

Participatory Risk Assessment of Tourism Development in Coastal Areas: Challenges and Implications for Management on the KwaZulu-Natal Coast

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ABSTRACT Geographic concentration of coastal tourism and its associated development impacts are strongly associated with proximity to the littoral zone. Concurrently, this is an area where normative collaboration, policy and science rarely coincide. Poor understandings of interlinks between coastal ecosystems by both public and private entities has led to short-sighted tourist investment which fails to consider beach capacity or resource constraints. The results are the loss of ecosystem services which critically impair the resilience of coastlines, making them susceptible to natural and climate-related risks. Concerns and contestations over natural resources are entrenched in ecological, economic and social dynamics. However tourism tends to favour the economic, which is inadequate. The potential for high-income, mass and ecotourism is huge along the KwaZulu-Natal coastline which is relatively undeveloped. The objective of this study emphasizes a participatory risk assessment of the tourism sector by interrogating land use-ecology interactions as necessary for optimal relationships between coastal uses and protection of coastal ecosystems. Key findings reveal that there are stressors acting cumulatively on individual ecosystems, thus the need to adopt a strategic view to management. Furthermore, the tourism footprint emerged as being larger than the industry itself, implying the potential benefits of integration across different sectors, stakeholders and legislation along the coast, with regard to tourism and its associated development.

INTRODUCTION

According to Honey and Krantz (2007), coastal and marine tourism represents the largest segment of contemporary travel and tourism industry. While the benefits of the sea, sun and sand were initial attractions to coastal areas, accessibility of new locations and different forms of interests have brought novel forms of tourist 'experiences' to the coast (Davenport and Davenport 2006). These range from the desire to observe wildlife, the demand for individual leisure transport such as a drive in the cruise line industry, scuba diving (Davenport and Davenport 2006) and water-based recreational activities (Cave 2003). In terms of coastal tourism development, contemporary trends suggest a desire for large-scale residential and resort complex development, spurred primarily by the baby boomer generation (Honey and Krantz 2007). The authors concede that the exceptionally strong second home market has driven the demand for "complexes to be all-inclusive 'villages', with their own spas, marinas, golf courses, shopping facilities, and vacation homes" (Honey and Krantz 2007: 77). However, as the number and diversity of experiences for a consumer-based

society increases in coastal and marine environments, so do concerns over the loss of ecological integrity, conflicts amongst the multitude of interests that converge at the coast and declining quality of the tourist experience (including its associated development) (Honey and Krantz 2007; Lee 2010; Needham and Szuster 2011).

Land use and cover change are considered the most important issues among the negative environmental impacts of coastal tourism, since they also contribute to many environmental problems which in turn impact on ecological systems (Kuvan 2005). Coastal zones which are focal points for all forms of tourism activities and infrastructure investment, as well as comprising unique biodiversity, present particularly practical sites for addressing cumulative impacts of development (Harriott 2002). In this context, integrated land use planning, by establishing collaboration among the public sector, and between the public and the private sector is an important step in solving land use conflicts (Kuvan 2005). As Harriott (2002) argues, in the absence of strategic planning, large-scale tourism development has the potential to increase the vulnerability of coastal societies and ecosystems to conditions of uncertainty.

Accordingly, this paper summarizes the tourism potentials, trends and emerging negative impacts along the KwaZulu-Natal coastline under study. The paper then interrogates the literature on the key features of coastal tourism such as its geographical concentration occurring within the littoral zone of coastal areas. It emphasises that tourist development in this zone fails to adequately consider beach capacities and resource constraints. The fundamental criticism against this short-sightedness stems from the reductionist approach to coastal development and planning. The paper argues for the social science approach to understanding tourism in contemporary society, drawing on the necessity for adopting a 'systems approach' which recognises the complexity of coastal zones and advocates a strategic framework for tourism planning. The next section deals with risk assessments as a viable tool for coastal tourism management, underscoring the essential role of participation. It discusses the practicality of participatory risk assessments to enhance adaptive capacity and utilise conflicts to provide a strategic conceptualisation of the systems within which tourism operates.

