PERCEPTIONS OF BEACHGOERS AND BEACH MANAGERS ON THE BLUE FLAG AWARD: THE CASE OF KWAZULU-NATAL BEACHES

BY

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ABSTRACT

The tourism industry has faced a massive growth in the previous years with the beach ecosystem being the most popular scene of leisure and recreation. With this growth comes undisputed environmental impacts such as solid waste, noise and air pollution, unattractive landscapes and erosion on the beach ecosystem. It is to this effect that the Blue Flag certification has been adopted by many coastal municipalities to mitigate the negative environmental impacts that tourism and recreation expose. KwaZulu-Natal has a minimal number of beaches with the award and literature has proved that the awareness and knowledge of the award among beach users is sparse. This study aims to conduct a comprehensive examination of the Blue Flag status of KwaZulu-Natal from a sustainable development perspective. Moreover, the study aims to assess the attitudes, awareness and the knowledge of the Blue Flag award amongst beachgoers and municipality managers as well the barriers facing the adoption of the Blue Flag in KwaZulu-Natal. A mixed method approach was used in this study and data was collected by means of structured self-administered questionnaires and semi structured interviews. The results indicated that the knowledge on the Blue Flag award by beachgoers is sparse. It was also evident that the award come with both benefits and challenges but when challenges are combated it leads to benefits. It is therefore recommended that municipalities in KwaZulu-Natal attain the award to ensure conservation and economic benefits. The research conducted is anticipated to be highly beneficial towards the improvement and reinforcement of the Blue Flag award in the country and it will perpetrate the need for environmental education and awareness of the award among beachgoers.

Key words: Blue Flag, environmental impacts, conservation, sustainable development, beach ecosystem.

DECLARATION

I, Lesleen Chenesai Mukaronda hereby declare that this dissertation is my own work carried out under the supervision of Dr Reshma Sucheran. The work in this dissertation represents my own work and findings except where indicated and that all references to the best of my knowledge are accurately reported. This work has not been submitted at any other university.

_____ 30 November 2020

Signature Date

DEDICATION

I dedicate this dissertation to my loving dad

Martin Mukaronda

(1967-1997)

I know you would have been proud… May you continue resting in peace.

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"….. And called the name of it Ebenezer, saying thus far the Lord has taken us"

1st Samuel 7:12

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DEFF: Department of Environmental Forestry and Fisheries

FEE: Foundation for Environmental Education

FFT: Fair Trade for Tourism

GHG: Green House Gas

KZN: KwaZulu-Natal

MPA: Marine Protected Area

SAMREC: South African Mineral Resource Committee

SANCCOB: South African Foundation of Coastal Birds

SAT: South African Tourism

TIES: The International Ecotourism Society

UNCED: United Nations Conference on Environment Development

UNESCO: United Nations Educational Scientific and Cultural Organization

UNWTO: United Nations World Tourism Organization

WESSA: Wildlife and Environmental Society of South Africa

WTO: World Tourism Organization

CHAPTER 1: INTRODUCTION

1.1 Introduction

The tourism industry has faced a massive growth in the previous years with the beach ecosystem being the most popular scene of leisure and recreation worldwide (Lucrezi and Saayman 2015: 1478). With this growth comes undisputed environmental impacts such as solid waste, noise and air pollution, unattractive landscapes and erosion on the beach ecosystem (Nepal, Irsyad and Nepal 2019:146). It is to this effect that the Blue Flag certification has been adopted by many coastal municipalities to mitigate the negative environmental impacts that tourism and recreation expose. The Blue Flag award is associated with a number of benefits when managed well, which include conservation, environmental education and awareness, influencing consumer choice, positive brand image, marketing of destinations as well as job creation (Geldenhuys and Van der Merwe 2014:2; Mir-Gual, Pons, Martin-Prieto and Rodriguez 2015:107; Petroman, Amzulescu, Sărăndan, Petroman, Coman, Orboi, Ivu 2010:426; Fraguell, Martí, Pintó and Coenders 2016:883-885; Silwani 2015:19). However, it has been acknowledged that the Blue Flag beach award is faced with a number of challenges in terms of implementation, maintenance, environmental education and information dissemination (Lucrezi and Saayman 2015:211; Cabezas-Rbadan, Rodilla, Pardo-Pascual and Herrera-Racionero 2019:223; Lucrezi and Saayman 2015:1479).

This chapter provides the background to the study, the problem statement, the study aims and objectives, a conceptual framework for the research, the research approach, the limitations and delimitations of the study and the structure of the dissertation.

1.2 Background of study

Globally, the environment has become under unprecedented threat due to the rising pressures caused by the effects of population growth, demographic shifts, economic development and climate change (Schlacher, Schoeman, Dugan, Lastra, Jones, Scapin, Mclachlan 2008:70). These effects pose a threat to the natural environment and ecosystems worldwide. According to Lucrezi and Saayman (2015:1478) the beach ecosystem is a place of recreation and leisure that supports tourism and trade than any other environment worldwide. Activities like tourism and recreation have faced a remarkable growth without suitable control and measures to protect the beach

ecosystem (Lucrezi, Saayman and Merwe 2016:211). This has brought about impacts such as solid waste disposal, noise, air and water pollution, unattractive landscapes, overcrowding and erosion (McLachlan 2013: 258). Pertaining to coastal degradation, many governments, voluntary organizations and managing authorities within the tourism sector have become progressively cognizant of the necessity for effective procedures to safeguard the environment (Robinot and Gianelloni 2010:157). For this reason, there has been the introduction of certification schemes and eco-labels aimed at minimizing the negative impacts on the environment and enhancing the conversation of natural resources.

The Blue Flag award is an international award that aims to manage beaches, protect the beach environment and attract tourism. It was launched by the Foundation of Environment (FEE) which cooperates with the United Nations World Tourism Organization (UNWTO) (Petroman, Amzulescu, Sărăndan, Petroman, Coman, Orboi, and Ivus 2010:426). In South Africa, the Blue Flag award is governed by the Wildlife and Environment Society of South Africa (WESSA). The Blue Flag targets the promotion of the sustainable development of beaches through the criteria of water quality, environmental education and information, safety and security and environmental management (Radchenko and Aleyev 2011: 52). For the beaches to receive the award, they must comply with 33 criteria grouped under the above four mentioned categories. Overall, the Blue Flag award is focused on raising awareness on environmental issues whilst attracting tourism to beaches (Radchenko and Aleyev 2011:53).

The Blue Flag award is however, characterized by several challenges in terms of implementation, maintenance, environmental education and information dissemination of the award it therefore requires further examination (Lucrezi and Saayman 2015:211). Geldenhuys and Van der Merwe (2014:6) explain that the award is characterized by high costs. Fraguell, Marti, Pinto and Coenders (2016:898) further explain that imperatives of implementing the award entail great economic effort. According to Lucrezi and Saayman (2015:1479) the award brings about overdevelopment to the coastal area which has negative impacts on the natural environment. Mir-Gual, Pons, Martin-Prieto and Rodriguez (2015:10) express that the Blue Flag award does not take into account all aspects hence leaving the beach environment exposed and vulnerable. Furthermore, Radchenko and Aleyev (2011:56)

highlight that the awareness and knowledge of the award is limited. Research examining these factors will be highly beneficial in mitigating the effects that recreation and tourism have on the environment and it will add value to knowledge.

1.3 Problem statement

KwaZulu-Natal has a total of 65 beaches and only 6 have the full Blue Flag award (WESSA 2020). According to Petroman et al. (2010:426), the award is a high standard symbol of environmental protection and it also acts as a draw card for tourists to these ecosystems. The minimal number of beaches with the Blue Flag in KwaZulu-Natal highlight limited coastal zone management thus making it difficult to reduce environmental degradation. Lucrezi and Saayman (2015:1479) state that researchers have acknowledged that the Blue Flag award remains only marginally understood by the managing authorities whilst the beachgoers have little or no information about the award. In a study conducted in the Western Cape, only 20% of the respondents were familiar with the Blue Flag and had information about the award (Lucrezi et al. 2015: 216). In 2008 there was the removal of the Blue Flag status in KwaZulu-Natal beaches like South beach, North beach, Addington, Bay of Plenty and Margate (McKenna, Williams and Cooper 2010:576). In the 2019/2020 season KwaZulu-Natal lost three Blue Flag beaches which are Westbrook, Lucien and Ramsgate (WESSA 2020). This highlights lack of continuity in the attainment of the award. There is therefore a need for further exploration of the Blue Flag award in the province of KwaZulu-Natal as there proves to be minimal literature on the subject. The study aims to examine KwaZulu-Natal's Blue flag status from a sustainable development perspective.

1.4 Aim and objectives

The study aims to examine beach goers and Blue Flag municipal managers' awareness, attitudes and perceptions of the Blue Flag award.

The objectives of the study are:

- To examine the beachgoers awareness, knowledge and attitudes towards the Blue Flag award in KwaZulu-Natal;
- To determine the role of municipalities in attaining the Blue Flag and their attitudes and perceptions of the award in KwaZulu-Natal;

- To ascertain the benefits of the Blue Flag award in KwaZulu-Natal; and
- To determine the challenges of the Blue Flag award on municipalities in KwaZulu-Natal.

1.5 Conceptual framework

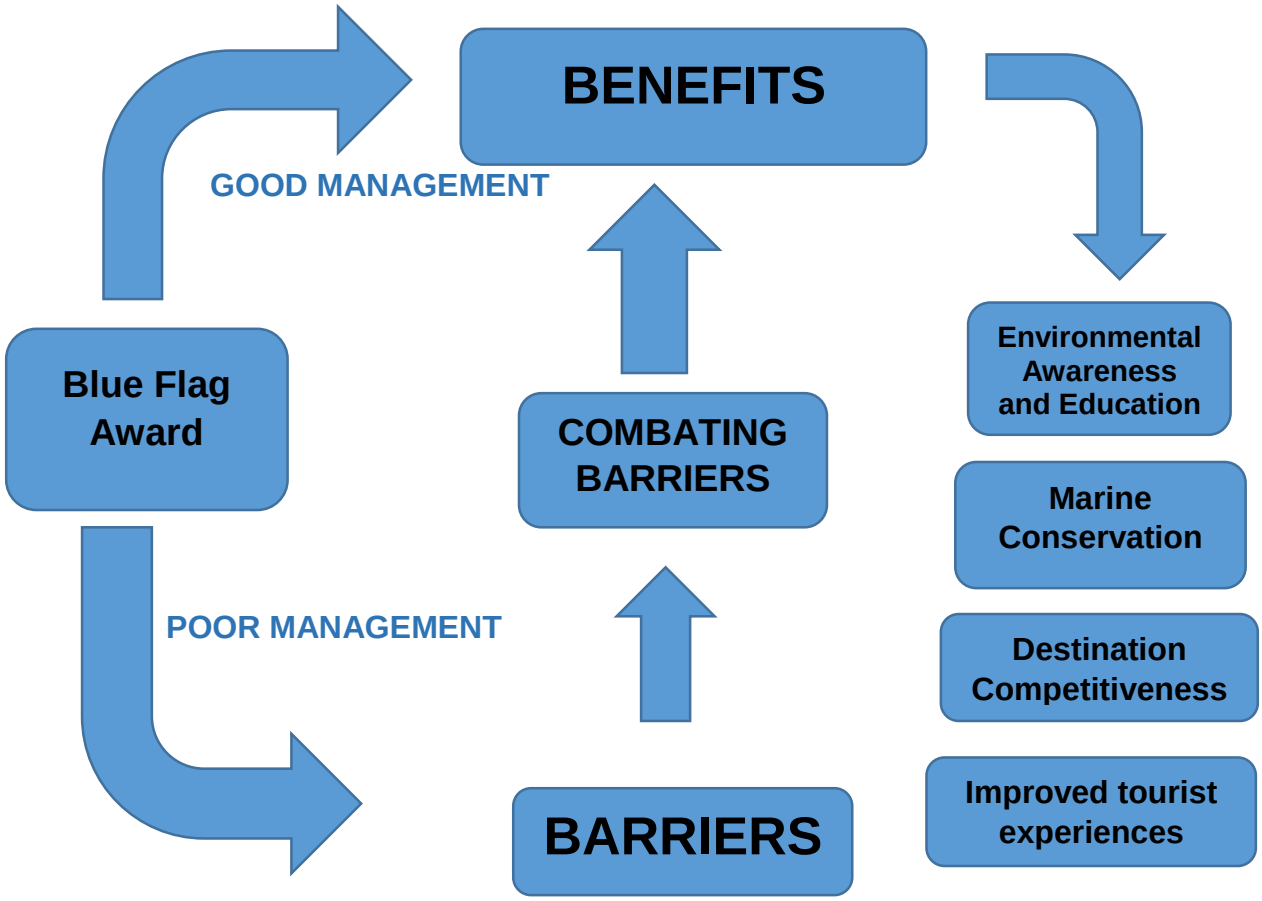

Figure 1.1 Conceptual Framework

Figure 1.1 indicates that the Blue Flag award has both benefits and barriers. Good management of the award leads to benefits whilst poor management leads to barriers of the award. However, when barriers are combated, they lead to benefits. The award is characterized by positive effects on the environment and the community. For the award to yield positive results, good management is a requirement. The benefits indicated in the figure include environmental awareness and education, marine conservation, destination competitiveness and improved tourist experiences. The

figure illustrates that the award has a fair share of barriers however, when there is good management it leads to benefits for both the environment and the community.

