

COASTAL TOURISM AND CLIMATE CHANGE: RISK PERCEPTIONS OF TOURISM STAKEHOLDERS IN SOUTH AFRICA'S GARDEN ROUTE

Wayde R. PANDY

University of Johannesburg, School of Tourism & Hospitality, Johannesburg, South Africa, e-mail: wayde360@gmail.com

Christian M. ROGERSON*

University of Johannesburg, School of Tourism & Hospitality, Johannesburg, South Africa, e-mail: chrismr@uj.ac.za

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Abstract: Coastal tourism destinations are highly vulnerable to the ramifications of climate change. Research conducted in South Africa has identified the potential losses associated with climate change on beach or coastal environments as one of the largest concerns for the tourism industry. In addressing the challenge of climate change a critical research issue is advancing our understanding of the risk perceptions of tourism stakeholders. The aim is to investigate risk perceptions of business stakeholders towards climate change impacts in one of South Africa's leading coastal destinations, the Garden Route District Municipality in Western Cape province. The results are analysed from 30 qualitative interviews conducted with tourism business owners and managers. Four core themes were scrutinised, namely awareness of climate change, perceptions of the potential climate change risks, the prioritisation of climate change as compared to other business risks, and greening and adaptive measures pursued by businesses. Overall, climate change is not considered as a major issue for tourism businesses in the Garden Route especially as compared to the immediate or pressing challenges relating to marketing, infrastructural deficits, government regulations and local human resource development for tourism. This conclusion raises significant concerns for the resilience of coastal tourism destinations and local economic development futures in South Africa.

Key words: coastal tourism, climate change, risk perception, business adaptation, local economic development, South Africa

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INTRODUCTION

Coastal tourism is acknowledged as the largest segment of the tourism industry with coastal areas worldwide identified as exposed to a range of risks as a result of climate change (Hall, 2008; Scott, 2011; Zeppel and Beaumont, 2011; Becken, 2013; Kaján and Saarinen, 2013; Gómez-Martín et al., 2014; Santos-Lacueva et al., 2017; Atzori et al., 2019; Dumitrescu et al., 2021). The impacts of climate change are projected to result in substantial damage to many coastal tourism facilities, important beach or leisure areas, and to key aspects of marine ecosystems that serve to attract tourists to destinations (Belle and Bramwell, 2005; Ruddy and Scott, 2016; Arabadzhyan et al., 2020; Dumitrescu et al., 2021).

Jarratt and Davies (2020: 423) maintain the impacts of climate change on the coast need to be recognised as significant given that climate change related events “are already damaging coastal tourism economies”. Scott (2011: 19) observes that the overall costs of damage to coastal areas where extreme events are identified goes beyond direct costs relating to infrastructure damage as there are indirect “implications for property values, insurance costs, destination competitiveness, marketing and wider issues of local social and economic wellbeing”. According to Weatherdon et al. (2016: 1) the impacts of climate change for coastal destinations “may also induce changes in tourism flows, leading to substantial geospatial shifts in economic costs and benefits associated with tourism revenue and coastal infrastructure protection and repairs”. The vulnerability of beach tourism destinations to climate change is flagged by Santos-Lacueva et al. (2019).

Shaaban and Ramzy (2010: 243) point to a wide array of climate change related impacts which are projected to have a profound effect on coastal tourism. These include shifts “in water availability, biodiversity loss, reduced landscape aesthetic, altered agriculture production, increased natural hazards, coastal erosions and inundation, and damage to infrastructure”. In facing these challenges tourism adaptation may be problematic in situations where “structural coastal protection is not well suited to the business objectives of coastal resorts” where traditional product and services appear set around “providing unobstructed views of the sea and maintaining unhindered access to the beach” (Scott et al., 2012: 893-894).

Buzinde et al. (2010) document the significant “displeasure” displayed by some tourists visiting beaches in Mexico after encountering enhanced coastal defences and which interfered with their perceptions of unhindered, pristine white sands. A disconnect in priority between risk reduction and preoccupation with aesthetics prompts comparison of such (in) action to ignoring the proverbial “canary in the coalmine” (Bicknell and McManus, 2006). Gómez-Martín et al. (2014: 305) point to several knock-on-effects that a decline of coastal tourism can have on activities which function “as a complement to the main activity of sun-and-sand tourism”. For local economies reliant on coastal tourism climate change presents a core policy challenge most especially for local economic development futures (Hyman, 2014; Rogerson, 2016).

* Corresponding author

In addressing the challenge of climate change a critical research issue is understanding the risk perceptions of tourism stakeholders. Ghilardi-Lopes et al. (2015: 85) emphasize the significance of evaluating “tourists’ perceptions of the impacts of climate change on coastal and marine environments in order to support decision making in touristic coastal areas”. Equally important are the perceptions and adaptation of local tourism business stakeholders to climate change. Research conducted in South Africa has identified the potential losses associated with climate change on beach or coastal environments as one of the largest concerns for the tourism industry (Pandy and Rogerson, 2018, 2020, 2021). Dube et al. (2021) demonstrate the risk of climate change and with rising sea levels an internationally recognised coastal destination such as Cape Town could experience significant damage to 80% of the city’s Blue Flag beaches. The occurrence of drought episodes also has been demonstrated to negatively impact tourism arrivals in South Africa’s leading international destination for international travellers (Dube et al., 2020). Against such a backdrop the aim in this paper is to analyse the risk perceptions of business stakeholders within one of South Africa’s leading coastal destinations. The next section turns to provide an overview of the case study region and of research methods. The results of the study are analysed in the subsequent section of material.