The KwaZulu-Natal north coast of South Africa is perceived as an up-market tourist destination. In assessing the tourist potential and trends in KwaZulu-Natal, Seymour et al. (2009: 19) state that "the north coast consists of about 50 to 70 kilometers of superb beaches and coastline, which has already been identified as probably having the best prospects for attracting higher income domestic and international tourism, given careful environmental management". Ecotourism has been identified as the main form of tourism linked to the north coast. The International Ecotourism Society (1990 cited in Honey and Krantz 2007: 30) defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the welfare of local people". By 2000, new terms such as "green," or "low-impact" and "pro-poor tourism" added further dimensions to the concept of ecotourism (Honey and Krantz 2007). All of these terms have implications for the study area. The White paper on the Development and Promotion of Tourism of 1996, for example, highlights tourism as the key 'engine of growth' with the potential to stimulate the economy, promote development and address the imbalances created by apartheid space-economy through job creation and skills development (Spenceley 2003).

Conversely, potential areas of conflict are emerging: large-scale land transformation is compromising ecosystem goods and services, the premature sanctioning of development projects without considering their ecological footprints and the increasing privatisation of the coastline through eco-estates and golfing estates. In terms of the latter, some properties extend down to the beach, therefore excluding large sectors of the population (including tourists) from accessing the coast. This growing trend is placing pressure on "municipal infrastructure at public beaches, altering access to coastal resources and 'skewing' recreational carrying capacities" (KwaDukuza Coastal Management 2008: 8), presenting significant challenges for the management and planning for tourism in the area.

The Geographical Concentration of Coastal Tourism

The coastal zone is not a homogeneous, easily demarcated area and often includes a variety of terrestrial and marine systems which impact and respond differently to stress caused by tourism activities (Island Resources Foundation 1996). Several authors concur that the geographic concentration of coastal tourism and its associated development impacts are strongly associated with proximity to the littoral zone (near and offshore coastal waters, fringing reefs, beach, rocky shores, and backshore zones such as estuaries and dunes) (Phillips and Jones 2006; Sárdá et al. 2005). This concentration of development in the littoral zone has both direct and indirect impacts which are reflected in both tourism development and leisure pursuits. According to Cooper (2007), the absence of sufficient planning, policies and regulation has resulted in tourist development occurring in an *ad hoc* fashion failing to take cognizance of beach capacity or resource constraints emerging from its ecological footprint. Gossling (2002) maintains that the tourism ecological footprint is often significantly greater than the direct built area, and cumulative, indirect and synergistic impacts are often not considered.

In terms of beach capacity, Phillips and Jones (2006), assert that current predictions of climate change and sea level rise (SLR) coupled with impacts from tourist development have brought coastlines worldwide under considerable risk of erosion. In addition, human-induced erosion

processes are threatening environmental stability and the future economic value of coastal areas (Yepes and Medina 2005). The authors cite the example of high erosion rates along the Mediterranean coastline as being a product of urban planning which favours the construction of buildings in the littoral active zone (Yepes and Medina 2005). On the KwaZulu-Natal coastline, several types of coastal risks have been identified, such as the possible impacts from the predicted SLR of 2.7 mm $\pm$ 0.05 mm per year (Mather 2007 cited in KwaDukuza Coastal Management 2008). In addition, Smith et al. (2007 cited in KwaDukuza Coastal Management 2008) have identified a return basis of 10–12 years for storm events resulting in extensive removal of beach sands and coastal retreat. The risk to society, in the form of damage to lives and infrastructure and the health and financial implications of damage to coastal infrastructure are other important issues that are linked to predicted SLR. Particular issues of concern relate to the negative impact of such SLR on sewerage networks and portions of the coastline that lie below sea level (KwaDukuza Coastal Management 2008). Furthermore, damage to infrastructure could have serious implications for water quality, marine biodiversity and could impact negatively on tourism potential in the area.

