

UNIVERSITY OF KWAZULU-NATAL

**EMBRACING GREEN PRACTICES: PERSPECTIVES FROM THE TOURISM
ACCOMMODATION INDUSTRY IN THE NORTH COAST OF KWAZULU-NATAL**

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of
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DECLARATION

I Zanele Kamwendo declare that

- (i) The research reported in this dissertation/thesis, except where otherwise indicated, is my original research.
- (ii) This dissertation/thesis has not been submitted for any degree or examination at any other university.
- (iii) This dissertation/thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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Signature:



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Abstract

Natural resources are becoming more scarce and costly. Greening has proved to be beneficial not only for the environment but for businesses as well and a lot more businesses are realising this hence putting initiatives in place. Tourism is viewed to be one of the fastest growing sectors worldwide but is also seen to be putting pressure on the natural environment. The aim of this study was to explore whether or not the tourism accommodation sector has tapped into the greening environment and the reasons thereof. The population for this study was tourism accommodation establishments located on the North coast of KwaZulu-Natal with a population size of 100 establishments in the selected geographic area. The questionnaires were sent to the entire population which was obtained with permission from tourism KwaZulu-Natal (TKZN) and a total of 82 respondents completed the questionnaire of which they were either owners or managers of the establishments. Data was analysed using a statistical package and the results revealed that the most implemented initiatives are energy efficient lighting, low flow shower heads and flow restrictors and encouraging guests to conserve water and energy by providing information in their rooms. The salient findings of this study are that the primary factor encouraging implementation of greening measures was the owner/manager's value system. Those who personally found environmental conservation important were more likely to seek more information on the subject and implement greening measures. Implementation costs and in some cases the perception of the expense were major obstructions to implementation of greening initiatives. With tourism being one of the fastest escalating sectors of the SA economy and being considered a major contributor to national GDP, successful implementation of greening initiatives will have a ripple effect not only on the natural environment but on the economic environment as well. It is recommended that decision makers in the tourism accommodation establishments ensure all activities and functions are executed in an environmentally considerate manner. They should merge environmental management with their business operations and implement ways to accomplish their business goals and be profitable without too much discomfort to their customers whilst not causing any harm to the environment.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This is a study on “Embracing green practices: perspectives from the tourism accommodation industry in the North Coast of KwaZulu-Natal”. This chapter presents the problem that is to be researched and the motivation for the study. It highlights the objectives of the study, background to the research, as well as purpose and the value of the study. The problem statement, research questions as well as limitations are also discussed. There is no clear global standard to define ‘greening’ (BCG, 2009) therefore Greening in the context of this document refers to any activity or product designed to reduce the generation of pollution and minimize risk/adverse impact to human health and the environment , (adopted from Dwyer, 2009)

1.2 Motivation for the study

Natural resources are becoming more scarce and costly. “Customers, consumers and business-customers alike, are becoming increasingly discerning in their selection of partners and suppliers, keen to align themselves with those who can demonstrate their environmental credentials” (Alcock, 2008:14). Research shows customers are now being progressively stricter concerning the accountability of companies to conserve and preserve the environment it functions in (Iwanowski & Rushmore, 1994).

Environmentally friendly tourism accommodation establishments conserve and preserve the environment through conserving water, reducing energy use, and minimising solid waste. The establishments have benefited in the form of profit increases, low-risk and high return investments, positive cash flows as well as reduction in liabilities and costs (Alexander, 2002).

Graci and Kuehnel (2009) add benefits such as bottom line increase, competitive advantage, employee retention, customer loyalty, mitigation of cost related to future compliance to regulations, environmental risk management, cost savings, improved value of the brand and of course that it is the right thing to do.

The motivation for this study is to explore whether the tourism accommodation industry shares the same view and to investigate what steps and initiatives they have taken towards greening their businesses as well as the motivation thereof. The study will help to determine how a business owner/manager perceives the benefits of green practices in the tourism accommodation industry.

Issues of global warming and climate change have been recognised in businesses worldwide. "It has been realised that sound environmental management is beneficial to all hotels, as it results in profitability, customer retention, improved corporate image and cost savings among others" (Mensah, 2007:17). Green movement associations will also gain understanding from this study on how the decision makers in this industry view and respond towards greening and environmental management in their business. The outcome of the study will enable the environmental conservation stakeholders to channel their awareness campaigns effectively.

Success of the industry in implementing greening measures will ultimately result in sustainability in terms of preserving and conserving the natural environment. Their success will also enable the industry to tap into the market of business-customers and consumers who are selective of businesses who have implemented and practice greening measures and align themselves accordingly as their service providers. Should environmental management become compulsory, the industry will be in a better position to comply to legislation if not already a step ahead which could reduce future regulatory and compliance implementation costs. In short the industry will be able to tap into benefits such as those identified by Alexander (2002), Graci and Kuehnel (2009) and more.

1.3 Focus of the study

“Tourism has become one of the most important sectors in South Africa, creating almost a million jobs and even overtaking gold exports as an earner of foreign currency” (Media, 2009). Critical to any tourism initiative is the accommodation sector as it makes up a major element of the tourism industry. Improvements on the operational activities in this sector will ultimately affect the SA economy.

This research will fill a significant gap in the literature on the influence on tourism accommodation establishments in implementing environmentally friendly practices and lead additional research in this critical part of the economy. A deeper understanding of the factors influencing greening of the tourism accommodation sector and insight into the measures willing to be taken by this industry will assist the industry in realising the commercial opportunities that come with such practices.

This is an exploratory study carried out on tourism accommodation establishments in the North Coast of KwaZulu-Natal (KZN), South Africa. The study investigates perceptions of the tourism accommodation sector in this geographic region around the issue of greening in relation to business practices.

1.4 Problem statement

Tourism is viewed as a sector with a harmful effect on its operating environment, (Van der Merwe & Wöcke, 2007). According to Alexander (2002), with time the expansion of tourism industry has produced an escalating pressure on the environment. Similar to any other industry, various types of tourism and some recreational activities, have multiple consequences on people's lives and on the environment (Beccali, La Gennusa, Lo Coco & Rizzo, 2008). The hotel industry produces negative environmental consequences regularly related to extreme use of water, energy, and non-durable commodities in addition to air, soil and water pollution (APAT, 2002).

Environmental management is now crucial for the tourism accommodation due to requests for responsible tourism development and increasing environmental awareness amid governments, tourists and organisations. As a result, green hotels and ecotourism are now a trend in the tourism sector (Mensah, 2007).

Results of this study will reveal what greening initiatives have been done by the tourism accommodation sector in North Coast KZN. From the results, a better understanding of the perceptions of decision makers in this sector as well as the motivation behind their implementation or non-implementation of greening initiatives will be gained.

1.5 Research questions

The empirical research was carried out to be able to address the following major questions:

- What are the perceptions in the tourism accommodation industry about the benefits of greening?
- What is the motivation behind greening practices in the tourism accommodation industry?
- What are the factors that prevent or encourage implementation of greening measures?
- What greening measures are tourism accommodation businesses willing to implement or have they implemented?

1.6 Objectives

According to Butler (2008), greening your business and convincing consumers that your business is greener than your competition may result in competitive advantage and presenting green alternatives provides a winning situation for both consumers and business operators in that consumers are progressively seeking for such options, and businesses are discovering the financial benefits of greening. Butler further argued that sustainable development and consumer interest in environmentally friendly operation will carry on, eventually becoming the norm.

Companies are identifying the commercial prospects of being environmentally conscientious hence they are forming more vigorous environmental management policies and as such will require those who do business with them to do likewise (Alcock, 2008). Companies therefore need to align with initiatives that address environmental concerns while operating in a more efficient and productive manner. For the tourism accommodation sector, this means incorporating environmental activities into every sphere of their operation particularly in water conservation, energy as well as solid-waste management.

The objectives for this study therefore were:

- To explore environmental awareness among tourism accommodation businesses.
- To determine what motives drive a tourism accommodation business into becoming environmentally involved.
- To investigate what factors prevent tourism accommodation businesses from implementing greening measures.
- To establish what factors encourage tourism accommodation businesses to implement greening measures.
- To establish the measures tourism accommodation businesses are willing to or have put in place so as to be environmentally friendly.

1.7 Overview of research methodology

In order to meet the objectives of this study, literature was reviewed from prior studies, books, journals and electronic resources on the topic and related concepts. The review considered the tourism industry and its importance to the economy. The focus was then narrowed to South African tourism. The literature was focused further into tourism accommodation. This study investigates embracing green practices in the tourism accommodation industry in KwaZulu-Natal. Therefore a review into what climate change is and why greening is necessary was undertaken.

Climate change and its effects on the environment were defined and the importance of greening and sustainability discussed. The review further examined environmental impact/effects within the hospitality industry and what global and national policies, actions and initiatives had been taken to reduce impact on the environment. Finally, the business rationale for participation in environmentally friendly activities in the accommodation sector was reviewed.

Having considered and reviewed literature from previous studies, a research methodology appropriate for this study was used to design a suitable instrument. Prior to the distribution of the research instrument, the researcher ensured that the ethical issues were complied with. The research was designed in a manner that did not subject the research population to embarrassment or any other material disadvantage. The researcher fulfilled all the necessary requirements and ethical clearance was granted to her by the University of KwaZulu-Natal (UKZN) Research Ethics Committee. Consent from individual respondents was ensured. Permission was obtained from the Tourism KwaZulu-Natal (TKZN) offices, as well as from Enterprise Illembe to contact their members and distribute the research instrument. The data was gathered in a manner that ensured a good response rate and was then analysed using an appropriate statistical package. The data was analysed and compared to findings from previous studies. The findings were discussed and thereafter a conclusion was drawn.

1.8 Limitations of the study

Among different limitations to the study, the following were identified, which should be considered as one looks at the information presented in this research report:

The sample size consisted of accommodation establishments situated in the North coast area of KwaZulu-Natal. The limitation with this is that findings of this study may be an opinion based on the geographic location of the respondents and may therefore not be a general view of all tourism accommodation establishments.

Another limitation to the study is the fact that not all types of tourism accommodation establishments are equally represented. The population only consists of the establishments located in a specific geographic area therefore the opinion will be mainly of the type that dominates in the area of research, which could however, also be representative of the ratio in the country.

There were erroneously listed e-mail addresses, causing some questionnaires being 'undeliverable'. This was however overcome by the researcher physically delivering the questionnaires. Therefore all willing participants were able to respond.

1.9 Summary

This is an introductory chapter that presents the problem definition that is to be researched and the motivation for the study. It highlights the objectives of the study, background to the research, purpose and the value of the study. The problem statement, limitations of the study, and research questions were discussed. Chapter two, the next chapter, will review the broad theoretical framework in relation to this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the broad theoretical framework in relation to this study. To understand the motives that drive a tourism accommodation business into becoming environmentally involved, as well as establish the measures tourism accommodation businesses are willing to or have put in place so as to be environmentally friendly, it is fundamentally imperative that theoretical review on the topic and related concepts is performed. This chapter presents a literature review that first examines the tourism and hospitality/accommodation industry and its significance to the country. The review then focuses on the importance of greening and sustainability giving a global perspective of the current environmental situation and what could potentially happen given a 'business as usual scenario'. From a global view a more focussed approach is taken giving an account of what impact/effects the hospitality industry has on the environment. Once the effect has been covered, the review then focuses on global and national policies and actions as well as government and industry association initiatives intended to mitigate the effects of climate change. Thereafter the business rationale for participation in environmentally friendly activities in the tourism accommodation sector is reviewed, subsequent to which, a conclusion is then drawn.

2.2 Tourism industry

Tourism has been recognized as one of the main economic sectors with outstanding potential for expansion (SAT, 2010). In numerous economies, tourism and its sub-sectors such as accommodation, transport and attractions comprise a progressively more imperative part (Becken, Frampton & Simmons, 2001). Tourism is renowned worldwide among the biggest trades and keeps on increasing at a quick pace, (United Nations World Tourism Organisation - UNWTO, 2006).

Tourism has evolved into a significant economic and social activity worldwide. Primarily with regards to employment, contribution to Gross Domestic Product (GDP) and consumer demand. Tourism is frequently signified as a motivating attribute in development policies moreover in developing countries. This is because one of the principal incentives for a particular region to advance itself as a tourist destination is an expected economic enhancement (United Nations Environment Programme - UNEP, 2001). Hunter (2002) suggests that tourism can as such be regarded as one of the biggest industries, which produces substantial financial benefits in the world.

Tourism has grown to be among main trade industries internationally. Statistics from the UNWTO show that the "amount of international arrivals in SA increased from a simple 25 million in 1950 to 880 million in 2009. Growth is anticipated to escalate more, with international arrivals expected to double to 1.6 billion in 2020. International arrivals to Africa also more than doubled from 18.6 million in 1995 to 45.9 million in 2009 and it is expected to get to 77 million by 2020, with an expected increase of five percent per year" (DOT A, 2010:1).

According to the International Monetary Fund (IMF), the worldwide economy is improving "considerably" quicker than expected, with business and consumer confidence rising and an improvement in international arrivals in the last quarter of 2009 (ATR, 2010:14). The UNWTO anticipates demand for tourism to increase while the World Travel and Tourism Council (WTTC) expects tourism and travel to remain a vigorous force of economic expansion in the long term, with a forecast of 0.5% GDP growth in 2010, 3% growth in 2011 and by 2020 the travel and tourism economy will account for 9.6% of global GDP. The emerging markets are anticipated to become progressively more significant in driving demand for travel and tourism over the next ten years (ATR, 2010:15).

"Foreign arrivals to South Africa continued its upward growth closing the year with a 3.6% increase over 2008. Revenue generated from foreign tourism increased by 7.0% during the same period. Tourism generated more foreign exchange earnings since 2003 compared to gold exports. Gold exports grew by 7.5% between 2003 and 2009 while foreign tourism direct spend grew by 9.6% in the same period" (ATR, 2010:5).

2.2.1 South African tourism

Tourism in South African economy is among the quickest escalating sectors. Directly and indirectly, tourism comprises about 7% of employment in South Africa (SA). Perfectly positioned for generating new employment and improving worth to the vast of the country's natural and cultural resources, it is identified by government as part of SA's growth sectors (SAI, 2010).

The tourism sector is generally understood to be capable of a considerable contribution in tackling various issues facing this country such as poverty and prevalent unemployment (Ashley, Roe & Goodwin, 2001). According to Hunter (2002), tourist activities create revenue and employment, improve understanding of foreign cultures, contribute to preservation of cultural and natural heritage as well as infrastructural investments, thus leading to social and cultural benefits.

Table 2.1 shows SA in the international perspective concerning tourism arrival data. "SA achieved well in 2009, with 9,9 million foreign arrivals, an increase of 3.4% over 2008. Among its contenders, Kenya obtained the highest growth 23.6% over 2008, as the country recuperated from post-election violence early in 2008. Arrivals in Australia reduced by 1.9% over 2008, while Brazil obtained a 6.7% reduction in arrivals" (ATR, 2010:13).

Table 2.1: Tourism Arrival Data

Country	International Arrivals 2008 (M's)	International Arrivals 2009 (M's)	Difference (000's)	% change
Thailand	14 243	12 504	-1 739	-12.2%
South Africa	9 592	9 920	328	3.4%
Brazil	5 157	4 810	-347	-6.7%
Australia	5 586	5 479	-108	-1.9%
Kenya	1 363	1 685	322	23.6%

Source: ATR (2010:13)

According to the 2009 annual tourism report, "tourism's input to the South African, economy was enhanced by approximately 2.7% from R184,4 billion in 2008 to R189,4 billion in 2009, consequence to a general contribution of 7.9% to the GDP. As a consequence, South Africa's global tourism destination ranking moved from 29th position in 2008 to 26th position in 2009" (ATR, 2010:6).

This results in an extremely affirmative industry outlook; predominantly with the publicity SA received in the prelude to and during the world's largest sporting affair, the FIFA 2010 World Cup, held in the country and the associated substantial upgrades to transport and accommodation infrastructure (SAI, 2010).

South Africa has obtained a multiple GDP increase of 29.7% during the phase between 2002 and 2008 and the increase in hotel capacity during this phase was 21.8% as calculated in 2010 (SAI, 2010). Income produced by foreign arrivals improved by 7.0% (R5,2 billion) contrast to 2008. The main causes of improvement in revenue were the rise in foreign arrivals as well as increased average spends per day of all tourists. The welcoming and pleasant people, good service and scenic magnificence were the attraction for tourists to South Africa in 2009 (ATR, 2010).

2.2.2 Tourism accommodation

The accommodation sector comprises a crucial element of the tourism product. Each tourist depends on the provision of accommodation, on this basis accommodation is regarded as the main sub-sector within tourism and plays a significant function in attaining sustainable tourism (Becken et al., 2001). In South Africa the accommodation sector can be considered as fundamental to any tourism initiative and constitutes a momentous part of the tourism industry (Van der Merwe & Wöcke, 2007). According to the 2009 Annual tourism report, leisure is still the main reason tourists visit South Africa and this has improved from 57.7% in 2008 to 58.6% in 2009 (ATR, 2010).

2.3 Climate change

“Rising fossil fuel burning and land use changes have emitted, and are continuing to emit, increasing quantities of greenhouse gases into the earth’s atmosphere” (United Nations Framework Convention on Climate Change - UNFCCC, 2007:8). The greenhouse effect is the heating up of the air as gases in the atmosphere absorb heat (energy) radiated by the earth. These gases, called greenhouse gases, are those which absorb heat energy due to their physical properties (BCC, 2011). “These greenhouse gases (GHG) include carbon dioxide (CO²), methane (CH⁴) and nitrogen dioxide (N²O), and a rise in these gases has caused a rise in the amount of heat from the sun withheld in the earth’s atmosphere, heat that would normally be radiated back into space. This increase in heat has led to the greenhouse effect, resulting in climate change” (UNFCCC, 2007:8). A visual display of the greenhouse effect is shown in Figure 2.1

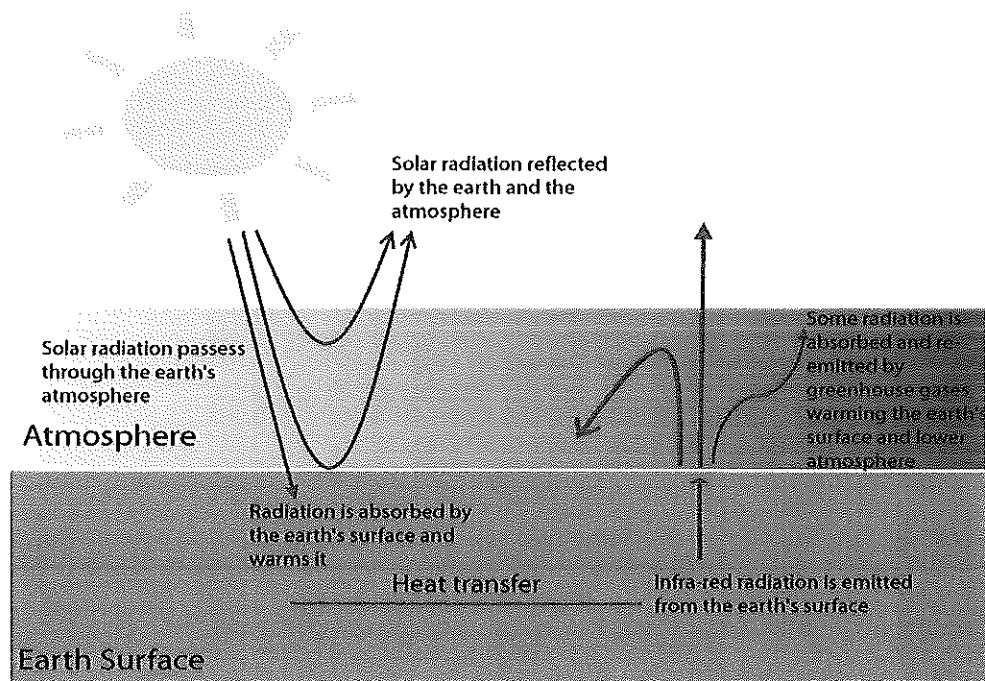


Figure 2.1. The Greenhouse Effect

Source: DEAT (2010:2)

From Figure 2.1 it can be seen how having greenhouse gases in the atmosphere lets inward short wave solar radiation to pass through to the earth's surface, yet take up and re-emit part of the outgoing longer-wave reflected radiation, warming the lower atmosphere. In the absence of greenhouse gases in the atmosphere and this warming process, life on earth would look noticeably different to what we are familiar with (DEAT, 2010).