CASE STUDY AND RESEARCH METHODS

The empirical focus is Garden Route District Municipality within Western Cape Province (Figure 1). The Garden Route is one of South Africa’s leading tourism destinations because of a unique combination of natural tourism assets based around the coast. For Visser and Barker (2004: 114) the Garden Route represents one of the country’s best known “internationalised tourism corridors” because of its provision of a high variety of experiences. The major tourism nodes are the towns of George, Mossel Bay, Knysna and Plettenberg Bay (Figure 1).

The region’s flora forms a crucial segment of the Cape floral region that has been recognised by the United Nations as a world heritage site as 70% of the plant species present do not exist anywhere else in the world. Its importance and diversity of habitats was recognised in 2017 with international status as a UNESCO Biosphere Reserve. Sections of the Garden Route include coastal wetlands which provide high levels of species diversity within the region. The Garden Route is thus a destination in which to experience a diversity of coastal attractions that include lagoons, rivers, valleys, lakes, and forests as well as traditional sun, sea and sand-based attractions. Historically, it developed as a popular domestic tourism destination for outdoor activities including caravanning and camping (Rogerson and Rogerson, 2020a, 2021a). The small towns on the Garden Route continue to be major destinations for domestic caravanners (Rogerson and Rogerson, 2021b).

Beyond leisure-based beach experiences, the area’s tourism offerings also include mountaineering, hiking, game viewing and eco-tourist based activities. In terms of marine tourism the Garden Route offers several tourism products or experiences such as whale and dolphin watching, scuba diving, snorkelling and shark cage diving. The area also has a range of water sports that include fishing, surfing, yachting, and water skiing. All of these activities are within the bounds of the United Nations definition regarding coastal tourism as “a unique resource combination at the interface of land and sea offering amenities such as water, beaches, scenic beauty, rich terrestrial and marine biodiversity, diversified cultural and historic heritage, healthy food and good infrastructure” (United Nations Environment Programme, 2009: 10).

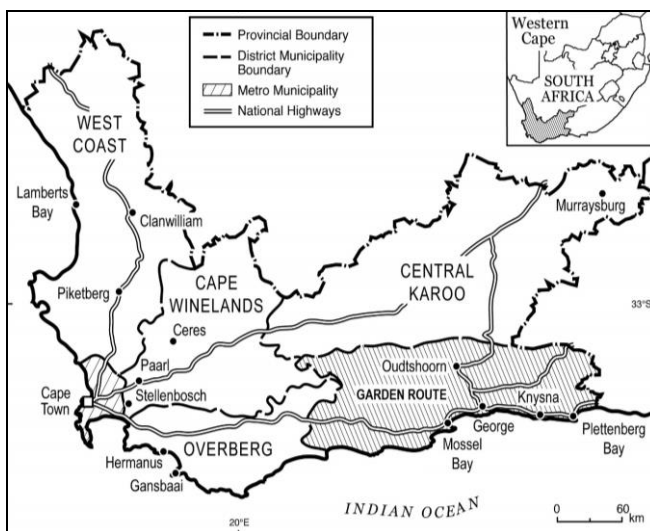


Figure 1. The Garden Route District Municipality within the Province of the Western Cape (Source: Authors)

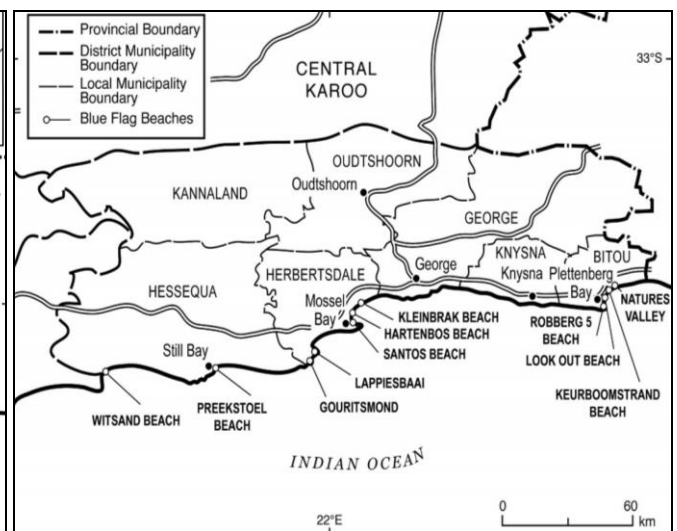


Figure 2. Blue Flag beaches along the Garden Route coastline (Source: Authors)

In pinpointing the significance of the natural environment upon which much of the Garden Route’s tourism economy is anchored it must be appreciated the region’s beaches are vital. The coastline of the Garden Route has 11 different blue flag beaches which assume a crucial role in “keeping the environment safe, clean and healthy” while also creating “expectations of clean, safe and environmental friendly beaches of visitors when they visit the beach” (Geldenhuys and Van Der Merwe, 2014: 13). The geography of these blue flag beaches in the Garden Route Municipality is shown on Figure 2. Van Zyl (2006: 33) considers the beaches as vital to the Garden Route’s overall tourist image wherein “unspoilt natural beauty, pristine coastlines