Davenport and Davenport (2006) argue that many ecological problems associated with tourism are compounded by undue numbers of tourists (generating demand) and perceptions of 'rights' to open access which generally characterise coastal areas. The results are serious and/or irreversible ecological damage, to which the response has been "to widen the area affected (to enter more pristine neighbouring habitats), or simply to transfer activities to 'more attractive' areas elsewhere" (Davenport and Davenport 2006: 290). The key threat to biodiversity posed by tourism is land cover transformation and degradation resulting from tourism development, particularly the clearing of littoral forest and mangroves and filling in wetlands for tourism development (Honey and Krantz 2007). In terms of resource constraints, fresh water availability, sewage capacity and ecological capacity have been highlighted as critical areas of concern in literature (Holden 2009; Honey and Krantz 2007; Gossling 2002).

Tourism theory recognises the key importance of environmental quality for ensuring the

competitiveness of tourist destinations (Goeldner and Ritchie 2006). Gossling and Hall (2006: 163) state that tourism "is largely dependent upon climatic and natural resources". Conversely, Franklin (2003: 47) claims that "one of the principal accusations in recent years has been that tourism has become an environmental hazard". Despite tangible evidence chronicling negative environmental impacts worldwide, Lynas (2003 cited in Holden 2009) laments that there are, at best, slight improvements in tourism-environment relationships. Several authors attribute this to the widely practiced reductionist approach to sustainable tourism, and maintain that as a result, there are few synergies between environmental policy and the practice of the tourism sector (McDonald 2009; Saarinen 2006). McDonald (2009: 455) further underscores the poor understanding of tourism:

As a stakeholder within a complex system of stakeholders... as a result, interpretations of sustainable tourism development are highly focused and sector-specific, thereby limiting understanding of the complex inter-relationships between tourism components and other components within a system

In addition, Trousdale (2001) highlights the growing breach between accruing tourism research and its practical application, particularly with reference to the relationship between tourism and its impacts on natural and human environments. Several authors underscore the importance of multiple stressors on coastal environments, ranging from climatic to poverty, population growth, resource depletion, growing demand for waterfront properties and tourist development (Scott et al. 2008). The KwaZulu-Natal coastline is a case in point. Strategic planning and management for tourism thus becomes critically important in coastal zones where a range of climate change and socio-economic land use drivers increase the risks to settlement and activities at the coast (Evans et al. 2004).

Social Science Approach to Understanding Tourism in Contemporary Society

As global concern heightens over risks in the society-environment nexus, an increasing number of disciplines find themselves drawn into the commentary (Burns 2008: 75). Within this, commentary, Pernecky (2010: 1), states that "the shores of Tourism Studies are starting to turn

into a very prolific, entangled, and interesting intellectual space". Shaw and Williams (2004: 1) have critiqued tourism research, stating that it is "often descriptive, a-theoretical, and chaotically conceptualised in being abstracted from broader social relationships". Fennel (2008: 1) states that the context of the social world, investigated within the social sciences, in relation to tourism is difficult to delineate, "due to its reliance on primary, secondary and tertiary levels of production and service, and the fact that it is so intricately interwoven into the fabric of life economically, socio-culturally and environmentally".

In addition, tourism's relationship with the natural environment is complex due to "the diversity of stakeholders, the spatial modifications brought on by its activities, a lack of clear definition of key conceptual themes, and the subsequent difficulties of the systematic planning of its development" (Holden 2009: 374). Drawing on Andrew Holden's work (*Tourism Studies and the Social Sciences* in 2005), which points to tourism and tourism studies within the social sciences, as a multidisciplinary area of study with plural theoretical underpinnings, Burns (2008), recently conceptualises tourism as a 'systems approach' which recognises the complexity and positions it within a strategic framework. He underscores, for example, the following benefits (Burns 2008: 76):

