefit-sharing, climate change and

* Corresponding author

environmental degradation, as well as global crises such as pandemics (Cloete et al., 2018:21; MTPA, 2023:167). Moreover, conservation initiatives are further hampered by the human dynamics within the ecosystems, exacerbated by limited participation and, consequently, limited benefits derived from protected areas (Tichaawa & Lekgau, 2024:1782).

There is limited research on the theories that can be applied in trying to address these crises. Moreover, from a socio-economic perspective, the surrounding rural communities are highly dependent on natural resources and tourism-linked livelihoods, providing vital income through guiding, hospitality, and craft industries (Snyman et al., 2021:48).

Persistent poverty and high youth unemployment rates in these rural municipalities limit the broader community benefits from tourism and conservation, which is exacerbated by limited access to skills development (van der Merwe & Saayman, 2025:2). As such, ongoing land reform and restitution claims for sites such as Manyeleti and Songimvelo require the establishment of responsive and inclusive governance structures to address community expectations for co-management and equitable benefit-sharing (MTPA, 2023:167).

The focus of this study is on crisis management for MTPA-managed wildlife tourism sites, aiming to explore the application of robust crisis management theories, including preventive measures and response plans, to safeguard both tourists and the tourism sector as a whole. Moreover, the study focuses on enabling the development of tailored crisis management strategies that address the complex social, economic, and environmental effects, thereby enhancing resilience and sustainability in the South African wildlife tourism sector (Snyman et al., 2021:48).

The primary research question for this study is: How can crisis management theories be effectively applied to manage and mitigate the diverse crises in MTPA-managed wildlife tourism sites? The objectives of this study are to identify and examine key theories of crisis management relevant to wildlife tourism, analyse how these theories have been applied in practice across various wildlife tourism contexts, and synthesise best practices and gaps in the existing literature to inform future crisis resilience strategies in Mpumalanga wildlife tourism. There are currently studies that have investigated wildlife tourism crisis management, as discussed in the following literature review section.

LITERATURE REVIEW

Global Lessons on Wildlife Tourism Crises

The global literature on crisis management in tourism has evolved significantly over the past two decades, offering a wealth of case studies and theoretical frameworks applicable to protected areas (Newsome, 2021:295) such as those under the management of the MTPA. Globally, there has been discussion about the degradation of tourism sites and protected areas caused by increasing congestion and inappropriate use (Paapa & Kambonal, 2025:352), over-tourism (Tourism Review, 2020:5139; Capocchi Vallone et al., 2019:3303), and the combined impacts of uncontrolled tourism access and development (Schulze et al., 2018:435). For example, comparative studies from East Africa, Australia, and the Amazon Basin state that crises disrupt wildlife tourism and that varying response frameworks yield different outcomes (Newsome, 2021:295). The tourism industry's exposure to crises has generated substantial academic interest worldwide. Pennington-Gray (2018: 136) pioneered structured approaches to crisis and disaster management in tourism, advocating for destination-specific risk assessments and adaptive planning mechanisms.

Case studies from Australia and Southeast Asia illustrate how natural disasters, such as tsunamis and bushfires, have devastated ecotourism economies but have also revealed opportunities to build resilience through community-based tourism and diversified visitor markets. In the Amazon Basin, reports indicate that illegal logging networks can exploit wildlife tourism opportunities when governance is compromised (Newsome, 2021:295).

Global lockdowns from 2020 to 2021 due to the Coronavirus (COVID-19) pandemic led to a near-total collapse in international travel. Protected areas and eco-tourism operations suffered significant economic losses during this period and in the subsequent years. As such, the key impact that stood out from this was that up to 90% revenue was lost in some privately-run reserves, staff had to be laid off, anti-poaching patrols were reduced, illegal hunting increased, and community livelihoods were severely affected for those dependent on tourism (Spenceley et al., 2021; United Nations Environmental Programme UNEP, 2020; African Leadership University-Wildlife Tourism Crisis Report, 2020).

Lessons that can be applied to the MTPA are that the lockdown highlighted the fragility of tourism-reliant conservation, thus emphasising the need for economic diversification, such as carbon credits, local crafts, and virtual experiences (Spenceley et al., 2021). This experience has also encouraged the establishment of emergency response funds and scalable park budgets (Spenceley et al., 2021).

African Perspectives on Wildlife Tourism Crises

African wildlife tourism is particularly vulnerable to systemic crises, such as pandemics and viral outbreaks (Maphanga, 2019:2). Studies on the outbreak of contagious diseases harm a destination, as everyday life is disrupted and commerce is disturbed. Tourists may shun destinations that have infectious disease outbreaks (Sifolo & Sifolo, 2015:11).