and vast open spaces” provide the perfect venue for tourism development. The Western Cape Province (and specifically the Garden Route) is recognised as highly vulnerable to the impacts and implications of climate change. Indeed, the province is viewed the most disaster prone in South Africa. In terms of specific provincial climate change-based projections, the Western Cape is anticipated to face increased drying conditions and a decrease in annual precipitation especially in the winter rainfall season. Shifts in rainfall patterns further are projected to include intense rainfall events leading to increase in the likelihood of extreme events such as localised flooding. Moreover, as for the rest of South Africa, the Western Cape is expected to endure significant increases in both minimum and maximum temperatures (Pandy and Rogerson, 2021). The outcomes of climate change are set be a range of impacts that increase the risk profile by introducing or increasing levels of vulnerability and exposure. The provincial government has identified several key climate change related impacts or areas of vulnerability that pose particularly serious challenges. The most prominent relates to water availability. As a water stressed province, water availability has already reached levels where demand in some localities already outstrips available supplies. In the wake of critical deficits, water shortages are projected as the greatest climate change related threat to the province and for the Garden Route (Western Cape Government, 2018). Further threats of climate change are for biodiversity of key areas of the Western Cape as a result of increasing temperatures and reduced water availability (Midgley and Roberts, 2001; Midgley et al., 2002). Biodiversity associated with water bodies such as rivers, estuaries or wetlands faces increased pressures as water shortages are exacerbated. Climate change threats raise significant concerns and the provincial government has conceded that “ecosystem goods and services are the foundation of our economy in the Western Cape necessary for inclusive economic growth and the sustainable delivery of basic services” (Western Cape Government, 2017: iv).

Another critical impact associated with climate change in the Western Cape surrounds the increased likelihood of extreme events able to damage the natural environment, critical infrastructure and endanger people’s lives and livelihoods. Other risks relate to increased fire occurrences as a result of wildfires which would be enhanced by dry conditions. Certain climate change predictions anticipate an increase in fire frequency and intensity in the eastern sections of the province by up to 40% of current risk conditions (Kraaij et al., 2013). Research on the effects of such increased fire risk and event occurrence has concluded that increased fires are also likely to significantly impact on key aspects of biodiversity due to the manner in which soil conditions would be altered as well as creating a platform for invasive or alien species to encroach on locations where rare species currently reside (van Wilgen et al., 2016). In terms of the specific climate change related challenges facing the Garden Route District Municipality the area encompasses 320 kms of coastline with 21 recognised estuaries that assume an important role in the area’s biodiversity. The provincial Department of Environmental Affairs and Development Planning identified the majority of the Garden Route’s coastal zones as at a “low to moderate risk to sea level rise induced coastal erosion and inundation” (Western Cape Government, 2010: ii).

The particular areas identified as most at risk are the Mossel Bay area, Wilderness to Knysna area, and the Plettenberg Bay to Nature’s Valley area. All these areas form the backbone for the coastal tourism economy (Rogerson and Rogerson, 2020b). Historically, the Garden Route has been prone to flooding events which occurred most recently in 1998 and 2003. The District is observed to experience also extreme events with hail, drought, and fire (Raju and Van Niekerk, 2013). Overall, the tourism economy of Garden Route thus presents a valuable case study on climate change for several reasons.

First, the Garden Route remains a relatively under-researched destination in terms of tourism studies in South Africa (Rogerson and Visser, 2020). Second, for international tourists visiting South Africa the Garden Route is among country’s most popular coastal destinations, including for backpackers (Visser and Barker, 2004; Rogerson and Rogerson, 2020b). Third, the Garden Route District Municipality has been identified as set to confront some of the highest levels of climate change related risk and exposure to extreme events. Finally, the Garden Route contains some of South Africa’s most tourism-dependent localities with coastal local economies anchored upon income and employment opportunities which are highly reliant upon leisure tourism (Rogerson and Rogerson, 2020b, 2021c).

Analysis is undertaken of the risk perceptions and adaptive responses undertaken by 30 tourism business stakeholders within the Garden Route District Municipality. Qualitative interviews were conducted with a cross-section of managers or owners of coastal tourism businesses mainly focussed on the provision of accommodation services. Interview respondents were purposively sampled in order to capture the array of different kinds of accommodation service establishments and tourism services. Hotel and time share-resort managers, bed and breakfast owners, guest house entrepreneurs, backpacker hostel operators and camping/caravan site managers were included in the study. The details of the 30 respondents are provided in Table 1. All respondents were in managerial positions. Interviews were conducted in person at the place of work of respondents. Length of interviews varied with an average interview duration approximately 30 minutes. Interviews were manually coded thematically for analysis in terms of several overlapping themes.

RESULTS OF COASTAL TOURISM STAKEHOLDER RISK PERCEPTIONS

The findings are analysed in this section from the 30 interviews to understand the risk perceptions of local tourism stakeholders in relation to climate change. Four core themes were under investigation. First, the study sought to identify stakeholders’ awareness of climate change and sources of knowledge. The second was perceptions of the potential risks that climate change might pose to tourism in the Garden Route. Third, the research explored the relative prioritisation of climate change as compared to other business risks that were impacting the local economy as perceived by respondents. Finally, the interviews explored the extent of greening actions currently either being undertaken or planned in relation to climate change adaptation or mitigation. In situations of no actions being undertaken by local stakeholders to tackle climate change the reasons for inaction were examined.

Awareness of Climate Change

At the outset of the analysis the first questions related specifically to the extent to which tourism stakeholders in the Garden Route were aware of the issue of climate change. It was disclosed that all interviewed stakeholders acknowledged that they had indeed 'heard of' climate change before. They stated the source of climate change information as from a variety of predominately public and social (online) sources. These included television, radio, newspaper articles, magazines, social internet platforms (especially Facebook), and in some instances from local community and government training forums. This said, in acknowledging that they had indeed heard of climate change before, the degree to which stakeholders understood, acknowledged or felt concerned about climate change appeared to vary. Table 2 captures the perceptions of tourism business stakeholders about climate change causation.