"The main characteristics of climate change are increases in average global temperature (global warming); changes in cloud cover and precipitation particularly over land; melting of ice caps and glaciers and reduced snow cover; and increases in ocean temperatures and ocean acidity – due to seawater absorbing heat and carbon dioxide from the atmosphere" (UNFCCC, 2007: 8).

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2007) dismissed numerous doubts concerning climate change. There is currently additional confidence that global climate change threatens sustainable development, particularly in developing countries. Warming of the climate structure is now indisputable. It is at present obvious that global warming is mainly caused by human behaviour through emissions of greenhouse gases (mostly CO²), and might challenge worldwide poverty mitigation endeavours and have rigorous repercussions for food security, clean water, energy supply, environmental health and human settlements. The Department of Environmental Affairs and Tourism (DEAT, 2004) acknowledges the total susceptibility of South Africa to climate change effects, and deems it essential for the country to perform adaptation initiatives. The characteristics and threats of climate change: processes are visually depicted in Figure 2.2

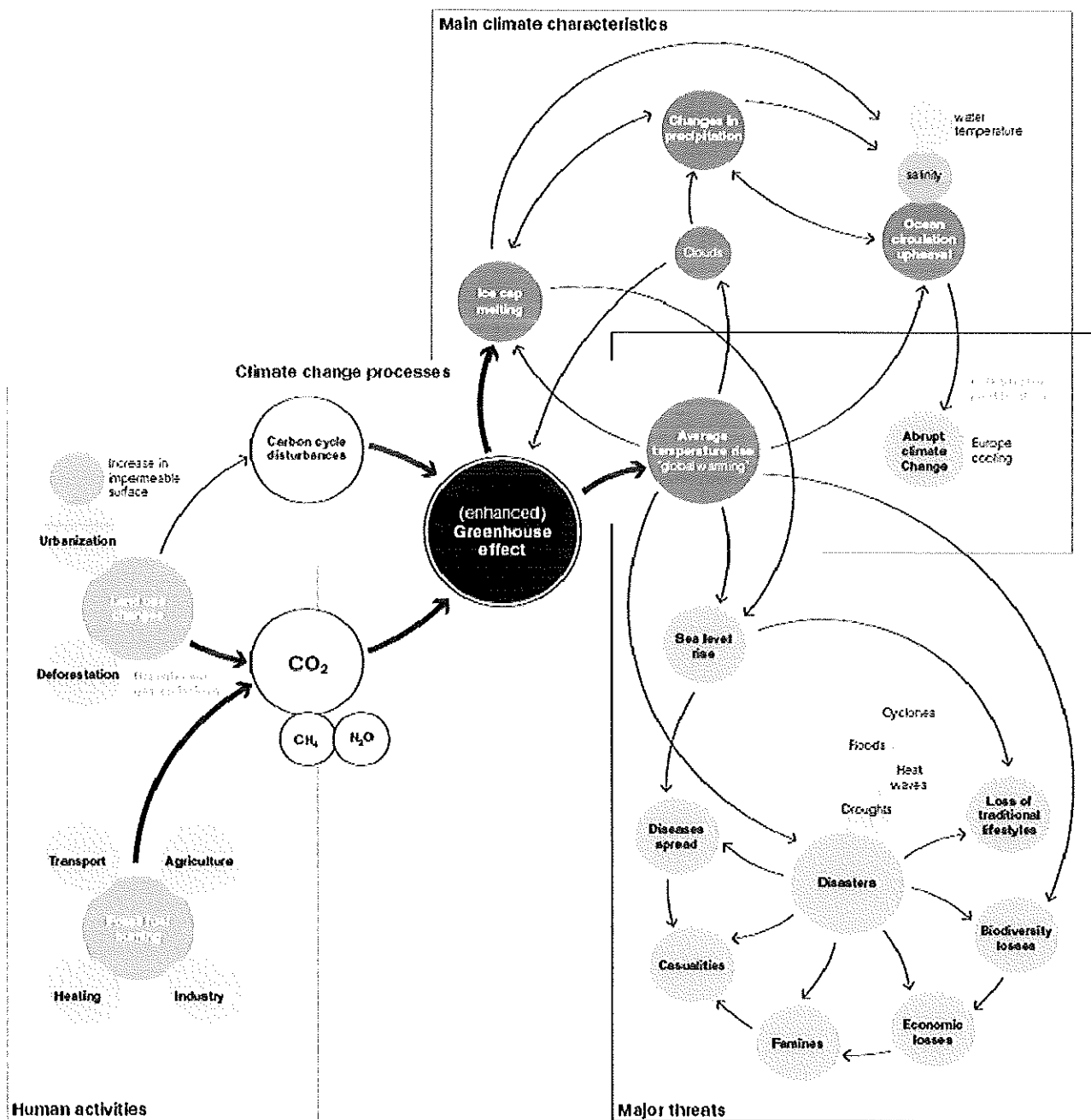


Figure 2.2 Climate change: processes, characteristics and threats

Source: UNFCCC (2007:9)

These climate change factors, depicted in Figure 2.2, being rising temperatures, changes in rainfall patterns, extreme weather events, changes in sea levels and changes in biodiversity, are viewed as having significant consequences on the world economy, rural livelihoods and development in general.

“Climate change can influence humans directly, through impacts on health and the risk of extreme events on lives, livelihoods and human settlements, and indirectly, through impacts on food security and the viability of natural resource-based economic activity” (UNFCCC, 2007:42).

According to Madzwamuse (2010), Africa especially will be the most affected by climate change yet it has minimal adaptive strength. Africa experiences escalating water shortages, a decrease in agricultural output, escalated floods and drought risks and negative impacts on the health sector to name a few. Climate change is an added dilemma to a continent currently suffering from food insecurity, high poverty levels, and an HIV/Aids pandemic. It will have significant effects on the economies in the countries (Madzwamuse, 2010:1).

2.3.1 Effects of climate change in SA

The IPCC confidently states that climate change exists and is a result of people's doing. It states that failure to attack climate change by 2015, will lead to detrimental effects as the atmosphere is being congested with GHGs at a fast rate (IPCC, 2007).

South Africa is the principal emitter of greenhouse gases in Africa and is among the major carbon emission-intensive economies worldwide. This is mainly caused by the extremely high reliance on coal for primary energy production (Imbewu, 2006). South Africa emits 10 tonnes per capita, almost double the amount emitted by developing countries (Madzwamuse, 2010).

Attributable to global warming, Africa's climate is further expected to be unpredictable; excessive weather activities may be frequent even further and more severe, flooding and drought in new places escalating the risk of health as well as life (Few, Ahern, Matthies & Kovats, 2004; Christensen et al., 2007) and flood attributable to sea-level increase in Africa's coastal regions, (McMichael et al., 2004; Nicholls, 2004).

According to the UNFCCC (2007:8), "climate change will have wide-ranging effects on the environment, and on socio-economic and related sectors, including water resources, agriculture and food security, human health, terrestrial ecosystems and biodiversity and coastal zones". It is capable of undermining sustainable development, enhancing poverty, as well as preventing or delaying the accomplishment of the Millennium Development Goals.

Table 2.2 highlights various effects of climate change in Africa on key sectors and indicates its adaptive potential to climate change. Africa is by now experiencing climate strain and is extremely susceptible to the effects of climate change (UNFCCC, 2007).

Table 2.2 Regional Impacts and Vulnerabilities to Climate Change in Africa

Impacts	Sectoral vulnerabilities	Adaptive capacity
Temperature <ul style="list-style-type: none"> Higher warming (x 1.5) throughout the continent and in all seasons compared with global average. Drier subtropical regions may become warmer than the moister tropics. 	Water <ul style="list-style-type: none"> Increasing water stress for many countries. 75-220 million people face more severe water shortages by 2020. 	<p>Africa has a low adaptive capacity to both climate variability and climate change exacerbated by existing developmental challenges including:</p> <ul style="list-style-type: none"> Low GDP per capita Widespread endemic poverty Weak institutions Low levels of education Low levels of primary healthcare Little consideration of women and gender balance in policy planning Limited access to capital, including markets, infrastructure and technology Ecosystems degradation Complex disasters Conflicts
Precipitation <ul style="list-style-type: none"> Decrease in annual rainfall in much of the Mediterranean Africa and the northern Sahara, with a greater likelihood of decreasing rainfall as the Mediterranean coast is approached. Decrease in rainfall in Southern Africa in much of the winter rainfall regions and western margins. Increase in annual mean rainfall in East Africa. Increase in rainfall in the dry Sahel may be counteracted through evaporation. 	Agriculture and food security <ul style="list-style-type: none"> Agricultural production severely compromised due to loss of land, shorter growing seasons, more uncertainty about what and when to plant. Worsening of food insecurity and increase in the number of people at risk from hunger. Yields from rain fed crops could be halved by 2020 in some countries. Net revenues from crops could fall by 90% by 2100. Already compromised fish stocks depleted further by rising water temperatures. 	
Extreme Events <ul style="list-style-type: none"> Increase in frequency and intensity of extreme events, including droughts and floods, as well as events occurring in new areas. 	Health <ul style="list-style-type: none"> Alteration of spatial and temporal transmission of disease vectors, including malaria, dengue fever, meningitis, cholera etc. 	
	Terrestrial Ecosystems <ul style="list-style-type: none"> Drying and desertification in many areas particularly the Sahel and Southern Africa. Deforestation and forest fires. Degradation of grasslands. 25-40% of animal species in national parks in sub-Saharan Africa expected to become endangered. 	
	Coastal Zones <ul style="list-style-type: none"> Threat of inundation along coasts in eastern Africa and coastal deltas, such as the Nile delta and in many major cities due to sea level rise, coastal erosion and extreme events. Degradation of marine ecosystems including coral reefs off the East African coast. Cost of adaptation to sea level rise could amount to at least 5-10% GDP. 	

Source: UNFCCC (2007:19)

The UNFCCC advises that changes in rainfall patterns are expected to cause severe water shortages and/or flooding. Melting of glaciers can create flooding and soil erosion. Rising temperatures result in shifts in crop growing seasons which impacts on food security and changes the circulation of disease vectors, placing more people at risk from diseases such as malaria and dengue fever. Temperature increases will prospectively increase immensely the rates of extinction for numerous habitats and species (up to 30 per cent with a 2° C rise in temperature) (UNFCCC, 2007).

“South Africa will equally be faced with adverse impacts of climate change. Climate change projections over the next 50 years show a warming of between 1°C and 3°C; a potential reduction of approximately 5 to 10% of current rainfall; increased daily maximum temperatures in summer and autumn in the western half of the country; increased incidents of flood and drought and, enhanced temperature inversions, which are likely to exacerbate air pollution problems” (Madzwamuse, 2010:1).

2.3.2 The importance of greening and sustainability

Southern Africa is expected to be rigorously affected by climate change, and therefore is designated as a priority region for supporting adaptation (Archer & Tadross, 2009). “The South African coastline which hosts high numbers of local and international tourists annually is generally exposed to moderate to strong wave action and provides little natural shelter to storms from the sea. With climate change expected to increase both the frequency and intensity of storms, the South African coast will become increasingly vulnerable to sea level rise, extreme weather events, storm surges and coastal erosion” (NCCR, 2011).

Climate change is considered one of the highest risks to sustainable development and if not alleviated, has the capacity to reverse or challenge a lot of the good progress obtained in achieving the country's development goals as well as the Millennium Development Goals (NCCR, 2011)

Madzwamuse (2010) states that with effects of climate change and the related economic, social and cultural costs; adaptation is certainly an economic development challenge that needs prompt focus in the country. Climate change effects carry considerable repercussions in the African economy, of which South Africa is a part (Madzwamuse, 2010). Measurements in South Africa show that climate change is already happening, with increase in surface temperature evident over both South and southern Africa (Kruger & Shongwe, 2004; New et al., 2006).

Tourism accommodation establishments are now seriously handling greening matters and are implementing initiatives such as water and energy conservation, waste management, recycling, environmental education, and tree planting. Mensah (2007) attributes the phenomenon in this sector to numerous of factors such as "government regulation, changing consumer demand, advocacy and initiatives by non-governmental organisations (NGOs) and ethics by professional associations". Studies conducted by the International Hotels Environment Initiative (IHEI) and Accor reveal that 90% of hotel guests prefer to stay in a hotel that cares for the environment. Environmental management in hotels also illustrates a change in perception in this sector from mass tourism to sustainable tourism (Mensah, 2007).

In the accommodation sector, greening programmes have been channelled in the direction of energy conservation, water conservation, reduction of waste and forming healthy relationships with society in their area. Solid environmental management is worthwhile to all accommodation establishments, since it leads to profitability, customer retention, improved corporate image and cost savings (Mensah, 2007).

2.4 Environmental impact/effects within the hospitality industry

Tourism is viewed as a sector with a harmful effect on its operating environment (Van der Merwe & Wöcke, 2007:1). According to Alexander (2002), the tourism sector's expansion with time has produced escalating impact on the environment. Similar to any other industry, various types of tourism and some recreational activities, have multiple consequences on people's lives and on the environment (Beccali, La Gennusa, Lo Coco & Rizzo, 2008). The hotel industry produces negative environmental consequences regularly related to extreme use of water, energy and non-durable commodities, in addition to air pollution and that of soil and water (APAT, 2002)

Originally, environmental impact was associated with sectors that directly produced greenhouse gasses via their waste and discharge. During that period, environmental effects affected an extensive scope of industries and thus far the effect is still growing. Simultaneously, the concern has developed much wider, attributing not merely to the operation production, but rather the entire process, incorporating all activities (Kirk, 1995).

Numerous small operations make up the hospitality industry, each using fairly small quantities of water and energy, food, paper and other resources. All contribute just minimal quantity of pollution to the environment in the form of smoke, smell, noise and chemical pollutants. Nonetheless, the combined effect of every little activity results in considerable impact on global resources. The dilemma now is to convince business participating in this sector (a majority of which are small independent businesses) to critically consider environmental management (Kirk,1995). Independently, companies have no major harmful effect on the environment. Cooperatively though, the result is not short of careless and they can guzzle an enormous quantity of resources (Graci & Kuehnel, 2009).

One remarkable scenario is that of the hospitality industry because it reveals numerous clashes that occur whilst practicing environmental management. Initially, numerous establishments are positioned in the vicinity of exceptional natural beauty, in locations with delicate ecological balance as well as historic capitals. Incorporating new facilities could draw guests to places by now suffering excessive tourism (Kirk, 1995).

Subsequently, a majority of customers looking for leisure anticipate being spoiled, with tons of hot water, jet showers, freshly washed linen, and a generous supply of towels, abundant supplies of food and drink, accessibility to swimming pools and saunas, and luxury cars for transportation to the airport. Obviously, anything done to minimize waste can only be through the customer's approval or in an approach that customers do not experience any deterioration of service (Kirk, 1995).

Tourism's effect on the natural and man-made environment is quite complicated. It incorporates plenty of activities which could lead to harmful environmental effects. A majority of these effects are associated with the construction of general infrastructures (i.e. roads and airports) and tourism facilities (i.e. resorts, restaurants, shops) (Beccali et al., 2008). If inappropriately supervised, it is capable of detrimental effects on the social and natural environments it operates in (Graci & Kuehnelt, 2009).

Despite the obvious affirmative effects of tourism accommodation establishments, they furthermore apply strain on the environment they exist in, occasionally with calamitous consequences. "In the Mediterranean, hotels could easily consume 400 litres of water per guest per day while locals may only require 70l per day. 13 Hotels have also taken valuable land away from local communities. In Nepal, 400,000 hectares of forest were cleared each year to construct hotels, lodges and furniture manufacturing, to provide fuel for cooking and for hot showers and campfires, 14 which led to increased risk of landslides and flooding. Hotels have also contributed to the depletion of energy resources" (Mensah, 2007:17). The activities of these establishments produce a vast amount of solid and liquid waste that is released into water bodies and some disapproved areas or is costly to control (Mensah, 2007).

Hospitality businesses utilize precious natural resources such as water, food, wood, plastics and energy. In addition, they emit numerous undesirables including CO², CFCs, noise, smoke and smells. Energy is wasted; (consumption in the form of space heating/cooling, ventilation and air conditioning), water; (for ablutions, cooking, cleaning), food and packaging (non bio-degradable materials) and many of these waste materials require disposal. Environmental wellbeing of workers is a concern. Utilisation of private as opposed to public transport could be promoted due to location. Various issues might appear somewhat insignificant however collectively, they are quite significant (Kirk, 1995).

The harmful effect of tourism development could progressively destroy the environmental resources that it relies on. UNEP (2007) mentioned that it can damage habitats, degrade landscapes in addition to rivalry over scarce resources and services, like land, clean water supply, energy and sewage treatment. In addition, UNEP stated that host inhabitants could experience the loss of their traditions and become more reliant on tourism income (Beccali et al., 2008).

Nonetheless, mention should be made that tourism as well, has the ability to produce a positive impact on the environment by contributing to environmental protection and preservation. Beccali et al. (2008) suggests that both tourism and the environment ought to be controlled in an incorporated and interdisciplinary manner. Tourism can develop into, in reality, a method of raising awareness of environmental issues and become a funding instrument for protection of natural areas whilst raising their economic importance.

Nowadays ecotourism (tourism that is nature-oriented and environmentally focused) is increasing fast, actually the market is increasing for greener alternatives in the tourism sector. Despite ecotourism, a majority in this sector now aware of the negative effect of their industry to the environment and have applied means to alleviate the impact. Companies operating in an environmentally friendly manner complement tourism with environmental sustainability and integrate exceptionally with the new trend of ecotourism (Alexander, 2002).

