


Research article

Tourism and the environment in rural South Africa: Conflict, coexistence, or symbiosis?

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ABSTRACT

The study aimed to explore the complex relationship between tourism and the environment by examining whether their interaction in rural South Africa results in conflict, coexistence, or symbiosis. Specifically, it investigated how tourism stakeholders perceive the environmental impacts of tourism activities in Nqileni Village, Eastern Cape province. Guided by an interpretive research paradigm, the study employed a qualitative case study approach and purposively selected 18 participants involved in tourism. Data were gathered via semi-structured interviews and validated through triangulation and member checking. The findings revealed differing stakeholder views: while many saw tourism as beneficial and not harmful to the natural environment, others observed environmental degradation linked to tourism activities, such as off-road biking. The study concludes that tourism and the environment in rural areas can coexist both cooperatively and contentiously. The results highlight the importance of environmentally responsible tourism practices, community involvement, and sustainable management strategies. This research offers a unique contribution by contextualising the tourism–environment relationship in a rural South African setting and providing insights into local perceptions that inform sustainable tourism policies and practices.

KEYWORDS

Sustainable tourism;
environmental impacts;
stakeholder perceptions; rural
development; tourism–
environment relationship

Introduction

Tourism is inextricably linked to the environment, as it is a resource-dependent and environmentally sensitive industry. On the one hand, a healthy ecological environment is the guarantee and source of development of the tourism economy, promoting further improvement of the ecological environment. The relentless pursuit of economic gains can lead to environmental degradation, undermining the sustainability of tourism's economic development (Gumbo, 2022). Researchers have been examining the relationship between the environment and tourism since the 1920s (Liu & Suk, 2021). Initially, scholars focused on the ecological impacts of tourism activities, primarily through general observations and qualitative descriptions (Jia, 2018). As tourism development began to negatively impact the environment, researchers shifted their focus to these effects (Shi et al., 2023). Many studies have focused on the adverse effects of tourism on water (Liu et al., 2021) and air quality (Xu et al., 2020). In the 21st century, research on the relationship between tourism and the ecological environment has become more specific and diverse, particularly concerning tourism capacity and carrying capacity (Liu et al., 2019), tourism ecological safety (Chen et al., 2020), and the development of tourism resources alongside ecological protection (Yang et al., 2020). Since the 1990s, tourism has played an increasingly vital role in global and regional sustainable development. It has been promoted as a low-impact, non-extractive economic development option, especially for developing countries (Shi et al., 2023). Many developing nations have enhanced their participation in the global economy through international tourism. Tourism development is crucial for economic growth, poverty alleviation, and improving food security (Tichaawa & Mhlanga, 2015). It enables communities rich in history and cultural

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heritage but poor in material wealth to leverage their unique assets for economic development (Liu et al., 2019).

The quality of the environment in tourist destinations is closely linked to tourism, as visits to natural areas and sightseeing are often primary leisure travel purposes. Forms of tourism, such as ecotourism, can aid in biodiversity conservation and the protection of ecosystem function in destination areas (Fennell, 2020). Confente & Scarpi (2021) argue that the mutual dependence between tourism and the environment should yield mutual benefits. Many developing countries are in regions with abundant natural resources and protected areas, suggesting that tourism can align nicely with sustainable development principles. The nexus between tourism and the environment is inherently complex, as certain forms of tourism have been associated with significant ecological consequences (Musora et al., 2017), including greenhouse gas emissions, freshwater depletion, land transformation, and increased food consumption (Gössling & Peeters, 2015). Scholarly evaluations of tourism sustainability have underscored critical dimensions, including protected areas, biodiversity conservation, pollution and climate change mitigation, economic development, and poverty alleviation, as well as peace, security, and demographic stabilisation (Buckley, 2012). Despite extensive research on the environmental impacts of tourism, the interplay between tourism and environmental dynamics within rural contexts remains underexplored. Addressing this gap, the present study seeks to elucidate the multifaceted relationship between tourism and the environment in rural settings, drawing on the perceptions of tourism stakeholders in Nqileni village, Eastern Cape Province, South Africa.

Theoretical framework for tourism growth and environmental performance

This study is underpinned by Simo-Kengne's (2022) theoretical framework for tourism growth and environmental performance, as shown in Figure 1 below. The theoretical framework presented highlights the complex relationship between tourism growth and environmental outcomes, illustrating both its negative and positive implications, which converge to produce a net environmental effect. This dual perspective reflects an ongoing debate in the tourism and environmental studies literature, in which tourism is alternately framed as a threat to environmental sustainability or as a potential instrument for conservation and ecological stewardship. Understanding this dynamic is critical, particularly given the rapid global expansion of the tourism sector and its positioning as a key driver of socio-economic development. On the negative side, tourism growth is frequently associated with environmental degradation, particularly through pollution and resource depletion. Tourism-related activities, ranging from increased transportation emissions to the overuse of water and energy in tourist facilities, exert considerable pressure on ecological systems (Gössling, 2002; Kolawole et al., 2016). For example, coastal and marine destinations frequently face challenges related to waste disposal, coral reef degradation, and habitat destruction due to excessive tourist influxes (Hall, 2008). Similarly, mountain tourism has been linked to deforestation, soil erosion, and biodiversity loss (Nepal & Chipeniuk, 2005). These effects are often exacerbated in regions where regulatory frameworks are weak or where economic imperatives of tourism development outweigh environmental considerations. Thus, the framework correctly positions pollution and resource depletion as central to the negative environmental consequences of tourism expansion.