Table 1. Details of the 30 Interviewed Respondents (Source: Authors)

Respondent's Role	Business Type
Business Owner	Guesthouse (G2)
	Guesthouse (G8)
	Guesthouse (G22)
	Guesthouse (G28)
	Lodge (G3)
	Lodge (G12)
	Lodge (G18)
	Camp (G6)
	Surf school & restaurant (G10)
	Caravan park (G13)
General Manager	Backpackers lodge (G30)
	Game reserve (G1)
	Ocean safari services (G4)
	Adventure experience providers (G5)
	Lodge (G9)
	Lodge (G11)
	Lodge (G16)
	Lodge (G27)
	Guesthouse (G14)
	Guesthouse (G19)
Assistant Manager	Guesthouse (G20)
	Guesthouse (G21)
	Timeshare Based Hotel & Resort (G23)
	Timeshare Based Holiday Resort (G24)
	Tourism office (G26)
	Backpackers lodge (G29)
	Nature reserve (G7)
	Hotel (G15)
	Lodge (G17)
	Lodge (G25)

Table 2. The Perception by Garden Route Tourism takeholders of the Cause of Climate Change (Source: Authors)

Position on Climate Change	No. of interviewees	%
Human-made	19	63
Climate change is 'natural'	8	27
Appear unsure or uninterested	3	10

Table 3. Perceived Risks Associated with Weather and Climate in the Garden Route (Source: Authors)

Perceived Type of Risk	No. of Respondents	% of Respondents
Drought/water shortages	15	37.5
Increased temperatures/heat waves	9	22.5
Storms/flooding	4	10
Ocean swells/storm surge	4	10
Beach erosion	4	10
Fire	3	7.5
Increased spread of disease	1	2.5

Note: Some respondents indicated more than one perceived risk

Note: The number in brackets refers to the respondent ID and was allocated in order of the interview schedule

It is evident that as much as 40 percent business owners in the Garden Route did not perceive (or care) human-based action as playing a role in the existence of climate change. As shown on Table 2 27% of all interviewees disclosed in some instances that they believed in 'natural' patterns and variations in climate. Another 10% of respondents suggested that while they were aware of climate change they were unsure or 'uninterested' of its underlying causes. Local stakeholders, such as one guest house owner, maintained that: "*It's not something you can really explain*" (G2).

The assistant manager of one lodge contended that "*the jury is still out on climate change*" (G25). Other tourism interviewees expressed doubts over the key cause of climate change. A general manager of a lodge maintained that to the best of their knowledge when it comes to the topic of weather and climate, "*It all works in natural cycles*" (G11). This view was re-stated by another lodge owner that "*Climate change is a natural process*" (G12). Other respondents – such as the general manager of a timeshare resort - offered perceptions based on their personal experience, stating "*I don't really pick it up, you have cycles in years*" (G23). Likewise, a guesthouse owner argued that in their opinion for the most part "*The weather can't change, at best the patterns usually shift a bit*" (G19). Another guesthouse owner considered as follows: "*The climate and the environment have not changed much in the last few years*" (G19).

Such views about the existence and perceptions of climate change stand in stark contrast to the position of the minority of interviewees who – such as one lodge owner - stated emphatically that "*The temperature is increasing*" (G3). A hotel owner similarly reflected that "*Climate change is making things hotter and hotter*" (G15). Other responses were "*It's definitely gotten warmer with less rain*" (G20) and that "*Weather and climate are a definite issue*" (G4). Although the perception of natural cycles as responsible for climate change was frequently highlighted by stakeholders who appeared to suggest that climate change was not as a cause of human activities or behaviour, several interviewees who acknowledged the existence of the phenomenon appeared less inclined to discuss specific human actions that underpinned climate change. Another lodge owner concluded: "*You can't get too deep into it, but yeah the climate is changing*" (G27). A few interviewees indicated that whilst they had heard of climate change that they were not fully aware of its cause. A guest house owner responded in terms of the causes of climate change: "*I have no idea, I've never thought about it*" (G2).

Risk Perceptions

A second key theme in exploring the climate change perceptions of those tourism stakeholders interviewed in the Garden Route District Municipality related to the degree to which interviewees perceived climate change as presenting a risk to their business or to local tourism as whole. A range of perceptions were offered. Some interviewees, such as an Assistant Manager of one lodge, acknowledge that climate change as representing a potential issue for the country: *“Climate change might definitely have an impact on South Africa, although many tourists would still keep coming. Climate change wouldn’t really affect tourism, just the way we sell ourselves”* (G17).

This position was reinforced by other lodge owners who, unsure of its long-term potential implications, argued instead that *“It (climate change) could impact on tourism depending on how severe things get”* (G12), or *“The only major threat that climate change could pose is if it stops our international tourist flows”* (G16).

These perceptions critically reflect what has been identified in other perceptions research on climate change, namely a phenomenon whereby climate change is acknowledged by an individual as affecting others in localities far away from them, while considering themselves and their immediate environment immune from its impacts and implications. Typically, stakeholders expressed the view: *“Climate change might not have much of an impact on us here along the coastline. The inland will definitely be more affected”* (G4). One manager of a camping site considered that: *“We are in a little bubble here in the Garden Route, the hectic and radical effects of climate change might take longer to reach us”* (G6). Other interviewees reflected that: *“I don’t think climate change will have a big impact on our (the Garden Route) tourism, if we’re still a safe place to go on holiday people will come”* (G20).

In unpacking the range of climate change perceptions among tourism stakeholders several indicated potentially positive local benefits such that increasing average daily temperatures *“might not necessarily be for the worst”* (G12). A lodge owner considered also that given the possibility of warmer weather all year round *“Climate change could be positive by increasing our winter tourism”* (G16). The potential that climate change might be a solution to the seasonality issues of Garden Route tourism was raised. One hotel manager stated that climate change effectively *“extends our seasons”* (G15) and a lodge owner similarly that it could produce *“more sunshine for guests”* (G3).