In this study, it is evident that the Blue flag award has both benefits and barriers. However, poor management has led to the award not yielding the expected benefits in Kwa-Zulu Natal. It is of paramount importance that the award is managed properly for it to yield positive results. The study will therefore explore the impacts that tourism has on the natural environment, the impacts that human activities have on the coastal\marine environment. The award will be explored further and the benefits and barriers will be identified.

1.6 Research approach

This study will utilize both the qualitative and quantitative methods in obtaining data for the study, which is referred to as the mixed methods approach. Participants of this study include beachgoers of the nine selected Blue Flag beaches in Kwa-Zulu-Natal. The other group of participants is the two municipalities in KwaZulu-Natal that have beaches with the Blue Flag status. Self-administered questionnaires will be given to beachgoers and semi-structured interviews will be conducted with the two municipality managers.

1.7 Limitations of the study

The study was confined to a particular group of people. It was confined to beachgoers who were at the beaches at the time of study. Therefore, the information was limited to only those present at the beach at the time of study. The study was limited to beachgoers at Blue Flag beaches in Kwa-Zulu Natal. Managers that have the Blue Flag award in their municipalities were the ones that were studied. The study was limited to only municipalities with the award.

Additionally, lack of participation and lack of preciseness and truthfulness from the beach respondents and municipal managers were the limitations of this study. Beachgoers were randomly selected and they were not forced to participate.

1.8 Delimitations of the study

In the study, not all beaches are represented in KwaZulu-Natal as the beaches under study were based upon selection by the researcher. The beaches under study were the Blue Flag beaches and some of the beaches in the municipalities that have the award. This was due to time and budget constraints. Municipality managers were not representative of all the municipalities in Kwa-Zulu Natal as only managers in the municipalities with the award were interviewed. The reason for this was because they could provide information on both Blue Flag and non-Blue Flag beaches.

1.9 Structure of the dissertation

This dissertation comprises of five chapters with the details that follow:

- Chapter 1: The introductory chapter provides the contextual background, themes and issues to be addressed in the dissertation. It addresses reasons that motivated the research, aims, objectives and research questions of the study. The chapter also includes the outline of the study as well as the scope and limitations.
- Chapter 2: This chapter reviews the conceptual and theoretical framework of the research and the key themes in depth.
- Chapter 3: Discusses the methodology of the research. It includes the research design, study area and motivation for the methodology used. The chapter particularly examines the research design, target population, sampling techniques, measuring instrument, data analysis, issues of reliability and validity and ethical considerations.
- Chapter 4: This chapter presents, interprets and discusses the results of the primary data collected.
- Chapter 5: The final chapter will draw conclusions and will provide recommendations bases on the research results.

1.10 Conclusion

The chapter presented the background of the study and themes that will be addressed in the research study. The aim, objectives, limitations and delimitations of the study

were explained. A conceptual framework was presented. The following chapter will present a review of the literature and explain different themes pertinent to this study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter will focus on a review of pertinent literature for the study. The literature review is based on a comprehensive understanding of the existing knowledge on the topic under investigation (Machi and Mc Evoy 2016:56). It involves locating and investigating information relating to the problem statement, as well as incorporating the aims and objectives of the research (Sekaran and Bougie 2013:96). The literature review also demonstrates how different studies relate to one another and vice versa, and it includes substantial findings and theoretical contributions to the topic. The chapter begins with the exploration of literature on tourism growth globally and the environmental impacts that tourism imposes. Literature on marine and coastal tourism is thereafter examined, as well as the environmental impacts of coastal and marine tourism. The chapter goes on to examine the literature on the environmental movement and sustainable tourism as well as tools for environmental management. Thereafter, literature on the Blue Flag award will be examined and the benefits and challenges of the Blue Flag Award will be discussed. Finally, discussion on the situation in South Africa will be undertaken with a comparison of literature from different researchers on the perceptions of beachgoers on the Blue flag award as well as the role of municipalities in attaining the award.

2.2 Global tourism growth

Tourism has seen a rapid growth in the previous years, especially in developing countries (Dioko and Macao 2017:26, United Nations World Tourism Organization (UNWTO) 2012:14, Michailidou, Vlachokostas and Moussiopoulos 2016:499, Gladstone, Curley and Shokri 2013:375). An immense increase in international tourist arrivals globally has been noted. There has been an increase from 25 million to 663 million in the 1950 to 1999 period (Beladi et al. 2009:39). The UNWTO has projected the increase to reach 1.8 billion by 2030 (UNWTO 2012:12).

Table 2.1 shows statistics for international tourist arrivals for the year 2017, 2018 and 2019, and as depicted Europe reached 671 million international tourists in 2017, 713

million in 2018 and 742 million in 2019 whilst Asia and the Pacific logged 324 million international tourist arrivals in 2017, 343 million in 2018 and 361 million in 2019. South Asian arrivals grew by 10% whilst South East Asia, Oceania and North East Asia increased by 8%, 7% and 3%, respectively. America welcomed 207 million international tourists in 2017, 217 million in 2018 and 222 million in 2019. Africa received 62 million international tourists in 2017, 67 million in 2018 and 70 million in 2019. The Middle East welcomed 58 million international tourists in 2017, 64 million in 2018 and 70 million in 2019 (UNWTO 2020). The UNWTO projects international tourism arrivals to grow at a rate of 3%- 4% in 2020.

Table 2.1: International tourists' arrivals for 2017, 2018 and 2019 (UNWTO 2020:1)

Continent	International tourist arrivals in 2017	International tourist arrivals in 2018	International tourist arrivals in 2019
Europe	671 million	713 million	742 million
America	207 million	217 million	222 million
Asia and the Pacific	324 million	343 million	361 million
Africa	62 million	67 million	70 million
Middle East	58 million	64 million	70 million

Tourism growth is often a two-edged sword which promotes economic growth but causes environmental and ecological degradation at the same time (Tang 2015:11, Sunlu 2013:2). Wells, Zarger, Whiteford, Mihelcic, Koenig and Cairns (2016:2) stress that the major consequence of rapid tourism growth is abrupt pressure on local resources. Zhong, Deng, Song and Ding (2011:2972) assert that the growth of tourism is to a greater extent dependent on the natural environment. As tourist numbers increase around the world, so are the types of activities that tourists partake in. Leisure activities in natural areas have increased rapidly (Oviedo-García, Vega-Vázquez, Castellanos-Verdugo, and Orgaz-Agüera 2019:74). In a study conducted on the Mediterranean ecosystems, there has been a constant increase in leisure activities like mountain biking and hiking which have brought about numerous negative impacts on the natural environment (Salesa, Tarol and Cerda 2019:505).

2.3 The negative impacts of tourism on the environment

While tourism has certainly contributed in a positive way on the global economy, it has however, contributed to negative tourism impacts such as environmental degradation and depletion of natural resources (Bastic and Gojcic 2012:1012). Negative effects of tourism come about when the intensity of human use is larger than the environment's ability to handle the use (Sunlu 2013:2). Strobl (2016:3) states that uncontrolled conventional tourism poses potential threats to the natural environment. Ouattara et al. (2016:1) state that tourism activities significantly deteriorate the environment. According to Beladi et al. (2009:40), tourism is not well managed from the environmental perspective and does not only cause environmental degradation, but also causes resources to be over exploited. Sunlu (2003:263) claims that uncontrolled conventional tourism poses potential threats to many natural areas around the world. Tourism growth also comes with tourism development which has negative environmental impacts if not controlled and managed properly (Sunlu 2003:263). The increase in tourism demand and activities leads to an influx of people and a large concentration of people at a specific place which is known as mass tourism. The rise in the numbers of tourists which exceed the carrying capacity as well as infrastructure development that is due to a large number of tourists, leads to negative environmental impacts on natural environments (Das and Chatterjee 2015:11; Ouattara et al. 2016:1; Michailidou 2016:499).

According to Zhong et al. (2011:2974) with the fast development of the tourism industry in China since 1980, the country has experienced an increased and overwhelming use of its natural environment for tourism, resulting in resources being exploited in many tourism destinations within the country. Bodoque, Baallesteros-Canovas, Rubiales, Perucha, Nadal-Romero and Stoffel (2017:2257) stresses that more than 600 000 people visited the National Park in the Spanish Pyrenes and more than 500 people visit the Anoncagna Provincial Park daily during the peak season. Also, 3.5 million tourists visit the Tatra National Park in Poland annually (Cwiakala, Kocierz, Puniach, Nedzka, Mamczarz Niewien and Wiacek 2017:78). The researchers emphasize that a growing pressure on the natural environment in these areas exists due to a rise in recreational activities.

The negative impacts of tourism on the natural environment highlighted in the literature include overconsumption and pollution of freshwater resources, air pollution, noise pollution, degradation and loss of ecosystem, solid waste disposal and littering and soil erosion (Ramazanova, Bulai, Ursu, Tortella, Kakabayev 2018:69; Zhang and Gao 2016:227; Caric 2016:493; Geneletti and Dawa 2009:239).

2.3.1 Overconsumption and degradation of freshwater resources

Water is a vital and scarce natural resource and an important component for the tourism industry (Cole 2012:1221; Ramazanova, Bulai, Ursu, Tortella, Kakabayev 2018:69; Zhong et al. 2011:2974; UNWTO 2013). In current years, the growth and development of tourism activities has increased the levels of pollution, degradation and overuse of water resources (Ramazanova et al. 2018:71). The tourism industry uses water in hotels (restrooms, bathrooms and personal use of water by tourists), when participating in recreational activities (swimming pools, theme parks, spas and wellness areas), golf tourism, for the maintenance and landscaping of tourist attractions and accommodation establishments and for producing food and fuel (Gossling, Peeters, Hall, Ceron, Dubois, Lehmann and Scott 2012:4; Ramazanova et al. 2018:70). Furthermore, recreational activities like swimming, surfing, boating and rafting could have a negative impact on the quality of water at beaches, lakes and rivers.

According to Ramazanova et al. (2018:71), lake water is one of the most sensitive and susceptible resources for many tourist destinations, whose attractiveness extremely depends on quality. In a study conducted in Northern Kazakhstan in the Shchuckink-Burabay area, it was highlighted that the lakes in the area have been facing environmental concerns due to their exploitation and increasing level of pollution as well as the overuse of resources over the past 30 years. Results show that tourism is one of the dominant factors for surface area decline of the main lakes in the area. Overconsumption of water was also evident in the study. The researchers emphasize that lakes in the area have been losing water due to many accommodation establishments that surround the lakes. For example, Shortand Lake has lost 11% whilst Ulken Shabakty Lake has lost 15% of water. Gossling et al. (2012:7) affirm that an individual tourist uses between 84 litres to 2000 litres of water per day and could reach 3423 litres of water per bedroom each day. The authors also assert that by 2020,

tourism's impact on water usage is expected to intensify adjacent to global tourism growth. Hence Wells, Zarger, Whiteford, Mihelcic, Koening and Cairns (2016:435) believe that the sustainable management of water usage and wastewater is very important.

2.3.2 Air pollution

Tourism is one of the key contributors of air pollution (Chen, Lin and Hsu 2017:398). This is due to the fact that it is one of the major emitters of greenhouse gases (GHGs), therefore contributing to about 5% of carbon dioxide emissions worldwide (Zhang and Gao 2016:227; Robaina-Alves, Moutinho and Costa 2016:521), with China being the largest carbon dioxide emitter (Wu, Han and Tian 2015: 184). Research concludes that 40% of these emissions are as a result of air travel (Zhang and Gao 2016:227; Higham, Cohen, Cavaliere, Reis and Finkler (2016:336). According to the United Nations World Tourism Organization (UNWTO:2015) report, it was suggested that 75% of the emissions from tourism were from the transport industry. Emissions are expected to grow at an average rate of 3.2% annually up to 2035 due to the rapid tourism growth (Wu et al. 2015:185). According to Higham et al. (2016:336) the tourism industry is expected to produce 40% of the entire carbon dioxide emissions by 2050 as the volumes of people travelling increases.

Air pollution has brought about numerous effects to the environment. The main consequences of air pollution include global warming, acid rain, smog and ozone layer depletion (Ashfaq and Sharma 2012:1). Global warming has been emerging as one of the most significant environmental challenges caused by air pollution (Ahmad, Draz, Su, Ozturk and Rauf 2018:3). The rapid growth of tourism is blamed for air pollution due to immense energy consumption and carbon emissions from tourism activities.

Deng, Li, and Ma (2017:771) highlight that travelling in a polluted environment diminishes the quality of visitor experiences and consequently decreases their willingness to visit a destination. In a study conducted by Chen et al. (2017:400), it was evident that atmospheric conditions are vital determinants in the tourists' destination selection as they alter tourist destination choice. In Taiwan the number of tourists has decreased over the years due to the air quality mostly caused by air pollution. Deng et al. (2017:774) stresses that in a study conducted in China it was

evident that air pollution directly affects tourists travelling to China directly, as exposure to air pollution is a health hazard to tourists.