Despite these concerns, tourism growth is also acknowledged as a potential catalyst for positive environmental outcomes. The framework emphasizes conservation and protection as key benefits, underscoring the argument that tourism can incentivize the preservation of natural resources. Ecotourism has been widely recognised as a means by which tourism contributes to biodiversity conservation and environmental education (Weaver, 2014). Revenue generated from tourism activities can be reinvested in conservation initiatives, such as maintaining protected areas, wildlife reserves, and heritage sites (Buckley, 2012). Moreover, tourism often encourages governments and local communities to assign economic value to ecosystems, thereby strengthening their commitment to environmental protection. For instance, studies from Sub-Saharan Africa demonstrate how wildlife-based tourism has provided essential funding for anti-poaching initiatives and habitat restoration (Spenceley, 2014). The balance between these negative and positive effects determines the net environmental impact of tourism. If poorly managed, the environmental costs of tourism, including ecosystem disruption and greenhouse gas emissions, may outweigh its conservation benefits, thereby undermining long-term sustainability (Holden, 2016). Conversely, when tourism is carefully regulated, it can provide a model for sustainable development, integrating environmental preservation with socio-economic growth. This balance depends heavily on governance structures, stakeholder engagement, and the implementation of sustainable tourism practices such as environmental impact assessments, eco-certification schemes, and community-based resource management (Bramwell & Lane, 2011). The theoretical framework also implicitly raises questions regarding scale and context. The environmental effects of tourism are not uniform but vary significantly across destinations depending on ecological sensitivity, carrying capacity, and cultural attitudes toward sustainability. For example, while

small-scale community-based tourism in rural areas may generate strong conservation outcomes, mass tourism in urban or coastal resorts is more likely to create acute environmental pressures (Torres & Momsen, 2004). Furthermore, seasonal variations in tourist flows can lead to uneven resource use, resulting in peak-period stress on local infrastructure and ecosystems. Thus, the net effect cannot be universally defined but must be assessed relative to specific contexts and management strategies.

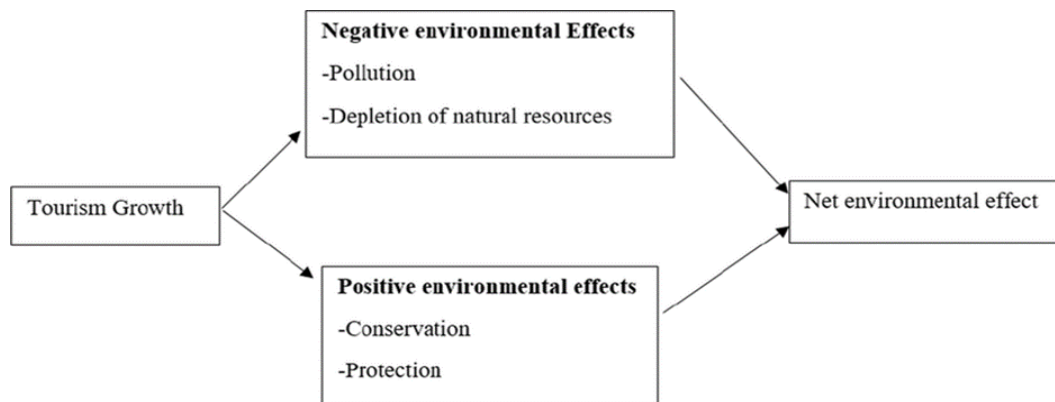


Figure 1: Theoretical framework for tourism growth and environmental performance
Source: Simo-Kengne (2022)

Literature review

The concept of sustainable development first emerged as a critical consideration in tourism research, particularly in relation to environmental constraints and the finite nature of natural resources (Du Pisani, 2006). It is commonly defined as development that fulfills the needs of the present generation without compromising the capacity of future generations to meet their own needs (Burton, 1987). Hall (2008) operationalised this concept through five foundational principles: adopting an integrated approach that encompasses environmental, social, and economic dimensions; safeguarding essential ecological systems; ensuring development that sustains long-term productivity; promoting balanced protection of biodiversity and cultural heritage; and striving for equity and fairness among nations. Initially, the discourse on sustainable development was dominated by environmental concerns; however, contemporary perspectives acknowledge the equal significance of social and economic dimensions in achieving comprehensive sustainability (Echebarria et al., 2018). The potential of tourism development as a tool to support environmental conservation, economic growth, and poverty reduction comes from several unique features of the tourism system (Butowski, 2021). First, tourism offers a chance for economic diversification, especially in marginal areas with limited other export options. Tourists are drawn to remote locations rich in cultural, wildlife, and scenic assets. Developing countries often rely on such assets as part of their cultural and natural heritage, and tourism can generate income while preserving these values. Tourism is the only export sector in which travellers travel directly to the exporting country, creating opportunities for lower-income households to become exporters by selling goods and services to foreign visitors. It is also labour-intensive, providing small-scale employment opportunities that promote gender equality. Additionally, tourism offers numerous indirect benefits for impoverished communities, such as increased market access in remote areas through the development of roads, infrastructure, and communication networks. However, travel is highly income-elastic and carbon-intensive, raising important concerns about the sustainability of the tourism sector (Lenzen et al., 2018).