By contrast to these positive views other interviewees expressed concerns over the potential long-term direct and indirect impacts associated with climate change. One campsite manager stated that: *“Tourism in the area is all built off nature and our ecosystems, if climate change affects that then it will affect the economy, and that will impact on me”* (G6). Likewise, the manager of a local timeshare resort expressed a similar view: *“What we have to offer is beaches. Water and power restrictions caused by climate change would have an impact”* (G23). A local guest house owner offered a similar sentiment: *“You come to Plettenberg to go to the beach, or to do outdoor activities. It’s a seaside resort. Periods of bad weather or climate will cause people to leave early”* (G20). Beyond threats of climate change to beaches certain interviewees such as one lodge owner pinpointed the critical importance and aesthetic of the natural environment that draws tourists to the Garden Route noting *“We need the forests, if anything happened to them it would impact tourism”* (G17).

As for perceptions surrounding the impact of short-term weather or more immediate atmospheric conditions, several stakeholders did acknowledge the potential impacts on their respective tourism businesses. More particularly, those tourism businesses reliant on providing tourists with outdoor experiences as their service or product offering showed higher levels of concern with regards to the impacts of weather and climate. A manager of one outdoor camping resort commented *“Weather and climate are an issue! Our biggest issue is when it rains”* (G6). A timeshare resort manager observed *“Weather and climate do have an influence to a certain extent. If the weather is really bad we do see a small impact”* (G24). In discussing the challenges attached to Garden Route attracting coastal focused tourists, one interviewee simply observed: *“You can’t do sandboarding in the wet”* (G27).

The above sentiments were further echoed by other Garden Route respondents: *“The weather and climate do play a role, the business and guests are very outdoors based”* (G3). Or, as one popular timeshare-based hotel and resort manager noted: *“Weather is the main challenge, our challenges change with the weather”*. Certain interviewees who suggested that they did not perceive climate change to be an issue still noted concerns as to the manner in which more immediate weather patterns could affect tourism highlighting its potential impacts for popular tourism products. An operator of ocean safaris considered that *“Whale watching is peak season and weather dependent”* (G4). Rainy weather was noted to impact on tourist occupancies as expressed by several respondents:

“Weather and climate do have an effect. Rain can be a challenge” (G17).

“Rainy days and bad weather impact more on international tourists” (G15).

“Weather plays a role in last minute bookings, as well as how long people stay. When the weather is bad people tend to move on to other locations and experiences, especially international tourists” (G19).

“Short stays and walk-ins are affected by weather” (G2).

The tourism business stakeholders were asked whether there were any particular weather or climate related impacts or hazards perceived as presenting a particular risk. The results are shown on Table 3. It is evident that the hazards involving drought or water shortages, increased temperatures or heat waves, storms or flooding events, ocean swells or storm surges, and beach erosion were the main risks identified. Lesser identified risks related to fire and concerns surrounding an increased spread of disease due to climate change. Overall, in terms of climate change related risk perceptions, drought or water shortages, and increased temperatures or heat waves were ranked by interviewees as representing the most significant perceived risks facing them as tourism dependent stakeholders. The qualitative responses of numerous stakeholders elaborated upon these threats, especially issues around water. For example, one lodge owner asserted that *“Water shortages would have a major impact on us”* (G12). Likewise, the time-share manager averred: *“Water is one of our biggest*

challenges" (G23). Another lodge owner when interviewed about their respective risk perceptions surrounding climate change went so far as to declare: "If you don't have water, you might as well shoot yourself" (G17). Further respondents opined that the impact of climate change could be "huge" and stated that "We didn't get rain this summer. In fact, we haven't had a quarter of our usual rainfall which caused a lot of worries" (G16). Moreover, others lamented "water is already a problem, we ran out of water in January two years ago" (G25). It was also disclosed that specific forms of tourism, such as wine tourism, would be at relatively greater levels of risk given their reliance on water availability. In terms of stakeholder perceptions regarding the impact of increasing temperature variable responses were offered. In the case of one larger well-capacitated enterprise, a hotel, it was stated that: "Heat is easy to deal with. We have air conditioning" (G15).

For smaller enterprises, those less well-resourced or cost conscious (such as a guest house): "We wouldn't be able to do air conditioning, we are (power and cost wise) already at our limit" (G28). Another similar enterprise respondent from a backpacker lodge observed: "We don't have the infrastructure to accommodate extreme heat" (G29). One stakeholder revealed concerns surrounding the wide-ranging effects of water shortages beyond the tourism enterprise itself: "Heat and drought affect the animals and vegetation that make the Garden Route such a popular attraction" (G4). One entrepreneur with a variety of tourism investments including a restaurant highlighted that "Heat affects people's behaviour, sometimes when it's really hot people are less inclined to eat out. They seem to prefer to rather stay on the beach", a situation that would impact the firm's profits (G10). Finally, worries were raised about potential impacts of increased heat by one respondent of the diversion of tourism flows: "If it gets hotter than it was this last December, people might go somewhere else" (G5).

Issues surrounding intense storm events or flooding, the impacts of ocean swells or storm surges along the coastline as well as beach erosion were of concern to several respondents. On flooding, a timeshare resort manager volunteered concerns about a past extreme event, noting "In 2008 before the current owners took over we had flooding. The water came all the way to the chalets'. The N2 highway nearby was almost completely under water" (G24). A guest house owner also reflected on past extreme events of "Severe rainfall, it was so bad that the town's annual oyster festival had to be cancelled" (G18). Other stakeholders variously expressed concern about the dangers of ocean swells, the regularity of beach erosion and of its advance as is evidenced by the following group of responses.