- the advantage of such an approach is that tourism is not automatically seen in isolation from its political, natural, economic or social environments;
- it emphasises the interconnectedness between parts of a system encourages multidisciplinary thinking;
- it also enables interdisciplinary thinking which lends depth to traditional ways of understanding; and
- a systems approach can enhance collaborative opportunities not previously apparent

Hence, a critical charge and purpose of the story is to "reduce an overt tourism complexity to a finite set of factors that is possible to handle in practice" (Gren and Huijbens 2009: 36). The following section examines the merits of utilising a participatory risk assessment as a practical environmental management tool to examine the relationships between tourism and the environment.

Participatory Risk Assessment

Risk assessments provide important leverage points for interdisciplinary research, as they have evolved concurrently within Science, Engineering and Social Science disciplines (Frosdick 1997). Participatory risk assessments provide a reworking of established risk assessment techniques with an emphasis on the social sciences (Roe 2010). Furthermore, they perform well within complex systems such as tourism and environmental relationships where impacts are multidimensional and problematic to quantify (Roe 2010). The Royal Commission on Environmental Pollution (1998 (chapter 7) cited in Milligan et al. 2009: 206) states:

Scientific underpinning of any social discussion is vital, but is not in itself sufficient. Local opinion, knowledge of processes which reflect experience and careful observation, as well as all the important values of social judgment must all contribute to a 'full scientific enquiry' in the modern era

McDonald (2009) argues that the complexity of the inter-relationships between stakeholders with political, environmental, economic, social and cultural interests in a coastal zone context and the conflicts that ensue, provide a strategic understanding of the systems within which tourism operates. According to Ledoux et al. (2000: 264), the aim of deliberative and inclusionary processes is to, "improve the quality of decision-making process so that the outcome is implementable, acceptable to all stakeholders, transparent and enduring". Furthermore, Birkmann (2006) asserts that place-based research has the ability to collect descriptive information on the determinants of vulnerability and risk (adaptive capacity) "as they are highly local and based on community's qualitative knowledge of their geographical and social environments".

Both tourism and environmental fields have developed the concept of risk and methods for its assessment in parallel, however with narrow collaboration. What are the principal reasons for this diversity and are there benefits in greater synergy? If yes, what are the ways through which greater integration can be promoted? This paper discusses these issues using a participatory risk assessment in coastal KwaZulu-Natal to describe gaps between tourism and environmental approaches, and investigates scope for mutual learning and collaboration in the development of methodologies for risk assessments.

METHODOLOGY

At the onset of a developmental resurgence, the KwaZulu-Natal north coast (the study area is indicated in red) of South Africa, is positioned for creating sustainable growth opportunities. This section describes the methodological approach used for the development of a participatory risk assessment, thought to be useful as a decision support tool for the management of tourism in coastal areas. Since coastal zones present complex interrelationships between social and natural systems, the methodology works within a framework of an integrated systemic assessment. The methodology combines the social and natural sciences, adopting an informed interdisciplinary approach (while the researchers are Geographers, the study draws from the natural, social and ecological sciences) and underscores the essential role played by stakeholder participation.

The study therefore impresses upon the recommendation (following from the literature) that respondents reflect a multi-sectoral perspective of tourism risk as critical to enhance the quality of research, through transcending disciplinary, racial, social and educational confines, which is particularly significant in the South African context. The quest for appropriate respondents to identify and analyse the risks on the coastline under question, focused on the following stakeholder groups: coastal managers (both provincial and local), tourism stakeholders (professionals and organizations), environmental experts and developers, who comprised the key informants for this research. General Interested and Affected Parties (I and AP) (community-based organisations, consultants, a Ratepayers Association and a Property Owners Association) participated in two separate focus group discussions in an attempt to elicit perceptions on the similarities and/or differences in use and function of this coastal zone. The technique used to identify suitable informants was that of purposive sampling. Research was conducted first through key informant interviews (which aided in criteria selection such as key ecosystems and stressors), and further elaborated through focus group discussions.