Concerns about environmental issues have emerged in tourism research as global awareness of the environmental impacts of human activities has increased. The United Nations Conference on the Human Environment was held in Stockholm in 1972, the same year as the publication of *The Limits to Growth* (Meadows et al., 1972). This event highlighted worries about the consequences of exponential economic and population growth in a world with limited resources. Buckley (2012) observed that tourism researchers began to focus on social and environmental concerns (Aslan et al., 2021). Sustainable development is often linked to the publication of *Our Common Future*, the report by the World Commission on Environment and Development, also known as the Brundtland Commission (World Commission on Environment and Development, 1987). The report defines sustainable development as satisfying "the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Four core principles form the foundation of sustainability: first, holistic planning and strategic formulation; second, preserving essential ecological processes; third, protecting both human heritage and biodiversity; and finally, developing in a way that ensures long-term productivity for future generations (Aslan et al., 2021). Besides balancing economic growth and conservation of natural resources, fairness and opportunity should be equitable

among the world's nations. The idea of sustainable tourism development arose as an alternative to mass tourism, which involves large groups participating in organized or packaged tours. Mass tourism has grown significantly over the past fifty-five years. Since 1950, international tourist arrivals have experienced sustained growth, expanding at an average annual rate of approximately 6–7%, a trend closely associated with the rise and consolidation of mass tourism as a dominant global phenomenon (Fennell, 2020). Mass tourism has been associated with numerous negative environmental and social impacts (Fennell, 2020). Sustainable tourism development has been promoted as a guiding principle in various ways, considering its complex economic, environmental, and social implications.

Early research on sustainable tourism initially focused on local environmental impacts, such as energy use, water consumption, food consumption, and land-use changes (Adebayo & Kirikkaleli, 2021). Later studies emphasised the global environmental effects of tourism, including greenhouse gas emissions and biodiversity loss (Hoang et al., 2020). Further research has highlighted how environmental changes, particularly climate change, influence tourism, including tourist behaviour (Adebayo & Kirikkaleli, 2021). Countries that rely on tourism for economic growth may be particularly vulnerable to the impacts of climate change. The scope of environmental concerns in sustainable tourism has expanded to encompass economic, social, and cultural aspects, as well as questions of power and fairness in society (Sun et al., 2021). Some frameworks incorporate concepts like social equity, prosperity, and cultural heritage. Sustainable tourism depends on long-term factors, including impacts, fairness, and understanding the significance of connections, as well as economic, social, and environmental considerations. It also requires promoting cooperation and collaboration among stakeholders (Andlib & Salcedo-Castro, 2021). Baloch et al. (2023) highlight that tourism resources are often part of the public domain or closely intertwined with local communities' social fabric. As a result, common tourist activities, such as sightseeing, may be perceived by residents as disruptive. The social impacts of tourism commonly stem from resource overuse, traffic congestion, rising land prices, urban sprawl, and changes in community social structures. Since interactions between tourists and residents are vital, sustainable tourism development largely depends on community support (Andlib & Salcedo-Castro, 2021).

The interrelationship between tourism and the environment has often been overlooked and insufficiently examined in depth. Nevertheless, environmental attitudes, particularly within the context of tourism and broader human development, have undergone considerable evolution over time. Human perceptions of the environment, patterns of utilization and exploitation, and efforts to protect it continue to shift across spatial and temporal scales (Baloch et al., 2023; Treephan et al., 2019). A prevailing misconception within tourism discourse is that the sector inherently depends on a pristine or healthy environment (Aslan et al., 2021). This assumption has fuelled arguments advocating for tourism's alignment with sustainability-oriented paradigms such as sustainable development and ecotourism, which emphasize environmental preservation (Baloch et al., 2023). While these concepts, particularly sustainable development, are widely endorsed as geographically rational and essential for tourism forms reliant on environmental quality (Adebayo & Kirikkaleli, 2021; Sun et al., 2021), the notion that all tourism depends on environmental integrity is only partially accurate. Certain tourism segments exhibit minimal interaction with the physical or natural environment. For instance, visiting friends and relatives, a category often contested in tourism typologies (Hoang et al., 2020), has a negligible environmental linkage, whereas heritage tourism primarily engages with cultural and urban landscapes rather than non-human environments. Similarly, sun, sand, sea, and sex tourism demonstrate limited environmental dependency beyond favourable climatic conditions and clean seawater. Indeed, numerous mass tourism destinations thrive despite weak associations with pristine ecosystems, as factors such as affordability, infrastructure, social homogeneity, and strategic marketing often outweigh environmental considerations. Nonetheless, environmental quality remains a fundamental determinant of destination appeal, as tourists generally avoid polluted or aesthetically degraded locales (Adebayo & Kirikkaleli, 2021; Sun et al., 2021). The growing prominence of tourism, coupled with evolving consumer expectations and the multifaceted challenges posed by climate change, necessitates renewed inquiry into best practices for fostering economic growth while mitigating carbon emissions. Tourism's sustainability and competitiveness increasingly hinge on its adaptive capacity to climate variability (Yang et al., 2020). As a climate-sensitive sector, comparable to transportation, agriculture, and energy (Klock & Nunn, 2019), tourism has been widely theorized to exacerbate energy consumption and environmental degradation (Andlib & Salcedo-Castro, 2021), yet empirical investigations into its direct contribution to ecological decline remain limited (Marengo et al., 2021).

Methodology

A qualitative, investigative approach, coupled with an in-depth exploratory examination, was employed for the study. This line of inquiry was undertaken to investigate the perceptions of tourism stakeholders regarding the environmental impacts of tourism activities in Nqileni Village, Eastern Cape province. The investigation employed a non-probability, purposive sampling technique to collect empirical data through

semi-structured interviews. Their fit-for-purpose rationalisation justified the population sampling for participation in the study, relating to activities and developments associated with tourism within the village. This was simplified by the village's economic makeup (a shareholding by all native community members in the Bulungula Lodge). All these participants were included to ensure balanced participation and to ensure that all voices within the community were heard. A total of 24 participants were identified for inclusion, and the data collection continued until no new information was forthcoming from participants, thereby reaching saturation with participant 18 (see Figure 1 below).