2.3.3 Noise pollution

The increase in tourist numbers in the recent years has led to a boost in air transportation and has caused uneasiness with regards to noise levels and their effects on the public and on the natural environment (Ozkurt 2014:120). According to Sadeghian (2019:71) cars, buses, recreation vehicles, attractions such as amusement parks, car and motorcycle racetracks and events are major contributors of noise pollution in recent years (Agarwal, Kariyapol and Pienchob 2019:140). The sound scope is an important element of the tourism environment as it assists in promoting positive tourist experiences which means that a peaceful environment is a draw card for tourism (Stefanica and Butnaru 2015:596). Noise pollution inflicts extreme problems to flora and fauna whose feeding, reproduction and migration habits are influenced by sound (Caric 2016:493). Noise pollution is becoming a universal topic of concern, altering conservation of natural environments due to wildlife disruptions, ecosystem destruction and loss of biodiversity (Iglesias Merchan, Diaz-Balteiro and Solino 2015:7). Moreover, it is suggested that human made noise is developing into a universal contaminant of natural surroundings.

According to Lewis (2018:611), recent studies show that cetaceans (aquatic mammals) are especially vulnerable to noise pollution because anthropocentric and human-made noise cause physical changes and behavioural impacts including death. The author gives an example of the bowhead whale that sings to interact with the environment and fellow mammals over a 60-mile distance. Noise pollution therefore affects the mammal and causes disruptions. In a study conducted by Musora and Mbaiwa (2018:19) in the Okavango Delta's wilderness, it was evident that the main source of noise is boats engines, aircrafts and tourists' vehicles. The study indicated that noise interrupts animals like lions during mating, which has long-term effects of reducing the species of such animals and therefore causing ecological imbalance. Noise pollution has also resulted in hippos in Xakanaxa lagoon to deteriorate in numbers. In addition to causing annoyance and stress, noise pollution causes distress to wildlife especially in protected areas (Buxton, McKenna, Mennitt and Fristrup 2017:532).

2.3.4 Degradation and loss of ecosystem

An ecosystem is a geographic area of interacting organisms and their physical surroundings such as soil, water, air and natural cycles that sustain them (Sadeghian 2019:72). The growing number of visitors exerts strong pressures on fragile ecosystems and has led to their degradation with consequent loss of biodiversity. The degradation happens when there are uncontrolled tourism activities that result in severe disturbance of wildlife habitats, increased pressure on endangered species and loss of biodiversity (Stetic and Trisic 2018:35; Papayannis 2017:1). According to Islam, Sunny, Hossain and Friess (2017:244) 60% of the world's ecosystem are being degraded or used in an unsustainable manner with tourism being the main contributor.

In a study conducted by Singh- Boori, Vozenilek and Choudhary (2015:18) in the Czech Republic in the Jeseniky mountains, it was evident that in the last five decades, agriculture and forested landscapes have been transformed due to tourism development. The area is a place for enthusiasts with historic and natural monuments and is full of natural treasure. The transformation has been due to the rapid tourism growth in the area and development of the tourism area. The transformation has disturbed various ecosystems, as there has been strong exploitation of vegetation and deforestation, which has led to qualitative land cover disturbance. In Karimunjawa, a small island, the ecosystem is vulnerable and excessive exploitation of the small island has led to a threat in the ecosystem as there has been deforestation for the erection of tourism infrastructure (Puryono and Suryanti 2019:2). This has led to the loss of vegetation in the area as well as loss of inhabitants.

2.3.5 Solid waste disposal and littering

The ecological and environmental impacts of litter have gained momentum recently and have become an international issue (Hu et al. 2018:273; Hu et al. 2019:1127; Musora et al. 2017:2). This is predominantly in nature-based areas such as mountains, lakes, seas and forests due to their environmental sensitive and ecologically fragile nature. Litter and solid waste have an extensive influence on natural areas affecting their visual appeal and ecological health (Garcés-Ordóñez, Díaz, Cardoso and Muniz 2020:2).

According to Hu et al. (2018:273) litter management is particularly a problem in mountainous tourist areas where the environment is fragile, the landscape is complex, and traffic is inconvenient. This leads to the difficulty in collection of litter and transportation on climbing trails. Improper litter management leads to negative impacts on the environment (Musora et al. 2017: 1128). Hu et al. (2017:273) states that litter can contaminate the soil and damage wildlife and the health of tourists by increasing the number of bees and flies. Litter has serious and extensive influence on natural areas affecting how they look and ecological health.

2.3.6 Soil erosion

According to Banja (2017:306) soil erosion is one of the most common forms of land degradation. Soil erosion has been increasingly recognized as a threat that causes loss of soil and water quality deterioration. Inappropriate development leads to soil erosion and desertification. In a study conducted in China it was discovered that the soil porosity and water holding capacity had declined extensively due to rapid tourism growth and development (Zhong et al. 2011:2975). Gong et al. (2009:14) emphasize that in a study conducted at the Huangshan Mountain Scenic Area, erosion has led to the loss of 50 000 cubic meters of soil due to the construction of tourism infrastructure and excessive horse riding which caused most of the damage to the soil.

Soil erosion due to recreational activities and the environmental impacts of trekking have been reported in developing countries such as India. In Ladakh, Indian Himalaya, there was extensive soil erosion as a result of trekking (Geneletti and Dawa 2009:239). Ng et al. (2018:422) found that recreation activities on natural areas such as hiking has increased six-fold in Hong Kong especially on mountainous areas. According to Salesa et al. (2019:505) the continuous increase in use causes trails to deteriorate and lose a high value resource, which is non-renewable, soil. The deterioration in trails and loss of soil happen if trails are used inappropriately such as the use of mountain bikes in sensitive areas, large running or bike competitions events, motorized vehicles or the overuse of the natural environment by visitors. There are numerous impacts associated with recreational activities on mountainous areas such as soil compaction and soil erosion.

Researchers have found that the rising concern of environmental problems over the previous years has resulted in a powerful shift in how academics and practitioners interpret the possible solutions to these concerns (Barr, Shaw, Coles and Prillwitz 2010: 474). According to Blanco, Rey-Maquieira and Lozano (2009: 112) the tourism literature shows an increase in sustainable development of natural resources at tourism destinations.

2.4 Sustainable tourism

The escalating environmental impacts of tourism led to the United Nations Conference on Environment Development (UNCED), which took place in Rio de Janeiro in Brazil in 1992. The Conference was called the Rio Earth Summit, and was a milestone event which brought together heads of states and chiefs of government from throughout the world. The conference forced governments and businesses to recognize and mitigate the negative environmental impacts caused by tourism and tourism development (Williams and Ponsford 2008:2). A non-binding, voluntary action plan for implementing sustainable tourism, Agenda 21 was established at the Rio Summit (Lafferty and Eckerberg 2013:56). It is a blueprint for sustainability in the 21st century. Agenda 21 specified goals for government and the private sector to achieve in order to attain sustainable tourism development.

Sustainable development is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (United Nations General Assembly 2016; Gabdrakhmanov, Rubtozov, Baybakov, Somaeh and Nugaev 2016:21). The concept of sustainable development aims at maintaining economic expansions and progress while protecting the long-term value of the environment through the integration and acknowledgement of environmental, economic and social concerns. Eikest et al. (2018:178) explains that three international conferences marked the milestone of the development of the concept of sustainable development. The environment dimension was defined in 1972 in Stockholm during the first conference on sustainable development. The economic dimension was then defined in Rio in 2012 at the second UN conference, and the social dimension in Johannesburg in 2002 at the third UN conference leading to the fourth conference on sustainable development, Rio+20 held in 2012.

Sustainability has been the buzzword in tourism over the last three decades (Orenstein and Shach-Pinsley 2017:1, Weaver and Lawton 2017:140, Xu et al. 2016:182, Weaver et al. 2011:1). The term 'sustainable tourism' has been a major trend in tourism literature since the 1970s (Weaver and Jin 2016:657, Hall 2016:285) and has been subjected to a number of interpretations and multiple definitions (Sharpley 2009:56). The UNWTO (1998:19) defines sustainable tourism as:

> "*Tourism that meets the need of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system".*

Evans (2016:14) believes that sustainable tourism is about finding the right balance between tourism development and the protection and the environment so that every aspect benefits in the long run. The United Nations Educational Scientific and Cultural Organization (UNESCO) further describes sustainable tourism as sustainable, economically viable and ethically and socially equitable. The definition of sustainable tourism is regarded to be complex, and according to Wheeller (2012:421) sustainable tourism will remain a "theoretical white elephant" unless it is addressed in wider social contexts riddled with greed, power, economic short-termism and hypocrisy. It is to this effect that sustainable tourism is understood as an ideology or point of view rather than a precise operational definition (Sucheran 2013:23).

Many destinations have been making efforts towards sustainability (Xu et al. 2016:183). However, Hardy et al. (2002:476) highlighted that sustainability is not a global criterion but an individual solution. Buckley (2012:530) also goes on to highlight that consensus on the conceptualization and measurement of sustainability does not exist. Sustainability indicators are developed for specific geographical areas. Instead of focusing on formal institutions only, other informal sectors, communities and individuals should be integrated (Xu et al. 2016:198).

According to Iniesta-Bonillo et al. (2016:5002), sustainability is a critical factor in the growth and competitiveness of a tourist destination. Consumers have become environmental conscious hence making companies that practice sustainable tourism to have a competitive advantage over those that do not. Sustainability can therefore

be a strategic resource that leads to competitive advantage and to superior performance (Dwyer et al. 2009:56).

In a study conducted by Iniesta-Bonillo (2016:5002) it was found that tourists perceived that a destination that practiced sustainability had a positive influence on their perceived value and satisfaction of the trip. The study revealed the existing positive relationship between sustainability and consumer satisfaction. The need for tourist satisfaction and environmental sustainability has led to a rapid growth in the implementation of tools for environmental management in tourism establishments.

2.5 Environmental management in tourism

The tourism industry has acknowledged the importance of environmental quality for ensuring the future existence of tourist attractions as well as consumer satisfaction (Mihalič 2000:65; Blanco, Rey-Maquieira and Lozano 2009:112). Environmental quality has gained momentum in tourist preferences in recent years. It has been noted that tourism managers are integrating environmental measures into their management strategies and policies to combat the growing demand for quality environment as well as well as consumer satisfaction (Runhaar 2016:1; Blanco, Lozano and Rey Maquieira 2009:110). Sucheran and Moodley (2019:2) explain that the term 'environmental management' is embedded in environmental law and is a management strategy with the aim of influencing and shifting the behaviour of people in their environment.

Hathroubi, Peypoch and Robinot (2014:27) express that consumer surveys highlight a growing segment of consumers who prefer attractions that are environmentally friendly. Thao and Trang (2018:18) highlight that these tourists are called green tourists and they demonstrate environmental consciousness and preferences for environmentally friendly products and services. The shift in tourist behaviour has seen the need for tourism establishments to adopt environmental management initiatives and strategies. Ayuso (2006:28) explains that tourism companies have adopted different environmental management initiatives to show their commitment in sustainable development. Heras-Saizabitoria, Boiral, Garcia and Allur (2020:1) further explains that many strategies and environmental management tools have been adopted to ensure environmental management in tourism.

2.5.1 Environmental management tools

To mitigate the negative impacts of tourism on the environment, governments and voluntary organizations have adopted voluntary initiatives such as environmental guidelines, codes of conducts and certification schemes that encourage commitment to change (Creo and Fraboni 2011:379). Blackman, Naranjo, Robaloni and Alpiza (2014:41) confirm that voluntary schemes certifying that tourism operations adhere to defined environmental performance standards address the problem of environmental degradation. The environmental management tools are described in Table 2.2 under four main categories, which are codes of conduct, best environmental practices, ecolabels/ certification and environmental management systems.

Table 2.2: Environmental management tools

ENVIRONMENTAL MANAGEMENT TOOLS	DESCRIPTION AND AIMS	EXAMPLES
Codes of Conduct	• An important structure of reference for responsible and sustainable tourism • They are a wide-ranging set of principles designed to guide important players in tourism development. • They are for governments, the travel industry, communities and tourists. • They aim to help make the most of the sector's benefits while reducing its potentially negative impacts on the environment, cultures and societies across the sphere	• Agenda 21 for the Travel and Tourism Industry • WTTC Environmental Guidelines • The Global Code of Ethics for Tourism (GCET) • Environmental management charter • UNEP Principles of the implementation of Sustainable Tourism • Code for Environmentally Responsible Tourism
Best environmental practices	• These are actions implemented by tourism companies with the aim of decreasing their environmental impacts. • They are for destination management, tour operators and travel agents, water and energy consumption and waste production in accommodation, restaurant, kitchen and campsites,	• Actions of energy saving, water saving and waste management.
Eco- labels/ Certification	• It is an instrument of ensuring that an activity or product meets certain standards set by the government or an industry sector. • Its aim is to mainly check the activities and standards of tourism enterprises, beach ecosystems to	• Blue Flag • Green Globe 21 • Dolphin Safe/ Dolphin friendly • Fair Trade Tourism • BIO Hotels • Earth check

	ensure consumer safety and satisfaction .	• Heritage Environmental Management Company certification
Environmental management systems	• It is a set of processes and practices that enable an organization to reduce its negative environmental impacts and increase its operating effectiveness. • The processes and practices are managed in a comprehensive, systematic, planned and documented manner	• ISO14001 • European Regulations EMAS
Environmental performance indicators	• These are strategies that help to communicate and assess the environmental performance of a company. • They give tourism and hospitality establishments a competitive advantage and help in environmental sustainability.	• Total energy consumption • Total water consumption • Waste production

Source: Modified from Ayuso (2006:209)

Environmental management tools to environmentally vulnerable tourism organisations and environments is presently being implemented across the globe in an effort to protect the natural environment and resources of a destination (Sasidharan et al*.* 2012:161). This is indeed evident by the many environmental management tools that have emerged to date. One of the most utilized environmental management tools in the tourism sector is ecolabels.