The social sciences and qualitative researchers often rely on focus groups to collect data from multiple individuals simultaneously (Onwuegbuzie et al. 2009). According to Kamberelis

and Dimitriadis (2005: 899), the benefits of using focus group discussions within qualitative research are that it “captures responses in real space and time in the context of face-to-face interactions and it strategically ‘focuses’ interview prompts based on themes that are generated in these face-to-face interactions and that are considered particularly important to the researchers”.

Although tourism is selected as the principle stressor on the coast, recommendations for management should be cross-sectoral with other socio-economic land use stressors such as property development in general (spurred by large estates and the new International King Shaka Airport), which has contributed to the optimism for continued economic growth (Celliers and MacKay 2005). This perspective provides a strategic understanding of the development surge on this coastline.

RESULTS

Table 1 addresses tourist stakeholder perceptions on the positive and negative relationships between socio-economic land use stressors and ecosystems in the study area, thereby presenting a stakeholder perception of a tourism risk assessment. Responses have been reinforced by findings emanating from the focus group discussions (I and APs) which also included a tourism component. The distinctions between the two groups will be highlighted in the discussion.

Table 1 indicates that a range of environmental impacts are perceived. SLR and local erosion are seen as an important aspect for tourism in the area, and is likely to impact negatively on the littoral zone (beach, primary dunes and estuaries) through beach loss. Furthermore, rocky shore biodiversity is rich in the area, and linked to harvesting and livelihoods, and erosion could impact on this activity. Many respondents were enthusiastic about the development of artificial reefs to make coasts safer for swimming, maintaining biodiversity, increasing tourism (especially the marine component) and reducing impacts of storms on the beach. However, some were sceptical about the physical nature of the coastline to accommodate artificial reefs. Furthermore, the biggest threat perceived, to much of the coastline stems from *ad hoc* building on the beach area and primary dunes, and removal

Table 1: Risk assessment of land use -ecosystem relationships

<i>Socio-economic stressors</i>	<i>Pressure points</i>					
	<i>Beach/ 1^o Dune</i>	<i>2nd Dune/ Forest</i>	<i>Estuaries</i>	<i>Grasslands</i>	<i>Wetlands</i>	<i>Agriculture</i>
Sea level rise (SLR)	X		X		P	
Local erosion	X					
Tourist Construction	X	X	P	X		X
General Construction	X	X	X	X	X	X
Pollution (sewage)	X		X		P	
Pollution (litter)	X					
Increase in tourists	X	X	X	P	P	P
Urban expansion	X	X	X	X	P	X

X: perceptions of 100% of the tourist stakeholders interviewed

P: perceptions of proportion (un-quantified) of the tourist stakeholder population

of dune vegetation. Respondents highlighted the lack of planned and adaptive management of the shoreline in response to frequency of storm events.

Perceptions on tourism construction activities indicate that tourism activities and development are highly concentrated in the littoral zone, with impacts such as dune trampling and day-tripper littering occurring. A proportion of the tourism organisations interviewed highlighted a growing interest in marinas and water sports in estuaries, and the associated infrastructure may be, in certain cases, inappropriately cited and hence could exacerbate erosion. Tourist construction was found to be highly associated with coastal dunes and coastal forests, and the concept of ‘nature’ was a strong preference for many tourists. However, the biggest negative impact perceived are the large linear developments taking place in forests and dunes which result in public access to the beach becoming limited and problematic. Respondents in tourism organisations as well as focus groups raised concerns over the large-scale conversion of grassland and agricultural land for eco-estates and golf estates (which was looked at from a general development as well as tourist component point of view).