For instance, the 2014-2016 Ebola outbreak severely impacted West African ecotourism by triggering global travel restrictions and stigma, despite limited geographic spread (Sifolo & Sifolo, 2015:11). Meanwhile, in East Africa, the Masai Mara and Serengeti experienced a decline in visitors during the COVID-19 pandemic, leading to increased poaching due to a lack of ranger presence and community unemployment (Waithaka et al., 2021). African case studies highlight the significance of community partnerships and diverse funding sources (BirdLife International, 2018; Rosenberg et al., 2019:120; Trisos & Pigot, 2020). Lessons from the Kruger National Park and Kenya's Maasai Mara emphasise proactive stakeholder engagement and ecological monitoring as best practices. However, much of the literature on wildlife tourism remains fragmented across environmental, sociological, and tourism disciplines (Newsome, 2021:295).

The lessons from the Southern African Development Community (SADC) region include examples from SANParks and Namibias community conservancies (entities that manage national parks). The Kruger National Park, for instance, responded to poaching and pandemic-related disruptions by digitising some operations, forming anti-poaching task forces, and leveraging private sector funding (SANParks, 2022). Likewise, these cases underscore the importance of flexible, multilevel governance in addressing protected area crises (Biggs et al., 2015:20). In Namibia, 86 community conservancies successfully managed wildlife and tourism activities on communal lands during the COVID-19 pandemic and drought crisis (World Bank, 2024). Their key strengths included the legal recognition of community land and wildlife rights.

Response to crises is facilitated through conservancies that draw on reserve funds, which are used to maintain ranger salaries, and there is strong external support from Non-Governmental Organisations NGOs (World Bank, 2024). Furthermore, the lessons from Namibia are that community-based governance and financial autonomy are essential for building resilience. There must be flexibility in co-management contracts to enable quicker local-level decision-making (World Bank, 2024). This is particularly relevant to Manyeleti and Songimvelo, in Mpumalanga, where there are community claims and partnerships (SANParks, 2022). The examples demonstrate how crisis resilience can be built through community empowerment, revenue-sharing models, and adaptive conservation funding.

South African Lessons from the Rhino Poaching Crisis Management in the Kruger National Park, South Africa

Since 2008, South Africa has faced a rhino poaching epidemic, with the Kruger National Park at the epicentre. Over 10,000 rhinos were poached between 2008 and 2021 (SANParks, 2024). There has been an increased militarisation of anti-poaching units and border controls within the park (SANParks, 2024; Endangered Wildlife Trust, 2021). The Kruger National Park's response strategy has utilised anti-poaching task forces comprising rangers, police, and the military, as well as employing technology such as drones, Global Positioning System (GPS) collars, and predictive analytics, alongside ensuring community partnerships in buffer zones (SANParks, 2024). Inter-agency collaboration in crisis response requires the development of community intelligence-gathering systems, alternative income options, and ensuring that surveillance technology is beneficial when complemented with community trust-building efforts (EWT, 2021; SANParks, 2024).

Background and Overview of the MTPA

The MTPA is a statutory entity established under the Mpumalanga Tourism and Parks Agency Act (Act No. 5 of 2005). It is mandated to manage, conserve, and promote the natural and cultural resources of the Mpumalanga province, while fostering sustainable tourism development. Operating under the Department of Economic Development and Tourism (DEDT), the MTPA serves as the primary steward of Mpumalangas Provincial Nature Reserves and tourism assets (Foxcroft et al., 2017:158; Mashabane et al., 2023:520). According to the MTGS (2025:3), the agency also facilitates the effective management and conservation of biodiversity and ecosystems within the Mpumalanga province, thereby promoting socio-economic growth and transformation in the tourism and conservation industries (MTGS, 2025:3; MTPA, 2023:167; Mashabane et al., 2023:520). Moreover, the MTPA is mandated to develop and ensure effective management of protected areas, thus fostering, promoting, developing, and marketing tourism sustainably (Foxcroft et al., 2017:158; Mashabane et al., 2023:520).

Protected Areas Under the MTPA Management

The MTPA manages approximately 219,015 hectares of formally protected areas comprising 26 nature reserves, which is equivalent to 3% of the Mpumalanga Province. Only 13 of the 26 nature reserves are physically managed by MTPA across three districts in Mpumalanga (MTPA, 2023:167; Cloete et al., 2018:21; Polaris Market Research and Consulting LLP, 2023). The 13 nature reserves are 100% claimed, and some have title deeds to landowners (MTPA Annual Report, 2023/2024). The MTPA manages reserves not only to protect biodiversity but also serves as a vital node for nature-based tourism, which is integral to the province's economic development (MTPA, 2023:167).