2.5.2 Ecolabels in the tourism industry

The benchmark which eco-labels provide creates a sustainable degree which can help lessen many social and environmental problems that a country faces (Prieto-Sandoval, Alfaro, Mejía-Villa and Ormazabal 2016:806). Bastič and Gojčič (2012:1013); Karlsson and Dolnica (2015:695) and Cucculelli and Goffi (2016:371) believe that an eco-labelling scheme aims to review the environmental performance of competitive products and services into signs that are identifiable and easy to comprehend while reviewing, assembling and testing it. Iraldo and Barberio (2017:872) highlight that the primary function of ecolabels is that of being communication tools. It aims to close the information gap between operations providing environmentally friendly products or services and its consumers.

The label then evolves into one of the many factors individuals may consider when choosing a tourism product or service. It plays a significant role in guiding consumers'

choices towards products and services with higher environmental quality (Iraldo et al. 2017:875; Karlsson and Dolnica 2015:706; Cai, Xie and Aguilar 2017:200). Buckley (2002:184) states that an eco-label is merely a term that deals primarily with the environment. Eco-labels and green certification are considered very significant matters in tourism as the sector has evolved into a globally competitive business and therefore requires internationally identifiable eco-labels (Buckley 2012:191; Iraldo et al. 2017:868)

Eco-labelling certification plays a significant role in the decision-making of the tourist and a large number of tourists view eco-labels as a dependable measure for selecting environmentally friendly service excellence (Iraldo and Barberio 2017: 862). Eco-labels are known to attract tourists that obtain higher income and have increased conservational expectancies and are therefore willing to pay higher premiums of up to 5% for service delivery that consist of eco-components (Capacci, Scorcu and Vici 2014:5). Additionally, eco-labelling certification and environmentally focused conduct and practices can be used as a marketing tool to gain the attention of those ecologically conscious tourists (Bastič and Gojčič 2012:1019).

Locally and globally, the purpose of eco-labels in tourism is to be used as a promotional tool which is a factor in consumer choice. This is applicable predominantly to those companies grounded on environmental accreditation and certification schemes (Buckley 2012:185). The author further determines that obtaining eco-certified tourism products delivers contentment to individual clients who are environmentally conscious and depend on eco-certificates (Cuccucelli and Goffi 2016:371)

The primary purpose of certifications is to reduce the environmental impact of tourism and ensuring that awareness is created to travellers which influence their behaviour (Ayuso 2006:207). According to Iraldo and Barberio (2017:860) certification's primary function is that of being communication tools and providing awareness of environmental impacts that tourism poses. Eco- labels provide the country as well as tourism organisations with the opportunity to effectively reduce their carbon footprint thus contributing to the overall sustainability of the country (Ayuso 2006:208). In South Africa there are several prevalent eco-labels in the tourism industry such as Fairtrade for Tourism, Green Globe, Blue Flag, Earth Check, Dolphin Safe/Dolphin Friendly as

well as Bio Hotels (Cuccelelli et al. 2016:373). These eco-labels are anticipated to have a profound effect on the contribution towards sustainability and sustainable tourism globally (Gosselt, van Rompay and Haske 2017:2).

Fair Trade Tourism- It is certification or an award for tourism businesses operating in accordance with the philosophies of Fair Trade and responsible tourism. The ecolabel deals with ethics of fair share, respect, transparency, democracy, reliability and sustainability (Fair Trade Tourism 2020). The tourism organisations are awarded with a trademark or logo as proof that they meet the sustainability criteria set by the global Fair Trade.

Green Globe- The certification was established by the World Travel and Tourism council (WTTC) in 1993. It is a structured assessment of sustainability performance for travel and tourism companies and their supply chain. Certification is granted when travel and tourism businesses monitor improvements and document achievements in sustainable operation and management. The tourism businesses have to meet 44 core criteria with more than 380 compliance indicators (Green Globe Certification 2020).

Bio Hotels- The certification covers organic products in Hotels. The hotels with this ecolabel use organic certified products. Hotels have to meet the standards of the ecolabel and it is applicable at life cycle and supply chain phases, businesses have to meet the social and environmental attributes of the label. To achieve the certification hotels, go under audit and surveillance requirements (Ecolabel Index 2020).

Earth check- It is a leading benchmarking certification and advisory group for the travel and tourism industry. The certification helps businesses, communities and governments to deliver clean, safe, flourishing and healthy destinations. The certification was developed by Sustainable Tourism CRC which is the largest research centre specialising in sustainable tourism and research (Earth Check 2020).

Dolphin Safe/ Dolphin friendly- It is an environmental monitoring certification for the conservation of marine life. The certification started in the United States of America. The death of millions of dolphins during tuna fishing motivated the Earth Island Institute to develop an effective monitoring programme and put in place policies that prohibits the killing of dolphins. The role of the Earth Island Institute is to monitor tuna

companies around the world to safeguard that tuna is caught by methods that do not harm dolphins and protect the marine ecosystem (Ecolabel Index 2020).

Blue Flag- It is an ecolabel awarded to beaches, marinas and sustainable boats. To attain the award some stringent criteria, have to be met. The criteria have four categories which are environmental management, safety and security, environmental education and information and water quality (Blue Flag 2020).

According to Iraldo and Barberio (2017:860), eolabel's primary function is that of being communication tools and providing awareness of environmental impacts that tourism pose. In particular, the type of tourism that has seen a rapid growth in the previous years is coastal and marine tourism (Papageorgiou 2016:44).

2.6 Coastal/ marine tourism

Coastal tourism refers to 'travel away from one's place of residence and partaking in recreational activities that include swimming, surfing, sunbathing, snorkelling, recreational fishing and other coastal recreational activities taking place on the coast'. It is based on a unique resource combination at the border of the land and sea (Attri 2018:3; Adriatic Ionian Ecoregion (AIE) 2018). Goliath, Mxunyelwa and Tilma (2018:1) agree that coastal tourism includes a full range of recreation, tourism and leisure activities that take place along the coastal zone and the offshore coastal waters. Marine tourism**,** on the other hand, includes sea based activities such as boating, yachting, cruising, nautical sports as well as their land based services and infrastructure (Attri 2018:3; Adriatic Ionian Ecoregion (AIE) 2018).

Coastal and marine tourism are terms that are often used interchangeably. Coastal and marine tourism also includes shore-based activities, such as reef walking, whale watching, cruise ship and yachting events within the overall domain of marine tourism. The concept of coastal tourism includes a range of tourism, leisure and recreationally oriented activities that take place in the coastal zone and immediate offshore coastal waters (Attri 2018:9). The activities include tourism related development like accommodation, restaurants and attractions and the infrastructure supporting coastal and marine tourism development.

2.6.1 Growth of coastal/marine tourism

Coastal tourism began in the 19th century and has since increased rapidly (Aragones, Garcia-Barba, Villacampa, Lopez, Gomez-Martin and Pagan 2017:705; Nara, Mao and Yen 2014:19; Papageorgiou 2016:44). With the growth of mass tourism, the use of beaches has intensified (Zielinski and Botero 2015:1150). In the last decade, sandy beaches worldwide have become the popular place to visit (Goncalves and Marques 2016:140). According to Papageorgiou (2016:45), two thirds of the planet is covered by water hence the majority of countries in the world are coastal. The author explicates that tourists now prefer visiting coastal areas, which has led to the rapid growth of coastal/ marine tourism. Gladstone, Curley and Shokri (2013:375) concur that a greater growth in tourism is happening in the sub sector of coastal and marine tourism as a result of coastal zones luring an influx of tourists.

Coastal areas have unique environments and man-made tourism facilities that attract millions of visitors annually worldwide (Nara et al. 2014:20). Beaches are considered one of the major sites for coastal tourism on a global scale (Prati, Albanesi, Pietrantoni and Airoldi 2016:422; Dodds and Holmes 2019:158; Alves, Benavente and Ferreira 2014:521). Tourism's focus on the 3Ss (sun, sand and sea) has increased rapidly with the use of sandy beaches being dominant (Gonzalez and Holtmann-Ahumada 2017:154). According to Dodds and Holmes (2018:124) beaches are listed among the top five vacation destinations for tourism. For example, in Thailand large numbers of tourists go to coastal recreation areas, where beaches are the main reason for visits. Coastal tourism in Thailand is regarded as the fastest growing areas of contemporary tourism, and Thailand has seen a growth of coastal tourism by 8.8% annually. Moreover, there has been a remarkable increase in the number of international tourists to countries of the Gulf and the Red Sea. Tourist attractions to the Gulf increased from 8.2 million to 22.9 million in 2010, whilst for the Red Sea tourist arrivals tripled to 32.9 million Average annual growth for the countries has been 5-18%. With the global tourism growth, arrivals in the Gulf and Red Sea have escalated (Gladstone 2013:3).

The coastline is a high natural value ecosystem, which has been a worldwide target for human activities and pressures in the last decade (Goncalves and Marques 2017:140). Coastal and marine tourism activities are diverse, and include walking, animal observation, off road vehicle tours, swimming, surfing, boating, diving, cruising,

marine mammal observation and fishing (Gladstone et al. 2013:375). According to the authors, recreational fishing, whale watching and diving globally involve 121milion people.

2.6.2 Coastal/ marine activities

- **Swimming and surfing**

Among the safest coastal activities is swimming and surfing. However, these activities require substantial infrastructure to support them (Davenport and Davenport 2006:285). Swimming is one of the most common coastal activities (Lozoya, Sarda and Jimenez 2014:401). Davenport and Davenport (2006:285) explain that surfing was initially a warm water activity but due to technology and marketing has grown to be a prominent coastal sport. Hence it has led to the construction of parking facilities and better vehicular access to meet the needs of those that partake in the sport.

- **Snorkelling and scuba diving**

The fastest growing coastal/marine activities are snorkelling and scuba diving. Participants of these activities are attracted to the most appealing sites. They are attracted to warm water sites with high levels of biodiversity and coral reefs. Davenport and Davenport (2006:285) explain that many diving sites are Marine Protected Areas (MPA). Snorkelling and scuba diving bring about extensive coastal development. To meet the needs of the participants, most resorts construct jetties and marinas to accommodate snorkelers and diving boats (Shao and Sun (2020:103).

- **Yachting and motorboats**

Yachts and motorboats have become very common in marine/ coastal recreational activities (Floerl, Pool and Inglis 2004:1725). Davenport and Davenport (2006:285) explain that these vessels come in different sizes, the smaller ones cause little or no environmental impacts compared to the larger ones. The authors highlight that recreational vessels are held at marinas near commercial trade or fishing points. The vessels also require extensive infrastructure to meet the needs of the tourists.

- **Sports**

Coastal/ marine sports have become common. The sports include beach soccer, beach bowling, beach volleyball, exercise and kiting (Davenport and Davenport 2006:289). These sports require infrastructure for them to take place with others

needing more infrastructure than others. Kiting has become very popular with large kites that are flown at heights of around 30 metres. These sports take place on beaches and sand dunes systems.

- **Picnicking**

Picnicking has become a common activity for beachgoers (Houngbeme, Igue and Cloquet 2020:2; Wicker, Downward and Rascinte 2020:2). Beachgoers go to the beach with the intention of relaxation and spending time with friends and family. Picnicking usually does not require a lot of infrastructure, except sitting areas and braai areas. According to Portman and Brennan (2017:541) activities such as picnicking have contributed to marine litter. Marine litter is a growing problem worldwide (Ansensio-Montesinos, Anfuso, Randerson and Wilson 2019:1). Picnicking is one of the contributors of marine litter as a result of food and drinks consumed by the beachgoers.

The rapid growth of coastal/ marine tourism recreational activities has caused ecological damages on the natural environments and has led to environmental quality decline. This is due to excessive human activities and infrastructure development to meet the needs of the tourists and has brought about numerous environmental impacts (Goncalves and Marques 2017:140; Costa, Landmann, Gaelzer and Zalmon 2017:1; Zielinski and Botero 2019:15).

2.6.3 Impacts of marine/ coastal tourism

Researchers have acknowledged that coastal tourism has brought about escalating negative environmental impacts (Perez- Maqueo et al. 2017:1). Literature claims that most of the environmental impacts are due to human activities at the beaches and marinas (French et al. 2017:37, Anfuso et al. 2017:184, Williams 2016:220, Yu et al. 2016:722) as well as associated development of coastal areas that is not well managed (Nara, Mao and Yen 2014:44; Papageorgiou 2016:44). The main environmental impacts of marine and coastal tourism include: habitat destruction and loss, overdevelopment of coastal areas and environmental degradation, solid waste and littering, and pollution of marine/ coastal water resources.

- **Habitat destruction and loss and overdevelopment of the coastal area**

Intense tourism, human activities and overdevelopment of coastal areas have led to habitat destruction and loss in the coastal/ marine ecosystems (Costa, Landmann, Gaelzer and Zalmon 2017:1). The authors explain that sandy beaches and their surf zones are coastal environments that are considered the most commonly used for human activities. The human pressure has, however, caused severe environmental degradation and constant threats to the biodiversity of those areas.