Table 1: Profile of the Participants

Identifier	Role of the participant
P1	Independent Municipal Ward Councillor
P2	Manager of Bulungula Lodge
P3	Village Chief Representative
P4	Marketing Manager (Bulungula lodge)
P5	Bulungula Incubator Manager
P6	Bulungula Social Services Manager
P7	Administrator/Receptionist at Bulungula Lodge
P8	Fishing Entrepreneur
P9	Canoeing Entrepreneur
P10	Hiking Entrepreneur
P11	Village Tour Entrepreneur
P12	Herbalist Tour Entrepreneur
P13	Surfing Entrepreneur
P14	Full Body Massage Entrepreneur
P15	Sunrise Pancakes Entrepreneur
P16	Learn to Drum Entrepreneur
P17	Secret Beach Tour Entrepreneur
P18	Incubator Tour Entrepreneur

Source: Author's own construction

Interviews were conducted in the local community's language (isiXhosa) to collect empirical data. Participants in the study signed a consent form and were informed of their right to withdraw at any given point. Interviews lasted 15-20 minutes, and the recordings were transcribed and translated into English. Prior to analysing the data, the transcripts and voice recordings (for those who cannot read) were made available to the participants for member checking, thereby allowing them to confirm or dispute the presentation of their views in the study. The study employed a thematic-interpretive analysis approach, following the method outlined by Braun & Clarke (2006). At the outset of the study, all interview questions were vetted by a qualitative statistician to ensure alignment with the research question. This ensured relevance, validity, and minimisation of irrelevant data that could contaminate the study. Semi-structured interviews were conducted, and the collected data were transcribed using Microsoft Word. After reading and validating the interview data, coding and analysis commenced using NVivo 14, a qualitative software program. Codes were created, and participants' dialogue was then assigned to respective codes. The code-recode method was used, in which all interview content was coded using relevant code names. Unnecessary codes were eliminated, and key codes retained. Thereafter, analysis techniques such as Word Clouds, Cluster analysis, Tree Maps, and Word trees were used to identify commonalities and latent patterns, enabling deeper interpretation of the data and leading to the formulation of relevant themes and subthemes. The primary themes aligned with the interview and research questions. These findings were further validated by a second round of analysis using the aforementioned techniques. After the themes were defined, a hierarchy chart was created to determine the size and relevance of each theme. This produced a comprehensive observation report that provided a clear picture of the participants' views, thereby informing the findings discussed in the results section. Ethical approval was obtained from the Research Ethics Committee (REC) for Social, Behavioural and Educational Research (SBER) at Stellenbosch University. The research ethics application was reviewed by the Faculty Ethics Screening Committee (DESC/FESC) of the School of Public Leadership (Environmental Management) in July 2024. It was subsequently classified as a low-risk project. This committee approved the application, and an approval certificate was issued, along with an ethical clearance certificate, which included project ID 27322. The ethics certificate granted permission for data collection, and all participants in the study completed an informed consent form, ensuring that they were fully aware of their decision to participate. Participants' anonymity and confidentiality were carefully maintained, and they had the right to withdraw from the study at any point. The researchers also assured that anonymity would be upheld when disseminating and publishing the research findings.

Results and discussion

The environment is a vital strategic asset for tourism, and its importance cannot be overstated. Since the early 2000s, scholarly discussions have increasingly examined shifts in human attitudes toward the environment, particularly in the context of tourism and broader development trajectories. These debates reveal different perspectives on how the environment is perceived, used, and exploited, as well as efforts to

protect it. Despite these differences, there is a strong consensus among stakeholders on the importance of conserving natural ecosystems for sustaining tourism activities. The following analysis explores this relationship in detail, using thematically organised insights and direct stakeholder stories.

Theme 1: The Natural environment as a pillar of tourism sustainability

This theme reflects the strong consensus among participants that the natural environment underpins tourism in Nqileni Village. Stakeholders emphasized that clean, attractive, and well-preserved natural surroundings are essential for attracting visitors and sustaining tourism-related livelihoods. The environment was perceived not only as a source of pride and cultural identity but also as a critical economic asset that supports employment and community well-being.

"The natural environment is what we are proud of, and it includes a few plants and species, several birds, and several hills and mountains, and it must be protected. It is what we boast because it makes us different from the other parts of the world." (participant 10).

"Our environment includes a few plants and species, several birds, and several hills and mountains. Several things must be protected. After all, it is what we boast because it makes us different from the other parts of the world" (Participant 1).

"It is important to protect the natural environment, especially in Nqileni village, because it is the natural environment that attracts many tourists, and these tourists bring money along with them" (Participant 18).

"The natural environment is critical because it attracts tourists, making them visit Nqileni because we take care of the natural environment; when the tourists arrive, they bring in money that assists the people of Nqileni so that they can be employed" (Participant 6).

The findings under theme 1 reveal a unanimous perception among participants that the natural environment is the cornerstone of tourism sustainability in Nqileni Village. Participants consistently highlighted that the pristine landscape, biodiversity, and ecological integrity not only attract tourists but also sustain community livelihoods and reinforce local cultural identity. This sentiment is strongly echoed in the broader literature, which positions the natural environment as a key determinant of tourism attractiveness and competitiveness (Honey, 2008; Buckley, 2012; Ritchie & Crouch, 2003). The participants' emphasis on natural beauty, comprising beaches, forests, grasslands, and mountainous terrain, resonates with the findings of Eagles et al. (2002), who assert that engagement with nature-based settings enhances visitor satisfaction. Similarly, Baloch et al. (2023) and Holland et al. (2022) affirm that environmental quality and conservation are central to tourists' destination choices, while Hassan et al. (2023) underscore the community's role in maintaining ecological health as part of responsible tourism practice. Participants' identification of the environment as both an economic and cultural asset further aligns with Marengo et al. (2021), who posit that community-based tourism thrives when residents attach emotional and heritage-based value to their natural surroundings. The participants' statements, such as describing the environment as their "pride" and "what makes us different from the other parts of the world", reflect this deep sense of stewardship and local attachment. This interconnectedness between ecological preservation and community identity mirrors Asmelash and Kumar's (2019) argument that sustainable tourism necessitates a balance between environmental conservation and socio-economic benefits. Moreover, the belief that tourism can coexist harmoniously with nature supports the idea that environmental protection directly enhances the long-term viability of tourism and community well-being (Weaver, 2014).