With regard to general development and urban expansion, both focus groups and tourist organisations felt that the citing of infrastructure such as sewer and storm water pipes were inappropriate from a flood, erosion, health and aesthetic point of view. One of the big drawbacks is the issue of water quality, which is becoming a problem along the entire coastline and will impact on the Blue Flag status of beaches and tourism in general. Respondents argue that

the March 2007 floods which struck the KwaZulu-Natal coast, causing widespread destruction, was a stark indicator that these kinds of infrastructure need to be removed from active zones, however, they have since been replaced in exactly the same spot, despite scientific evidence of the likelihood of intensity and frequency of storms on the coastline increasing. This indicates a lack of planned retreat (as enshrined in the National Environmental Management Integrated Coastal Management Act) and a lack of a long-term planning perspective. Furthermore, there were concerns expressed by both focus groups and tourist organisations that some portions of the coastline may be over-developed and require carrying capacity management. In addition, building heights obscuring sea views were also deemed to be problematic by the respondents. In addition, demands by the tourism sector on municipal infrastructure was also an issue that needs to be reconciled if tourism is to be sustainable.

Many respondents from the focus group discussions and tourist organisations expressed concern over the mass beach tourism component, claiming there was lack of adequate infrastructure such as roads, parking, ablution facilities and even access in some places to accommodate this. Perceptions of crime and safety were also important criteria and affects tourism in the area.

The constraints placed on the tourism sector to adequately address the issues and impacts associated with tourism in their localities relate to:

- ♦ Lack of funding specifically for tourism development investment;
- ♦ Lack of political will to engage constructively in environment-development negotiations; and

- ♦ Lack of a specific focus on employment and skills training, despite national motivation for job creation.

DISCUSSION

Seventeen years since the abolition of apartheid, spatial marginalisation from economic opportunities remain an imposing feature of the South African space-economy, and coastal areas have become the focal points to redress poverty and inequality, the inherent disjuncture between where people live and where economic opportunities exist and ensure shared growth (Policy Coordination and Advisory Services 2004). According to the Department of Agriculture and Environmental Affairs-DAEA (2004) this redress is expressed most pronouncedly in the linear growth of holiday homes and tourism infrastructure in the area. This is attributed to the beaches which attract a large number of people. Stakeholders concur that the prime socio-economic benefits (and drivers) of tourism development is employment creation. They assert that the tourism industry has the potential to employ people across a range of skills and education levels, from highly to very lowly skilled. This aspect is important as 72% of the KwaZulu-Natal workforce is black and over-represented in the unskilled occupation categories, holding over 95% of these positions (Graham Muller and Associates 2006). In addition, the price of labour of the poor is pushed up by the fact that many live a great distance from their places of work (Graham Muller and Associates 2006). Stakeholders concur that KwaZulu-Natal has the highest proportion of poor people and also the greatest potential for tourism. They also indicate that tourism and employment creation is strongly advocated by Government's mandate for economic growth in South Africa. However, this needs to be appropriately managed. They see benefits in integrating and working across the different sectors, stakeholders and legislation along the coast. They also indicated the need for interdisciplinary input into tourism planning and management.

Stakeholder perceptions from tourist organisations hold that international tourism and long-haul tourism has decreased in the past two years due to the global economic crisis. Some perceptions suggest that hotel occupancy has decreased by approximately 2-5%. However, re-

spondents identified certain categories of tourists that could be targeted for the study area despite the recession, and they are primarily northern foreign tourists (who are perceived will recover faster from the economic recession) and in particular, the older segments of the international tourist, and young, professional and single people. All these categories are potential targets as they have greater spending money and higher incomes. According to Tourism Intelligence International (2009), the tourist segment likely to travel in the face of recession, include the traditionalists, adventurers and individuals. Stakeholders also stated that although domestic tourism has dropped, KwaZulu-Natal is perceived to have a higher domestic tourist visitation than other provinces in South Africa. This part of the coastline displays components of nature-based tourism and ecotourism. The main attraction, however, is the beaches. Hence, the study area holds potential for both domestic and international tourism, which is intricately linked with the area's natural attributes. The main problems impacting on tourism identified by the respondents on the north coast are crime and the general lack of sufficient infrastructure to support the number of people coming to the beach, particularly mass tourism.