Table 1. The MTPA-managed reserves in Mpumalanga Province (Source: MTPA Annual Report, 2023/2024)

District Municipality	Reserve(s)
Ehlanzeni District Municipality	Andover Nature Reserve, Barberton Nature Reserve, Blyde River Canyon Nature Reserve, Mahushe Shongwe Nature Reserve, Manyeleti Nature Reserve, and Mthethomusha
Gert Sibande District Municipality	Nooitgedacht Dam Nature Reserve and Songimvelo Nature Reserve
Nkangala District Municipality	Loskop Dam Nature Reserve, Mabusa Nature Reserve, Mkhombo Nature Reserve, Ohrigstad Dam Nature Reserve, SS Skosana Nature Reserve, and Verloren Valei Nature Reserve

The MTPAs wildlife tourism portfolio includes game-viewing and photographic safaris in Big Five and scenic reserves, as well as eco-lodges and camping facilities, often co-managed or leased to private operators. It also features community-based tourism projects that link cultural heritage with wildlife experiences and adventure tourism activities, such as hiking, boating, and birdwatching (Cloete et al., 2018:21; MTPA, 2023:167).

METHODOLOGY

This study employs a desktop research methodology to explore and synthesise existing theories and documented practices adopted during crisis management within wildlife tourism. Drawing on secondary data and global case contextual

analysis of 20 publications, the desktop study approach is suitable for generating insights through the systematic review and analysis of secondary data sources to build a theoretical understanding. Using the research onion framework (Saunders et al., 2019), a qualitative interpretive research approach was employed to investigate how theories can be used in crisis management for wildlife tourism sites. The interpretive paradigm is deemed appropriate for the study, given the focus on understanding the application of theories to institutional dynamics and lived experiences.

The research onion, as described by Saunders et al. (2019), comprises six layers: Philosophy, Approach, Strategy, Choice, Time, and Technique. This study has adopted each layer as illustrated in the table below:

Table 2. Summary of the research onion application (Source: Author's own creation)

Layer	Research onion	Description	Application to the study
Layer 1	Research philosophy	The foundation of a study is the set of beliefs upon which the research is built (Saunders et al., 2019).	Interpretivism was applied, as the study employs an approach grounded in subjective ontological assumptions.
Layer 2	Research approach	This is the broader method a researcher uses for research, which can be either inductive or deductive (Saunders et al., 2019).	A deductive approach was used to test the existing theory.
Layer 3	Research strategy	This layer outlines how, in line with the study's aims, research can be conducted (Saunders et al., 2019).	A case study was used to develop a theory, which was systematically collected and analysed.
Layer 4	Methodology choice	It involves deciding how many data types (qualitative or quantitative) to collect, whether mono, mixed, or multi-method (Saunders et al., 2019).	The mono method has been utilised to analyse unstructured data and subjective conclusions.
Layer 5	Time zone	Defines the time frame for the research: Cross-sectional (short-term)- collecting data at a specific point in time. Longitudinal – the process of collecting data repeatedly over a long period of time to compare data (Saunders et al., 2019).	A cross-sectional time period was employed to collect data at a single point in time, enabling the study of the phenomenon.
Layer 6	Technique	Data collection style and analysis (Saunders et al., 2019).	Desktop secondary data and global case contextual analysis from 20 publications.

The research onion by Saunders et al. (2019) has guided this study, as explained in the layers outlined in Table 2. The following section will discuss the conceptual/theoretical framework that is important to the study.

Conceptual/ Theoretical Framework

This study identifies and examines key theories of crisis management relevant to wildlife tourism, including resilience theory, stakeholder theory, crisis communication theory, and community-based natural resource management theory.

Resilience Theory

According to Filimonau & De Coteau (2020: 202), the word resilience originated from the Latin word “resilere”, translated as “to spring back”, and therefore implies a certain degree of flexibility. Resilience is the capacity of a system to absorb disturbance, undergo change, and retain essentially the same function, structure, identity, and feedback (Copley, 2025:23). Resilience can be understood as the ability of the system to reduce the likelihood of a shock, to absorb a shock if it occurs (an abrupt reduction in performance), and to recover quickly after a shock (re-establishing normal performance) (Copley, 2025:23). Studies on tourism resilience theories are primarily centred on natural disasters, making them unsuitable for the epidemic crisis due to its suddenness, rapid transmission, and comprehensiveness (Ling et al., 2021:684).

Therefore, one can argue that the resilience theory is particularly relevant to the context of complex socio-ecological systems that are frequently disrupted by factors such as poaching, droughts, and pandemics. The application of resilience theory can help better understand the state and change of tourism destinations in the face of an epidemic (Ling et al., 2021:685). Challenges to applying resilience theory in a setting like the MTPA-managed reserves may arise if the reserve operates within a rigid, top-down, and exclusionary system that lacks adaptive governance, stakeholder feedback, institutional learning, fixed policies, and integrated socio-ecological thinking—essential components of resilience. It is vital to explore other theories applicable to wildlife tourism, such as crisis communication theory.