However, while the participants' optimism reflects a strong stewardship ethic, several scholars caution against assuming that tourism inherently promotes environmental sustainability. Gössling (2002) and Holden (2016) highlight that tourism growth can inadvertently lead to environmental degradation when ecological management capacities are weak. Although participants in Nqileni largely perceived tourism as non-destructive, a minority expressed concern about potential harm from unregulated activities, echoing these authors' warnings. This contrast underscores the significance of institutional support, environmental monitoring, and community capacity-building in preserving natural assets over time (Holland et al., 2022; Mantymaa et al., 2021). Overall, the participants' narratives and supporting literature converge on the notion that the natural environment in Nqileni serves as both a tourism product and a foundation for livelihoods. However, the contrasting evidence in the literature reminds us that without systematic conservation measures and local empowerment, the very resource that sustains tourism could become vulnerable to degradation. Thus, while the findings affirm the perceived harmony between tourism and nature, they also emphasize the need for strategic interventions to ensure that environmental preservation remains integral to tourism development in Nqileni Village.

Theme 2: Divergent perceptions of tourism's environmental impact

This theme highlights contrasting stakeholder views on whether tourism activities harm the environment or coexist harmoniously with it. While some participants viewed tourism as environmentally benign or even beneficial, citing tourists' respectful behaviour and knowledge-sharing, others identified negative impacts such as soil erosion, vegetation loss, and littering caused by certain tourist practices: *"I do not agree because the tourists assist us by giving us knowledge of using the natural environment"* (Participant 4).

"Yes, it is important, and fortunately, they do not damage the environment. I will not lie; I have never seen such damage done by tourists; they are law-abiding because taking their cars to the lodge itself is not allowed; we can give them a few minutes to take out their luggage because it is 500m to go to the lodge" (Participant 9).

Gössling (2002) and Holden (2016) highlighted that tourism growth can inadvertently lead to environmental degradation when ecological management capacities are weak. Some of the participants supported this view and noted that they believed that tourism activities damage the environment, and this is supported by their narrations below: *"Yes, you can go to big bikes, motorbikes, and scooters if I may say so, if it is the right word. They are climbing up on the hills, cracking the soil and damaging the grass, doing several things, so it does not make our mountains look beautiful"* (Participant 14).

"Tourist activities are good on the other side for the people who are doing it, but for our environment, they leave a bad mark because the green is the beauty of the hill, so if the bike makes lines on the hill, it dents the greenness that makes the hill beautiful" (Participant 8).

"Tourism sometimes damages the environment; sometimes, we ask our visitors not to drive in the lodge with their vehicles because we protect the environment. Sometimes tourists force and drive in with their vehicles, stating that they cannot leave them far and do not understand that it is killing the grass". (Participant 2).

The findings under theme 2 reveal a clear divergence among participants in Nqileni Village regarding the impact of tourism on the environment. While most respondents perceived tourism as environmentally harmless or even beneficial, as shown under theme 1, others expressed concern about its potential to damage natural resources. Participants who viewed tourism positively emphasised visitors' respectful behaviour, adherence to local environmental norms, and contribution to knowledge exchange, aligning with Adebayo & Kirikkaleli (2021) argument that tourism can operate in a symbiotic relationship with the environment when mutual respect and conservation awareness guide interaction. This perception also aligns with the findings of Torres and Momsen (2004), who observed that small-scale, community-based tourism initiatives in rural contexts, such as Nqileni village, are more likely to foster conservation outcomes compared to mass tourism operations in urbanized destinations. Similarly, Shi et al. (2023) note that community attitudes toward tourism often evolve with experience, economic dependence, and exposure to environmental education, suggesting that local perceptions of tourism's ecological effects are dynamic and context specific.

Conversely, a subset of participants expressed concerns about tourism-related environmental degradation, particularly through activities such as off-road biking, vehicular intrusion into sensitive areas, and littering, which were observed to disrupt vegetation and soil stability. These concerns align with the views of Fletcher et al. (2017) and Chen et al. (2020), who argue that even well-intentioned or carefully planned tourism can lead to environmental degradation when local management capacity and enforcement mechanisms are inadequate. Similarly, Chen et al. (2020) caution that, although rural tourism is often small-scale, it can cumulatively strain fragile ecosystems in the absence of regulatory oversight, adequate infrastructure, and sustained community training. The negative examples provided by participants, such as motorbikes damaging hillsides, illustrate this tension between tourism's economic benefits and its ecological consequences, highlighting the inherent trade-offs between development and conservation. Socio-economic factors may also explain the divergence in local perceptions. As Shi et al. (2023) argue, residents who benefit directly from tourism income tend to perceive its environmental effects as minimal, while those excluded from its economic advantages are more likely to notice and emphasise ecological harms. This pattern is evident in Nqileni, where participants who linked tourism to employment and income generation tended to downplay its environmental risks. Such findings reinforce the observations of Adebayo & Kirikkaleli (2021) that tourism's environmental impact cannot be uniformly defined but is mediated by local values, awareness levels, and governance structures.