2.5 Global and national policies, actions and initiatives to reduce impact on environment

Various policies have been taken throughout the world to deal with climate change and its impact on the environment. "In 1997 the Kyoto Protocol was negotiated, setting legally binding targets and timeframes for reductions in emissions of greenhouse gases by Annex I Parties (developed countries), and providing for 3 market based trading and cooperation mechanisms as well as verification and compliance mechanisms. The legally binding target for Annex I Parties as a group for the first commitment period (2008-2012) is 5% below 1990 levels. The Kyoto Protocol came into force in 2005" (Sustainability SA, 2009).

"What happens beyond 2012 is one of the key issues governments of the 195 Parties to the Convention are currently negotiating. Climate change is a complex problem, which, although environmental in nature, has consequences for all spheres of existence on our planet. It either impacts on or is impacted by global issues, including poverty, economic development, population growth, sustainable development and resource management. It is not surprising, then, that solutions come from all disciplines and fields of research and development" (UNFCCC3, 2011).

Various institutions and bodies have been put together to ensure the objective of the convention is met. Figure 2.3 gives a brief depiction of the relationship between these various bodies.

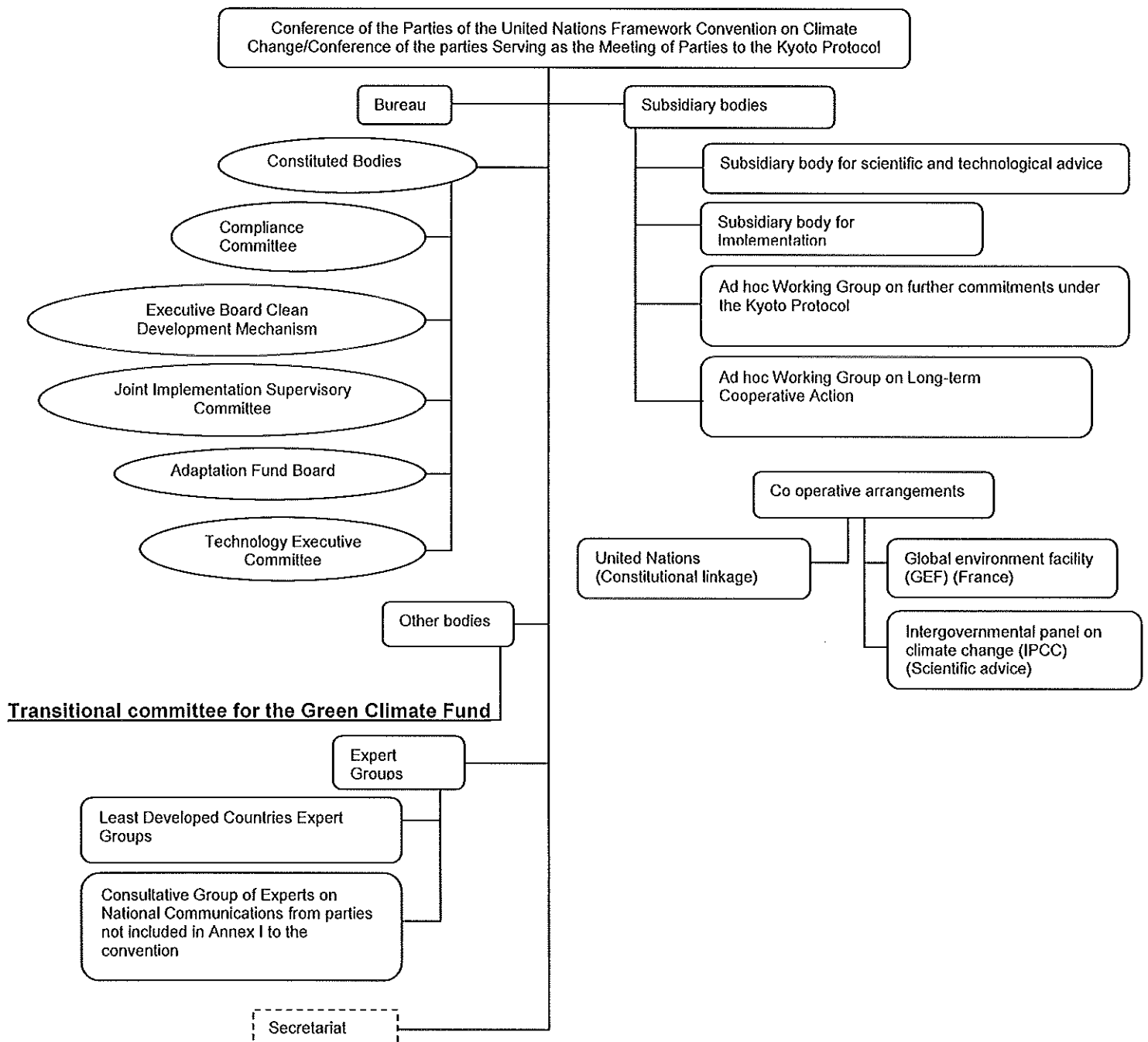


Figure 2.3. Convention bodies involved in the international climate change negotiations

Adapted from: UNFCCC3 (2011)

"Conference of the Parties (COP) is the supreme decision making body of the Convention. All governments that are party to the Convention are represented at the COP where they review and promote the implementation of the Convention and any other legal instruments that the COP adopts, including institutional and administrative arrangements. The COP serves as the Meeting of the Parties to the Kyoto Protocol (CMP). All governments that are party to the Kyoto Protocol are represented, while governments that are not party are observers. The CMP reviews the implementation of the Kyoto Protocol and takes decision to promote its effective implementation" (UNFCCC3, 2011).

"The office of the Conference President rotates annually between the five United Nations (UN) regional groups. Mexico held the COP 16 / CMP 6 in 2010 and is currently the COP/CMP President. The African Group will be the next proud host of the Conference with COP 17 / CMP 7 taking place from 28 November to 9 December 2011 in Durban, South Africa. Kenya held the Presidency of the Conference in 2006 with the COP 12 / CMP 12 in Nairobi" (COP, 2011).

2.5.1 South African Government and industry association initiatives

Adjusting to climate change requires adjustment and transformation at all stages – from communities to national governments, including international efforts. Society is advised to construct their resilience and take up suitable technologies meanwhile incorporating conventional knowledge, and diversify their livelihood to manage existing and future climate demands. Ministries, governments, non-government organizations and institutions are advised to integrate climate change on all plans, budgets and decisions (UNFCCC, 2007).

There are at present numerous regulations pertaining the environmental conservation and management in SA. The overriding legislation is enclosed in the National Environmental Management Act of 1998. Climate change is clearly mention in the White Paper on Integrated Pollution and Waste Management of 2000, and referenced in the White Paper on a National Water Policy for South Africa, 1997 (DEAT, 2004).

South Africa's international response to climate change issues is in line with Framework Convention on Climate Change (FCCC) and the Kyoto Protocol. The country ratified the FCCC in 1997 and the Kyoto Protocol in 2002. As an FCCC non-annex I party, there are no quantified emission limitations and reduction commitments for SA in terms of Article 3 of the Kyoto Protocol (IMBEWU, 2006).

South Africa produced its National Climate Change Response Strategy (NCCRS) in 2004 which presents a general policy framework to tackle climate change associated matters subsequent to ratification of the UNFCCC. The strategy insufficiently and unsuccessfully highlights cross-sectoral effects of climate change, it also fails to develop incorporated adaptation schemes. Furthermore socio-economic repercussions of climate change especially to most susceptible regions in society are not shown (Madzwamuse, 2010).

The Long Term Mitigation Scenarios (LTMS) was formed by government considering its international obligations. It highlights opportunities for dropping GHGs effectively alleviating climate change. While LTMS considers effects on the GDP, job creation and wealth distribution (aspects missing in NCCRS), LTMS is driven by business and capital interests (Madzwamuse, 2010:4).

With tourism viewed to have a major effect on the environment it functions in, the significance of responsible tourism was outlined at the Earth Summit in 1992, which expressed the core principles for sustainable development in the 21st century (WTTC, 2002).

DEAT defines responsible tourism as "tourism that promotes responsibility to the environment through its sustainable use; responsibility to involve local communities in the tourism industry; responsibility for the safety and security of visitors and responsible government, employees, employers, unions and local communities" (DEAT, 1996:4). Various SA tourism companies such as Wilderness Safaris are renowned worldwide for their responsible tourism efforts (Van der Merwe & Wöcke, 2007).

South Africa has numerous greening initiatives in the tourism industry with the concept ingrained in the White Paper on the Development and Promotion of Tourism in South Africa (1996). The initiatives are structured as responsible tourism awards, certification membership organisations and voluntary guidelines. These include: the Imvelo responsible tourism awards established by Federated Hospitality Association of Southern Africa (Fedhasa); DEAT created guidelines for responsible tourism in SA that got published as a 'responsible tourism handbook'; International Union for the Conservation of Nature and Natural Resources (IUCN) certifies applicants with the 'Fair Trade in Tourism South Africa (FTTSA) Trademark' in line with global association standards; Heritage Environmental Ratings Programme audits its members in line with International Organization for Standardization (ISO) 14000 standards (Van der Merwe & Wöcke, 2007).

A small amount of tourism companies partake in these government and industry initiatives although the tourism industry is considered a major contributor to GDP. The initiatives are voluntary resulting in no tangible incentive to participate in responsible tourism activities (Van der Merwe & Wöcke, 2007). Noteworthy is that a majority of tourism companies that enthusiastically partake in corporate social responsibility programmes are either listed on the Johannesburg Stock exchange or belong to voluntary organisations which uphold responsible tourism (Van der Merwe & Wöcke, 2007).

2.6 The business rationale for participation in environmentally friendly activities in the accommodation sector

Companies nowadays are considered on their environmental accountability as opposed to just financial performance as a result, environmental management is also critical in companies. This influences shareholders and consumers alike (Kirk, 1995). Huge, dominant and widely-respect companies are recognising the financial prospects of being environmentally responsible, therefore they are implementing more firm environmental management policies and consequently those who have business with them will be expected to act likewise (Alcock, 2008).

The McKinsey Quarterly Report (MQR) (2007) in Engelbrecht (2010) found that environmental and social issues have flown to the top of the sustainability agenda. Companies anticipate that the environment will attract more public and political interest and influence shareholder value above any other societal issue (MQR, 2007:2, cited from Engelbrecht, 2010). The notion of sustainability in the corporate world should embrace the principle or recognising the importance of the inter-dependent relationships between a business and its environment. "Sustainability of a company means conducting operation in such a manner that meets existing needs without compromising the ability of future generations to meet their needs" (King III report, 2010:61).

The South African King III Report on corporate governance (2010) confirmed these concerns as it identifies sustainable development as the "primary moral and economic imperative for the 21st century and one of the most important sources of risk and opportunities for businesses" (King III report, 2010:61).

Commerce is accepting public concerns about climate change, these shifts in consumer attitudes and changes in consumer purchasing behaviour leave the industry no choice. It has thus developed into a trend for companies to market what they are doing to prevent global warming. People and businesses, are getting more selective about suppliers and their partners, they want to associate with those who express their environmental credentials (Alcock, 2008). Research shows that customers are stricter on business accountability with regards to environmental protection and conservation within their operations (Iwanowski & Rushmore, 1994).

"There is now a substantial body of research (Bansal & Clelland, 2004; David et al., 2005; Livesey & Kearins, 2002; Hunter & Bansal, 2007) which has explored whether it pays to be "green" from which environmental management practices have emerged as a key lever in improving manufacturing performance and subsequent corporate profitability.

When combined with other numerous environmental challenges, such as climate change, air and water pollution, natural resource management, natural disasters and industrial accidents, the costs of not responding adequately to these environmental challenges can be considerable, and in some cases represent a significant drag on a country's economy" (Dwyer, 2009:1200 - 1201). Increasing concerns about the effects of tourism on the environment resulted in the tourism sector's acceptance of the notion of sustainability (Mensah, 2007).

Hanas (2007) and Lee (2008) predict that the idea of an environmentally conscious manner of executing business will turn out to be conventional. "Right now, the question is no longer whether organizations should take charge of their environmental impacts, but rather how they can do so and still profit (Heal, 2007; Larson, 2006; Lyon & Maxwell, 2006; cited from Dwyer, 2009:1202) .

Pressure to address green concerns is mounting as costs of inaction rise and consequences are felt" (cited in Dwyer, 2009:1205). Improving a tourism accommodation establishment's environmental performance helps to advance organisational efficiency and adds value to its performance and services (Penny, 2007).

According to Dwyer (2009), this is the right time for companies to incorporate activities, planning and responsibility procedures as well as personnel, to achieve their environmental objectives if they want to flourish in this new age of worldwide environmental acceptance and adjustment. Actually, numerous research (Bansal & Roth, 2000) shows that integration of this nature will result in increased performance and accountability (Dwyer, 2009). DOI (2009) highlights the benefit of implementing greening measures prior to legislation which may compel businesses to oblige leading to compliance costs which could have been avoided.

Enhanced environmental practices can lead to tourism accommodation establishments being more efficient and productive, performance and services improved, as well as cost saving. A healthy, secure and ecologically sound environment decreases detrimental effects of the environment to consumers and personnel. In addition, numerous studies reveal an increase in pressure from consumer for these establishments to green their operations (Penny, 2007).

Tourism accommodation establishments take on environmental initiatives for various reasons, companies have realised that being greening your establishments and convincing consumers that you are greener than your competition may result in competitive advantage (DOI, 2009). In other instances hoteliers might react to influence from the public or to legislation changes (Kirk, 1998). They can also be influenced by their consumers (Clark, 1999). Another reason could be dropping the use of energy, water, and materials therefore dropping overhead (Forbes, 2001; cited in Van der Merwe & Wöcke, 2007). Simultaneously, they are convinced it might improve consumer loyalty and the organisation's public image (IHA, IHEI & UNEP, 1995).

A study done by Tzhesentke (2004) revealed that the prospects of bringing down costs by raising the standard of operational efficiency was the principal drive for greening implementation. Implementation was discovered to be a steady procedure with help from replacement or upgrading requirements, a variety of reasons leading to elevated operational costs were found to be fast-tracking implementation. Increasing water, energy and waste removal costs often came up to substantiate reasons behind seeking for cheaper substitutes to their operations. "It is a continuous process adopted through management decisions, through which an organisation ' s activities are monitored and appropriate programmes devised to reduce the negative environmental impacts. There are many examples of hotels taking specific initiatives to reduce the impacts of their operations on the host community" (Mensah, 2007).

Greening initiatives for tourism accommodation establishments are in the form of conserving water and energy, reducing waste and forming good relationships with their communities. These initiatives are the most common due to their ability to save cost. Some managers have discovered that adopting good greening initiatives can reduce their energy and water bills (Mensah, 2007). According to Alexander (2002), tourism accommodation establishments are repeatedly getting greener. "The most costly and wasteful use of resources in hotels are usually in the consumption of non-renewable energy, excessive water use, and the generation of waste". Financial benefits have been identified in reduced water, energy and waste expenses, reduced environmental and emissions expenses, and reduced maintenance and operational costs, as well as improved health and productivity (DOI, 2009).

Numerous studies have shown that making environmental performance of accommodation establishments better can result in reduced energy consumption and operational costs (IHEI, 1996; Kirk, 1998), create an environmentally friendly atmosphere for employees and consumers (Cooper, 1998), and assist in improving the corporate image for the company to gain a competitive advantage (Mensah, 2006; Taylor, 1992).

Every establishment discovered that cost savings, operating efficiencies, and excellent marketing opportunities came from their greening activities. Managers at some of the environmental establishments feel governmental demands must not be the only influence towards greening implementation (Enz & Siquaw, 1999). Enz and Siquaw (1999) believe the greening initiatives make financial sense because they result in cost savings, enhanced customer and employee satisfaction. The green establishments felt greening initiatives will shortly be a necessity for all establishments based on consumer choices and government regulations (Enz & Siquaw, 1999).

Various top organisations are utilising environmental pressure to advance their operational efficiency, raise their corporate image, develop new products and opportunities and thus gain a competitive edge (Taylor, 1992).

Environmental programmes have been accepted in the hospitality sector as a result from public outcry about the environment. "Green Hotels," an initiative of the Green Hotels Association, concentrates on initiatives intended to save water and energy and minimise waste. Initiatives like towel rack hangers and sheet-changing cards have received good responses from management and consumers for more than ten years, (Green Hotels Association, 2005).

A study conducted by the Travel Industry Association of America in 1992 revealed that in America, 43 million people were self-proclaimed "eco-tourists" and they were prepared to pay 8.5% extra for green travel companies. This therefore means hospitality establishments that institute eco-friendly practices and communicate their initiatives to society can have a competitive advantage and can thus tap into this escalating market segment (Iwanowski & Rushmore , 1994). One of the studies in America showed 73% of guests who knew of a hotel's greening program took part.

Chapman (1997) states that previous studies show most organisations do not have knowledge, experience and expertise needed to put together an environmental management program and a majority are not willing or able to appoint the necessary personnel and finances to carry out such operation. Butler (2008) is of the opinion that in the absence of guests insisting on green establishments, the impression that greening an establishment was too expensive is what prevented this sector from doing so.

Particular sectors (such as power generation, petrochemical refining, cement manufacturing, industrial and commercial combustion, and landfills) are now carrying more accountability for reducing GHG emissions, and they will certainly impact the hospitality sector due to escalated costs and limitations (Butler, 2008).

Butler (2008) asserts previously establishments may have had a 10-15% added cost for constructing a green building. However, he feels it may have been the case when greening technologies were expensive and relatively ineffective. He believes improvement in technology reduces greening cost to and enhances the experience.

Numerous American hotel groups have created customer attention by including environmental policies and processes. A study on frequent travellers showed 75% of clients admitted to being green conscious customers and 54% of customers admitted that in addition, they required green hotels (Feiertag, 1994).

In a study conducted by the Boston Consulting Group (BCG) in 2008 to assess green attitudes and shopping behaviours, the results clearly indicated that when it comes to being green, consumers hold companies to a high standard. In addition, the study revealed that customers are prepared to pay extra for some green products, including tight budget periods if they believe that such products are safer, healthier, or better for the environment (BCG, 2009).

Graci and Kuehnel (2009) say apart from capital costs and the likelihood of a long return on investment period related to greening programmes, the financial gain often overshadows the cost of carrying out such programmes. They propose that beginning with initiatives cheaper to execute (like retrofitting light bulbs, energy metering, and training staff to be sensitive to how they utilise energy) will result in significant cost savings.

A report issued in America in 2003 showed that the cost of green design and construction had declined with time, attributable to improved experience in green building (Butler, 2008:238).

"The report showed energy savings for green buildings ranged from 25 - 30 %. Together with other initiatives, there were notable financial benefits of green building. Particularly, the report showed that there is financial gain in green buildings not found in normal buildings. The financial benefits are in lower energy, waste and water costs, lower environmental and emissions costs, and lower operational and maintenance costs, and increased productivity and health. The study also noted that green buildings seem to show noticeable improvements in the health and productivity of people working in them".