Crisis Communication Theory

Crisis communication theory is a multidisciplinary field that encompasses a range of practices by which organisations communicate before, during, and after crises to restore normal operations (Spradley, 2017:1; Ulmer et al., 2015). Effective crisis communication is recognised as essential for maintaining trust, mitigating reputational damage, and ensuring organisational continuity in the face of adverse events (Coombs, 2019:370).

Crisis communication theory uses attributions of the organisation's responsibility for a crisis to prescribe crisis response strategies that should maximise the protection of the organisation's reputation (Coombs, 2019:370). The crisis communication theory is well-suited to the context of wildlife tourism sites managed by the MTPA, as it promotes effective communication, which is essential in crises such as pandemics, poaching, and natural disasters, to maintain tourist confidence, coordinate staff, and disseminate information to local communities. The MTPA typically utilises radio, social media, and park signage to manage public messaging during crises, aligning with best practices from the

theory (MTPA, 2023:167). The crisis communication theory supports proactive planning, which helps reduce reputational damage and operational disruption during tourism-related crises (Coombs, 2019:371).

The application of the crisis communication theory would be hindered by the lack of transparency in communication structures if the MTPA lacks well-established or proactive communication channels to inform stakeholders during a crisis. Limited public engagement or media presence may hinder the operationalisation of the crisis communication theory, especially if the MTPA has limited public visibility and media relations capacity at the individual nature reserve level. Therefore, past failures to address community concerns or environmental issues can erode the credibility necessary for the theory to be practical, due to a lack of trust in the theory (MTPA, 2023:167).

Community-Based Natural Resource Management Theory

Child (2019:152) and Muzirambi et al. (2019:143) state that community-based natural resource management theory is a people-centered approach that integrates the conservation of the natural resource base. Muzirambi et al. (2019:143) state that community-based natural resource management theory for wildlife tourism crisis management emphasises the role of local communities in managing and protecting natural resources, especially during crises affecting wildlife tourism. This approach is rooted in the idea that communities living near wildlife areas have the most direct stake in the health of the environment and are therefore best positioned to manage these resources sustainably (Seoraj-Pillai & Pillay, 2016:34; Muzirambi et al., 2019:143). The community-based natural resource management theory could be applied in several MTPA-managed nature reserves. For example, the MTPA can allow communities to benefit from the resources while ensuring the protection and conservation of ecosystems. The Community-based natural resource theory applies to wildlife tourism sites, as many are located adjacent to or embedded within rural communities with strong cultural and economic ties to the land. The theory aligns with the MTPA's goals of involving local people in wildlife management and in deriving tourism benefits, thereby helping reduce conflict and improve conservation outcomes (MTPA, 2023:167). The application of community-based natural resource management theory would be challenged by a top-down governance model, in which policies and decisions are made by government officials rather than by communities, which contradicts the bottom-up participatory approach required by the theory.

Limited community involvement can challenge the application of the theory, which, by nature, seeks the full participation of communities in planning, decision-making, and benefit sharing (Seoraj-Pillai & Pillay, 2016:34).

Stakeholder Theory

According to Khan (2023:34), tourism stakeholders are individuals or organisations with a vested interest in the tourism sector. They may be directly involved, such as tourism businesses and government agencies, or indirectly involved, such as local communities and environmental organisations (Freeman, 2023:80). Pennington-Gray and Basurto-Cedeno (2023:325) point out that the stakeholder theory in tourism crisis management emphasises the importance of involving all relevant parties in the planning, response, and recovery processes of a crisis. Pennington-Gray and Basurto-Cedeno (2023:325) also argue that stakeholder theory underscores the need to recognise and address stakeholders' diverse interests, concerns, and roles in effective crisis management. Stakeholders relevant to the study include MTPA management and staff, local communities, tourists, conservation organisations, government agencies, the media, and tourism operators. The United Nations UN, (2023:78) states that communication and transparency are key in the application of stakeholder theory, whereby clear, consistent, and transparent communication is essential to keep all stakeholders informed and aligned regarding the crisis event. This helps prevent misinformation, manage expectations, and build trust among stakeholders during a crisis (Pennington-Gray & Basurto-Cedeno, 2023:325; Wondirad et al., 2020:7810).

The United Nations World Tourism Organisation (UNWTO, 2020:40) and the UN (2023:78) argue that integrating stakeholder theory into wildlife tourism crisis management makes the approach more comprehensive, inclusive, and likely to yield sustainable outcomes that protect both wildlife and the interests of all parties involved.