Taken together, the results suggest that while Nqileni's community essentially perceives tourism as compatible with environmental preservation, this perception remains conditional and potentially fragile. The literature underscores that achieving a genuine balance between tourism and nature requires institutional support, effective environmental education, and participatory management frameworks that empower communities to regulate and monitor tourism activities (Mtapuri & Giampiccoli, 2016). Without such structures, even community-based tourism risks contributing to gradual ecological degradation. Therefore,

the findings affirm that while tourism in Nqileni may currently coexist harmoniously with the environment, sustaining this balance depends on continuous stewardship, equitable benefit-sharing, and the integration of environmental management into local tourism planning.

Linking the results with the theoretical framework

The theoretical framework illustrates the dual nature of tourism growth, emphasizing its potential to generate both positive and negative environmental effects, which together shape the net environmental outcome. The findings from the participants in Nqileni provide strong empirical support for this conceptualisation, highlighting the nuanced ways in which tourism interacts with the natural environment. On the one hand, the participants' narratives strongly align with the positive side of the framework, where tourism is seen as a driver of conservation and protection. Respondents consistently articulated that the natural environment constitutes the foundation of the tourism economy in Nqileni. The aesthetic and ecological integrity of the area, including its hills, mountains, bird species, forests, and coastal landscapes, was identified as a unique asset that differentiates Nqileni from other destinations. This supports Honey (2008) and Buckley (2012), who argued that pristine natural settings are among the most valuable attractions for nature-based tourism. Furthermore, the participants emphasized that tourism not only relies on but also incentivises environmental protection. For instance, participants noted that when tourists arrive, they bring in money that helps the people of Nqileni find employment, thereby linking environmental preservation directly to socio-economic benefits. This reflects the conservation-for-development rationale described by Eagles et al. (2002) in which tourism revenues provide the economic justification for protecting landscapes and biodiversity. Activities such as canoeing, village tours, and eco-based experiences depend on the area's natural integrity, demonstrating how tourism can function as a mechanism of environmental stewardship, consistent with Weaver's (2014) arguments on ecotourism and sustainability. The participants' appreciation of the area's "untouched" quality further underscores alignment with Mantymaa et al. (2021), who observed that nature-based tourists seek authentic, natural-looking environments. The recognition that tourists are drawn to Nqileni specifically because of its clean, intact, and naturally beautiful environment also resonates with Margaryan (2018), who stressed that destination attractiveness is inseparable from environmental quality. Thus, the dominant consensus among participants underscores the positive loop described in the framework: tourism growth fosters conservation and protection by relying on the natural environment.

However, the findings also reveal points of tension consistent with the theoretical framework's negative side. While most respondents perceived tourism as non-damaging, a minority voiced concerns about environmental degradation, particularly from motorised tourist activities such as biking. Some participants lamented that "big bikes, motorbikes, and scooters are climbing up on the hills, causing soil erosion and damaging the grass. This aligns with the concerns of Fletcher et al. (2017) and Chen et al. (2020), who argue that tourism, regardless of planning, inherently carries a risk of ecological disruption. Similarly, Participant 8 noted that biking activities scarred the hillsides, diminishing the area's visual appeal. These observations illustrate how tourism growth can lead to pollution and resource depletion; the adverse environmental effects are emphasised in the framework. The coexistence of these divergent perspectives among participants highlights the complexity captured in the theoretical model. On the one hand, tourism in Nqileni operates symbiotically with the environment, generating economic benefits while incentivising protection. On the other hand, as Mantymaa et al. (2021), note, the relationship between tourism and the environment can also be competitive, with unchecked or inappropriate activities undermining ecological sustainability. The duality is echoed in Shi et al. (2023), who pointed out that societal attitudes toward the environment are fluid, involving simultaneous processes of use, abuse, and protection. This complexity underscores the central insight of the theoretical framework: that the net environmental effect of tourism growth is contingent on the balance between conservation-oriented practices and environmentally damaging activities. In Nqileni, the dominant perception is that tourism contributes more positively than negatively to the environment, a view consistent with Torres and Momsen (2004), who argued that small-scale, community-based tourism in rural settings often generates conservation outcomes, in contrast to the ecological stresses typical of mass tourism in urban or coastal resorts. At the same time, the findings indicate that this positive balance is fragile. If damaging practices such as off-road biking continue to expand, or if tourism development intensifies without adequate regulation, the equilibrium could shift toward net negative impacts. This possibility highlights the importance of governance, environmental education, and community involvement in tourism management. The consensus among participants on the need to protect the environment provides a strong foundation for such sustainability-oriented strategies, echoing Hassan et al. (2020) on the critical role of communities in safeguarding natural resources.

Conclusion

This study highlights the pivotal role of the natural environment as both a foundation and a determinant of sustainable tourism in Nqileni Village. The findings reveal a strong consensus among participants that the pristine natural landscape, comprising hills, forests, bird species, and coastal scenery, is not only a source of livelihood and community pride but also a strategic asset for tourism development. Participants recognised that tourism depends on the conservation of the natural environment, linking ecological preservation directly to socio-economic well-being. This reflects global perspectives that position environmental stewardship as essential for maintaining tourism competitiveness and community resilience (Honey, 2008). However, divergent perceptions emerged regarding the environmental impact of tourism. While many participants viewed tourism as environmentally benign or even beneficial, highlighting respectful tourist behaviour and local conservation awareness, others noted signs of ecological strain, including soil erosion, vegetation loss, and damage from motorised activities. These contrasting views highlight the dual nature of tourism's environmental impacts: it can serve as both a catalyst for protection and a driver of degradation, depending on management practices, regulations, and community involvement. The findings align with existing scholarship (Gössling, 2002; Holden, 2016), which cautions against assuming that tourism inherently promotes sustainability without robust environmental governance. The study's results also align with the theoretical framework that underpinned this study, as they reveal that Nqileni's experience encapsulates the balance between tourism's positive conservation incentives and its potential ecological risks. The village's community-based approach currently leans toward a symbiotic relationship with the environment, where tourism reinforces protection efforts. Nonetheless, this equilibrium remains fragile and contingent on continued environmental education, equitable benefit-sharing, and participatory management. Strengthening local governance and monitoring systems is thus essential to prevent small-scale degradation from evolving into broader ecological challenges. Overall, the study affirms that tourism and environmental conservation in Nqileni Village are interdependent and mutually reinforcing when guided by stewardship, awareness, and collaboration. Sustaining this balance requires embedding environmental management into all stages of tourism planning and empowering local communities as custodians of their natural assets. Doing so will not only safeguard the ecological integrity of Nqileni but also ensure that tourism continues to serve as a vehicle for both environmental and socio-economic sustainability.