"Beneficial features include better sitting, better use of daylight, improved thermal comfort and better ventilation, reducing use of toxic materials, and use of low-emission adhesives, sealants, paints, carpets, and other materials. The report noted that there have been thousands of studies finding significantly reduced illness symptoms, reduced absenteeism, and increases in perceived productivity, as compared to workers in buildings without green features. The report particularly cited two European studies of more than eleven thousand workers in 107 European buildings. Based on these studies, the report concluded that there was ample evidence of improved health and productivity of people in green buildings. The report also commented on how the users of such buildings enjoy significant benefits in attracting and retaining a committed workforce" (Butler, 2008:239).

2.7 Conclusion

In this chapter literature was reviewed from prior studies, books, journals and electronic resources on the research topic and related concepts. Tourism has evolved into a significant economic and social activity worldwide and has become among the main trade industries internationally. Tourism demand is anticipated to increase worldwide and is among the fastest growing sectors in SA. Global climate change is a threat, particularly to developing countries. If no action is taken to mitigate it, there will be detrimental effects on livelihoods and human settlements. Tourism accommodation establishments utilise precious natural resources and can reduce impact on the environment. Globally and nationally various policies and initiatives have been taken to reduce impact on the environment. Companies nowadays are also considered on their environmental accountability and studies have shown several benefits to implementing environmental programmes. In chapter three, the research methodology and data collection techniques applied to this study are discussed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter two reviews the literature from prior studies on the research topic and related concepts. In this chapter, the aim and objectives of this study are stated. The research methodology and data collection techniques applied in this study are discussed. The population, geographic area as well as accommodation category definitions are shown. It is considered critical to establish a research design that would provide acceptable answers to the research questions. The research design and methods are also described in this chapter. Finally, data collection and analysis is discussed.

3.2 Aim and objectives of the study

Solid environmental management has been recognised as favourable to all accommodation establishments because it results in profitability, customer retention, improved corporate image and cost savings to name a few, Mensah (2006). The aim of this study is to explore how the tourism accommodation sector has embraced and applied the greening concept, and the factors thereof.

The objectives of the study are:

- To explore environmental awareness among tourism accommodation businesses.
- To determine what motives drive a tourism accommodation business into becoming environmentally involved.
- To investigate what factors prevent tourism accommodation businesses from implementing greening measures.
- To establish what factors encourage tourism accommodation businesses to implement greening measures.
- To establish the measures tourism accommodation businesses are willing to or have put in place so as to be environmentally friendly.

The questions to be answered in the research are:

- What is the motivation behind greening practices in the tourism accommodation industry?
- What are the perceptions in the tourism accommodation industry about the benefits of greening?
- What are the factors that prevent or encourage implementation of greening measures?
- What greening measures are tourism accommodation businesses willing to implement or have they implemented?

3.3 Data collection strategies

Sekaran (1992) indicates that data collection can be executed in numerous ways, various settings and from a variety of sources classified as primary or secondary source. Primary data source includes focus group, observation, face-to-face interviews, telephone interviews, computer assisted interviews, personally administered questionnaires and even projective tests. Examples of secondary data sources include personnel files, government publications and industrial analysis offered by the media. In this study, data was collected by administering a questionnaire to each subject.

Ethical clearance was obtained for the study and confirmation is Appendix B. Due to the nature of this study, exploratory research was utilised as this kind of research explores different views expressed by respondents and collates and group's similar responses received. The data collection method used in research is key to the outcome; therefore it is very important to select a method appropriate for the research objectives. Large scale surveys fall within the quantitative paradigm; it is a common approach to research in business and management and creates the opportunity to collect large quantities of data or evidence through the use of questionnaires (Watkins, 2006).

An e-mail survey was used for this research, the reason being that "e-mail surveys are both very economical and very fast. More people have email than have full Internet access. This makes email a better choice than a web page survey for some populations" (SD, 2010). In this case a list of e-mail addresses for the sample used was readily available from the Tourism KZN department. Given the time and financial constraints, this type of survey was most favourable. The drawbacks to this survey method were reduced or eliminated by combining this method with personally delivery and collection of the research instrument (questionnaires).

The study used a structured questionnaire, which was developed to study the attitude, behaviour and motives of accommodation establishment owners/managers in adopting environmentally friendly practices.

3.3.1 Population

A population in a study refers to the "entire group of people, events, or things of interest that the researcher wishes to investigate" (Sekaran, 1992:225). Basha and Harter (1980) define a population as any set of persons or objects that possesses at least one common characteristic. In this research the common characteristic is that of being a tourism accommodation establishment based on the North coast of KwaZulu-Natal. A geographically dispersed population can be expensive to survey and greater economy can be achieved by a geographical cluster sampling. The North coast is one of the popular and affluent holiday areas for local and international visitors with tourism being one of their main activities in the area. A survey in this area would therefore meet the objectives in a cost effective way that can provide high precision in a feasible manner, hence the North coast was chosen. Since populations can be quite large, researchers directly question only a sample (i.e. a small proportion) of the population. In this study, it was deemed feasible to contact the entire population group (a tourism accommodation establishment based on the North coast of KwaZulu-Natal) as this number was small enough to be deemed contactable. There were only 100 establishments in the selected geographic area therefore it was felt prudent to do a census.

The population of reference for this study is all tourism accommodation establishments on the North coast of KwaZulu-Natal according to the database from Tourism KwaZulu-Natal (TKZN) which comprises of 100 establishments in that area. The population includes all different types of accommodation establishments according to the department of tourism. This includes backpackers / hostels, bed and breakfast (B & B), caravan and camping, country houses, guest houses, hotels and lodges.

Tourism KwaZulu-Natal website (TKZN1) has the following accommodation category definitions (Table 3.1):

Table 3.1 Tourism accommodation category definitions

Backpacker/ Hostel

A Backpacker and/or Hostelling establishment is an accommodation facility that provides communal facilities, including dormitories yet may offer a range of alternative sleeping arrangements. Only establishments that cater for transient guests (travelling public) will qualify for grading.

Bed and Breakfast

Bed and Breakfast accommodation is provided in a family (private) home and the owner/manager lives in the house or on the property. Breakfast must be served. Bathroom facilities may or may not be en-suite and/or private. In general, the guest shares the public areas with the host family.

Caravan and Camping

Caravan and Camping Park is a facility that provides ablution and toilet facilities and space for guests to provide for their own accommodation, such as a tent, motor home and or caravan.

Country House

A country house is a large guest house, usually situated in natural, peaceful surroundings such as near a nature reserve, a forest, a lake etc. It offers all the services of a hotel, including dinner.

Guest House

A guest house can be an existing home, a renovated home or a building that has been specifically designed to provide overnight accommodation. A guest house will have public areas for the exclusive use of its guests. A guest house is a commercial enterprise and as such the owner or manager may live on the property.

Hotel

A hotel provides accommodation to the travelling public, has a reception area, and offers at least a 'breakfast room' or communal eating area. In general a hotel makes food and beverage services available to guests; these may be outsourced or provided by the hotel.

Lodge

A lodge is an accommodation facility located in natural surroundings. The rates charged are usually inclusive of all meals and the experience offered at the lodge, with game drives, battlefield tours, etc.

Self Catering

A house, cottage, chalet, bungalow, flat, studio, apartment, villa, houseboat, tent or any accommodation where facilities and equipment are provided for guests to cater for themselves. The facilities should be adequate to cater for the maximum advertised number of residents the facility can accommodate.

Source: TKZN 1

Figure 3.1 and Figure 3.2 show the location of North coast KwaZulu-Natal otherwise known as the Dolphin Coast.

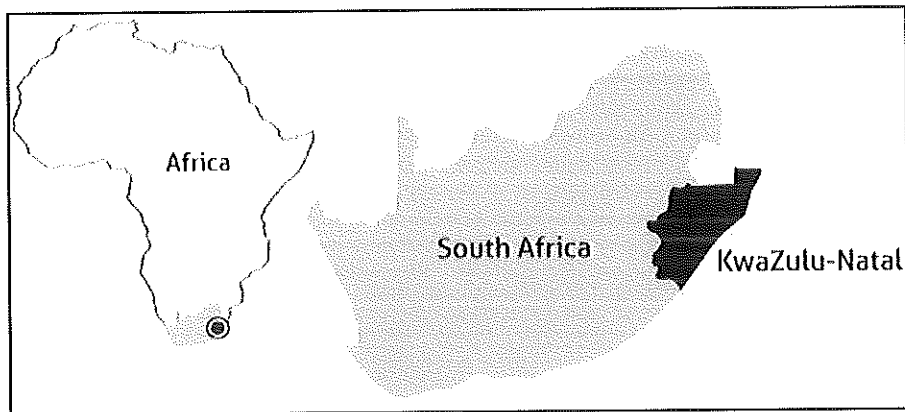


Figure 3.1 Location of KwaZulu-Natal

Source: KZN. 2011

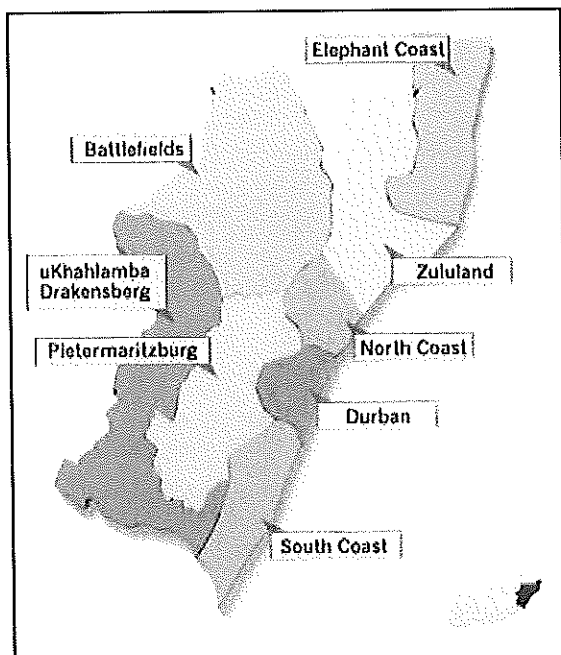


Figure 3.2 Location of North coast of KwaZulu-Natal /Dolphin coast

Source: KZN. 2011

3.4 Research design and methods

To ensure the objectives of the study are met, the research methods have to be designed and executed effectively and in a manner that will allow these objectives to be addressed. The research design outlines the type of study that is undertaken in order to provide acceptable answers to the research problem or questions. It discusses what type of research design was followed in the study, why this design was selected and what possible challenges or limitations in the design will require the researcher's attention. A quantitative approach suggests structured 'closed' questions, while a qualitative approach suggests unstructured 'open-ended' questions (Watkins, 2006).

Babbie (2005:25) expresses the opinion that ".....recognising the distinction between qualitative and quantitative research doesn't mean that you must identify your research activities with one to the exclusion of the other. A complete understanding of a topic often requires both techniques". This study uses a combination of qualitative and quantitative inputs into the data gathering activities to test the attitude, behaviour and motives of accommodation establishment owners and managers in adopting environmentally friendly practices.

To facilitate the ease of completing the questionnaire, respondents were provided with close ended questions containing a number of possible answers for each question, based on information gathered during the literature review. An attempt was made to include all possible options, but respondents were also provided with an open ended option "other", "reason" or "general comment" that they could use to indicate a response that was not included in the list. SD (2010) advises that when the answer choices are a list of possible opinions, preferences, or behaviours, these options should usually be allowed.

3.4.1 Description and purpose

The questions asked of the respondents were specifically developed for this study. The questions were arranged in groups that allowed the author to obtain clarity on specific issues relating to the problems that were under investigation. A good questionnaire design is very critical to the success of any survey. Mouton (2008: 104) provides useful insight and guidelines to develop good questions, specifically suggesting that "leading questions, double-barrelled questions, and ambiguous questions should be avoided".

Secondary data was retrieved from prior studies, books, journals and electronic resources. A structured questionnaire was compiled in order to gain an understanding of the motivational attitude, behaviour and motives of accommodation establishments in adopting environmentally friendly practices and the decisional factors involved. The process of going green, reasons for involvement in environmental activities, participation in environmental management, perceived benefits and drawbacks, as well as stakeholders' influence and response towards going green were investigated.

These were directed to the owners, general managers and operations/maintenance managers of the establishments since these are the people who are highly involved in decision making, planning and implementing strategies.

3.4.1.1 Construction of the instrument

In this study, data was collected by administering a questionnaire to each subject. According to Sekaran (1992), a questionnaire is a report an individual completes by answering a number of questions regarding their current and previous habits, feelings, perceptions and attitudes within closely defined alternatives. Questionnaires were chosen as a research instrument using the reasoning from Surv (2010): They are cost effective, easy to analyse, familiar to most people, reduce bias, are less intrusive than telephone or face to face (Surv, 2010).

Questionnaires do however have their drawbacks and measures were taken to minimise them:

- The possibility of a low response rate was overcome by sending out the questionnaires from a source respondents are familiar with and would trust i.e. the department of tourism KZN.
- The responses were allowed flexibility by mixing open ended and closed ended questions (respondents were given space to qualify their answers). Comments are among the most helpful of all the information in the questionnaire, and they usually provide insightful information that would have otherwise been lost.
- Gestures and other visual cues are not relevant in this study therefore it was not affected by lack of personal contact.
- Questionnaires went directly to the e-mail address of the person registered with the tourism department, in addition, some of the questionnaires were personally administered which reduces the chances of the wrong respondent filling it in.

The questionnaire was kept short and simple (14 questions) so as to encourage participants to complete the questionnaire. According to SD (2010), long questionnaires lead to most potential respondents giving up in horror before even starting. The questionnaire was structured in a way to hold the respondents' interest to complete it. One way to keep the questionnaire interesting was providing a variety in the type of items used. At the same time, items were grouped into coherent categories. All items were made to flow smoothly from one to the next.

Simple, clear and direct language was used in order to reduce misunderstandings and make the questionnaire appear easier to complete. Adequate space was left for respondents to make comments, leaving space for comments provided valuable information not captured by the response categories. White spaces were left as a design to make the questionnaire look easier as cluttered questionnaires are less likely to be answered.

Introductory questions obtained a profile of the establishments and respondents while another question provided a wide variety of meanings for the term 'greening' in order to test respondents' understanding of the concept. Question 6 of the questionnaire related to the level of confidence of the respondents about their knowledge and understanding of what greening is and what it entails. The subsequent questions attempted to solicit specific information about whether the respondents had implemented any greening activities and the reasons behind the implementation or for non-implementation. The final question examined reasons that would drive respondents into greening their establishments.

3.4.2 Pre-testing and validation

The list of questions was pre-tested with a few suitable candidates. This was done to assist the author in testing the phrasing of the questions, removing ambiguous statements and also to enable evaluation of the data collection technique. The responses to the questions and comments were useful in improving the final list of questions for the questionnaire.

3.4.2.1 Validity of the questionnaire

Validity refers to the evidence that the instrument, technique or process used to measure a concept does indeed measure the intended concept (Sekaran, 2003). In terms of internal and external validity, the researcher was concerned about the issue of the authenticity of the cause-and-effect relationships (internal validity) and their generalisability to the external environment (Sekaran, 2003). The questionnaire was sent to the owner or manager to ensure validity of participants. These are the people highly involved in decision making, planning and implementation of any initiative in the establishments. The research instrument was designed in a way that one would be able to conduct the study in other times, places, and industries ensuring external validity. Care was taken to ensure that the research methodology focused on the objectives hence the questions are closely related to the aims and objectives of the study.

3.4.2.2 Reliability of the questionnaire

Reliability attests to the consistency and stability of the measuring instrument (Sekaran, 2003). The reliability of a measure is its consistency. A measure is reliable if the measurement does not change irrespective of the number of times it is measured. For the purpose of this study, to ensure reliability, the questionnaire was tested with fellow MBA students at UKZN to ensure the questions were concise, explicit and answerable.

3.4.3 Administration of the questionnaire

A self-completion questionnaire was developed which was sent to respondents via e-mail with a return fax number provided as an option should some respondents prefer to manually fill in the questionnaire. Making it convenient for respondents was a priority since the easier it is for the respondent to complete the questionnaire, the greater the compliance.

To encourage a high response rate, the questionnaires were e-mailed from the TKZN address which was an address that could be trusted by the owners of the establishments. All questionnaires were sent with a cover letter explaining the purpose of the research. Respondents were given consent forms to sign and were informed that participation in the project is voluntary. Participants were notified that they may refuse to participate or withdraw from the project at any time with no negative consequence, there will be no monetary gain from participating in the survey and the fact that confidentiality and anonymity of records will be maintained by the UKZN.

To further improve the response rate, questionnaires were physically delivered at the tourism accommodation establishments of those who did not respond to the e-mails and collected at the same time when the respondents had finished answering the questionnaire. The researcher carried an identification card with a picture in order to gain trust from the owners of the establishments.

3.5 Analysis of the data

For the data analysis, the analysis programme Statistical Package for the Social Sciences (SPSS) version 19 was used since it is capable of a wide variety of statistical analyses, for example, it allows one to organise and read almost any kind of data, analyze data, and create reports and graphs. It can perform many different types of data analysis, from simple descriptive statistics to logistic regression, reliability measures and functions can be modified to run different statistical models and examine different variables. This helps one understand and predict behaviour by using a unique combination of attitudinal data gathered through surveys. SPSS enables in depth understanding by using and interpreting information obtained from surveys including responses to open ended questions (SPSS, 2011).

Exploratory research was used to analyse questions, by grouping similar responses. The analysis of the data used descriptive statistics. Descriptive statistics include frequencies, means and standard deviation. Huysamen (1996) reports that the purpose of descriptive statistics is to classify summarise and describe numerical data so that an overall impression can be established. According to Sekaran (1992:259), frequencies focus on how often certain phenomena occur, from which the percentage of the occurrence of the subcategories is calculated. Frequencies and percentages are generally obtained for nominal variables. Both Sekaran (1992) and Huysamen (1996) describe measures of central tendency as a method for the researcher to understand or interpret the characteristics of the sample. The measure of central tendency used in this study is the mean. The mean is the arithmetic average of the scores in a distribution, used to portray a general picture of the data by providing an average or centre value for the data (Huysamen, 1996). The data is presented in tables and graphs.

3.6 Summary

This chapter outlines the research approach and strategy, methodology, data collection technique used and the details on the instrument and population. The instrument in Appendix A was used to collect the primary data that is relevant to this study. The data that was gathered is presented in chapter four.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 Introduction

In chapter 3 the research methodology and data collection techniques applied in this study are discussed. Chapter 4 now presents the data that was gathered through the research carried out on tourism accommodation establishments in the North Coast area of KZN. A statistical analysis of the data is carried out. A total of 82 responses were received, indicating a response rate of 82%. This places the confidence level at 95% with a margin of error of 5%, which is deemed acceptable for this study.

4.2 Presentation of results

The results from the data analysis on the responses to the questionnaires are presented in the following sections.