The stakeholder theory applies to the MTPA, as it operates in a multi-stakeholder environment involving government departments, private tourism operators, NGOs, researchers, traditional leaders, and residents. The stakeholder theory may be compromised by factors such as power imbalances, a lack of transparency, and the dominance of top-down decision-making (Pennington-Gray & Basurto-Cedeno, 2023:325). In a politically sensitive context, such as land claims or benefit-sharing disputes, the stakeholder theory may be further compromised.

Below is a summary of the theory's application to crises that have previously affected the MTPA, providing a practical approach to studying their impact on MTPA-managed wildlife tourism sites.

Table 3. Summary of theoretical application on crises that have previously affected the MTPA-managed wildlife tourism sites

Crisis	Period	Impact on the MTPA-managed reserves	Theory linked
COVID-19 pandemic	2020-2023	Travel bans led to drastic declines in visitors, resulting in revenue shortfalls and a risk to local livelihoods.	Crisis communication theory: Importance of clear messaging to stakeholders (Coombs, 2019:370). Community-based theory: Emphasises community livelihood diversification and resilience (Muzirambi et al., 2019:143).
Poaching and illegal wildlife trade	2008-present	Sharp increase in rhino deaths; heightened security and patrol costs; tourist concerns	Resilience theory: The necessity to build an anti-poaching system with resilience and adaptive capacity (Copley, 2025:23). Stakeholder theory: Need for inclusive collaboration with communities and law enforcement (UNWTO, 2020:40).

Human-wildlife conflict	Ongoing since 2010	Crop damage, livestock loss, and community resentment are impacting conservation support.	Community-based theory: Necessity of community involvement in mitigation and benefit-sharing (Muzirambi et al., 2019:143) Stakeholder theory: Managing conflicting interests through participatory governance (UNWTO, 2020:40).
Historical land and socio-political crises	Post 1994 and ongoing	Land claims complicate park boundaries and management, as well as community mistrust.	Stakeholder theory: Complex power dynamics and the need for inclusive conflict resolution (Freeman, 2023:80). Community-based theory: Recognising indigenous rights and traditional knowledge (Muzirambi et al., 2019:143).
Natural disasters and severe drought events	2015-2017	Water scarcity stressed wildlife and communities.	Resilience theory focuses on the adaptive capacity of ecosystems and social systems (Ling et al., 2021:685). Stakeholder theory: Coordinated responses are necessary among the government, communities, and NGOs (Pennington-Gray & Basurto-Cedeno, 2023:325).
MTPA employees and local communities protest	Ongoing	Disruption of reserves operation; economic and reputational damage, and conservation and wildlife management risks	Stakeholder theory: Getting all affected stakeholders involved (UNWTO, 2020:40).
Infrastructure degradation	2010-present	Reduced park accessibility and service quality, along with operational inefficiencies.	Resilience theory: Importance of maintaining system functions under stress. Collaboration: the need for multi-sectoral partnerships to mobilise resources (Ling et al., 2021:685).

Each theory offers distinct yet complementary contributions. For instance, the resilience theory provides a systems-level adaptive approach, the crisis communication theory enhances transparency and trust, the community-based natural resource management theory grounds resilience in local agency and knowledge, and the stakeholder theory ensures broad-based participation and strategic alignment (Freeman, 2023:80). Theory-practice gaps may persist due to the implementation of theory being weakened by top-down governance, funding limitations, and a lack of effective monitoring frameworks, as further discussed in the following sub-section.

Gaps Between Theory and Practice in the Context of MTPA

Despite the relevance and potential of crisis management theories, a significant gap remains between theoretical frameworks and actual practice within the MTPA. These gaps hinder effective crisis preparedness, response, and long-term sustainability. Below is an analysis of the most critical disconnects.

Table 4. Summary of a theory-practice gap (Source: Author's creation)

Theory	MTPA Practice	Identified Gap	Assumed best Practice
Resilience theory (Ling et al., 2021:684)	Reactive crisis handling; lack of adaptive planning	Planning bias: not all stakeholders are involved	Long-term planning for ecological/social shocks
Stakeholder theory (Pennington-Gray & Basurto-Cedeno, 2023:325)	Centralised decisions with limited community voice	Stakeholders are not consulted/ involved in the early stages	Inclusive, participatory governance in planning
Crisis communication theory (Coombs, 2019:370)	Delayed and inconsistent messaging to local communities	Poor communication protocols and information dissemination	Timely, audience-specific information sharing
Community-based natural resource management theory (Seoraj-Pillai & Pillay, 2016:34)	Communities are sidelined from real decision-making.	Lack of capacity-building and trust in local community capabilities	Empowered local roles in tourism/crisis response

To close the existing gaps, it is suggested that for an organisation such as the MTPA to do the following;

- Translate theory into action by developing operational guidelines grounded in key theories, supported by training and funding (Ling et al., 2021:684).
- Conduct institutional audits to assess current gaps in stakeholder engagement, communication capacity, and crisis readiness (UNWTO, 2020:40; Ballantyne et al., 2023:197).
- Pilot community-based tourism crisis initiatives in selected sites, focusing on co-creation and local leadership (Seoraj-Pillai & Pillay, 2016:34).
- Develop integrated communication platforms for crisis alerts, updates, and feedback collection, tailored to diverse linguistic and digital access levels (Coombs, 2019:370).
- Institutionalise learning from past crises through after-action reviews and the development of a crisis knowledge management system (Ballantyne et al., 2023:197).