Respondent perceptions reveal that tourists want a variety of amenities and experiences so tourist organisations and developers (who are also acutely aware of tourism trends) cannot replicate resorts with similar experiences along the coast. Respondents identified the following tourist accommodation sectors as significant (and influencing increases in up-market tourism) to encourage tourism in the area: guest houses, bed and breakfast establishments, time-shares and luxury accommodation linked with ecotourism and coastal resorts/ eco-estates. There is also a perception that eco-estates hold immense potential for second home ownership. According to Seymour et al. (2009: 9), "many Americans are starting to follow their European counterparts in considering their vacation a birth right, and time-share is a more affordable alternative to renting vacations". Furthermore, they assert that the value proposition looks even more attractive in a down economy hence time-share represents an affordable retirement home alternative.

Respondents' perceptions of tourist experiences reveal that there is a demand for events

tourism, sport tourism (particularly golf), eco-tourism with a land-marine based tourism, and cultural tourism. Respondents state that there are still many avenues of tourism potential in the area that have been untapped, and include building tourism around historical and cultural sites (particularly based on Zulu culture). Golf tourism in South Africa has grown in the last few years, with a corresponding increase in the number of developments of golf courses/ golf estates. KwaZulu-Natal has eight golf clubs rated in the top 30 in South Africa (Tourism KwaZulu-Natal-TKZN 2005). Furthermore, a study conducted by South African Tourism, indicated that South Africa was the eighth most popular destination for golfers. Furthermore, this is translated to about 200 000 golfers interested in visiting South Africa. Again, Germany is one of KwaZulu-Natal's key source markets (TKZN 2005).

CONCLUSION

The study reflects a participatory risk assessment undertaken for the tourism sector on the KwaZulu-Natal north coast of South Africa. The responses indicate that there are multiple stressors acting on individual ecosystems, and thus there is the need for a strategic view to management. While the potential for tourism is high in the study area, with various options for diversification of both high-income and mass tourism, there needs to be appropriate management of this sector.

The literature suggests that the tourism footprint is larger than the industry itself, and this was highlighted in the risk assessment and stakeholders were able to appreciate the potential benefits of integrating and working across the different sectors, stakeholders and legislation along the coast, with regard to tourism and its associated development. Literature on any coastal zone management, and certainly in the literature in this study, indicates that coastal zones are areas of high sectoral conflict and there is thus a need to optimise relationships between coastal uses and the protection of the coastal ecosystem by adopting a normative approach with an agreed acceptance of the sustainable development principle as a cornerstone in development. A risk assessment of specific industries can aid in finding synergies between sectors, avoid duplication of information and enhance collaboration between sectors with a stake in coastal zones.

In this context, integrated land use planning, by establishing coordination and cooperation among the public bodies, and between the public and the private sector would be an important step in solving land use conflicts, particularly between developers and conservation.

RECOMMENDATIONS

Tourism is one of the key drivers in the area. Both focus groups and tourist organisation stakeholders concur that the prime socio-economic benefits (and drivers) of tourism is employment creation. Furthermore, they assert that tourism is an industry that has the ability to employ people across a range of skills and education levels, from highly to very lowly skilled. In addition, they agree that KwaZulu-Natal has the highest proportion of poor people and also the greatest potential for tourism. They also indicate that tourism and employment creation is strongly advocated by Government's mandate for economic growth in South Africa. It is recommended that suitable forms of tourism be pursued, which takes the sustainability of natural environments into consideration. The literature indicates that when tourism and other activities compromise the natural environment, tourists will relocate to other areas. With the amount of infrastructure and commitment to skills development in the tourism sector, it cannot afford to pursue an unsustainable path. Stakeholders have overwhelmingly suggested that the most appropriate form of tourism for the area is ecotourism. There are interesting prospects for the inclusion of marine ecotourism for the area, and literature indicates that this form of tourism is growing phenomenally internationally. However all of this demands careful planning.

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