4.2.1 Profile of respondents and establishments

Part of the criteria to ensure reliability of the questionnaire was that it must be completed by someone in a decision making position. Respondents therefore were asked to state their position in the establishment, the results of which are shown in Table 4.1

Table 4.1: Position of respondents

	Frequency	Percent
Owner	54	65.9
Manager	28	34.1

Responding establishments varied in size. Sizes ranged from a small, bed and breakfast establishment with two rooms, to a large hotel with 120 rooms. Table 4.2 showcases the wide range across the number of rooms.

Table 4.2: Number of rooms

Number of rooms	Frequency	Percent	Cumulative Percent
2	5	6.1	6.1
3	10	12.2	18.3
4	14	17.1	35.4
5	21	25.6	61.0
6	6	7.3	68.3
7	10	12.2	80.5
8	3	3.7	84.1
9	2	2.4	86.6
10	5	6.1	92.7
12	1	1.2	93.9
16	2	2.4	96.3
21	1	1.2	97.6
73	1	1.2	98.8
120	1	1.2	100.0
Total	82	100.0	

To further get an indication of the establishments' profile, respondents were requested to indicate the number of permanent employees and the results are displayed in Table 4.3

Table 4.3: Number of permanent employees

	Frequency	Percent	Cumulative Percent
1	15	18.3	18.3
2	21	25.6	43.9
3	23	28.0	72.0
4	9	11.0	82.9
5	5	6.1	89.0
6	1	1.2	90.2
7	2	2.4	92.7
10	2	2.4	95.1
12	1	1.2	96.3
40	1	1.2	97.6
95	1	1.2	98.8
120	1	1.2	100.0
Total	82	100.0	

As part of profiling the establishments, the tourism accommodation category was also evaluated. The accommodation category definitions are given in section 3.3.1 of this document. The types of establishments that responded are illustrated in Figure 4.1.

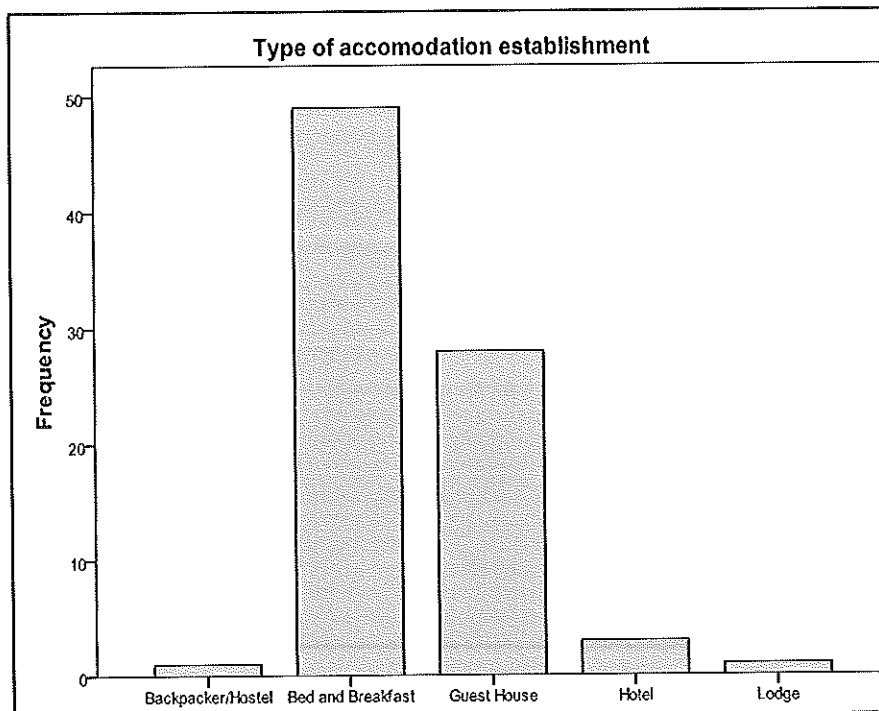


Figure 4.1: Profile of accommodation establishments

From Figure 4.1, the number of accommodation establishments that responded can be seen. The tourism accommodation establishments which responded comprised of 49 'bed and breakfasts' (59.8%), 28 'guest houses' (34.1%), three 'hotels' (3.7%) and lastly one 'backpacker/hostel' (1.2%) and one 'lodge' (1.2%). It is reasonable to assume this is representative of the establishment category percentages in the area.

A further analysis was made to evaluate through cross tabulation, the number of employees for each accommodation category. The results are displayed in Table 4.4

Table 4.4: Number of permanent employees per accommodation category

		Type of accommodation establishment					Total
		Backpacker/ Hostel	Bed and Breakfast	Guest House	Hotel	Lodge	
Number of employees	1	0	12	3	0	0	15
	2	0	12	9	0	0	21
	3	0	12	11	0	0	23
	4	0	6	3	0	0	9
	5	0	4	1	0	0	5
	6	0	1	0	0	0	1
	7	0	2	0	0	0	2
	10	0	0	0	1	1	2
	12	1	0	0	0	0	1
	40	0	0	1	0	0	1
	95	0	0	0	1	0	1
	120	0	0	0	1	0	1
Total		1	49	28	3	1	82

4.2.2 Environmental awareness among tourism accommodation businesses

In order to evaluate their level of awareness about greening and environmental matters, respondents were asked about their understanding of greening and what it entails. Table 4.5 shows the respondent's level of confidence about their knowledge and understanding of what greening is and what it entails.

Table 4.5: Respondents confidence in their understanding of greening

	Frequency	Percent
Strongly Agree	34	41.5
Agree	47	57.3
Uncertain	1	1.2
Total	82	100.0

When asked to rate their level of knowledge of their understanding of what greening is and what it entails, 41.5% were very confident whilst 57.3% were confident, 1.2% indicated uncertainty. Overall 98.8% of respondents were confident about their knowledge and understanding of the greening concept.

In terms of proactively looking for information on environmental matters, 64.6% of respondents admitted to actively seek information and 35.4% indicated that they do not. This analysis is shown in Table 4.6.

Table 4.6: Respondents who actively seek information on environmental matters

	Frequency	Percent
Yes	53	64.6
No	29	35.4
Total	82	100.0

Respondents behaviour towards greening was moreover determined by profiling how many of those who actively seek information also practice greening activities in their establishments. Respondents who had a designated staff member and also practice greening, were evaluated as well, this is displayed on Table 4.7.

Table 4.7: Respondents who actively seek information on environmental matters/ designated staff member * Practice greening activities Cross tabulation

		Practice greening activities		Total
		Yes	No	
Actively seek information on environmental matters	Yes	49	4	53
	No	25	4	29
Designated staff member	Yes	11	4	15
	No	63	4	67

As seen from Table 4.7, in terms of having a designated staff member in charge of environmental matters, only 15 establishments (18.3%) had, whilst 67 establishments (81.7%) did not have. A majority of the establishments (63) practice greening activities but do not have a designated staff member. There was also a higher rate of establishments who actively seek information on environmental matters as well as practice greening activities.

Respondents were asked to indicate what the term 'greening' means to them in their business, to determine how they view the concept in relation to their businesses. They could choose any number of descriptions from a list provided. The results of the responses to the different terms in relation to greening are displayed in Table 4.8.

Table 4.8: 'greening' as seen by respondents

	Frequency	Percent
Taking greater interest in environmental issues and acting to protect the environment	78	95.1
Waste reduction	55	67.1
Responsibility to the environment through sustainable use of natural resources	48	58.5
Planting of trees	39	47.6
Marketing opportunity	16	19.5
Increased cost of doing business	12	14.6
Strategic business tool	4	4.9

Table 4.8 provides the frequency and percentage of responses per description provided in the questionnaire. The most favorable response with 95.1% was the term describing greening as "taking a greater interest in environmental issues and acting to protect the environment". Other descriptions selected by more than 50% of respondents include "Waste reduction" and "Responsibility to the environment through sustainable use of natural resources". The least chosen was "Strategic business tool" of which only 4.9% selected. Other descriptions least chosen were "Increased cost of doing business" and "Marketing opportunity".

4.2.3 Perceptions in the tourism accommodation industry about the benefits of greening

In order to explore the perceptions of the tourism accommodation industry about the benefits of greening, a series of questions were asked on the effect of greening on their business. Respondents were asked to rate their agreement or disagreement with five attitude statements on a five point Likert-scale, the results of which are displayed in Table 4.9.

Table 4.9: Impression on greening in the tourist accommodation business

	Strongly agree (%)	Agree (%)	Uncertain (%)	Disagree (%)	Strongly disagree (%)
By greening I can reduce operational costs	32.9	34.1	23.2	9.8	0
By greening I can attract more customers	19.5	26.8	32.9	15.9	4.9
By greening I can increase customer satisfaction	19.5	28.0	25.6	26.8	0
By greening I can improve my image and gain a competitive advantage	13.4	45.1	25.6	15.9	0
Greening will not make any difference on my business	9.8	24.4	15.9	36.6	13.4
Greening is an expensive exercise that will not benefit my business	11.0	20.7	54.9	13.4	0
Greening is an expensive exercise but worthy since it will benefit my business	9.8	48.8	29.3	4.9	7.3
Accommodation sector has a negative influence on the natural environment	23.2	32.9	31.7	12.2	0
We have a demand for environmentally friendly practices	18.3	37.8	19.5	19.5	4.9
Customers are willing to participate in greening initiatives	18.3	32.9	13.4	25.6	9.8
Customers find discomfort in the extra effort they have to put in greening activities	3.7	18.3	15.9	42.7	19.5

As can be seen in Table 4.9, 50% of respondents believed greening would make a favorable difference to their business, whilst 15.9% were uncertain and the remaining 34.1% did not believe greening would make any difference to their business. There were more respondents who believed greening was an expensive but worthy exercise (58.6%) than those who believed greening was an expensive exercise which would not benefit their business (31.7%) in one form or another. A staggering 54.9% were uncertain whether or not greening was an expensive exercise which would not benefit their business.

4.2.4 Greening measures tourism accommodation businesses are willing to implement or have implemented

The subsequent questions attempted to solicit specific information about whether the respondent's had implemented any greening activities or not. When asked whether they practiced greening initiatives in their establishments, 90.2% of respondents answered 'yes' whilst 9.8% answered 'no' as displayed on Table 4.10.

Table 4.10: Respondents who practice greening activities

	Frequency	Percent
Yes	74	90.2
No	8	9.8
Total	82	100.0

Further questions investigated which initiatives had been implemented, which had not been implemented and which initiatives respondents were not willing to implement. The results are shown in Table 4.11

Table 4.11: Greening initiatives implemented

		Yes (%)	No, and not willing (%)	No, but willing (%)
Energy Efficiency	Solar photovoltaic (PV) to generate electricity	17.1	24.4	58.5
	Energy efficient lighting	100	0	0
	Heat pumps	15.9	36.6	47.6
	Solar water heating	17.1	25.6	57.3
Water Conservation	Low flow shower heads and flow restrictors	62.2	18.3	19.5
	Towel and sheet changing cards	54.9	30.5	14.6
	Recycle water for gardening purposes	40.2	20.7	39
	2 level flushing	37.8	20.7	41.5
Waste reduction	Change to non-toxic detergents	36.6	20.7	42.7
	Recycle and colour code bins for glass, plastic, paper and metal	37.8	3.7	58.5
	Use non-disposable containers and products	50.0	4.9	45.1
General	Encourage guests to conserve water and energy by providing information in their rooms	61.0	2.4	36.6

Further analysis was done using a cross tabulation to determine which category of the establishments had implemented greening initiatives. This is displayed in Table 4.12.

Table 4.12: Establishments which practice greening activities by category

		Practice greening activities		Total
		Yes	No	
Type of accommodation establishment	Backpacker/Hostel	1	0	1
	Bed and Breakfast	45	4	49
	Guest House	25	3	28
	Hotel	2	1	3
	Lodge	1	0	1
Total		74	8	82

To get a better understanding of which initiatives had been implemented, the data was analysed. Overall, the most widely implemented greening initiatives in order of popularity are shown in Figure 4.2.

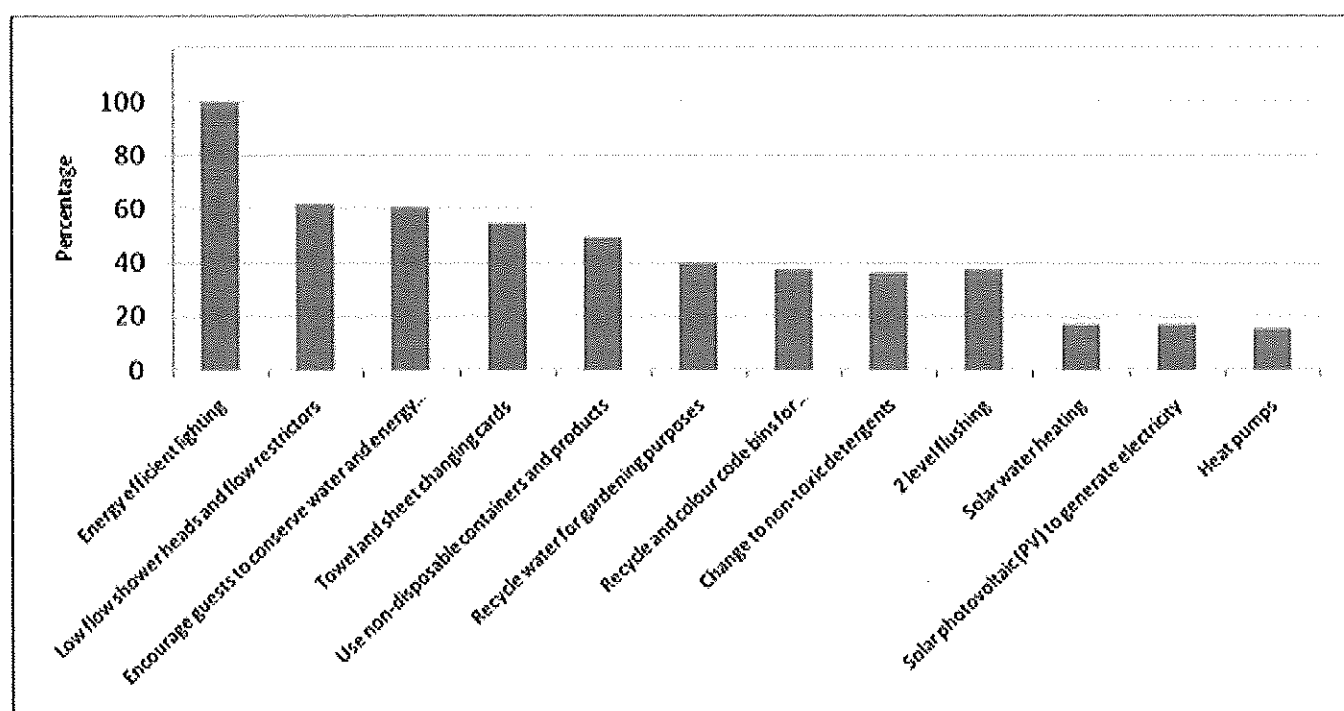


Figure 4.2: Adopted initiatives in order of popularity

Figure 4.2 shows energy efficient lighting in the lead for implemented greening initiatives (implemented in all 82 establishments) followed chronologically by low flow showerheads and flow restrictors (implemented in 51 establishments). Provision of greening information in the rooms was implemented in 50 establishments making it the third most implemented method followed by towel and sheet changing cards with a rate of 45 establishments and use of non-disposable containers and products implemented by 41 establishments.

Other initiatives implemented were water recycling for gardening purposes, color coded bins for recycling glass, plastic, paper and metal; use of non-toxic detergents and dual flush systems. The least popular initiatives were solar photovoltaic (PV) for electricity generation, solar water heating as well as heat pumps.

4.2.5 Motivation behind greening practices in the tourism accommodation industry

In order to understand the motivation behind greening practices, respondents were asked to choose reasons why they had implemented or not implemented greening activities in their establishment. Figure 4.3 below shows the reasons chosen by respondents who had implemented greening measures in their establishments which is 90% of the respondents.

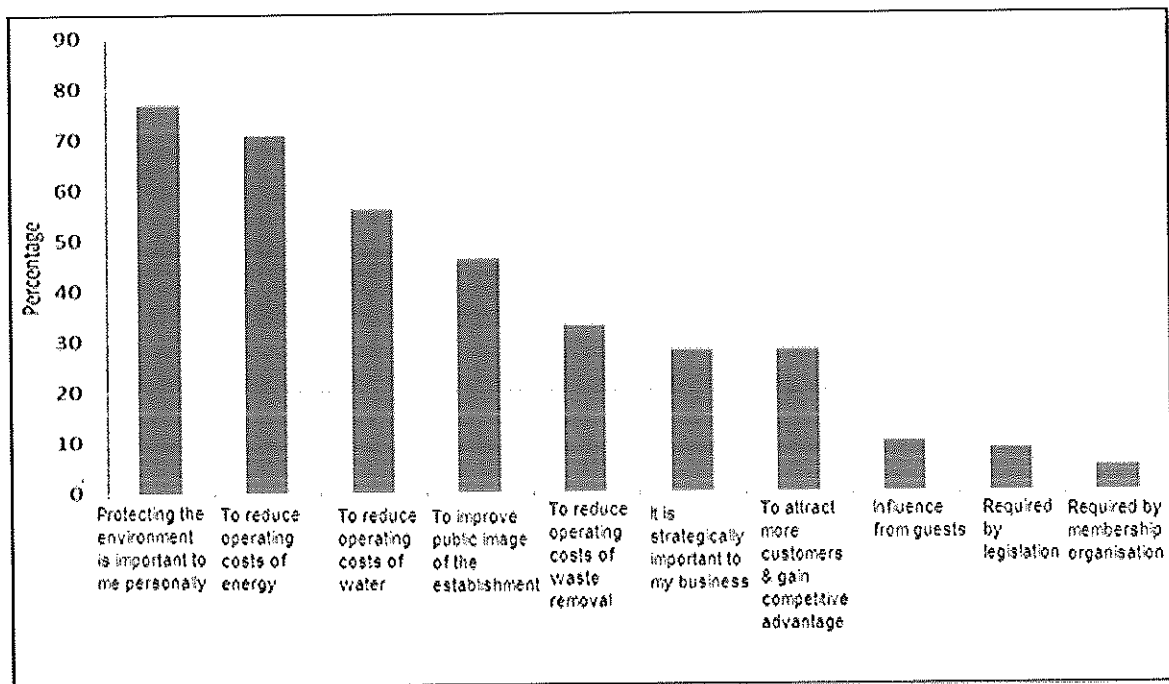


Figure 4.3: Reasons for implementing greening measures

Those who had not implemented any greening measures were also requested to choose reasons why they had not implemented any greening measures in their establishments. The reasons given by the establishments which had not implemented any greening measures are illustrated in Figure 4.4.