In a study conducted by Costa et al. (2017:2) in the South Eastern Brazilian coast it was found that intense tourism and human activities have resulted in habitat destruction especially in surf zone areas. At the end of summer, there was a significant reduction in the fish richness, abundance and diversity in tourist pressure areas. The authors highlight that marine and coastal ecosystems provide a wide variety of goods and services including important food resources, however, they are exposed to impacts due to increasing urbanization and tourism growth in those areas. A study conducted by Martin et al. (2005:1029) in Spain, Italy and the United Kingdom confirms that coastal areas that are not well controlled result in significant reduction in the various fish communities.

Machado, Suciu, Costa, Tavares and Zalman (2017:11) explain that human trampling has been one of the causes of habitat loss and destruction in coastal areas. The authors highlight that overcrowding and uncontrolled activities at the beach cause habitat loss and destruction and there is need for supervision and regulation of activities and the quantity of people that visit the beach.

According to Gladstone et al. (2013:380), tourist activities in the Gulf such as diving fishing, cruising, snorkelling and sailing have been reported to cause damage in Iran and the United Arab Emirates. There has been breakage of coral reefs by snorkelers who have been snorkelling excessively. The authors also explain that the construction of artificial waterways, marinas, lagoons and breakwaters has indirectly caused loss of habitats by altering local circulation leading to sedimentation and smothering in the United Arab Emirates.

Growing demands for tourism in recent years has generated intense coastal development, which has become a major threat to the coastal ecosystem (Gonzalez

and Holtmann-Ahumada 2017:154). The rapid growth of coastal tourism comes with the development of the tourist area to meet the needs of tourists. There is construction of hotels, resort cottages, waterways, recreational parks and restaurants at the coastal area (Suciu 2017:3; Aragones et al. 2017:704). The development of the coastal area yields important economic revenues but degrades the environment as it leads to habitat loss and destruction.

González and Holtmann-Ahumada (2017:157) report that in a study conducted in Northern Chile the conservation value was zero for all study sites. Areas like Penuelas, La Herraduna and Totarallillo beaches had very low remaining dunes due to tourism development. In these areas the coastal area was affected by the construction of roads, pedestrian walkways and flattening of land for parking. This has excessively led to the destruction and loss of habitats and loss of nature through the overdevelopment of the coastal area. In a study conducted by Anfuso et al. (2017:177) seven out of one hundred beaches in Cuba were extremely attractive with natural sites and high landscape value. This was as a result of overdevelopment of the coastal areas in Cuba.

According to Gladstone et al. (2013:382), tourism in the Great Barrier Reef Marine Park contributed A$5 billion to the Australian economy. The Great Barrier Reef has seen tourist numbers increasing to one million visitors per annum. The continued growth of coastal and marine tourism has led to ongoing concerns about its environmental impacts. The Gulf has a smaller number of species compared to other sub regions of the Indian Ocean due to high water temperatures. This has been caused by rapid coastal development, more than 40% of the coastline has been developed. The Gulf and the Red Sea have seen massive coastal development mainly for tourism purposes. There has been the construction of artificial waterways, walkways, marinas, lagoons, break waters and there has been infrastructure development through the building of shops, accommodation facilities and roads close to the coastal area (Wilson and Verlis 2017:270). Such rapid development is associated with intense environmental degradation and loss of habitats.

A high density of buildings can be observed along the coastline in France, Italy and Spain where the built up area exceeds 45% which causes landscape degradation as the natural environment is disturbed by the erection of buildings (Williams et al.

2016:220). The authors go on to describe places where marine overdevelopment has been evident. In 2000 within the Mediterranean region 40% of the coastline had been lost to buildings and by 2025 it is estimated that 50% would be irreversibly artificial. Correspondingly, 75% of the Colombian population is centred at the sea which highlights extensive coastal development leading to environmental and landscape degradation.

- **Solid waste and littering**

The accumulation of solid waste in coastal environments is a growing concern worldwide that is resulting in the death of marine organisms as well as unattractive coastal areas. Suciu et al. (2017:1) agree to the notion that coastal environments are being affected by human activities associated with tourism and rapid demographic growth. The authors go on to highlight that rapid tourism growth and its recreational potential makes it easier for coastal environments to be exposed to solid waste. The study that was conducted at the Praia Grande beach in Brazil highlighted that plastic constituted the largest number of solid waste with 84% of plastic being collected. In the Southern Great Barrier reef solid waste was a major concern due to activities like recreational boating and fishing (Wilson and Verlis 2017:274).

Carvic and Mackelworth (2014:352) acknowledge the fact that tourism activities such as cruise tourism pose a lot of solid waste in the coastal environments. In the Adriatic Sea it was found that 250 billion pieces of plastic were floating in a column of 10-15 cm depth. According to researchers, marine debris has physical, chemical and biological implications. Rangel- Buitrago et al. (2017:142) emphasize that solid waste/ beach litter is a major concern in beaches and marinas in Colombia.

In a study conducted by Mastanza, Botero, Anfuso, Chica-Ruiz, Pranzini and Mooser (2019:576) in the Ecuador and Galapogas Islands it was evident that human activities at the beach were the cause of marine litter. The authors explain that human activities such as picnicking and braais at the beach are a cause of marine litter. Canteiro, Córdova-Tapia and Brazeiro (2018:224) further express that activities such as hiking, biking, surfing, snorkelling sun and beach tourism or relaxation and camping are the major causes of litter at the marine/ coastal environments.

Tran and Nguyen (2019:170) in a study conducted in Vietnam indicate that 70% of the waste found in coastal areas is from industries, residential areas that are close to the

coast. This waste is due to the overdevelopment of the coastal area and urbanization. The waste comprises of plastics, chemicals, metals, oil residues and radioactive substances. This waste extremely affects the marine ecosystem, destroys marine resources and endanger human health (Dika, Kusimi and Gyekye 2018:101).

- **Water pollution**

According to Suciu et al. (2017:4), sewage from industrial and domestic waste and faecal material is one of the main pollutants of coastal waters. As a result of coastal development, beaches receive large amounts of domestic and industrial sewage. Consequently, this has an impact on the marine ecosystem, as the proliferation of bacteria and the reduction of dissolved oxygen near the shore impacts on the structure and function of aquatic communities. In a study conducted by Cândido and Netto (2020:106) the authors explain that due to the increased urbanization and coastal development it is of paramount importance for coastal areas to have a proper and effective sewage treatment. However, the authors argue that in many developing countries sewage treatment is largely ignored. In Brazil only 40% of the coastal cities have some sort of sewage services and treatment which leads to pollution at coastal areas. The non-treatment of sewage in coastal areas has a negative impact on the marine ecosystem (Fiori, Bravo, Elías, Serra, Carcedo, Dos Santos and Botté 2020: 136).

In a study conducted in China at three coastal sites, it was evident that due to extensive tourism activity in the studied sites, the bathing beach exhibited higher micro plastic abundance compared to a non-bathing beach (Yu, Peng, Wang, Wang, Bao 2016:729). The other pollutants that were found in the sea were cotton strands, grassroots and non-plastic fibres. An estimated 6-12 million tonnes of plastic enter the ocean each year as a result of coastal tourism (Jambeck, Geyer, Wilcox, Siegler, Perryman, Andrady, Narayan and Law 2015:768). Vince and Hardesty (2017:123) also highlight that pollution is significant with a lot of plastic found in the marine ecosystem which puts danger on marine living organisms.

Furthermore, in a study conducted by Canteiro, Córdova-Tapia and Brazeiro (2018:225) the results highlighted that environmental impacts such as water pollution are associated with activities at the marine environments. Activities such as hiking, visits, boat trip, fishing, sun and beach tourism and camping result in the contamination

of marine waters. The authors explain that this is due to the lack of supervision and regulation of the quantity of people that visit the marine environments.

In Vietnam there are oil spills at the sea due to ships and boats from recreational activities at coastal/ marine environments as well as from industries close to the coast (Tran and Nguyen 2019:172). Oil spills have a negative effect on the coastal environment because it causes ecosystem degradation and it reduces the ability of resilience and the flexibility of the ecosystem. Oil spills also affect marine organisms and may cause death (Abdulla, Nasa and Ayyad 2019:40; Van Quy and Dong 2019:136).

Botero et al. (2017:1) however state that the environmental impacts can be reduced through proper management of coastal tourism. Gonzalez and Holtmann- Ahumada (2017:154), Aragones et al. (2017:704) highlight the need for sustainable use of beaches so as to keep up with the growing demand of coastal tourism. The environmental impacts of tourism have led to the need for sustainable tourism around the globe with Blue growth being the recent call for the sustainability of marine and maritime sectors.

2.7 Blue Flag Award for beaches and marinas

The Blue Flag is an international award that aims to manage beaches and marinas by promoting sustainable development in freshwater and marine areas (Blue Flag Global 2020:1; Geldenhuys and Van Der Marwe 2014:2; Gual et al. 2015:108; Pencarelli et al. 2016:28). Silwani (2015:19) highlights that environmental education is the core value and characteristic of the programme. The award was launched by the Foundation for Environment Education (FEE), which is a non- governmental and non-profit organization which also cooperates with the United Nations World Tourism Organization (UNWTO) (Petroman et al. 2010:426). The Blue Flag award was established in 1985 in France, making it the first eco-label (Duglio et al. 2017:83). It has been operational in Europe since 1987 and in areas outside Europe since 2001, when South Africa joined the programme (WESSA 2016).

According to Dulgio et al. (2017:84), beach certification schemes like the Blue Flag have been designed to bridge the gap between recreation and conservation. Fraguell et al. (2015:884) explains that the Blue Flag award promotes sustainable development

of coastal areas and encourages the cooperation between tourism and the environment. The Blue flag award also serves as a key indicator for environmental quality. Lucrezi and Saayman (2015:1479) and Radchenko and Aleyev (2011:53), emphasize that the Blue Flag award has a dual aim of preventing environmental damage and attracting tourism.

Sun and beach tourism has flourished extensively in the coastal areas hence the need for conservation of the coastal ecosystem (Gual et al. 2015:107, Lucrezi and Saayman 2015:1478). According to Fraguell et al. (2015:882) the beach is the focal point of the whole range of tourist attractions. The tourist experience and demand together with environmental awareness across the globe has created the need for high quality beaches hence the growth of the Blue Flag and the need for local authorities and beach operators to achieve high beach and marine standards (Fraguell 2015:888; Pencarelli et al. 2016:29).

The Foundation for Environmental Education (FEE) (2014:5) states that the Blue Flag award unites stakeholders in the sustainable management and development of beaches and marinas from the tourism and environmental sectors at local and national level. The stakeholders are united through:

- The promotion of the Blue Flag award which basically deals with water quality, environmental education, environmental management, safety and security;
- Education of those working directly with management of beaches and marinas;
- Education of beach visitors about good practices in the coastal environment and ecosystem;
- Education of the whole community about protecting the coastal environment and
- Encouragement of voluntary involvement in environmental action.

The Foundation for Environmental Education (FEE) further highlights that the Blue Flag programme has steadily broadened its objectives to improve the environmental management of coastal regions rather than just beaches and marinas. The strengths of the Blue Flag programme are mainly due to the principles and characteristics on which the programme operates. The principles and characteristics are:

- Positive reinforcement which highlights the achievements of the award-winning beaches and marinas;
- Broad participation involving several local and national stakeholders on which all actions depend;
- Voluntary action, implying that those who volunteer to join accept the responsibility of complying with the Blue Flag criteria;
- Independent operation; the award system cannot be influenced by the local or international financial interests; and
- Adaptability of the criteria, which is adapted internationally but allows for expansion of the scheme to different regions reflecting specific environmental conditions (FEE 2014:5).

The goal of the Blue Flag programme in the management of the coastal system is to keep the resource suitable for all the designated uses, both existing and the future. Basically, the Blue Flag award aims to conserve the beach and marine ecosystem for the present and future generation (FEE 2014:7). The Blue Flag award is the largest eco-label in the world, and it continues to grow (Pencarelli et al. 2016:28). According to Table 2.3, a total of 46 countries worldwide participate in the programme with 4573 Blue Flag beaches, boats and marinas (Blue Flag 2020).

Table 2.3: Blue Flag awarded sites per country

Country	Beaches awarded	Marinas awarded	Boats awarded	Awarded sites
1. Spain	566	98	5	669
2. France	393	106	-	499
3. Greece	478	14	6	498
4. Turkey	453	21	-	474
5. Italy	385	72	-	457
6. Portugal	352	17	12	381
7. Denmark	196	20	-	216
8. Netherlands	57	122	-	179
9. Germany	43	87	-	130
10. Croatia	95	27	-	122
11. Ireland	79	8	-	87
12. England	71	-	-	71
13. Cyprus	65	1	-	66
14. South Africa	45	9	10	64
15. Mexico	53	3	-	56
16. Israel	46	2	-	48
17. Wales	34	3	6	43
18. Canada	28	12	-	40
19. Montenegro	32	1	-	33
20. Poland	22	10	-	32
21. Dominican Republic	25	-	-	25
22. Latvia	21	2	-	23
23. Iceland	2	2	19	23
24. Morocco	21	1	-	22
25. Belgium	12	8	-	20
26. Sweden	9	11	-	20
27. Brazil	13	6	-	19
28. Norway	16	3	-	19
29. Puerto Rico	2	2	11	15
30. Bulgaria	14	1	-	15
31. Russia	15	-	-	15
32. Ukraine	15	-	-	15
33. Slovenia	11	3	-	14
34. United Arab Emirates	13	-	-	13
35. Northern Ireland	8	4	-	12
36. Malta	12	-	-	12
37. Jordan	4	1	-	5
38. Lithuania	5	-	-	5
39. Columbia	4	-	-	4
40. New Zealand		4	-	4
41. Japan	4	-	-	4
42. US Virgin Islands	3	1	-	4
43. Romania	3	-	-	3
44. Estonia	3	-	-	3
45. South Korea	1	-	-	1
46. Serbia	1	-	-	1

Source: Blue Flag (2020)

2.7.1 The Blue Flag criteria and accreditation process

The Blue Flag targets the promotion of sustainable development of beaches through the criteria of water quality, environmental education and information, safety and security and environmental management (Radchenko and Aleyev 2011:52; Geldenhugs and Van der Merwe 2014:2, Pencarelli 2016:30, Fraguell et al. 2015:889). In order to receive the award, beaches must comply with 33 criteria grouped under the four mentioned categories, as depicted in Table 2.4. The criteria are set by the international coordinators of the Blue Flag campaign, the Foundation of Environmental Education (FEE) (WESSA 2016).