References

- Adebayo, T. S., & Kirikkaleli, D. (2021). Impact of renewable energy consumption, globalization, and technological innovation on environmental degradation in Japan: Application of wavelet tools. *Environmental Development and Sustainability*, 23(11), 16057–16082. <https://doi.org/10.1007/s10668-021-01322-2>
- Andlib, Z., & Salcedo-Castro, J. (2021). The impacts of tourism and governance on CO₂ emissions in selected South Asian countries. *Etikonomi*, 20(2), 385–396.
- Aslan, A., Altinoz, B., & Özsolak, B. (2021). The nexus between economic growth, tourism development, energy consumption and CO₂ emissions in Mediterranean countries. *Environmental Science and Pollution Research*, 28(3), 3243–3252. <https://doi.org/10.1007/s11356-020-10667-6>
- Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., Umar, A., & Khan, A. M. (2023). Impact of tourism development on environmental sustainability: A suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30, 5917–5930. <https://doi.org/10.1007/s11356-022-22496-w>
- Bramwell, B., & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, 19(4–5), 411–421. <https://doi.org/10.1080/09669582.2011.580586>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Buckley, R. (2012). Sustainable tourism: Research and reality. *Annals of Tourism Research*, 39(2), 528–546. <https://doi.org/10.1016/j.annals.2012.02.003>
- Burton, I. (1987). Report on Reports: *Our Common Future. Environment: Science and Policy for Sustainable Development*, 29(5), 25–29. <https://doi.org/10.1080/00139157.1987.9928891>
- Butowski, L. (2021). Sustainable tourism: A human-centered approach. *Sustainability*, 13(4), 1835. <https://doi.org/10.3390/su13041835>
- Chen, J., Li, Z., Dong, Y., Song, M., Shahbaz, M., & Xie, Q. (2020). Coupling coordination between carbon emissions and the eco-environment in China. *Journal of Cleaner Production*, 276, 123848. <https://doi.org/10.1016/j.jclepro.2020.123848>
- Confente, I., & Scarpi, D. (2021). Achieving environmentally responsible behaviour for tourists and residents: A norm activation theory perspective. *Journal of Travel Research*, 60(6), 1196–1212. <https://doi.org/10.1177/0047287520938875>
- Du Pisani, J. A. (2006). Sustainable development: Historical roots of the concept. *Environmental Sciences*, 3(2), 83–96. <https://doi.org/10.1080/15693430600688831>
- Eagles, P. F. J., McCool, S. F., & Haynes, C. D. (2002). *Sustainable tourism in protected areas: Guidelines for planning and management*. IUCN.
- Echebarria, C., Barrutia, J. M., Eletxigerra, A., Hartmann, P., & Apaolaza, V. (2018). Local sustainability processes worldwide: A systematic review and research agenda. *Journal of Environmental Planning and Management*, 61(8), 1289–1317. <https://doi.org/10.1080/09640568.2017.1342611>
- Fennell, D. A. (2020). *Ecotourism* (5th ed.). Routledge. <https://doi.org/10.4324/9780429346293>
- Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2017). *Tourism: Principles and practice*. Pearson.
- Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change*, 12(4), 283–302. [https://doi.org/10.1016/S0959-3780\(02\)00044-4](https://doi.org/10.1016/S0959-3780(02)00044-4)
- Gössling, S., & Peeters, P. (2015). Assessing tourism's global environmental impact 1900–2050. *Journal of Sustainable Tourism*, 23(5), 639–659. <https://doi.org/10.1080/09669582.2015.1008500>