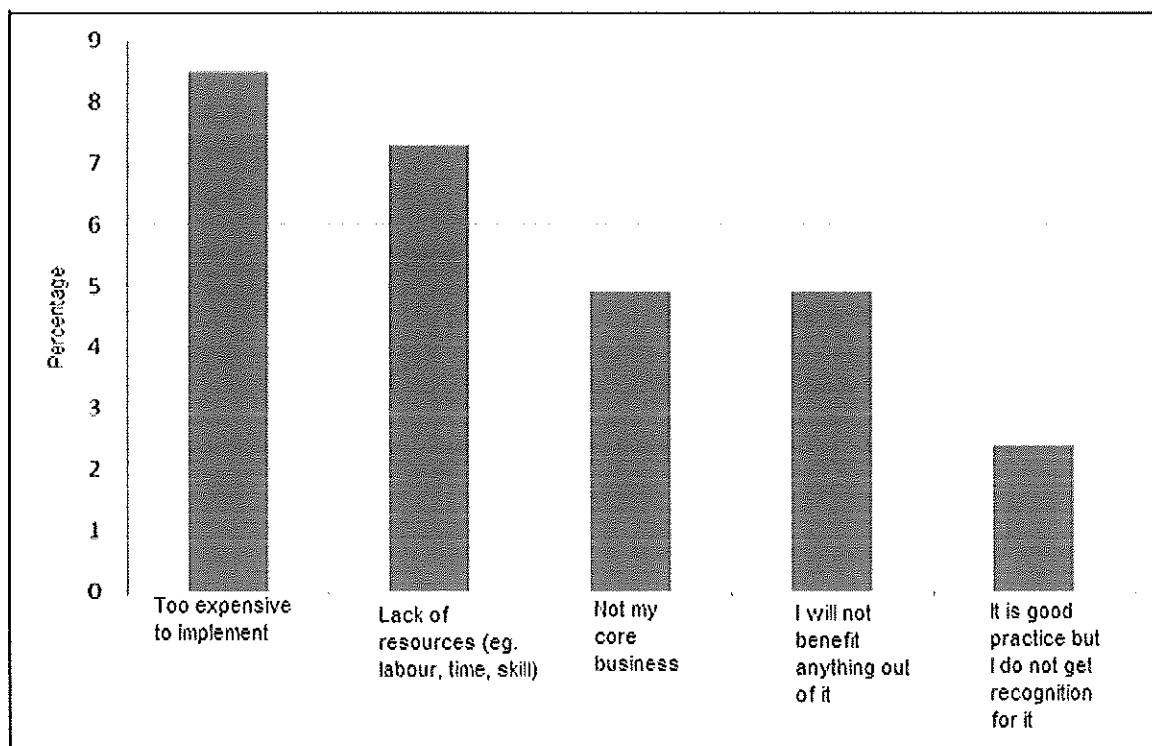


Figure 4.4: Reasons for not implementing greening measures

To further understand the motivation behind implementation, the establishments with designated staff members were analysed according to what initiatives they had implemented, results of which are shown in Table 4.13 using cross tabulations.

Table 4.13: Initiatives implemented by establishments with designated staff members

Solar photovoltaic (PV) to generate electricity

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	0	7	8
	No	14	13	40

Energy efficient lighting

		Yes
Designated staff member	Yes	15
	No	67

Heat pumps

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	7	5	3
	No	6	25	36

Low flow shower heads and flow restrictors

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	12	0	3
	No	39	15	13

Towel and sheet changing cards

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	12	3	0
	No	33	22	12

Recycle water for gardening purposes

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	8	0	7
	No	25	17	25

2 level flushing

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	5	4	6
	No	26	13	28

Change to non-toxic detergents

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	8	0	7
	No	22	17	28

Recycle and colour code bins for glass, plastic, paper and metal

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	12	3	0
	No	19	0	48

Use non-disposable containers and products

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	11	0	4
	No	30	4	33

Encourage guests to conserve water and energy by providing information in their rooms

		Yes	No, and not willing to implement	No, but willing to implement
Designated staff member	Yes	11	0	4
	No	39	2	26

Table 4.13 shows that the most popular initiative which was implemented by establishments with designated staff members was energy efficient lighting implemented by 15 establishments which is a total of all establishments with designated staff members. This was followed by a three way tie between 'low flow shower heads and flow restrictors'; 'towel and sheet changing cards'; as well as 'recycle and colour code bins for glass, plastic, paper and metal'; which was implemented in 12 out of 15 establishments with designated staff members. None of the establishments with designated staff members had implemented solar photovoltaic (PV) to generate electricity and only 5 establishments had 2 level flushing. These were the least implemented among establishments with designated staff members.

4.2.6 Factors preventing or encouraging implementation of greening measures

In order to explore what factors encourage implementation of greening measures, respondents were given a list of reasons and were asked to select reasons which would motivate them into greening their establishments. The results are shown in Table 4.14.

Table 4.14: Factors influencing implementation of greening measures in tourism accommodation establishments in descending order

Reason	Frequency	Percent
To reduce operating costs of energy	73	89.0
To reduce operating costs of water	73	89.0
Protecting the environment is important to me personally	72	87.8
To reduce operating costs of waste removal	65	79.3
To improve the public image of the establishment	52	63.4
To attract more customers and gain competitive advantage	39	47.6
Influence from guests	38	46.3
If it is required by legislation	28	34.1
If it is required by membership organisation	28	34.1

The main factor that would drive implementation of greening measures was to reduce operating costs of energy and water, according to 89% of respondents. Another primary reason chosen by respondents as one that would drive them to operate in an environmentally friendly manner was if it was personally important to them, this was chosen by 87.8% of respondents. Therefore if the owner or manager personally sees value in conserving and protecting the environment, it would be a major motivating factor. This was followed by reducing operation costs of waste removal as a motivating factor which was chosen by 79.3% of respondents.

The other reason chosen by more than half of respondents was to improve the public image of the establishment (63%). Tourism accommodation establishments appeared not to be encouraged by attracting more customers and gaining competitive advantage or influence from guests as less than 50% of the establishments chose this reason as a motivating factor. The least chosen as motivating factors were if it was required by legislation or a requirement of a membership organisation. The factors affecting implementation of greening initiatives were further analysed using a cross tabulation according to accommodation type with the results shown in Table 4.15.

Table 4.15: Influencing factors for implementation of greening initiatives according to accommodation type

Reasons for implementing greening initiatives	Type of accommodation establishment				
	Backpacker/ Hostel	Bed and Breakfast	Guest House	Hotel	Lodge
To reduce operating costs of energy	1	43	25	3	1
To reduce operating costs of water	1	43	25	3	1
To reduce operating costs of waste removal	1	38	22	3	1
To attract more customers and gain competitive advantage		25	11	2	1
To improve the public image of the establishment	1	34	14	2	1
If it is required by membership organisation		14	12	2	
If it is required by legislation		15	11	2	
Influence from guests		24	10	3	1
Protecting the environment is important to me personally	1	45	23	2	1

In Table 4.15 it can be seen that for 'Bed and Breakfast' establishments the most influential factors were operation cost reduction with legislation and membership requirement the least influential. The trend was similar for guest houses whose primary factor was also operation cost reduction, for this category influence from guests and legislation requirement was the least influential. 'Hotels were also influenced primarily by operation cost reduction although for this category, guests were influential as well.

The research instrument was designed with sections open for the respondents to add their comments if they so wish. The intention was to capture any relevant information which may not be revealed by the response categories. The comments have been summarised as shown in Table 4.16 and are discussed in chapter 5.

Table 4.16: Open-ended section response summary

Meaning of the term greening	<ul style="list-style-type: none"> • Stop wasting, start saving • Taking care and protecting our environment • Recycling, saving on electricity, collection of water, chemical environmentally friendly, reduction of waste • Environmental compliance is good business • Pursuing that which gives me joy and fulfils the needs of others while remaining respectfully, lovingly, protectively and dependently connected to my planet earth • Reduce, reuse recycle • Develop business to fully utilise renewable resources and lower our carbon footprint, recycling of waste, efficient utilisation of water resources • Saving electricity and water, reducing waste, planting of trees, picking up litter • Take into consideration environmental factors that can help the business and individuals • Every bit counts • Reduce pollution • It is easy for new establishments to start off green than to alter an existing place • Eco friendly
Reason for not having a designated staff member	<p>Establishment too small, I take care of it myself, never thought about it, no need, small business, my responsibility as the owner,</p>

Reason for not implementing (Except energy efficient lighting)	Solar photovoltaic – Too expensive, cost, financial, huge cost, high setup cost, do not have funds Heat pumps – Too expensive, would like to know more about this option, too expensive, cost, no funds Solar water heating – Too expensive, setup cost, no funds, not suitable as continuous hot water is needed, financial Energy efficient lighting – Exchanged by Eskom but provided no replacement, slightly affordable, saves power, Low flow showerheads, flow restrictors and 2-level flushing – Added expense, guests not happy with pressure, flow not good, water pressure, customers will complain, funding, cost, no money to implement, needs new equipment Recycling – not enough space, municipality not on board, no funds for additional bins, nowhere to take waste, service provider not participating, too much time & effort Non-toxic detergents – Cannot find in supermarket, not easily available, too expensive, do not know much,
General comments	Greening is the right thing to do, Greening puts more pressure and effort on owner and customer will not care, very interested in/passionate about the environment, Have been green for years, guests must turn off air conditioners when not in the rooms, switch off geysers, greening doesn't make any difference, greening should not cost more

4.3 Summary

The results derived from the study and data analysis have been presented in this chapter. The findings from the statistical analysis in this chapter are interpreted and discussed in chapter five.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

In chapter four the results of the research findings are presented. Chapter five provides an interpretation and discussion of the research findings presented in chapter four which encompasses the findings in conjunction with readings, case studies and previous research conducted.

The objectives for this study are:

- To explore environmental awareness among tourism accommodation businesses (see discussion on 5.3 and 5.4).
- To determine what motives drive tourism accommodation business into becoming environmentally involved (see discussion on 5.6).
- To investigate what factors prevent/encourage tourism accommodation businesses to implement greening measures (see discussion on 5.7).
- To establish the measures tourism accommodation businesses are willing to or have put in place so as to be environmentally friendly (see discussion on 5.5).

5.2 Profile of respondents and establishments

Most of the respondents were the establishment owners at 65.9%, with 34.1% of respondents being establishment managers. The majority of the establishments were five roomed (25.6%), followed by four roomed (17.1%), then seven and three roomed (12.2%). Table 4.2 shows that 97.6% of the establishments had 21 or less rooms. Combining the results of Table 4.2 with those of Table 4.1, one can see that the profile of the establishments were small serviced tourism accommodation establishments, run by the owners. This is further confirmed by Table 4.3 whereby 89% of the establishments had 5 or less permanent employees, and Table 4.4 which shows the majority of the establishments, 'bed and breakfast' and 'guest house' had an average of three or less permanent employees.

5.3 Environmental awareness among tourism accommodation Businesses

When asked to rate their level of knowledge on their understanding of what greening is and what it entails, 41.5% of respondents were very confident whilst 57.3% were confident and only 1.2% were uncertain. Overall 98.8% of respondents were confident about their knowledge and understanding of the greening concept.

The fact that only 64% of the respondents admitted to being proactive when it comes to environmental issues (Table 4.6), yet 98% were confident (Table 4.5) about their knowledge around the greening concept raises questions as to how respondents acquire their knowledge and how can they be confident about their knowledge without actively seeking information in this regard. The author can assume their knowledge came from the information available to them through different channels used by stakeholders in environmental conservation and sustainability, without the respondents necessarily going out of their way to look for the information.

When managers or owners actively seek information on greening matters, there was a high probability that they will implement greening initiatives in their establishments. This is evident from Table 4.7 which shows that 49 out of the 53 respondents who actively sought information had implemented greening measures in their establishments.

A very large number of the respondents did not have a designated person in charge of environmental matters, only 15 out of the 82 respondents had. Many of the respondents (63) had implemented greening initiatives even though they did not have a designated staff member. This is attributed to the fact that the majority of the establishments were small serviced accommodation establishments run by the owner/manager therefore they do not see the need to appoint someone as they personally ran the establishments. This was the most popular reason given by those respondents who filled in the open ended 'reason' section. A few respondents indicated that they had never thought about it.

When asked to describe greening, the most favorable response by 95% was the term describing greening as “taking a greater interest in environmental issues and acting to protect the environment”. Other descriptions selected by more than 50% of respondents included “Waste reduction” and “Responsibility to the environment through sustainable use of natural resources”. The least chosen was ‘Strategic business tool’ of which only 4% selected. Other descriptions least chosen included ‘Increased cost of doing business’ and ‘Marketing opportunity’.

This shows that greening was treated as a separate issue and not interrelated to the business operation. This was indicated by the fact that greening of the establishment was not associated with marketing opportunities, neither was it seen as a strategic business tool. This is further confirmed by the fact that a few of the respondents who implement greening chose the reasons ‘it is strategically important to my business’ as well as ‘to attract more customers and gain competitive advantage’ as contributing factors to them practicing greening in their establishments.

Various establishments quoted the “reduce, reuse, recycle” slogan as a description of what greening means to them in the open ended section. Other respondents in their own words also included statements like recycling, saving of electricity, collection of water, reduction of waste, using environmentally friendly chemicals, planting of trees, even picking up litter. There are also those few respondents who highlighted that greening is very important to them and they are passionate about conserving the environment. One respondent felt that greening puts more pressure and effort on the owner, whilst customers do not even care. Another respondent also mentioned that it was easier for an establishment to start off/be built in an environmentally friendly manner as opposed to alter existing practices or structures. The responses given by the respondents in the structured as well as open ended section show that most respondents had a reasonable understanding of what greening entails and had at some point or another come across information on greening.

The most common understanding of greening among respondents was a means to be responsible for the environment, using natural resources in a sustainable manner, protecting the environment and reducing waste, planting of trees being one of the ways to achieve this. This was consistent with the generally accepted view of greening although no formal international definition of the term is available. There are generally accepted views of what it means and entails and these were in line with the responses.

5.4 Perceptions in the tourism accommodation industry about the benefits of greening

In order to explore the perceptions of the accommodation industry about the benefits of greening, a series of questions were asked on the effect of greening on their business. Respondents were asked to rate their agreement or disagreement with five attitude statements on a five point Likert-scale results of which are displayed in Table 4.9.

In a study done on hotels in Macao-China by Penny (2007), on a 5 point Likert scale, 81% of respondents agreed that hotel facilities had an influence on the natural environment whilst 5.4% strongly agreed. In contrast 32.9% of respondents in this study agreed and 23.2% strongly agreed, instead a large number (31.7%) was uncertain. Penny's study was done on hotels and whilst this study was conducted on various types of tourism accommodation establishments, this could be one of the reasons for the difference in opinion. Another reason could be the different geographical locations. Nonetheless, the relevance in this study is the fact that all establishments are tourism accommodation establishments.

The respondents in this study believed that greening could reduce their operational costs (33% strongly agreed, 34% agreed totaling 67% of respondents that agreed and strongly agreed). This is similar to Penny's (2007) findings whereby 62.2% strongly agreed and agreed that adopting green would bring economic benefits (although the ratio is different).

None of the respondents strongly disagreed on both studies. Undoubtedly, similar results were obtained on both studies meaning the tourism accommodation sector to some extent concurs that being environmentally friendly can yield economic benefits.

Respondents strongly agreed and agreed (46.3%) that by greening they could attract more customers, this was slightly less compared to Penny's (2007) study which resulted in 56.8% in agreement that improving environmental performances would increase customer satisfaction. What is similar though is that 33% and 38% (Penny) were uncertain.

The high uncertainty rate concurs with the fact that there are a few who actively seek information, meaning respondents had not given much attention to the environmental issues in their businesses. Respondents saw greening as a tool that could be used for competitive advantage, as 45% of them agreed and 13.4% strongly agreed meaning 58.4% agreed. This conflicts with the reasons given by those who had implemented greening as only 34% chose 'to attract more customers and gain competitive advantage' as a reason for implementation of greening in their establishments. This could be attributed to the fact that few of the respondents actively sought information.

A study conducted by Penny (2007) recorded several respondents having reported that complaints were received from customers saying putting shampoo and bath gel in ceramic containers instead of disposable ones and reusing towels was not hygienic enough. The respondents in this study were of the notion that there is a demand on the sector for environmentally friendly practices (55.8% strongly agreed and agreed) and customers were willing to participate in greening initiatives (51.2% strongly agreed and agreed). The respondents strongly agreed and agreed (62.2%) that should customers have to put in an extra effort due to greening practices, they would be willing to participate and would not find discomfort.

Respondents believed greening would make a difference to their business and they did not see greening as an expensive exercise that would not benefit their business. They believed the expense was worthwhile as the business would benefit in one form or another as shown in Table 4.9. What was interesting to note was that although they believed so, some had not acted on that belief.

5.5 Greening measures tourism accommodation businesses are willing to implement or have implemented

According to Alexander (2002), the most expensive and uneconomical activities in a tourism accommodation establishment are mainly in the use of non-renewable energy, extreme use of water, and the creation of waste. "The term 'green hotels' describes hotels that strive to be more environmentally friendly through the efficient use of energy, water, and materials while providing quality services. Green hotels conserve and preserve by saving water, reducing energy use, and reducing solid waste" (Alexander, 2002:2). Although there are other ways accommodation establishments can become greener, this study focuses mainly on these initiatives as numerous articles highlight these as the main methods the establishments can apply in order to become environmentally friendly.

5.5.1 Energy efficiency

According to the responses, the most popular means to reduce energy consumption among the tourism accommodation sector is the use of energy efficient lighting. All establishments that responded had implemented energy efficient lighting. Solar photovoltaic (PV) panels together with solar water heating appeared not to be very popular as only 17% had implemented them and about 25% had not and were not willing either. The rest of the respondents had not implemented but were willing to. Heating water using heat pumps was the least implemented method at a 15.9% rate and had the highest 'uninstalled and not willing' rate on the energy efficiency initiatives. The remaining 37% did not have and were not willing to install one.

The most common reason in the open ended section given by the respondents who had not implemented solar photovoltaic (PV), solar water heating and heat pumps was that it was expensive to implement. Some gave reasons for not implementing solar water heating to be attributed to the fact that the hospitality sector needs continuous hot water which they believe the solar water heating technology could not provide.

5.5.2 Water conservation

In terms of water conservation, the most widely implemented were the low flow shower heads and flow restrictors with 62.2% of establishments having implemented these initiatives. Towel and sheet changing cards for guests were the next most popular method used for water conservation at an implementation rate of 54.9%. Only 14.6% had not implemented it and were not willing. A majority of the respondents who had not and were not willing to implement low flow showerheads attributed this to the fact that the pressure was not great and customers would complain. Two level toilet flushing was the least implemented at 37.8% but had the highest number of respondents (41.5%) willing to install for water conservation. Some of the respondents mentioned the fact that a dual flushing system needs new equipment and that was an added expense. This was followed by recycling water for gardening purposes which had the second least implemented at 40.2% but had more willing to implement (39%).

Research on hotels in Ghana by Mensah (2007) showed 67.3% of hotels had installed low flow shower heads and sink aerators and hardly 28.8% had installed the dual flush system. Reuse of linen and towels was the most adopted water conservation initiative. In the study by Penny (2007), water control systems, low flow shower heads and sink aerators were cited as the most common environmental initiatives adopted by hoteliers for water conservation.