"Storm surges affect tourist's enjoyment of the sea" (G4).

"In 2007, the waves were so high that they actually hit the hotel and did a lot of damage... we really had to worry about people's safety" (G23).

"Every year beach erosion completely stops and stalls things...It usually takes about two weeks to get everything back into shape" (G4).

"Last year, the beaches washed away three times" (G10).

"A few years ago when the lagoon broke through. We lost the lookout beach" (G20).

In general, the financial consequences for tourism businesses were appreciated by many respondents concerning the damage to beaches and of the ocean becoming too dangerous for pleasure seekers (G4; G5; G10).

One other aspect of the risk perceptions as shown in Table 3 concerns fire-based events. Three tourism stakeholders acknowledged concerns relating to fire and the manner wherein climate change could increase risk levels. A camp site manager stressed "We are in a high fire risk area" and as a result the risks associated with fire represented an important subject of concern which often went unnoticed by a lot of residents (G6). This sentiment was re-iterated by another interviewee: "When it comes to fire you have to be prepared. We make sure to clear away excessive dead wood and have fire breaks in place" (G1). Given that the Garden Route District Municipality is projected to face increasing climate change related impacts, including enhanced fire risk, the need to understand the perceptions of tourism stakeholders becomes clear.¹

The Relative Significance of Climate Change to Local Tourism Businesses

The above discussion demonstrates that for many Garden Route tourism businesses climate change, albeit acknowledged as a potential future issue, does not rank as a key immediate priority. This sub-section turns to show further the relative (in) significance of climate change in relation to other challenges that face tourism businesses in Garden Route District Municipality. Figure 3 summarises the responses offered by the 30 tourism stakeholders of the current challenges faced by the area's coastal-based tourism economy. It reveals that there are at least eight issues mainly impacting the immediate competitiveness of the local tourism economy as viewed as of much greater priority than climate change.

Overall, the content analysis discloses that tourism businesses identify at least 12 specific issues or topics of concern, albeit several are overlapping in character. The four most important relate to (1) marketing, (2) the state of key public infrastructure, (3) government regulations, and (4) human resource or staffing issues. Concerns relating to improving marketing strategies centred on consumer awareness campaigns in order to increase sales or tourist volumes and these made up the largest and most significant issue that businesses view as of overall concern or area of focus. The challenges concerning the poor condition of key public infrastructure and service delivery were put forward by many stakeholders. It was stressed by respondents that damaged or inadequately maintained infrastructure undermined enterprise marketing initiatives whilst at the same time making difficult a variety of daily business functions. Issues relating to government regulations (including controls) as well as 'red tape' also were highlighted frequently by

¹It should be noted that during June 2017 (almost a year after the research interviews in the Garden Route were completed) a severe fire event occurred. The event- a mega-fire - has been described as the worst wildfire disaster in South African history causing seven deaths and destruction of hundreds of homes. In total 30 tourism accommodation businesses were either damaged or destroyed with the consequence of diminishing the overnight tourism carrying capacity of the area by over 500 beds (Western Cape Government, 2017).

respondents. Finally, in terms of providing appropriate levels of service delivery for potential guests, business owners and managers consistently referred to concerns surrounding the recruitment and training of suitable qualified staff. Other issues which ranked higher than climate change for Garden Route stakeholders included water shortages, general financial concerns, and questions about the unreliability of electricity supplies.

Further detail was offered by respondents on the importance of the above issues which were perceived as more immediately significant and prioritised higher than climate change (Figure 3). Numerous stakeholders stressed the imperative to “restructure our marketing” (G6) in the face of increasing regional and local competition. Indeed, some of the ‘older’ or more ‘well-established’ tourism stakeholders in the Garden Route complained that existing marketing initiatives were “fragmented” and forged an image of a local destination such as “Plettenberg Bay as nothing more than a through-point” (G10). The outcome of poor marketing is to arrest the growth of paid bednights by leisure tourists, most especially by international visitors. Stakeholders observed that “marketing has seen a huge shift” (G3) towards such initiatives as “collective cross-marketing” (G17). With technological advancement the marketing tools used by accommodation providers have shifted with TripAdvisor noted as particularly significant (G11). One small guest house owner pinpointed the new marketing challenges: “Social media has meant that we have to be more interactive” (G19).

Arguably, Garden Route tourism businesses prioritise the immediate challenges of enhanced marketing and give it far greater attention than the ramifications of climate change. Beyond marketing the poor state of public infrastructure within the Garden Route was of serious concern. The timeshare resort operator opined that: “There is no point in even advertising to tourists if the roads are so bad that no one can get to us” (G23). Lodge owners complained of “limited municipal services” and seen as “a major challenge that often puts people off coming” (G17). Specific concerns for entrepreneurs in coastal tourism, where public infrastructure or management is heavily reliant on by a range of private tourism stakeholders (such as for toilet facilities at local beaches), are to provide “a safe environment for tourism” (G20).