A national operator can choose to have stricter criteria and so the 33 criteria by the Foundation of Environmental Education (FEE) is a guideline. All the imperative criteria have to be met in order to obtain the Blue Flag award (Blue Flag 2019). The international criteria are designed to allow for small variations from region to region. Table 2.4 below shows the criteria that must be met by operators.

Table 2.4: The Blue Flag Criteria

Categories	Criteria
Environmental education and information	1. Information about the Blue Flag programme and other FEE eco-label must be displayed. 2. Environmental education activities must be offered and promoted to beach users. 3. Information about bathing water quality must be displayed. 4. Information relating to local ecosystems and environmental phenomena must be displayed. 5. A map of the beach indicating different facilities must be displayed. 6. A code of conduct that reflects appropriate laws governing the use of the beach and surrounding areas must be displayed.
Water quality	7. The beach must fully comply with the water quality sampling and frequency requirements. 8. The beach must fully comply with the standards and requirements of water quality analysis. 9. No industrial, waste water or sewage- related discharges should affect the beach area. 10. The beach must comply with the Blue Flag requirements for the microbiological parameter fecal coli bacteria and intestinal enterococci. 11. The beach must comply with the Blue Flag requirements of the following physical parameters: • There must be no oil visible on the surface of the water and no odour detected. • There has to be the absence of floatables such as wood, plastics, bottles, containers, glass or any substance.
Environmental management	12. The local authority should establish a beach management committee. 13. The local authority must comply with all regulations affecting the location and operation of the beach. 14. Sensitive area management. 15. The beach must be clean 16. Algae vegetation or natural debris should be left on the beach. 17. Waste disposal bins must be available at the beach in adequate numbers and they must be regularly maintained. 18. Facilities for the separation of recyclable waste materials should be available at the beach. 19. An adequate number of toilet facilities must be provided. 20. The toilet facilities must be kept clean. 21. The toilet facilities must have a controlled sewage disposal. 22. On the beach there will be no unauthorized camping or driving and no dumping 23. Access to the beach by dogs and other pets must be strictly controlled. 24. All buildings and beach equipment must be properly maintained. 25. Marine and fresh water sensitive habitats such as coral reefs in the vicinity of the beach must be monitored. 26. A sustainable means of transportation should be promoted in the beach area.
Safety and services	27. Appropriate public safety control measures must be implemented. 28. First aid equipment must be available on the beach. 29. Emergency plans must be available on the beach. 30. There must be management of different users of the beach so as to prevent conflicts and accidents. 31. There must be safety measures in place to protect users of the beach. 32. A supply of drinking water should be available at the beach. 33. At least one Blue Flag beach in each municipality must have access and facilities provided for the physically disabled.

Source: Blue Flag International (2020)

- **Blue Flag criteria: Environmental education and information**

The Blue Flag criteria highlights that a beach in a municipality that has Blue Flag beaches must have at least one information board in place containing all information required by the criteria. Information about the Blue Flag programme and other FEE ecolabels must be displayed. The beach has to have the correct logo displayed in accordance with the FEE branding guideline. The contact details of Blue flag representatives should also be posted (national and international). Information on bathing water and local ecosystems should be displayed. Environmental education activities must be offered and promoted to beach goers as planned (Geldenhuys and Van der Merwe 2014:2). The planned environmental activities for the following season must be included in the application as well as a report of the activities carried out in the previous Blue Flag season if the beach had the Blue Flag status. At least five different activities must be offered in the community or municipality, and the focus of the activities should be on the environment, environmental issues, sustainable issues or Blue Flag issues. Some of the activities should be carried out at the beach and have direct focus on the environment (Lucrezi, Saayman and Van der Merwe 2015:215).

- **Blue Flag criteria: Water quality**

The Blue Flag programme requires beaches to achieve the appropriate bathing water quality. The water quality standards are based on international and national standards and legislation. Additionally, a Blue Flag beach must at least have one sampling site located where the concentration of bathers is the highest. Samples for microbiological and physical parameters should be taken and there must be not more than 30 days between samples during the Blue Flag season (Lee, Kwon, Hong, Lee, Ha, Cho and Lee 2020:852). The Blue Flag programme does not accept applications from beaches where less than five samples have been taken. An independent, officially authorized and trained person collects the samples. An independent laboratory must carry out the analysis of bathing water samples. A bathing water profile must be compiled for every Blue Flag beach (Merino and Prats 2020:3). The profile should include a description of physical, geographical and hydrological characteristics of bathing water, identification of potential sources of pollution and an assessment of the potential of cyanobacteria and algae formation. There should be no discharge of industrial, urban wastewater or sewage related discharge into the Blue Flag area or immediate buffer

zone. In an event that there are discharge points in the area of the beach, they must be documented at the time of the application (Blue Flag 2019).

- **Blue Flag criteria: Environmental management**

The local municipality or beach operator should establish and appoint a beach management committee that should be in charge of ensuring compliance with all environmental management criteria. All relevant stakeholders at local level should be part of the committee. The committee is responsible for instituting environmental management systems and audits of the beach and the surrounding areas that include paths, parking areas and access to the beach must be clean and maintained at all times (Dodds and Holmes 2020:6). Litter should not accumulate causing the areas to be unappealing or hazardous. The local authority or beach operator must comply with the regulations pertaining to issues relating to coastal zone management, environmental management wastewater legislation, environmental legislation and other legislations in order for the beach to receive or maintain the Blue Flag award. Facilities for the separation of recyclable waste material should be available. The number of toilet facilities available at the beach should match the average number of beachgoers during the peak season, the length of the beach and the number of major access points (Blue Flag 2019).

- **Blue Flag criteria: Safety and services**

The local authority should undertake an official risk assessment of the beach and an appropriate response strategy must be set up. The provision of lifeguards or equipment at the beach is an example of the strategy. Lifeguards must have national or international qualifications and their certificates must be checked before employment and must be available to the operator. The bathing areas patrolled by lifeguards should be clearly marked out (Merino and Prats 2020:3). The criteria strongly recommend that busy beaches and family beaches must have first aid stations with qualified staff in attendance. Stations should be clearly sign-posted for easy location by beachgoers. The emergency plan must be a clearly identified procedure in the case of an emergency. A plan must specify who should be contacted in the case of a pollution incident. The person should be someone who is a local and should be a responsible individual (Zielinski and Botero 2019:21). Beaches that support multiple activities must have management plans in place so as to prevent

accidents and conflicts. Recreational use of the beach must be managed without impacting on the environment negatively. The occurrence of various activities must be separated and clearly marked and zoned. There should be a portable water source in the restroom block or on the beach front but it must be protected from contamination by animals (Dodds and Holmes 2019:165). The public must have access to the Blue Flag beaches without being a client of a certain hotel or beach club and they must feel safe while at the beach. Blue Flag beaches must have facilities that allow access by the physically disabled granting them access to the beach and surrounding buildings and restroom facilities (Blue Flag 2019).

If the criteria are not met during the Blue Flag season and standards lower, the municipality or beach operator is given ten days to regain the standards. If not, the award is withdrawn (Fraguell et al. 2015:884). According to Silwana (2015:22) the criteria is revised and updated every 5 years. When a local municipality or beach operator is satisfied that they comply with the criteria then they can apply (WESSA 2019).

2.7.2 Blue Flag application process

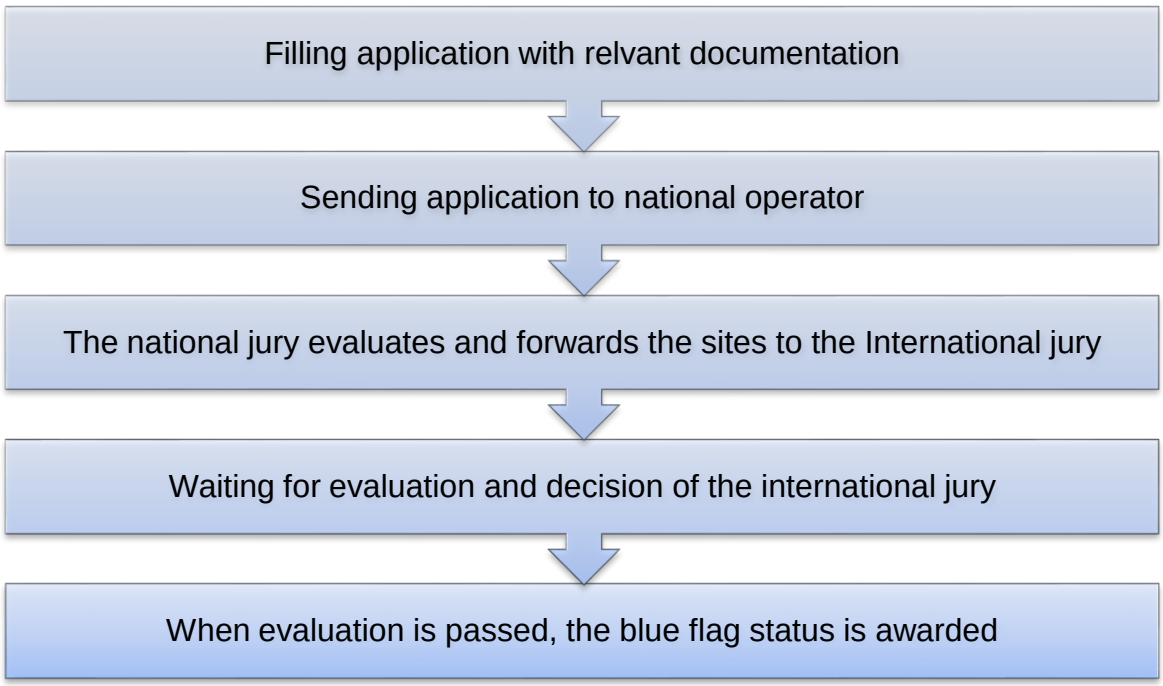

Figure 2.1 Blue Flag application procedure
Source: Adopted from WESSA (2019:1)

As highlighted in Figure 2.1, the first step in applying for the Blue Flag status is filling an application with relevant documentation. The beach should comply with the 33 International Blue Flag Criteria. The application is then sent to the national operator which evaluates the application. If the sites meet all criteria, the National Jury then forwards the application to the International Jury which is in Copenhagen in Denmark. The International Jury evaluates the application and if the site meets the criteria the Blue Flag status is awarded. Beaches that are striving toward the highest quality of environmental management are awarded the pilot status. The pilot status is when a beach is striving to get the full Blue Flag status and it gets evaluated in that year. The operators then apply for the full status in the following Blue Flag season.

According to WESSA (2019:25), the Blue Flag is awarded by the Foundation for Environmental Education (FEE). The Foundation for Environmental Education FEE works with national operators in awarding the Blue Flag. The Blue Flag National Jury is made up of:

- Minister of Environment
- Minister of Tourism
- Environmental organizations
- Association of local authorities
- National life saving federation
- Environmental Education expert
- Marina experts
- Association of beach managers
- FEE representative

The Blue Flag award lasts for one Blue Flag season which is usually a year (Blue Flag 2019). The municipality or beach operator can choose a specific season relevant to their site which is usually the site's peak season. WESSA (2019:15) highlights that the application is only for one season and once the season ends the municipality or beach operator should apply again. WESSA conducts seasonal inspections at the beach each season and decides whether the flag should continue to be flown. The Blue Flag certification costs R24000 per season.

2.7.3 Role of local governments and local stakeholders in the Blue Flag Award

According to FEE (2014) and Silwana (2015:19) the local government that is local municipalities and stakeholder groups play a significant role in the Blue Flag programme. Their role is:

- Coordinating applications for the Blue Flag;
- Monitoring the bathing water quality sample results for beaches if they are in compliance with the Blue Flag criteria and if not they are responsible for taking action;
- Organizing litter collection and adequate forms of litter disposal;
- Organizing the collection of waste for recycling;
- Organizing the collection of hazardous waste for appropriate disposal;
- Ensuring that the criteria regarding providing safety are met;
- Managing beaches to avoid environmental deterioration;
- Monitoring the beach in an aesthetically pleasing form;
- Educating visitors about the need to protect the environment, safety precautions and available services;
- Incorporating environment considerations into local planning;
- Improving environmental education and information activities;
- Flying the Blue Flag on awarded beaches and displaying the relevant criteria and information;
- Publicizing the awarded sites and results of the Blue Flag programme locally; and
- Taking down the Blue Flag in cases of non-compliance.