5.5.3 Waste reduction

The most popular method of waste reduction was the use of non-disposable containers and products with an implementation rate of 49% followed by recycling and color coded bins at 37.8%.

Recycling and color coded bins had the highest number of establishments who had not but were willing to implement (58.5%). This method had overall the least resistance in terms of willingness to implement followed by the use of non-disposable containers and products at 45.1%.

The common reasons from respondents who had not implemented this practice were lack of space, no recycling places in the area to take the waste to, if the waste removal service provider picked the items from the gate they would put more effort into separating recyclable waste, the municipality not being on board and participating or facilitating, taking extra time and effort and no funds available for additional bins.

The least implemented (36.6%) and the largest resistance in this category was towards changing to non-toxic detergents where 29% of these establishments had not and were not willing to implement. Some of the respondents who had not implemented this practice but were willing mentioned the drawback to be the fact that non-toxic detergents were not as readily available off the shelf as the regular detergents.

5.5.4 General

The responding establishments provided information for their guests in their rooms on how to conserve water and electricity with a 61% implementation rate. There was only a 2% resistance to this initiative with the rest having not implemented but willing to implement. This method was also cited by Penny (2007) as one of the most commonly adopted environmental initiatives.

The study conducted on hotels in Ghana by Mensah (2007) revealed the most popular eco-friendly practice to be the use of energy efficient light bulbs with an implementation rate of 94.2% followed by reuse of linen and towels at 74% and the use of eco-friendly cleaning products at 72%.

The results of this study show energy efficient lighting in the lead for greening initiatives (100%) followed by low flow showerheads and flow restrictors, provision of greening information in the rooms, towel and sheet changing cards and the use of non-disposable containers and products. Other initiatives implemented were water recycling for gardening purposes, color coded bins for recycling glass, plastic, paper and metal; use of non-toxic detergents and dual flush systems. The least popular initiatives were solar photovoltaic (PV) for electricity generation, solar water heating as well as heat pumps. In Mensah's study (2007) the least popular greening methods were recycling of waste, use of solar energy and composting of food waste.

In his study, Mensah (2007) found the reason for implementation in that order accounted by the fact that all hotels wanted to cut overheads in order to remain profitable and competitive and the use of energy efficient light bulbs as well as reuse of linen and towels helped accomplish this. Although hotels are bigger than most of the respondents in this study, it is still relevant in the sense that the industry is still the same, tourist accommodation. The results of this study concur with Mensah's findings since 89% of the respondents chose operation cost reduction as a main factor that would influence them to green their establishments other than for personal values. A study by Penny (2007) showed that the ten most commonly cited environmental initiatives adopted by the tourism accommodation establishments were associated with cost savings with energy efficient light bulbs being the second most frequently cited initiative after electricity control systems.

5.6 Motivation behind greening practices in the tourism accommodation industry

A large majority (90%) of the respondents practiced greening in their establishments, and only 10% did not. Interesting to note is that even though 10% mention that they are not practicing any greening activities, all respondents had implemented energy efficient lighting.

Although the reason for this has not been fully explored in this study, it could partially be attributed to the energy efficient lighting campaign the power utility Eskom had where they moved from house to house replacing inefficient lamps with energy efficient lamps at no expense to customers – some respondents mentioned in the open ended section that they received energy efficient lights during the campaign but for sustainability they now had to supply their own.

Among those who practice greening, the most common reason given by 76.8% of respondents was that protecting the environment was important to them personally. Another primary reason was reducing operation costs of energy consumption (70.7%), consecutively followed by reducing operating costs of water usage (56.1%) then to improve the public image of the establishment (46.3%). This was in line with previous studies which suggested that involvement in environmental activities may be driven by economic as well as ethical considerations. The results pointed to the role played by personal values and beliefs in small firm's decision making and the need to gain a greater understanding of the complexity of motives that drive the small hospitality business owner.

Other reasons given, which were not so popular are the reduction of operating costs of waste removal (34%), that it is strategically important for their business (28%) as well as to attract more customers and gain competitive advantage. The least influential reason for implementation was a requirement by membership of an organisation (5%). This was followed by a requirement by legislation (8%) and influence from guests (10%).

It was interesting to note that influence from guests was among the least influential factors yet 56.1% indicated that there is a demand for environmentally friendly practices. This could mean the demand does not come from the guests.

The minority that had not implemented any greening measures attributed this to expense (8.5%), lack of resources (7.3%), and the fact that they would not benefit anything out of it (4.9%). They mentioned that it was not their core business (4.9%) and although it is good practice, the fact that they do not get any recognition for it, resulted in them not implementing any greening practices (2.4%).

5.7 Factors influencing implementation of greening measures

The main factor that would drive implementation of greening measures is if conserving the environment is personally important to the owner or manager - 88% of respondents chose the main reason to be if it is personally important to them. The second reason mostly chosen was to reduce operating costs of energy, water and waste. In the hotel industry the key issues on the management's agenda are improving customer services and revenue as opposed to environmental management (Chan and Wong, 2005). This could partially be the reason why most respondents chose operational cost reduction as one of the most motivational reasons that would drive them to implement greening activities as this has an effect on the revenue. The other reason chosen by more than 50% of respondents was to improve the public image of the establishment.

Tourism accommodation establishments would not be encouraged just because of requirement by legislation or requirement by membership organisation, if anything, this reason was least chosen as encouraging to go green, indicating that it is not a significant motivating factor. In a study by Penny (2007), hoteliers expressed that environmentally friendly products were expensive, at the 'right price' they would consider using environmentally friendly products and raw materials.

5.8 Summary

The findings and data analysis presented in chapter four was interpreted and discussed in this chapter in line with the study objectives. Based on the discussions in this chapter, recommendations and conclusions are drawn in chapter six.

CHAPTER SIX

RECOMMENDATIONS AND CONCLUSIONS

6.1 Introduction

In chapter five, an interpretation and discussion of the research findings of this study is conducted. The findings are interpreted in conjunction with readings, case studies and previous research. Based on the discussion, chapter six makes recommendations and concludes the study.

6.2 Summary of research findings

The study population comprised mostly of small accommodation establishments with a few exceptions. The establishments were mainly run by the owners and some by managers who were largely involved in most activities of the establishment due to their sizes. It is concluded from the results of this study that the tourism accommodation establishment owners/managers have a fair understanding of the term greening. However, they are not taking the initiative to go out of their way in looking for initiatives to implement or ways to operate in an environmentally friendly manner. Some of the respondents requested a copy of the questionnaire indicating that they have been alerted to various initiatives they could implement in their establishments. This further emphasises the fact that they are not proactive when it comes to seeking information on environmental matters. The findings suggest that the most effective way to increase the adoption of greening practices would be for the different stakeholders to collaborate and inform associations such as Tourism KZN of available initiatives and for the associations to communicate to their members on these issues.

The study reveals that owners and managers of the tourism accommodation establishments on the North coast area of KwaZulu-Natal have a reasonable understanding of greening. They see greening as taking a greater interest in environmental issues and acting to protect the environment. Respondents see greening as a means to be responsible for the environment, using natural resources in a sustainable manner, protecting the environment and reducing waste, planting of trees can be one of the ways. Most rely on information they come across and do not proactively seek information, and with the information they have gives them confidence about their knowledge on the subject. The owners and managers believe that by greening they can attract more customers which can lead to a competitive advantage.

From the responses it shows that the tourism accommodation sector believes such initiatives are expensive and there are no resources available by only looking at the cost upfront of implementation and not comparing it with the monthly savings it would bring, exactly what will need to be done and which resources will be needed and if they are available, the public image of the establishment, effect on customer satisfaction. The fact that few actively seek information means respondents may be making uninformed conclusions and decisions.

Energy efficient lighting is in the lead for greening initiatives followed in chronological order by low flow showerheads and flow restrictors, provision of greening information in the rooms, towel and sheet changing cards and use of non-disposable containers and products. Other initiatives implemented are water recycling for gardening purposes, colour coded bins for recycling glass, plastic, paper and metal; use of non-toxic detergents and dual flush systems. The least popular initiatives are solar photovoltaic (PV) for electricity generation, solar water heating as well as heat pumps.

The primary factor encouraging implementation of greening measures is the owner/manager's value system. Those who personally find environmental conservation important are more likely to seek more information on the subject and implement greening measures. Reduction in operational costs as well as improving the public image of the establishment has major influence on implementation of greening measures.

Implementation costs and in some cases the perception of the expense are a major obstructions to implementation of greening initiatives. Lack of resources which can also be associated to available financing, and in some cases lack of knowledge are major contributing factors to non-implementation of greening measures. By stating that they will not benefit anything out of greening initiatives respondents prove that they are not gathering enough information on the topic and do not associate greening with business activities. Managers and owner's failure to look at the value chain and their focus on activities with a direct impact on the business also plays a part. Selecting a reason like 'not their core business' and that although it is good practice, the fact that they do not get any recognition for it results in them not implementing any greening practices shows this.

The study shows that the respondent's reasons for implementing the various greening initiatives are based primarily on the manager/owner's individual perception. The customers did not have a material influence on the adoption of greening practices.

Legislation is not considered of influence and any legislation in this regard could have negative consequences as this industry comprises of numerous small and medium entrepreneurial organisations that could struggle with compliance.

The fact that all establishments had implemented energy efficient light bulbs including those who were not into environmental management shows that establishment owners are not proactive when it comes to such matters, it is not a priority in the running of the business.

It may not be a priority due to the fact that consumers and other businesses are not yet applying pressure and insisting on receiving service or offering business to an environmentally friendly business. From previous literature, such a demand is on the increase and is gaining momentum.

It would appear that the smaller establishments do not see the benefit in implementing greening initiatives, as they have smaller revenues which may be a contributing factor as greening is not generally seen by respondents as providing a business advantage.

6.3 Recommendations

It is recommended that the tourism accommodation establishment owners and managers take the initiative and actively seek information on what greening measures can be applied in their establishments before it becomes legislated or becomes a requirement to operate in such a manner. In this way, they can position themselves well before all establishments jump on the bandwagon. The owners/managers should constantly update themselves on current environmental management trends in the industry. The decision makers in these establishments should ensure all activities and functions are executed in an environmentally considerate manner.

Paper companies should provide recyclable plastic drums/bags in a different colour for establishments to put in paper and collect plastics like they do in some metropolitan areas in KZN. On the same note, glass and metal recycling companies should also provide a pick-up service for their recyclable materials. The recycling companies can benefit in that they will receive more materials to recycle as this can eliminate the fact that respondents did not find the need to separate material as it meant them applying an extra effort in the disposal of the recyclable material.

Non- toxic detergents should be made more accessible and available through the use of more department and chain stores at affordable prices so as to get more people using them. An increase in demand should reduce the selling price. The companies that manufacture non-toxic detergents should put in more effort into advertising and educating the public about the environmental benefits of using such products.

Institutions such as the Tourism KwaZulu-Natal should organise workshops to educate the establishment owners/managers on sound environmental management practices. They can engage with different stakeholders such as the Department of Water Affairs (which is interested in water conservation), the Integrated Demand Management (IDM) department of the power utility (which is interested in energy efficiency), as well as the different waste removal and recycling companies to come up with strategies and implement ways in which they can work together to achieve the common goals at minimum cost but with maximum impact.

The accommodation establishment owners/managers should educate and sensitise their staff as well as customers about environmentally responsible behaviour. Buy-in from staff and guests will ensure that the owner/manager's efforts are not in vain. One can implement the best technology/measures on the planet but if not properly applied, the benefits cannot be realised. For instance the establishments can provide the different colour coded bins but if the staff do not see the need and do not separate the garbage, all is in vain. The establishment can have energy efficient light bulbs but if the customers do not see the need to and do not, switch the lights off when they leave the room, all is in vain. If the customers are not informed of energy efficiency and still leave their air conditioners on when they leave the room, the efforts are in vain. The establishment can have water flow restrictors, if the staff/ guests do not see the need, all is in vain. Education and sensitising of staff and guests is as important as implementing the initiatives.

The owners/managers should stick reminders next to taps and plugs as well as garbage disposal areas. They should provide brochures in the rooms for the customers and include environmental management as part of their sessions with staff.

6.4 Implications of this research

There is currently additional confidence that global climate change threatens sustainable development, particularly in developing countries. In South Africa, tourism relies primarily on wildlife, the beach, heritage sites and scenic features. Expansion in the tourism industry impacts development through generation of foreign exchange, creation of job opportunities, market expansion for agricultural and industrial goods and also development of small or local entrepreneurship. South Africa's tourism, through wildlife, generates an average of R1.3 billion per year with substantial growth prospects (DEAT, 2009). Climate change, particularly the incidence of recurrent flooding and drought threatens the survival of wildlife which in turn endangers species and spoils landscapes creating a threat that the attractions tourists are interested in will cease to exist.

This research has made a useful contribution to scholarship in terms of understanding how managers and business owners view environmental management and greening matters in the tourism accommodation sector. It also reveals what greening initiatives have or have not been implemented in the establishments and the reasons behind it. The study further determines factors that would drive or motivate the establishment owners or managers into implementing greening measures in their establishments.

With tourism being one of the quickest escalating sectors of the SA economy and being considered a major contributor to national GDP, successful implementation of greening initiatives will have a ripple effect not only on the natural environment but on the economic environment as well.

The results and recommendations from this study will assist in formulating ways in which environmental management can be merged with the business operation in a manner that the business can operate profitably without too much discomfort to customers whilst not causing any harm to the environment. Ultimately, every little initiative adds up. Tourism is an industry with global influence, climate change is a global issue, successful implementation improves not only local or national businesses but benefits will impact on spheres such as global poverty alleviation, energy supply, food security, human settlements, clean water and environmental health.

This research can also be applied to any business. Available initiatives can be investigated and methods of conducting business and accomplishing their business goals whilst minimising the impact on the environment can be designed. Once the motivating factors to implementation are known, strategies can be designed in a manner that will improve the implementation rate of greening not only in tourism accommodation establishments, not only in the North coast of KwaZulu-Natal, but in any business in any geographical area. An improvement in the implementation rate of greening initiatives means businesses can realise all the benefits that come with integrating greening with business operations.

6.5 Recommendations for Future Studies

The current study looks at one area in the KZN province. Follow up research with opinions from the different provinces in SA is recommended. A study can also be conducted by comparing similar categories of the tourism accommodation establishments irrespective of geographic area or within the same geographic area. This can enable a deeper understanding of the reasons and whether the size or category of establishment plays any role in the decision.

This study can also be conducted on other industries and sectors to highlight their opinions on environmental matters and reasons behind their decisions.

Another meaningful study would be to study the capital cost of implementing different measures against the financial benefits in the long and short term. This could help determine whether the cost really justifies the benefits.

A case study is recommended where business operations can be measured on a business as usual scenario against operations after implementation of greening initiatives, where the benefits can be quantified.

6.6 Summary

In this chapter we revisited our objectives for this study and reviewed whether the objectives have been met and research questions answered. This study set out to investigate the perceptions about greening in the tourism accommodation sector of the North Coast of KwaZulu-Natal, South Africa. The motivation behind greening practices in this industry was explored. Factors that encourage or prevent implementation of greening measures were investigated together with what greening measures these businesses are willing to or have implemented. The research findings showed the decision maker's value system together with operational cost reduction as the primary motivational factors. The sector believes the initiatives are expensive to implement but they have not actively researched about it. It was recommended that managers take initiative, seek information around this subject and find cost effective ways of implementing the initiatives. The implications of this research will have a global effect as global warming is a worldwide issue. Follow up research can be conducted in other industries and in other provinces. A change in each sector will ultimately add up in securing a healthier future for generations to come.

REFERENCES

- Alcock, N., 2008. Businesses must face the realities of a low carbon economy. Emerald Group Publishing Limited, ISSN 0258-0543 Strategic Direction Vol. 24 No. 6 2008, pp. 13-15.
- Alexander, S., 2002. Green hotels: Opportunities and resources for success. Zero waste alliance (online). Available http://www.zerowaste.org/publications/GREEN_HO.PDF (Accessed 07/11/2009)
- APAT, 2002. Tourists accommodation EU eco-label award scheme – Final Report. Italian National Agency for the Protection of the Environment and for Technical Services, Rome.
- Archer, E.R.M. & Tadross, M.A., 2009. Climate change and desertification in South Africa – science and response. *African Journal of Range and Forage Science* 26(3): 127 – 131.
- Archer, E.R.M. Conrad, J. Münch, Z. Opperman, D. Tadross, M.A. & Venter, J., 2009. Climate change, groundwater and intensive commercial farming in the semi-arid northern Sandveld, South Africa. *Journal of Integrative Environmental Sciences* 6(2): 1- 17.
- Ashley, C. & Haysom, G., 2005. From philanthropy to a different way of doing business: Strategies and challenges in integrating pro-poor approaches into tourism business. Paper presented in Pretoria, October 2004 at the ATLAS Africa Conference. Submitted as a paper, January 2005.
- Ashley, C. Roe, D. & Goodwin, H., 2001. Pro-poor tourism strategies: Making tourism work for the poor. Nottingham: The Russel Press.
- ATR. 2010. Annual Tourism Report. South African Tourism Strategic Research unit, June 2010. (Online). Available from Department of Tourism <http://www.tourism.gov.za/> (Accessed 07/07/2010)
- Babbie, E., 2005. The basics of social research. Belmont: Thomson Wadsworth.
- Bansal, P., & Roth, K., 2000. Why companies go green: A model of ecological responsiveness. *Academy of management journal*, 43 (4), 717-736.
- BCC. 2011. The basics of climate change. (Online). Available http://media.csag.uct.ac.za/faq/qa_2basics.html (Accessed 05/05/2011)
- BCG. 2009. Capturing the green advantage for consumer companies. The Boston Consulting Group, Inc. 2009. (Online). Available <http://www.bcg.com/documents/file15407.pdf> (Accessed 14/04/2010)

Beccali, M. La Gennusa, M. Lo Coco, L. & Rizzo, G., 2008. An empirical approach for ranking environmental and energy saving measures in the hotel sector. Elsevier: Renewable energy Vol, 34 no. 1, 2009 pp 82-90. (online). Available <http://www.sciencedirect.com/science/article/B6V4S-4SYD9N6-2/2/5891062666fe98bb52e71e4180d06c4c> (Accessed 09/11/2009)

Becken, S. Frampton, C. & Simmons, D., 2001. Energy consumption patterns in the accommodation sector – The New Zealand case, Elsevier science: Ecological Economics 2001 Vol. 39 No. 3 pp. 371-386

Biloslavo, R. & Trnavcevic, A., Web sites as tools of communication of a “green” company. Emerald: Management decision Vol.47 no. 7, 2009 pp 1158-1173. (online). Available www.emeraldinsight.com/0025-1747.htm (Accessed 05/11/2009)

Boko, M. Niang, I. Nyong, A. Vogel, C. Githeko, A. Medany, M. Osman-Elasha, B. Tabo, R. & Yanda, P., 2007. Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Parry, M. L. Canziani, O. F. Palutikof, J. P. van der Linden, P. J. & Hanson, C. E. (eds). Cambridge University Press. Cambridge UK. pp. 433 – 467.