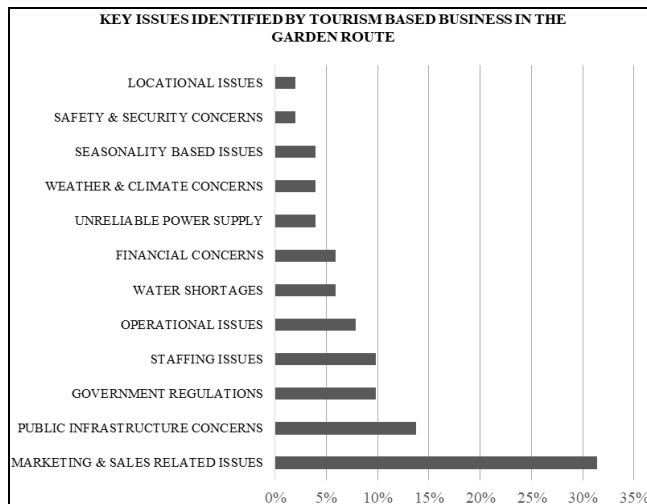


Figure 3. Key issues and priorities of tourism stakeholders in the Garden Route District Municipality (Source: Authors)

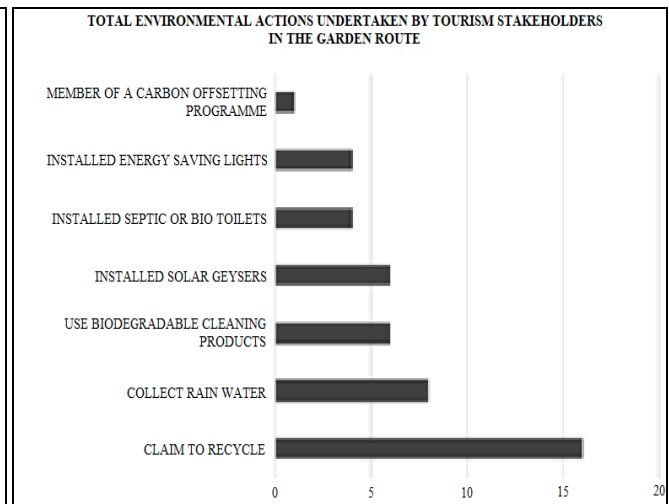


Figure 4. Environmentally-friendly products and actions undertaken by tourism stakeholders in the Garden Route (Source: Authors)

Many entrepreneurs considered that the decline in local public infrastructure damaged the overall tourist experience as “a lot of public facilities are not up to standard people require” (G10). Mostly when discussing the role of infrastructure and governance within the Garden Route, the common sentiment expressed by tourism stakeholders revealed the perception that: “government has more important things on their plate than worrying about climate change” (G4).

Particular criticism was directed by interviewees to misguided visa regulations that negatively impacted the arrivals of international tourists. One typical response given by a lodge owner was: “With visas there was no planning or preparation, the decision just got made without ever thinking about the consequences on us” (G18). Human resource development issues and recruitment of staff was a final issue ranked as more important than climate change. The nature of human resource issues impacting tourism development in the Garden Route is evidenced in the following responses:

“Hiring experienced and well-trained staff remains a constant challenge” (G9).

“It can be really difficult when you first get staff who have never even been on holiday before to understand that being helpful and polite to guests can make all the difference to their experience” (G4).

According to the assistant manager of an exclusive hotel, the core challenge associated with labour “is teaching everyone that in our industry you can never have an off-day, being polite and going the extra mile is part of what people pay for” (G15).

Greening, Adaptation and Climate Change

The fourth theme under scrutiny was greening and adaptation measures by tourism businesses. In analysing the extent to which environmentally friendly or ‘green’ based actions are prioritised or undertaken by Garden Route tourism stakeholders it was observed that numerous interviewees indicated a wish to reach the point of being completely off-the-grid for electricity; none, however, had succeeded in doing so. Cost considerations were the major factor: 60% of stakeholders pointed to the significant costs associated with adopting a wide range of products to be considered as being

'green'. The general manager of a local timeshare resort responded that: *"I don't think we've gone too far into things. We have worked very hard on our recycling but we would like to move into being far more green"* (G24).

Figure 4 shows the most common environmental actions as undertaken by tourism stakeholders in the Garden Route. The most prevalent activities were recycling, collection of rainwater, use of biodegradable cleaning products and the installation of solar geysers; other interventions relate to use of septic or bio-toilets and energy saving lights. The actual commitment to greening is questionable. In particular, a high proportion of stakeholders cited the installation of infrastructure to capture and hold rainwater, but the main driver as already discussed had little to do with being 'green' and instead was a response to the challenge of low water availability. The interview responses revealed constraints other than cost considerations in terms of limits to the greening of businesses or the pursuit of other environmentally friendly actions. An important issue that was flagged related to the age of existing building infrastructure. For many stakeholders the age of buildings was a challenge as some, such as one lodge, were *"old and never designed to be green"* (G18).

Such infrastructure was needed because regular water-borne sewerage was either unavailable or financially not viable. As a result green infrastructure was relatively cheaper and where bio-toilets or septic tanks are in use, biodegradable products must be used in order to maintain such a system. A lodge owner confirmed: *"As a result of being on septic tanks, we have to use biodegradable solutions"* (G18). Cost concerns were again in evidence with one tourism enterprise involved with the carbon offsetting programme. The interviewee disclosed: *"We are heavily invested in carbon reversal and greening, planting 67 trees a year, as well as having dropped the size of the engines we use"*. This said, one of the core drivers for such activities was that it was part of the criteria required to maintain the businesses licence required to operate (G4). Nevertheless, the long-term impact was considered beneficial as it *"represented a win-win scenario"*, given that *"in the course of doing business we are able to make a real difference"* (G4).