CONCLUSION

This paper concludes that no single theory is sufficient to address the layered crises facing the MTPA wildlife tourism sites. A hybrid framework that draws on resilience, crisis communication, community-based natural resources, and stakeholder theories offers the most promise. Future research should include empirical case studies and interviews

with MTPA officials and community stakeholders to validate these conceptual insights. Strengthening crisis readiness will not only protect biodiversity but also support the long-term sustainability of tourism in Mpumalanga. To maximise collaborations, the MTPA should establish a provincial crisis collaboration platform that brings together NGOs, local government, local communities, traditional leaders, private operators, and emergency services.

The MTPA must further formalise community resilience programs as part of its conservation and tourism mandate, with dedicated budgets and local coordinators. It is recommended that the MTPA establish an inter-agency emergency protocol with clear roles, timelines, and mechanisms for resource sharing to support effective crisis management.

Train staff in collaborative leadership, community engagement, and crisis diplomacy, recognising the human element in crisis governance. Stakeholder interviews and participatory research should be conducted through in-depth interviews and focus groups with diverse stakeholders, including MTPA officials, local community leaders, tourism operators, conservation NGOs, and law enforcement personnel. Investigate community perspectives on benefit-sharing, trust in the MTPA, and willingness to engage in crisis preparedness and response.

The increasing frequency and complexity of crises impacting wildlife tourism in Mpumalanga underscore the urgent need for a transformative approach to crisis readiness and sustainability within the MTPA-managed sites.

This paper highlights that resilience is not merely the capacity to recover from shocks but also the ability to adapt and innovate proactively in the face of uncertainty. Furthermore, strategic investments in robust communication systems, early warning mechanisms, and diversified economic models can buffer against shocks while maintaining stakeholder trust and engagement. Enhancing crisis readiness in the MTPA context requires a holistic mindset, one that recognises the interdependence of ecological health, community wellbeing, and economic viability.

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REFERENCES

African Leadership University School of Wildlife Conservation. (2020). *The state of the wildlife economy in South Africa. Country case study for the state of the wildlife economy in Africa report.* Wildlife Economy Research Publications. https://research.alueducation.com/index.php?page=case-studies

Ballantyne, R., Slabbert, L., Packer, J., & Sneddon, J. (2023). Negotiating stakeholder solutions to complex visitor management problems: the case of traffic management in the Kruger National Park. *Sabinet African Journals*, 78(3), 197-206. https://doi.org/10.1080/0035919x.2023.2214105

Biggs, R., Schlüter, M., & Schoon, M. (2015). An introduction to the resilience approach and principles to sustain ecosystem services in social-ecological systems, In *Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems.* 1-31. Cambridge University Press. https://doi.org/10.1017/CBO9781316014240.002

BirdLife International. (2018). State of the worlds birds: Taking the pulse of the planet. *BirdLife International*, Cambridge.

Capocchi, A., Vallone, C., Pierotti, M., & Amaduzzi, A. (2019). Overtourism: A literature review to assess implications and future perspectives, *Tourism Sustainability*, 11(12), 3303. https://doi.org/10.3390/su11123303

Child, B. (2019). Sustainable governance of wildlife and community-based natural resource management, *Natural Resource Management*, pp. 152. https://doi.org/10.4324/9781315211152

Cloete, B., Venter, F., Munro, S., & Milburn, D. (2018). Performance and expenditure review. Provincial Nature Reserves. Final report, DNA Economics. Consolidated general report on National and Provincial audit outcomes. PFMA 2020-21, *Auditor-General South Africa*, pp. 21.

Coombs, W. T. (2019). The value of communication during a crisis: The situational crisis communication theory. Corporate communications. *An International Journal*, 24(3), 370-378. https://doi.org/10.1016/j.bushor.2014.10.003

Copley, L. (2025). Resilience theory: Core concepts & research insights. Positive psychology. http://positivepsychology.com/resilience-theory

Endangered Wildlife Trust EWT. (2021). Fighting for our Rhino. from https://ewt.org/sp-sept-2019-fighting-for-our-rhinos

Filimonau, V., & De Coteau, D. (2020). Tourism resilience in the context of integrated destination and disaster management (DM2). *International Journal of Tourism Research*. 22(2), 202-222. https://doi.org/10.1002/jtr.2329