Busha, C.H., & Stephen P.H., 1980. Research Methods in Librarianship: Techniques and Interpretation. Orlando. FL: Academic Press, Inc.

Butler, J., 2008. The Compelling “Hard Case” for “Green” Hotel Development. Cornell Hospitality Quarterly 2008; 49; 234. (online). Available <http://www.jmbm.com/site/portalresource/lookup/poid/Z1tOI9NPluKPtDtNcb6RbDdEqW3Cq0l/file.pdf> (Accessed 20/08/2010)

Chan, E. S. W. & Wong, S.C.K., 2005. Motivations for ISO 14001 in the hotel industry (2006). Elsevier: Tourism management, 27 (3), pp 481-492.

Chan, W. W. & Ho, K., 2006. Hotels’ environmental management systems (ISO 14001): creative financing strategy. International Journal of Contemporary Hospitality Management Vol. 18 No. 4, pp. 302-316

Chan, W.W. & Lam, J.C., 2002. Prediction of pollutant emission through electricity consumption by the hotel industry in Hong Kong. Hospitality Management 21 (2002) 381 – 391 [Elsevier Science Ltd]

Chapman, T., 1997. “The role of group learning in the development of ISO 14001 EMS in Hong Kong and the link to sustainability”, Proceedings in POLMET Conference, Hong Kong, Hong Kong Institution of Engineers, November, pp. 431-40.

Christensen, J.H. Hewitson, B.C. Busuioc, A. Chen, A., Gao, X. Held, I. Jones, R. Kolli, R.K. Kwon, W-T. Laprise, R. Rueda, V.M. Mearns, L. Menéndez, C.G. Räisänen, J. Rinke, A. Sarr, A. & Whetton, P., 2007. Regional Climate Projections. Climate Change 2007: The Physical Science 13 Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Solomon, S., Qin, D., Manning, M. et al., Cambridge, United Kingdom and New York, NY, USA, Cambridge University Press.

Clark, D., 1999. What drives companies to seek ISO 14000 certification? Pollution Engineering International, Summer, 14-15.

Cooper, I., 1998. "Emerging issues in environmental management", in Alexander, K. (Ed.), Facility Management: Theory and Practice, Spon Press, London, pp. 111-9.

COP 2011. What is COP17/CMP7? (Online). Available <http://www.cop17-cmp7durban.com/en/about-cop17-cmp7/what-is-cop17-cmp7.html> (Accessed 24/06/2011)

Dalton, G.J. Lockington, D.A. & Baldock, T.E., 2008. A survey of tourist attitudes to renewable energy supply in Australian hotel accommodation. Renewable energy 33 (2008) 2174 – 2185

DEAT. 1996. Department of Environmental Affairs & Tourism (DEAT). 1996. White Paper on the Development and Promotion of Tourism in South Africa. Pretoria: Government Printer.

DEAT. 2004. A national climate change response strategy for South Africa. Department of environmental affairs and tourism. (online). Available www.saaqis.org.za/filedownload.aspx?fileid=11 (Accessed 19/08/2010)

DEAT. 2010. Climate change – A critical emerging issue May 2010. (Department of Environmental Affairs and Tourism, Republic of South Africa). (Online). Available http://soer.deat.gov.za/Climate_change_-_a_critical_emerging_issue_-_May_2010_1ZyIN.pdf. (Accessed 16/08/2010)

DOT A. 2010. Media statement by the office of the Minister of tourism, Mr Marthinus van Schalkwyk, 21 May 2010.(Online).Available http://www.tourism.gov.za:8001/PublicDocuments/2010_09_14/MediaStatement.NTS_SLaunch.May2010.final.pdf (Accessed16/08/2010)

DOI. 2009. Why going green won't cost the earth. Strategic Direction Vol. 25 No. 3 2009, pp. 15-17,

Dwyer R., 2009. "Keen to be green" organizations:a focused rules approach toaccountability. Management Decision Vol. 47 No. 7, 2009 pp. 1200-1216

Engelbrecht, M., Towards the Quadruple Bottom Line: Corporate Governance and Sustainability in the 21st Century – A South African Perspective. (Online) Available <http://ssrn.com/abstract=1713362> (Accessed 26/04/2011)

Enz, C.A. & Siquaw, J.A., 1999. Best hotel environmental practices. *Cornell Hotel and Restaurant Administration Quarterly*; Oct 1999; 40, 5; ABI/INFORM Global pg. 72

Feiertag, H., 1994. Boost sales with environment-driven strategy. *Hotel & Motel Management*, Vol. 209 No. 2, p. 8.

Few, R. Ahern, M. Matthies, F. & Kovats, S., 2004. Floods, health and climate change: a strategic review. Working Paper No. 63. Tyndall Centre for Climate Change Research.

Graci, S. & Kuehnel, J., 2009. How to increase your bottom line by going green (online) Available <http://green.hotelscombined.com/GreenYourHotelWhitePaper.php#introduction> Accessed (25/01/2010)

Green Hotels Association. 2005. (Online). Available www.greenhotels.com/whatare.htm (accessed 25/11/2009).

Hanas, J., 2007. "A world gone green; environmental awareness has not only yipped in the media: it's hit corporate boardrooms as well". (Online). Available http://adage.com/eco-marketing/article?article_id¼117113 (accessed 5/12/2007).

Heritage, 2005. Heritage Responsible Travel & Accommodation Guide. 2005. 'Heritage environmental Ratings programme'. (Online). Available <http://www.heritagesa.co.za/> Accessed (19/04/2009)

Hunter, C., 2002. Sustainable tourism and the touristic ecological footprint. *Environment, Development and Sustainability* 2002;4:7–20.

Huysamen, G.K., 1996. Psychological Measurement. An Introduction with South African Examples. Third revised edition. South Africa: J.L. van Schaik Publishers.

IHA, IHEI & UNEP., 1995. The hotels' environmental charter. Environmental action pack. The prince of Wales business leaders, United Nations Environment programme industry and environment.

IHEI. 1996. Challenge and Change: 1992-2000, International Hotels Environmental Initiatives, London.

IMBEWU. 2006. Options for greenhouse gas mitigation mechanisms in South African legislation. ImbewuEnviro-Legal Specialists (Pty) Ltd, November 2006 (online). Available http://www.imbewu.co.za/documents/BASIC_imbewu_101106.pdf (Accessed 19/08/2010)

IPCC, 2007. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K. &Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

Iwanowski, K. & Rushmore, C., 1994. Introducing the eco-friendly hotel. Cornell Hotel and Restaurant Administration Quarterly; Feb 1994; 35, 1; ABI/INFORM Global pg. 34

King III Report on Corporate Governance in South Africa. Institute of Directors, 2010

Kirk, D., 1995. Environmental management in hotels. International journal of contemporary hotel management, Vol. 7 No. 6, 1995, pp 3-8. MCB University press limited, 0959-6119.

Kirk , D., 1998 . Attitudes to environmental management held by a group of hotel managers in Edinburgh . International Journal of Hospitality Management .17, pp.33 – 47 .

Kruger, A. C. & Shongwe, S., 2004. Temperature trends in South Africa: 1960-2003. International Journal of Climatology 24: 1929-1945

KZN. 2011. KwaZulu-Natal tourism authority website: (Online). Available <http://www.kzn.org.za/index.php> (Accessed 11/05/2011)

Lee, K., 2008. Opportunities for green marketing: young consumers. Emerald: Marketing intelligence and planning Vol. 26 No. 6, 2008 pp. 573-586. (online). Available www.emeraldinsight.com/0263-4503.htm (Accessed 05/11/2009)

Madzwamuse, M., 2010. Drowning voices: The climate change discourse in South Africa. Heinrich-Böll-Stiftung 2010. (online). Available http://www.boell.de/downloads/2010-07-02_Drowning_Voices_The_Climate_Change_Discours_in_South_Africa.pdf (Accessed 16/08/2010)

McMichael A. J. Campbell-Lendrum, D. Kovats, R. S. Edwards, S. Wilkinson, P. Edmonds, N. Nicholls, N. Hales, S. Tanser, F. C. Le Sueur, D. Schlesinger, M. Andronova, N., 2004. Climate Change in Comparative Quantification of Health Risks: Global and Regional Burden of Disease due to Selected Major Risk Factors (eds Ezzati, M. Lopez, A. D. Rodgers, A. & Murray C.J.L.) Ch. 20: pp. 1543 –1649. World Health Organization. Geneva.

Media. 2009. (online). Available http://www.medioclubsouthafrica.com/index.php?option=com_content&view=article&catid=41:visit_bg&id=91:tourism-industry-overview (Accessed 16/08/2010)

Mensah, I., 2006. "Environmental management practices among hotels in the greater Accra region", *International Journal of Hospitality Management*, Vol. 25 No. 3, pp. 414-31.

Mensah, I., 2007. Environmental management and sustainable tourism development: The case of hotels in greater Accra region (GAR) of Ghana. *Journal of retail and leisure property* (2007) 6, 15-22.

Morina-Azorín, J.F. Claver-Cortés, E. López-Gamero, M.D. & Tarí, J.J., 2009. Green management and financial performance: a literature review. *Management Decision*, Vol. 47 Iss: 7, pp.1080 – 1100. (online). Available www.emeraldinsight.com/0025-1747.htm (Accessed 05/11/2009)

Mouton, J., 2008. How to succeed in your master's and doctoral studies, Pretoria: Van Schaik publishers

NCCR. 2011. National climate change response green paper. Government of the republic of South Africa. (online). Available <http://www.climateresponse.co.za/home/gp/1> (Accessed 30/10/2011)

New, M. Hewitson, B. Stephenson, D.B. Tsiga, A. Kruger, A. Manhique, A. Gomez, B. Coelho, C.A.S. Masisi, D.N. Kululanga, E. Mbambalala, E. Adesina, F. Saleh, H. Kanyanga, J. Adosi, J. Bulane, L. Fortunata, L. Mdoka, M.L. & Lajoie, R., 2006. Evidence of trends in daily climate extremes over southern and west Africa. *Journal of Geophysical Research* 111, D14102, doi:10.1029/2005JD006289.

Nicholls, R.J., 2004. Coastal flooding and wetland loss in the 21st century: changes under the SRES climate and socio-economic scenarios. *Global Environmental Change*. 14: pp 69 – 86

Penny, W., 2007. The use of environmental management as a facilities management tool in the Macao hotel sector. *Emerald : Facilities* Vol.25 No. 7/8, 2007 pp 286 – 295. (online). Available www.emeraldinsight.com/0263-2772.htm (Accessed 08/11/2009)

SAI. 2010. (Online). Available <http://www.southafrica.info/business/economy/sectors/tourism-overview.htm> (Accessed 28/11/2009)

SAT. 2010. (Online). Available http://www.artprinting.co.za/index.php?option=com_content&view=article&id=4:tourism&catid=5:about-south-africa&Itemid=13 (Accessed 20/06/2010)

SATA. 2010. (Online). Available <http://www.southafrica.net/sat/content/en/cn/full-article?oid=12642&sn=Detail&pid=109> (Accessed 20/06/2010)

SD. 2010. Survey design 2010. (online) Available
<http://www.surveysystem.com/sdesign.htm> (Accessed 28/05/2010)

Sekaran, U., 1992. Research Methods for business: A skill building approach. Second Edition. London: John Wiley and Sons Inc.

Sekaran, U., 2003. Research Methods for Business .4th Edition John Wiley and Sons, Inc.

SPSS. 2011. (Online). Available www.spss.com/corpinfo/spss_edge.htm (Accessed 21/04/2010)

Surv. 2010. Survival Statistics. ISBN 0-918733-11-1. (Online). Available
<http://www.statpac.com/statistics-book/order.htm> (Accessed 03/11/2009)

Sustainability SA. 2009. Discussion document: National information and consultation session 4 August 2009. (online). Available from
<http://www.sustainabilitysa.org/LinkClick.aspx?fileticket=sLr8ctuW03I%3D&tabid=94>
(Accessed 30/06/2010)

Taylor, S.R., 1992. "Green management: the next competitive weapon", Futures, Vol. 24, pp. 669-80.

TKZN1. Accommodation category definitions. (Online). Available
<http://www.kzn.org.za> (Accessed 10/05 2009)

Tzschentke, N. Kirk, D. & Lynch, P., 2004. Reasons for going green in serviced accommodation establishments. International Journal of Contemporary Hospitality Management, Vol. 16 No. 2, 2004 pp 116-124.

UNFCCC. 2007. Climate change impacts vulnerabilities and adaptation in developing countries. United Nations Framework Convention on Climate Change 2007. (Online). Available <http://unfccc.int/resource/docs/publications/impacts.pdf> (Accessed 20/05/2010)

UNFCCC3. 2011. United Nations Framework Convention on Climate Change. (Online). Available http://unfccc.int/essential_background/items/6031.php (Accessed 30/10/2011)

UNWTO. 2006. Retrieved August 16, 2007 from the World Wide Web:
<http://www.world-tourism.org/facts/menu.html> - UNWTO 2008, Tourism Highlights. 2008 Edition.

UNWTO. 2009. UNWTO Barometer, Interim update April 2009

Van der Merwe, M. & Wöcke, A., 2007. An investigation into responsible tourism practices in the South African hotel industry', South African Journal of Business Management. vol. 38, no. 2, 2007 pp. 1-15. Available from [http://www.journals.co.za/ej/ejour_busman.html] (Accessed 08/11/2009)

Watkins, Prof. Dr, J.A., 2006. Theses Dissertations Research Reports: A practical guide for students to the preparation of written presentations of academic research. V1.5

White, T.M., 1994. Measure for measure. The Environmental Forum, Vol. 11 No. 4, p. 1620.

Wilco, W. Chan, K. H., 2006. Hotels' environmental management systems (ISO 14001): creative financing strategy. International Journal of Contemporary Hospitality Management, Vol. 18 Iss: 4, pp.302 – 316

World Travel and Tourism Council (WTTC), International Federation of Tour Operators (IFTO), International Hotel and Restaurant Association (IH&RA), International Council for Cruise Liners (ICCL) and United Nations Environment Programme (UNEP). 2002. Industry as a partner for sustainable development. United Kingdom: The Beacon Press.

APPENDIX A

Questionnaire for accommodation establishments

1) Position of respondent

owner
manager
Other (please specify)

2) Number of rooms

3) Number of permanent employees

4) Type of accommodation establishment

Backpacker/ Hostel
Bed and Breakfast
Caravan and Camping
Country House
Guest House
Hotel
Lodge

5)

What does the term 'Greening' mean to you in your business? (Please tick all that apply)

Taking a greater interest in environmental issues and acting to protect the environment
Responsibility to the environment through sustainable use of natural resources
Planting of trees
Waste reduction
Increased cost of doing business
Marketing opportunity
Strategic business tool
"Greening" your business in your own words

6) How would you rate your level of knowledge about "greening"?

Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
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I understand what greening is and what it entails

7)

What is your perception on the effect of greening on your business?
(Please answer all)

- By greening I can reduce operational costs
- By greening I can attract more customers
- By greening I can increase customer satisfaction
- By greening I can improve my image and gain a competitive advantage
- Greening will not make any difference on my business
- Greening is an expensive exercise that will not benefit my business
- Greening is an expensive exercise but worthy since it will benefit my business

Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree

General comment

Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree

- The accommodation sector has a negative influence on the natural environment
- We have a demand for environmentally friendly practices
- Customers are willing to participate in greening initiatives
- Customers find discomfort in the extra effort they have to put in greening activities

8)

Do you have a designated staff member/team in charge of environmental management?

Yes

No

Reason

9) Do you actively seek information about environmental matters?

yes

No

Reason

10) Do you practice any 'greening' activities in your establishment?

yes

no

11) If no in (10), why not? (Please tick all that apply)

<input type="checkbox"/>	Haven't thought about it
<input type="checkbox"/>	Don't believe it's important
<input type="checkbox"/>	Not required by law
<input type="checkbox"/>	Too expensive to implement
<input type="checkbox"/>	Lack of resources (e.g labour/ time/skill)
<input type="checkbox"/>	Not my core business
<input type="checkbox"/>	I will not benefit anything out of it
<input type="checkbox"/>	It does not make any business sense
<input type="checkbox"/>	It is good practice but I do not get recognition for it
<input type="checkbox"/>	Other (please specify)

12) If yes in (10), why? (Please tick all that apply)

<input type="checkbox"/>	To reduce operating costs of energy consumption
<input type="checkbox"/>	To reduce operating costs of water usage
<input type="checkbox"/>	To reduce operating costs of waste removal
<input type="checkbox"/>	It is strategically important to my business
<input type="checkbox"/>	To attract more customers & gain competitive advantage
<input type="checkbox"/>	To improve the public image of the establishment
<input type="checkbox"/>	Required by membership organisation
<input type="checkbox"/>	Required by legislation
<input type="checkbox"/>	Influence from guests
<input type="checkbox"/>	Protecting the environment is important to me personally
<input type="checkbox"/>	Other (please specify)

13) Which of the following do you implement in your establishment? (Please answer all)

	Yes	No, and not willing to implement	No, but willing to implement	Reason you are willing or not willing to implement
Energy efficiency				
Solar photovoltaic (PV) panels to generate electricity				
Energy efficient lighting				
Heat pumps				
Solar water heating				
Other (please specify)				

Yes	No, and not willing to implement	No, but willing to implement	Reason you are willing or not willing to implement

Yes	No, and not willing to implement	No, but willing to implement	Reason you are willing or not willing to implement

Yes	No, and not willing to implement	No, but willing to implement	Reason you are willing or not willing to implement

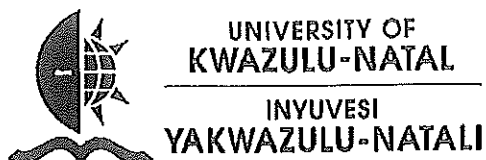
14)

Which of the following would drive you into greening your establishment?
(Please tick all that apply)

- To reduce operating costs of energy
- To reduce operating costs of water
- To reduce operating costs of waste removal
- To attract more customers & gain competitive advantage
- To improve the public image of the establishment
 - If it is required by membership organisation
 - If it is required by legislation
 - Influence from guests
- Protecting the environment is important to me personally
- Other (please specify)

End of the Questionnaire

Thank you for taking the time to complete the questionnaire.



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28 March 2012

Mrs Zanele Ntombikayise Kamwendo (208518010)
Graduate School of Business

Dear Mrs Kamwendo

PROTOCOL REFERENCE NUMBER: HSS/0207/010M

PROJECT TITLE: Embracing green practices: perspectives from the tourism accommodation industry in the North Coast of KwaZulu-Natal

In response to your application dated 23 January 2012, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Professor Steven Collings (Chair)
Humanities & Social Science Research Ethics Committee

cc Supervisor Mrs Gill Manion
cc Mrs Wendy Clarke