- Gumbo, B. G. (2022). The negative impacts of tourism in Africa: The case of Botswana. *African Journal of Hospitality, Tourism and Leisure*, 11(SE2), 1750–1764. <https://doi.org/10.46222/ajhtl.19770720.323>
- Hall, C. M. (2008). *Tourism planning: Policies, processes and relationships*. Pearson Prentice Hall.
- Hoang, T. T. H., Van Rompaey, A., Meyfroidt, P., Govers, G., Vu, K. C., & Nguyen, A. T. (2020). Impact of tourism development on livelihoods and land cover in northern Vietnam. *Environmental Development and Sustainability*, 22(2), 1371–1395. <https://doi.org/10.1007/s10668-018-0253-5>
- Holden, A. (2016). *Environment and tourism*. Routledge. <https://doi.org/10.4324/9781315767659>
- Holland, K. K., Larson, L. R., Powell, R. B., Holland, W. H., Allen, L., Nabaala, M., & Nampushi, J. (2022). Impacts of tourism on conservation support and community resilience around Maasai Mara National Reserve, Kenya. *Journal of Sustainable Tourism*, 30(11), 2526–2548. <https://doi.org/10.1080/09669582.2021.1932927>
- Honey, M. (2008). *Ecotourism and sustainable development: Who owns paradise?* (2nd ed.). Island Press.
- Jia, X. (2018). The role of tourism environmental protection on sustainable tourism development. *Advanced Engineering Research*, 163, 1642–1646. <https://doi.org/10.2991/icesd-18.2018.296>
- Klock, C., & Nunn, P. D. (2019). Adaptation to climate change in small island developing states. *Journal of Environment and Development*, 28(2), 196–218. <https://doi.org/10.1177/1070496519835895>
- Kolawole, I. O., Mbaiwa, J. E., & Mmopelwa, G. (2016). Environmental impacts of tourism on quality of life in Maun, Botswana. *African Journal of Hospitality, Tourism and Leisure*, 5(4), 1–14.
- Lenzen, M., Sun, Y. Y., Faturay, F., Ting, Y. P., Geschke, A., & Malik, A. (2018). The carbon footprint of global tourism. *Nature Climate Change*, 8, 522–528.
- Liu, J., Li, C., Tao, J., Ma, Y., & Wen, X. (2019). Spatiotemporal coupling of tourism, urbanization and ecological environment in Shaanxi, China. *Sustainability*, 11, 4923. <https://doi.org/10.3390/su11184923>
- Liu, K., Qiao, Y., Shi, T., & Zhou, Q. (2021). Coupling coordination between economic development and ecological environment in Yellow River Basin cities. *Environmental Science and Pollution Research*, 28, 6898–6912. <https://doi.org/10.1007/s11356-020-11051-0>
- Liu, N., Liu, C., Xia, Y., & Da, B. (2018). Urbanization and eco-environment coordination in China. *Ecological Indicators*, 93, 1163–1175. <https://doi.org/10.1016/j.ecolind.2018.06.013>
- Liu, Y., & Suk, S. (2021). Tourism economy and ecological environment in Nagasaki Prefecture. *International Journal of Environmental Research and Public Health*, 18, 12818. <https://doi.org/10.3390/ijerph182312818>
- Mantymaa, E., Tyrväinen, L., Juutinen, A., & Kurttila, M. (2021). Forest landscape quality and nature tourism businesses. *Land Use Policy*, 107, 104095. <https://doi.org/10.1016/j.landusepol.2019.104095>
- Marengo, M., Iborra, L., Leduc, M., Lejeune, P., Boissery, B., & Gobert, S. (2021). Spatial and temporal trends in a Mediterranean fish assemblage. *Diversity*, 13(8), 368. <https://doi.org/10.3390/d13080368>
- Margaryan, L. (2018). Nature as a commercial setting in Sweden's nature-based tourism sector. *Current Issues in Tourism*, 21(16), 1893–1911. <https://doi.org/10.1080/13683500.2016.1232378>
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). *The limits to growth*. Universe Books.
- Mtupuri, O., & Giampiccoli, A. (2016). A comprehensive model of community-based tourism development. *South African Geographical Journal*, 98(1), 154–168. <https://doi.org/10.1080/03736245.2014.977813>
- Musora, O., Mbaiwa, J. E., & Murray-Hudson, M. (2017). Tourists' perceptions of tourism's impact on water resources in the Okavango Delta, Botswana. *African Journal of Hospitality, Tourism and Leisure*, 6(3), 1–10.
- Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. CABI.
- Ryan, C., & Huyton, J. (2000). Who is interested in Aboriginal tourism? *Journal of Sustainable Tourism*, 8(1), 53–88. <https://doi.org/10.1080/09669580008667349>
- Shi, Z., Jiang, Y., Zhai, X., Zhang, Y., Xiao, X., & Xia, J. (2023). Changes in environmental factors on a tourism-oriented island. *Frontiers in Public Health*, 10, 1090497. <https://doi.org/10.3389/fpubh.2022.1090497>
- Simo-Kengne, B. D. (2022). Tourism growth and environmental sustainability: Trade-off or convergence? *Environment, Development and Sustainability*, 24(4), 1–30. <https://doi.org/10.1007/s10668-021-01775-5>
- Spenceley, A. (2014). Tourism and protected areas: Challenges and opportunities. *Koedoe*, 56(2), 1–2.
- Sun, Y., Yesilada, F., Andlib, Z., & Ajaz, T. (2021). Eco-innovation and globalisation for carbon neutrality in the USA. *Journal of Environmental Management*, 299, 113568. <https://doi.org/10.1016/j.jenvman.2021.113568>
- Tichaawa, T. M., & Mhlanga, O. (2015). Residents' perceptions of tourism development: Victoria Falls, Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, 4(1), 1–15.
- Torres, R., & Momsen, J. H. (2004). Linking tourism and agriculture for pro-poor tourism. *Progress in Development Studies*, 4(4), 294–318. <https://doi.org/10.1191/1464993404ps0920a>
- Treephan, P., Visuthismajarn, P., & Isaramalai, S. A. (2019). Participatory ecotourism and mangrove conservation model in Thailand. *African Journal of Hospitality, Tourism and Leisure*, 8(5), 1–8.
- Weaver, D. B. (2014). Asymmetrical dialectics of sustainable tourism. *Journal of Travel Research*, 53(2), 131–140. <https://doi.org/10.1177/0047287513491335>
- World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.
- Xu, W., Zhang, X., Xu, Q., Gong, H., Li, Q., Liu, B., & Zhang, J. (2020). Water-use efficiency and economic development coordination. *Sustainability*, 12(3), 1246. <https://doi.org/10.3390/su12031246>
- Yang, Y., Bao, W., & Liu, Y. (2020). Coordination of rural production–living–ecological space in the Beijing–Tianjin–Hebei region. *Ecological Indicators*, 117, 106512. <https://doi.org/10.1016/j.ecolind.2020.106512>