Foxcroft, L. C., Van Wigen, N. J., Baard, J., & Cole, N. (2017). Biological invasions in South African National Parks, March 2017. *Bothalia – African Biodiversity and Conservation*. 47(2), 158. https://doi.org/10.4102/abc.v47i2.2158

Freeman, A. (2023). About the stakeholder theory: The task of executives is to create as much value as possible for stakeholders without resorting to tradeoffs. pp. 80. https://doi.org/10.2139/ssrn.263511

Jones, E., Atzori, R., González, A. F., & Shirsat, A. (2023). Starting anew: Ecotourism and resilience principles as a framework for building wildlife destination sustainability in a post-COVID-19 world. *Journal of Ecotourism*, 1–31. https://doi.org/10.1080/14724049.2023.2171048

Kelso, C., & Giddy, J. (2023). A post-pandemic perspective of domestic nature-based tourism in Mpumalanga, South Africa. *African Journal of Hospitality, Tourism and Leisure*. 12(5), 1910-1921. https://doi.org/10.46222/ajhtl.19770720.474.

Khan, Y. (2023). Tourism industry stakeholders: A guide to understanding and engaging with key players. *HRG Investment Group*, 34.

Kruger National Park Annual Report. (2023). *Park Management Plan* 2018-2028, 151-175. https://portal.environment.gov.za/Portal Downloads/PACA_Gazettes/PA/NP/Kruger_NP.pdf?utm_source=chatgpt.com.

Kupi, M. (2025). The impact of an artificial intelligence-based forecasting model on the development of sustainable tourism. *Geojournal of Tourism and Geosites*, 61(3), 1758–1766. https://doi.org/10.30892/gtg.61334-1544

Lekgau, R. J., & Tichaawa, T. M. (2022). Wildlife tourism, employment and livelihood strategies in Tsabong, Botswana. In J. K. Gona & L. Atieno (Eds.), *Sustainable tourism dialogues in Africa*, 99–113, Berlin: Walter de Gruyter.

Ling, F., Jiaxin, G., & Yi, L. (2021). Research methodology for tourism destination resilience and analysis of its spatiotemporal dynamics in the post-epidemic period. *Journal of Resources and Ecology*. 12(5), 682-692. https://doi.org/10.5814/j.issn.1674-764x.2021.05.011

Maphanga, P. M. (2019). The tourism impact of Ebola in Africa, Lessons on crisis management. *African Journal of Hospitality Tourism and Leisure*. 8(3), 1.

Mashabane, M., Matam, N., & Nsokani, M. (2023). Biological invasions in nature reserves in Mpumalanga, South Africa. *Conference: National Symposium on Biological Invasions*, Houw Hoek Hotel, Elgin. Western Cape. pp. 520. https://doi.org/10.13140/RG.2.2.17213.23520

Mpumalanga Tourism Growth Strategy MTGS. (2025). *Final report*. 16 November 2025. pp. 3.

Mpumalanga Tourism and Parks Agency MTPA. (2023). *Mpumalanga Government of South Africa*. version 2.10.24. pp. 167.

Mpumalanga Tourism and Parks Agency Annual Report. (2024). Mpumalanga Tourism and Parks Agency.

Muzirambi, J., Musavengane, R., & Mearns, K. (2019). Revisiting devolution in community-based natural resources management in Zimbabwe. Routledge, In: book: natural resources, tourism and community livelihoods in Southern Africa, 143-158.

Newsome, D. (2021). The collapse of tourism and its impact on wildlife tourism destinations. *Journal of Tourism Futures*. 7(3), 295-302. https://doi.org/10.1108/JTF-04-2020-0053

Paapa, C., & Kambona1, O. (2025). A critical analysis of tourism as a vector and victim of climate change: A review paper. International *Journal of Science and Research Archive*. 16(03), 352–362 https://doi.org/10.30574/ijsra.2025.16.3.2547.

Pennington-Gray, L. (2018). Reflections to move forward: Where destination crisis management research needs to go, *Tourism Management Perspectives*. 25(8), 136-139. https://doi.org/10.1016/j.tmp.2017.11.013

Pennington-Gray, L., & Basurto-Cedeno, E. (2023). Integrated stakeholder-centered tourism crises. Sector for disaster/crises management and resilience in tourism. *Frontiers in Sustainable Tourism*. 2(23), 325. https://doi.org/10.3389/frsut.2023.1209325

Polaris Market Research & Consulting LLP. (2023). Wildlife tourism market share, size, trends, *Industry Analysis Report, by group* (groups/friends, couples, family, and solo). By booking mode; By wildlife tour type; By region; Segment forecast, 2023–2032. New York, NY.