Philips and Jones (2006:522) explain that the primary responsibility of coastal managers is to ensure the conservation of coastal scenery in its natural state as much as possible. The authors further emphasize that the role of coastal managers is also to facilitate the enjoyment in the coastal environments by the public through recreational activities that are in accordance to their primary responsibility. Hall (1997:1) emphasized that promoting conservation implies an understanding of coastal zone geography, the generation, longevity and that the relationship with the ecosystems strongly depends on them. Therefore, to ensure that recreation and

tourism assets are protected it is of paramount importance to understand the ecosystem and what happens in it. The author commends that coastal managers and the local government should be more involved in educating the public and making sure that coastal areas are protected.

Granja (2001:415) highlighted that the lack of coastal zone management has irreversibly contributed to the gradual degradation of the coastal zone. The author makes reference to the Portugal coastal zone that has gradually degraded due to poor coastal zone management as the landscape has degraded gradually.

2.7.4 Benefits of the Blue Flag Award

Numerous positive effects to both the environment and the community characterize the Blue flag award (Lucrezi et al. 2015:212). The award requires good management if it is to yield positive results. Benefits of the award include conservation, environmental education and awareness, influencing consumer choice, positive brand image, marketing of destinations as well as job creation.

- **Conservation**

The Blue Flag award has many benefits with the main one being conservation of the marine environment (Geldenhuys et al. 2014:2). According to the authors, the Blue Flag award preserves the natural environment that is the safety of the marine life and the environment. Mir-Gual et al. (2015:107) emphasize that the Blue Flag confirms excellent water quality in the coastal zone. McKenna, Williams and Cooper (2011:572) further explain that the award is seen as a symbol of clean, safe and environmentally friendly coastal areas. The award also ensures the protection of the natural ecosystem (Fraguell et al. 2015:883). The authors go on to say the award promotes sustainable development of the coastal areas and encourages cooperation between tourism and the environmental sectors and good environmental practices.

In a study conducted by Mir-Gual et al. (2015:114) in Spain, it was found that the Blue Flag award has grown in the country and this has seen remarkable coastal environment conservation. According to Blue Flag (2020) and Fraguell (2016:882), Spain has the highest number of Blue Flag awarded sites, with a total of 669 sites. This is an indicator of intensive environmental conservation according to Blue Flag. Out of the 131 beaches that were under study in the Cantabrian coast in Spain 67%

of the beaches were in an excellent state of conservation because of the Blue Flag award. Pencarelli et al. (2016:28) emphasize that the Blue Flag award challenges local authorities and beach operators to achieve high environmental standards.

Petroman, Amzulescu, Sărăndan, Petroman, Coman, Orboi, Ivu (2010:426) in a study conducted in Romania report that the Blue Flag in Romania has increased the quality of coastal tourism services. The authors explain that from the inception of the award in Romania, the bathing water quality has increased as well as ensuring environmental protection of the coast in Romania. The award has played the role of ensuring long term sustainable use of coastal resources. Blue Flag (2020) indicate that Romania has maintained a consistent number of Blue Flag annually which has improved their marine/coastal zones.

Ulme, Graudiņa-Bombiza and Ernsteins (2018:122) explain that the implementation of the Blue Flag award in Lactivia started in 1998. The authors explain that the award has maintained a steady growth in the country and it has proven to be beneficial and successful nationally and at municipal level. The award has ensured that there is sustainable marine/coastal tourism as well as environmentally friendly recreation. It has enabled conservation in Lactivia over the years.

Fraguell et al. (2016:885) explain that the evolution of the of the Blue Flag programme in the renewal of the criteria demonstrates the willingness to approach the principles governing the paradigm of sustainable tourism. The criteria are revised after every five years to ensure that the award still aids conservation and sustainability. The criteria are a guideline and the national operator can choose to have some stricter criteria that will ensure that there is adequate conservation at the beach. It is flexible and continuously being updated to adapt to different geographic context and new tourists' requirements.

- **Environmental education and awareness**

The Blue Flag award embodies very important principles such as environmental education (Lucrezi et al. 2015:212). Environmental education and awareness are significant drivers of pro-environmental behaviour (Dodds and Holmes 2018:125). According to Lee, Jan and Huang (2015:870), awareness and education changes behaviour and it makes the targeted population to be able to make informed decisions with regards to conservation. The Blue Flag award is an educational programme and

its core value is environmental education (Silwani 2015:19). Environmental education also possesses the potential to educate not only beach goers but also the authorities responsible for beach management (Lucrezi et al. 2015:212). The award also informs the public on critical coastal issues and also involves the public in coastal management through beach clean ups. Therefore, the award educates and engages both the beach goers and the managers as well.

According to Pencarelli et al. (2016:33), Italian tourists have displayed increasing interest in environmental issues. This is due to the fact that certification schemes such as the Blue Flag award play a significant role in creating increased environmental awareness. According to Blue Flag (2016) Italy ranks number five in terms of the Blue Flag award with 409 awarded sites in total.

- **Influencing consumer choice**

Lucrezi and Saayman (2015:1478) highlight that the Blue Flag has a dual aim of preventing environmental damage as well as attracting tourism. Tourists have become environmentally conscious and prefer destinations that are environmentally sustainable. The tourist experience and demand together with environmental awareness have created the need for high quality beaches and an aim for most European coastal destinations to obtain accreditation such as the Blue Flag award (Fraguell et al. 2016:883).

According to Mir-Gual (2015:107), the Blue Flag has an impact on the choice of destination as it is considered as a sign of prestige. Lucrezi and Saayman (2015:1478) confirm that Blue flag has an influence in the tourists' decision making. Tourists prefer beaches that are clean, safe and environmentally conscious (Pencarelli et al. 2016:28; Fraguell et al. 2015:882; Mir-Gual 2015:107).

Environmental quality has gained momentum in tourist preferences in recent years and the demand for environmentally sustainable tourism has grown (Runhaar 2016:1; Cerqua 2017:1159). Tourists have become environmentally conscious and they prefer attractions that are environmentally friendly The Blue Flag award is a symbol of environmental excellence and has been influencing consumer choices in recent years. The award ensures satisfaction which results in repeat visits and it impacts on beach goers' choice (Klein and Dodds 2018:42; Saayman and Saayman 2017:1440).

- **Marketing and brand image**

Pencarelli et al. (2016:35) emphasize that the Blue Flag award serves as a key indicator for quality assurance. It sends signals to the market about the high standards that a destination offers. The authors further elaborate that the award increases competitiveness of tourism destinations and enhances the territory's touristic brand which has been evident with Italy. Italy is one of the famous beach destinations in the world. The ecolabels like the Blue Flag award bring destination image enhancement leading to added value for tourism (Mir- Gual et al. 2015:108; Fraguell et al 2016:900). Klein and Dodds (2018:42) explain that the award results in press releases and articles that put Blue Flag beaches in the positive light and act as a marketing tool.

Zeliha (2013:455) highlights that the Blue Flag award has the benefit of marketing and confirms that having the Blue Flag award at a destination increases the marketing power of the destination as well as customer attention. The study was conducted on marina and beach managers and other tourism business in Turkey and it confirms that a cost is allocated in the municipalities marketing budget which helps in positioning the destination l as well as differentiating themselves from competitors. The study also highlights that the award has marketed Turkey as a sustainable destination, hence increasing tourist numbers. The author claims that not only is it a marketing tool it also challenges destinations that do not have the award to attain it hence increasing marine conservation (Zeliha 2013:455).

- **Job creation and economic benefits**

Geldenhuys et al. (2014:5) state that the Blue Flag award benefits the community. It increases visitor numbers hence creating jobs for the people in the visited communities. The Blue flag award acts as a draw card for tourists, therefore, it lures tourists to beaches with the award and bringing economic benefits to the area. The tourists spend money in accommodation, food, attractions and activities bringing income to the areas.

Eagleton and du Plessis (2019:209) bring to light that the Blue Flag award has brought about job creation to local community members through homemade crafts that have become very popular in South Africa. The authors explain that local community members make crafts with the touch of South Africa and they have been common at the beach front. Chamorro-Mera, de Oliveira and García-Gallego (2019:255) explain

that the Blue Flag award has improved the quality of life of residents at tourist destinations as it creates jobs for them as well as opening business opportunities.

According to Larga and van den Bergh (2012:185); Riera McConnell, Giergiczny and Mahieu (2011:65); Sayan, Williams, Johnson and Unal (2011:20) user satisfaction at the coastal area leads to user satisfaction which leads to greater willingness to pay which in turn brings and increases the economic value of the beach. Fraguell et al. (2016:883) further explain that beaches provide the tourism sector with the coastal area which is a source of profit. The researchers bring to light that in Costa Brava, Spain, a Blue flag beach yield € 6 818 950 per hectare per day during the peak season.

2.7.5 Challenges of the Blue Flag award

It has been acknowledged that the Blue flag beach award is faced with a number of challenges in terms of implementation, maintenance, environmental education and information dissemination of the award; it therefore requires further examination (Lucrezi et al. 2014:211). Such challenges include:

- **Gap in knowledge**

There is overwhelming literature on the gaps that the award has (Lucrezi and Saayman 2015:1479; Nelson et al. 2000:87; Lucrezi et al. 2015:216; Radchenko and Aleyev 2011:56; Cabezas-Rbadan, Rodilla, Pardo-Pascual and Herrera-Racionero 2019:223). The most dominant gap is the lack of knowledge about the award amongst beachgoers. Lucrezi and Saayman (2015:1479) explain that the Blue Flag award remains marginally known and understood by the public raising the question whether it is worth having the award. Nelson et al. (2000:87) confirms that public knowledge about the award is very sparse. In a study conducted in the Western Cape only 20% of the respondents were familiar with the award (Lucrezi et al. 2015:216). The authors describe awareness and knowledge of the award as skewed among the beachgoers and the results are seen to be discouraging. Similarly, in a study conducted in Ukraine, the researchers emphasize a gap in environmental education stating that minimal beach users have enough knowledge of the Blue Flag (Radchenko and Aleyev 2011:56).

A study conducted in Turkey further confirms that awareness on what the Blue Flag award represents is limited. Out of 60 respondents that participated in the survey only

4 were aware of what the award represents (McKenna, Williams and Cooper 2010:58). In a study conducted by Cabezas-Rbadan, Rodilla, Pardo-Pascual and Herrera-Racionero (2019:223) in Mediterranean beaches, beachgoers showed a significant lack of knowledge with regard to the beaches possession of the Blue Flag award. Only 43.2% of the beachgoers knew if the beach had the Blue Flag. The researchers claim that the managing authorities are not doing enough in terms of information dissemination on the Blue Flag is aimed to do. Lucrezi et al. (2015:225) also acknowledge that beach managers are responsible for making better use of the award by means of proper marketing and more effective education of the public.

According to Cabezas-Rabadan et al. (2019:228) lack of awareness of the Blue Flag award leads to the award having little or no influence in the beachgoers' choices when choosing a beach. The authors indicate that lack of knowledge about the award by beachgoers defies the purpose of the award as it has to provide information and environmental awareness. Prati, Albanesi, Pietrantoni and Airoldi (2016:427) further explain that environmental education and awareness is fundamental to avoid the current rigid and top down approach which conflicts with the purpose and aim of the Blue Flag award.

- **High costs**

The process of attaining the Blue Flag award is costly and time consuming (Geldenhuys et al. 2014:6). The beach manager is given a time frame to meet the Blue Flag criteria and when awarded it becomes subject to uncontrolled visits by the national jury or the Foundation for Environmental Education (FEE). The visits are unannounced and when the beach has downgraded its standards, the municipality is given a 10-day grace period. If standards are still not met the Blue Flag status is taken away and the whole process has to be repeated again (Blue Flag 2016).

Fraguell et al. (2016:898) explain that the imperatives of implementing the Blue Flag award entail great economic effort for coastal regions to equip their beaches with the services required by the Foundation for Environmental Education (FEE). According to WESSA (2016) for a beach to attain the status a fee of R24 000 has to be paid for each season. Moreover, the authorities have to constantly improve facilities at the beach and pay for environmental improvement (water sampling and laboratory fees), equipment as well as paying staff that aid in the maintenance of the Blue Flag award

to meet the criteria of the award. Geldenhuys and Van der Merwe (2014:6) further explain that the programme is a constantly costly process since beach management has to conduct water tests after every two weeks to ensure a clean beach throughout the season. The financial implications are therefore great and the cost associated with keeping the award is R17-25 million per year which is inclusive of the fee that has to be paid to FEE, water tests, laboratory fees, cleaning, waste management, purchase of equipment, maintenance of facilities as well as paying staff. Cabezas-Rabadan et al. (2019:229) support the factor of high costs by explaining that management practices carried out to attain the award and after the award has been awarded are very costly.

- **Natural environment degradation**

In a study conducted by Cabezas-Rabadan et al. (2019:223) in Mediterranean beaches, 52% of the beachgoers perceived the beach as having many people. The study shows that more than half of the beachgoers perceived the beach as being overcrowded. The award tends to attract a lot of tourists and they end up being uncontrolled, leading to overcrowding and exploitation of resources and the natural environment.