Finally, in analysing the position of climate change as a current or future priority for the tourism dependent stakeholders in the Garden Route, along with the specific actions which businesses have thus far undertaken as regards adaptation and mitigation, it must be concluded that the results are varied. In other instances, regardless of many interviewees' perceptions regarding the cause, importance or risk relating to climate change some forms of adaptation have taken place. Arguably, the major driver has been water shortages and local severe drought events. One lodge owner elaborated: *"Over the course of running the business we went through a two-year drought. It was really serious and forced us to make a lot of water saving adaptations"* (G17). The general manager of a timeshare resort remarked: *"These days everyone has rain-tanks to catch and recycle rainwater. You also put a sign up to let everyone know that you are using grey water and not wasting"* (G23).

In addition to the driver of water shortages adaptation responses were occasioned by the pressures from local community social networks in a small-town setting. This is illustrated by the responses respectively from the assistant manager of a hotel and from a local lodge.

"Adaption happens quicker because it's a small town where the community stands together. We have a tight sense of community and use social media to name and shame those people who are being inconsiderate of others. Like those people foolish and selfish enough to be watering their gardens with clean drinking water during a drought" (G15).

"You have to keep up with the Jones's. You have to maintain the standards people expect" (G1).

In discussing the importance of pro-activity, another hotel manager noted the extent to which the business was willing to invest in adaptation in terms of a desalination plant and stated: *"We do our own reverse osmosis"* (G24).

In this instance, however, it should be observed that the actions taken were specific to issues that represented a tangible and immediate challenge for which the broader context of climate change was ignored. In final analysis, this illustrates a situation wherein Garden Route stakeholders focus on treating the symptoms associated with climate change without ever really addressing the underlying causes. In several cases unwillingness was expressed even to contemplate that proactive planning and action might be needed in relation to climate change. Typical responses, such as from a backpackers lodge, were: *"To be honest, I wouldn't know. Everyone would need to get involved"* (G30). By contrast other stakeholders – such as the manager of a timeshare resort – were of the opinion: *"Sometimes people make the right noises, but I really don't think they have their head around it (climate change) yet"* (G24). In explaining the main reasons for a lack of proactive climate change related planning or action, the general manager of a small game reserve reflected that: *"If you keep on working on threats, you'll end up working on something you don't know. So rather work with what is in front of you"* (G1). In one case where it was discussed that climate change might have far-reaching impacts on the future availability of key resources (such as water, food) if proactive action were not implemented, the lodge owner reasoned that such a resource could always be procured from somewhere else with little disruption given that: *"most travellers don't care where food or services come from"* (G16). A hotel manager, however, was more positive in the ability to react adaptively stating: *"I'm a glass half full person, when the time comes that we need to, we'll adapt"* (G15).

Overall, the core theme that emerged repeatedly in interviews to explain inaction was that Garden Route tourism enterprises perceived more immediate and pressing businesses challenges at this time than climate change. The manager of a backpacker lodge typically stated: *"There are other big issues that we need to look at first"* (G29). Others – such as a manager of a camping operation – justified inaction by reasoning that in the case of the severe flooding that impacted their business: *"The road being washed away once, was a random event"* (G6). Of interest is explanations for inaction were defensive perceptions whereby the stakeholders interviewed preferred to adopt either a stance of learned helplessness or religious position. In response to questions where climate change and the need for action was involved as a means of offsetting the potential impacts and implications the manager of one restaurant opined *"What can you do? It's nature"* (G10) whereas an assistant manager of a lodge responded: *"You can do nothing about acts of God. You can't actually worry about it"* (G17).

CONCLUSION

Climate change must be understood effectively as conditioning the sustainability of coastal tourism destinations (Santos-Lacueva et al., 2017). Indeed, according to Dwyer and Gill (2019) climate change is one of the 'wicked problems' that challenges the development of coastal tourism destinations because of the damage it can inflict. As a consequence of climate change, coastal areas and the natural systems which underpin them are confronted with increasingly adverse impacts. Significant outcomes exist for tourists visiting coastal spaces as well as for tourism businesses owners (Hall, 2001; Scott et al., 2012; Arabadzhyan et al., 2020; Jarratt and Davies, 2020).

In South Africa coastal tourism is a significant dimension of the national tourism economy both for domestic and international tourism flows (Rogerson and Rogerson, 2020b). The ramifications of climate change are projected to present significant policy issues for tourism-dependent localities and businesses in South African coastal areas (Dube et al., 2020, 2021). The aim in this paper was to investigate the perceptions of tourism stakeholders in one leading South African coastal destination. The empirical work used original qualitative-based research to analyse the perceptions of coastal tourism stakeholders in the Garden Route about the risks, impacts and implications of climate change on this tourism destination. Issues under scrutiny were stakeholder awareness of climate change, perceptions of the risks posed by climate change for coastal tourism, the main climate change-based risks as perceived by respondents; and, the extent of actions currently being undertaken in relation to climate change adaptation or mitigation.

The major findings from the Garden Route study point to a significant disconnect between the manner in which numerous stakeholders perceive the issue and of expert climate change projections. Tourism business stakeholders struggle to view climate change as relating to human-made or anthropogenic actions. Moreover, whilst all tourism stakeholders acknowledge their awareness of the phenomenon from a variety of sources, not all are convinced climate change presents a potential risk to local tourism or their respective businesses. This perception was mirrored in the business responses undertaken by those stakeholders who consider climate change as nothing more than a 'natural occurrence' and consequently do not take mitigation actions. Overall, climate change is not considered or currently perceived as a major issue for tourism businesses in the Garden Route and most especially as compared to the immediate or pressing challenges relating to marketing, infrastructural deficits, government regulations and local human resource development for tourism. This conclusion raises significant concerns for the long-term adaptation of local businesses, the resilience of coastal tourism destinations and for local economic development futures in South Africa.

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