Rosenberg, K. V., Dokter, A. M., Blancher, P. J., Sauer, J. R., Smith, A. C., Smith, P. A., & Marra, P. P. (2019). Decline of the North American avifauna. *Science*. 366(6461), 120-124. https://doi.org/10.1126/science.aaw1313

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students*. 6th ed., Pearson. London

South African National Parks SANParks. (2022). *259 Rhinos poached in South Africa in the first six months of 2022.* Media Release.

South African National Parks SANParks. (2024). *SANParks annual performance plan 2024/2025*. https://www.sanparks.org/wp-content/uploads/2024/06/SANParks-Annual-Performance-Plan-2024-2025.pdf?utm_source=chatgpt.com.

Schulze, K., Knights, K., Coad, L., Geldmann, J., Leverington, F., Eassom, A., Marr, M., Butchart, S. H., Hockings, M., & Burgess, N. D. (2018). *An assessment of threats to terrestrial protected areas*. Conservation Letters, 11(3), 435. https://doi.org/10.1111/conl.12435

Seoraj-Pillai, N., & Pillay, N. (2016). A meta-analysis of human–wildlife conflict: South African and global perspectives. *Natural Sustainability Tourism*. 9(1), 34. https://doi.org/10.3390/su9010034

Sifolo, N., & Sifolo, P. P. S. (2015). The Tourism Inconvenience of the Ebola Epidemic: Lessons for the South African Tourism Sector. *African Journal of Hospitality, Tourism and Leisure.* 4(1), 1-11.

Snyman, S., Shumba, D., Vorties, F., Gitari, E., Ender, C., Ahenkan, A., Pambo, A. F. K., & Natacha, O. A. (2021). State of the wildlife economy in Africa. *School of Wildlife Conservation*. Alu. pp. 482.

Spenceley, A., Mc Cool, S., Newsome, D., Báez, A., Barborak, J., Blye, C. J., Bricker, K., Cahyadi, H., Corrigan, K., Halpenny, E., Hvenegaard, G., King, D., Leung, Y., Mandic, A., Naidoo, R., Rueede, D., Sano, J., Sarhan, M., Santamaria, V., & do Val Simardi Beraldo Souza, T. (2021). Tourism in protected and conserved areas amid the COVID-19 pandemic. Parks.

Spradley, R. T. (2017). *Crisis communication in organisations*. Stephen F. Austin State University. USA, 1(2), 1-13. https://doi.org/10.1002/9781118955567.wbieoc050

Tichaawa, T. M., & Lekgau, R. J. (2024). The state of tourism development in transfrontier conservation areas in Southern Africa. *GeoJournal of Tourism and Geosites*, 56(4), 1781–1790. https://doi.org/10.30892/gtg.56433-1347

Tourism-Review. (2020). *Mass tourism affects major travel destinations in Europe*. www.tourism-review.com/mass-tourism-hit-santorini-venice-and-ibiza-news5139

Trisos & Pigot. (2020). Available at:https://theconversation.com/climate-change-could-cause-abrupt-biodiversity-losses-this-century

Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2015). *Effective crisis communication: Moving from crisis to opportunity*. Thousand Oaks. CA: Sage.

United Nations UN. (2023). Climate action. https://www.un.org/en/climatechange/what-is-climate-change

United Nations Environmental Programme. (2020). UNEP and COVID, briefing note, published in September 2020 to coincide with the 75th session of the United Nations General Assembly.

United Nations World Tourism Organisation UNWTO. (2020). *World tourism barometer. International tourism is expected to decline by over 70% in 2020, back to levels of 30 years ago*. 8 (7), 20. https://www.untourism.int/news/tourism-back-to-1990-levels-as-arrivals-fall-by-more-than-70?utm_source=chatgpt.com.

Van der Merwe, P., & Saayman, A. (2025). Assessing the contributions of hunting tourism to the South African economy: a post-COVID analysis. Wildlife Research 52. WR24192. https://doi.org/10.1071/WR24192

Waithaka, J., Dudley, N., Álvarez, M., Arguedas Mora, S., Chapman, S., Figgis, P., Fitzsimons, J., Gallon, S., Gray, T. N., Kim, M., & Pasha, M. K. S. (2021). Impacts of COVID-19 on protected and conserved areas: A global overview and regional perspectives. *The International Journal of Protected Areas and Conservation*. https://doi.org/10.2305/IUCN.CH.2021.PARKS-27-SIJW.en

Wondirad, A., Tolkach, D., & King, B. (2020). Stakeholder collaboration as a significant factor for sustainable ecotourism development in developing countries. *Tourism Management*. pp. 7810.

World Bank. (2024). *World Bank experience in community conservancy as a social development movement in Namibia*. Land for Life. https://documents1.worldbank.org/curated/en/932261467996758036/pdf/105665-WP-PUBLIC-Land4Life.pdf?utm_source=chatgpt.com

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