An example of the confrontation between the recreational function and the environment is the mechanical cleaning of beaches carried out to supposedly keep the beach clean and to protect beachgoers from geomorphic hazards (Cabezas-Rabadan et al. 2019:229; Lucrezi and Saayman 2015:1479). The researchers highlight that the beach cleaning is done at the expense of critical ecosystems instead. Roig-Munar et al. (2018:554) explain that the practice removes seagrass residues which negatively affect the environment as it removes nutrients from the system and affects the stability of beaches. Defeo, McLachlan, Schoeman, Schlacher, Dugan, Jones, Lastra and Scapini (2009:3) further emphasize that the process of cleaning the beach area removes dune plants and other plants which roughens the sand exposing the surface to erosion.

According to Lucrezi and Saayman (2015:1479), the Blue Flag award is criticized for the installation of excess, unwanted facilities. The researchers explain that the facilities damage the natural environment and lead to the overdevelopment of the beach area.

- **Overdevelopment of the beach area**

According to Fraguell (2016:898), in order for beach management to meet the recreational needs of beach users there is installation of services in the public space. The award comes with a lot of development hence it leads to the reduction of available space to artificial facilities as well as the deterioration of the space. Mir-Gual et al. (2015:108) argue that the award is for beaches with more services and tourism facilities ad it encourages authorities to install a lot of services. The award basically brings overdevelopment in an area (Geldenhuys 2014:7). Lucrezi and Saayman (2015:1478) support the point that the Blue Flag award leads to installation of too many facilities to meet the criteria as well as the needs of the beach goers whilst causing damage on the natural ecosystem.

Cabezas-Rabadan et al. (2019:229) explain that the award contributes to undesired facilities and overdevelopment of the coastal area. In a study that the researchers conducted beachgoers indicated that the beach they were at had a lot of undesired facilities such as umbrellas and sunbeds, kiosks and sand games. The respondents indicated that the beach ended up having too many facilities and lost its natural touch. Lucrezi and Saayman (2015:1479) agree that overdevelopment of the coastal area reduces the scenic value of the beaches. Defeo, McLachlan, Schoeman, Schlacher, Dugan, Jones, Lastra and Scapini (2009:1) emphasize that intense coastal development has brought about modification of sandy beach ecosystems.

In a study conducted in Spain on the Mediterranean coast it was noted that 63% of the Blue Flag beaches under study had urban features as well as coastal development with the construction of buildings, waterways and other facilities that support tourism services. Nine and a half percent (9.5%) of the beaches were semi-urban with little development on the coast and 26.4% were in a good state of conservation (Mir-Gual et al. 2015:114). The researchers conclude that Blue Flag in this area of Spain has brought about a lot of coastal development and services with no real management and conservation of the fragile coastal ecosystem.

- **Criteria and poor management**

Lucrezi, Saayman and Van der Merwe (2015:212) highlight that the Blue Flag award does not address all relevant aspects that are encompassed in the beach ecosystem function hence leading to poor management. An example is a rural beach in Spain

called Augas Santas which has had the award since 1997 (Fraguell et al. 2016:898). The beach was considered to be one of the best in the world, but the influx of tourists to the beach has generated congestion and degradation of the natural environment. This has not led to the loss of the Blue Flag award since the whole point of the award, which is to conserve the beach ecosystem was not met. Cabezas-Rabadan et al (2019:229); Roig-Munar, Fraile-Jurudo, Pena-Alonso (2018:553) bring to light that there are doubts of the award as an indicator of good environmental conditions as sometimes the awarded beaches have lower environmental values. Morgan (1999:408) concluded that the Blue Flag award accounts for 36% of the parameters that should be considered in beach management.

Lucrezi et al (2015:212) state that the award tends to emphasize some criteria more than others. For example, bathing water is monitored weekly or after two weeks and a sample is taken to ensure quality bathing water. The accuracy of the water sampling technique is however questionable considering the rapid physical and biological changes of sea water. Lucrezi and Saayman (2015:1478) emphasize that the most publicized criteria of the Blue Flag are the maintenance of high standard water quality and some criteria tend to be overshadowed. The researchers further explain that the weekly and fortnightly water sampling and testing has been questioned for the inability to determine whether the standards of water are met consistently.

According to Fraguell et al. (2016:884) the Blue Flag award is primarily for urban beaches with a lot of facilities which leaves out the rural beaches. Lucrezi et al. (2015:1478) also support the fact that the Blue flag is meant for urban beaches with a wide range of facilities to meet the criteria of the award. Cabezas-Rabadan (2019:229) explain that the award does not consider heterogeneity of beachgoers and may contribute to undesired and too many facilities at the beach. Lucrezi, Saayman and Van der Merwe (2016:2) support this point and bring to light that the Blue Flag is strongly focused on the recreational function and pays little or no attention on the structure and dynamics of different beach communities.

Fraguell et al. (2016:898) bring to light that the criteria does not regulate activities that take place on the beach throughout the year and commitment to the natural environment. Activities are not limited hence it is difficult to reduce the impact of human activities on the natural environment

- **Exploitation as a marketing tool**

The primary purpose of the Blue Flag award is providing users with facilities and an environment that is sustainable. However, most municipalities follow the management guidelines of the award because it is perceived as a quality index (Mir-Gual et al. 2015:10). Therefore, they use the award primarily as a marketing tool. Lucrezi, Saayman and Van der Merwe (2016:1) insist that beach management is being exploited to attract tourism. The authors emphasize that beach tourism is the largest trade worldwide hence the Blue Flag award ends up focusing more on attracting tourism and satisfying tourism demands rather than its primary purpose.

Lucrezi and Saayman (2015:1478) explain that coastal municipalities are obtaining the Blue Flag award to sell their beaches as good quality products. Beach awards like the Blue Flag increase popularity of the beach and they are being exploited as marketing tools rather than being used as management tools for sustainable tourism and educating the public on conservation.

Pencarelli et al. (2016:35) report that municipalities in Italy are mostly interested in obtaining the Blue Flag award for the purpose of promoting the destination. The authors explain that the interest is on the potential of the award being a promotional tool. Most municipalities have shown interest in the award because of promotional purpose and they neglect the primary purpose of the award but focus on using it as a promotional tool.

2.8 Marine/ coastal tourism in South Africa

South Africa has a huge coastline that extends for approximately 3924 km of which 70% encompasses sandy beaches (Harris, Nel, Holness and Schoeman 2015:3; Rogerson and Rogerson 2019:26; Lucrezi, Saayman and Van der Merwe 2016:3; Saayman and Saayman 2017:1437). Ndlovu, Cele, Bob, Marschall, Gumede and Phoofolo (2018:110) acknowledge that marine and coastal tourism has excessive potential to unlock sustainable socio-economic development, multiple benefits for local communities and the nation at large at the same time protecting and conserving biodiversity of marine and coastal environments of South Africa. Bob, Swart, Ngalawa and Nzimande (2018:1) further emphasize that coastal and marine tourism offers significant development opportunities that contribute to sustainability.

According to Brett (2019:2) South Africa's long coast and coastal environment presents opportunities for further marine and coastal tourism development. Tourism has seen a rapid growth in South Africa with the majority of tourists visiting coastal destinations (Rogerson and Rogerson 2019:26).

Beach tourism has been considered to be the largest form of coastal and marine tourism (CMT) in South Africa (Friedrich and Stahl 2019:24; Chen and Tang 2016:213; Mestanza, Anfuso, Chica-Ruiz, Pranzini and Mosser (2019:574). According to South African Tourism (SAT) (2019) about 75% of all foreign tourists spend time at the beach whilst 71% of all domestic tourists spend some time at the beach. Friedrich and Stahl (2019:25) and Zielinski, Botero and Yones (2019:397) further explain that beaches are defined as the most significant attraction in the country.

This has exerted pressure on the coastal and marine ecosystems especially beaches in South Africa leading to negative environmental impacts. According to the Department of Environmental Affairs (DEA) (2016) 48% of the coastal environments in South Africa are considered threatened of which 17% are critically endangered and 52% are the least threatened.

In the south of Durban, tremendous urban, industrial expansion and mass tourism has been witnessed (Vetrimurugan et al. 2017:538) resulting in significant pressure being exerted over marine environments. The area studied is close to the harbour and there are a lot of tourism activities taking place. A massive number of metal concentrations were found in 7 beaches in South Durban. Pollution threatens people using the beaches as well as the living organisms in the beach.

Plastic is widely perceived as the dominant marine pollutant (Anggraini, Risjani and Yanuhar 2020:168; Locritani, Merlino and Abbate 2019:321; Mazarrasa et al. 2019:118). In a study conducted in South Africa in 1994, 2005 and 2015 in the three coastal provinces of South Africa at the beaches, 99% of the marine litter was plastic (Ryan, Perold, Osborne and Moloney 2018:1008). The researchers explain that the plastic is due to increased human population and activities at the marine environments. Plastic litter has a negative impact on the coastal ecosystem as it causes damage to the aesthetics of aquatic ecosystems and death of marine organisms.

In a study conducted by Goliath et al. (2018:2) in the Eastern Cape at the Wild Coast, the environmental impacts included water pollution from sewage and dumping of waste in the tourism areas. The authors explain that this is due to uncontrolled marine/ coastal tourism and lack of understanding of the environmental impacts that it has.

Harris et al. (2015:22) bring to light that coastal and marine tourism in South Africa has brought about overdevelopment of the coastal area. The authors highlight that there has been construction of amenities like restaurants, waterways, marine parks, hotels and other amenities that support tourism in the coastal areas of South Africa. Brett (2019:2) explains that the South Coast of KwaZulu-Natal province in South Africa, has the greatest number of coastal tourism bringing about overdevelopment of the area. Harris et al. (2015:22) indicate that overdevelopment of the coastal area has massive environmental impacts such as the degradation of the natural ecosystem and habitat loss. Goliath, Mxunyelwa and Tilma (2018:2) confirms that the development of the coastal areas has implications for environmental impacts at marine and coastal environments.

There has been a large number of shark attacks in KwaZulu-Natal as a result of massive coastal activities. This is due to the fact that their habitats are used for coastal activities and an increase in water activities at the coast. The Western Cape and Eastern Cape have seen an increase in the number of sharks attacks. It is attributed to the increased population accessing and using coastal environments (State of the Oceans and Coasts around South Africa Report 2017:17). The increasing impacts that marine/coastal tourism have on the environment require effective marine/coastal tourism management.

2.8.1 Marine/ coastal tourism management in South Africa

Marine/ coastal tourism in South Africa is managed by the Department of Environmental Affairs (DEA). As indicated in Figure 2.2 there are four levels of marine/ coastal tourism management in South Africa with the regional level being the highest, followed by the national level, provincial level and lastly the local or municipal level (Department of Environmental Affairs 2016).

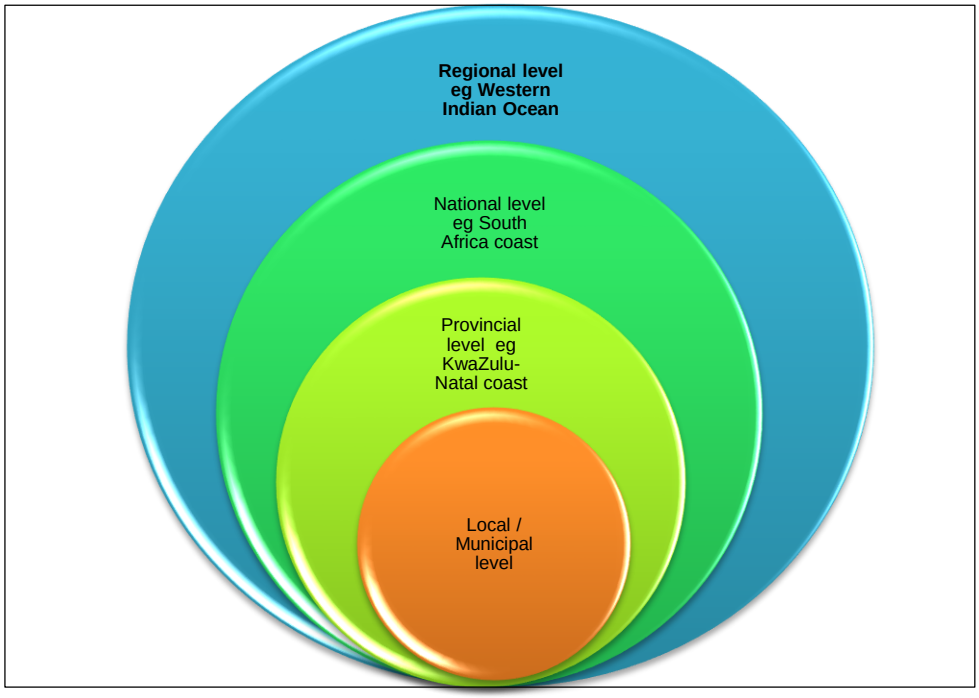

Figure 2.2: Coastal management levels in South Africa
Adapted from Department of Environmental Affairs (2016:2)

In South Africa most marine/coastal management programmes are managed at municipal or local level. The organizations at local level then report to the province, the province reports to the national organization and then the Department of Environmental Affairs reports to the region. Ndlovu, Cele, Bob, Marschall, Gumede and Phoofolo (2018:110) express that in South Africa effective coordination and collaboration is hindered due to ineffective structures and understanding of tourism within municipalities. The authors emphasize a number of gaps in the marine/ coastal management in South Africa that include:

- Ineffective coordination and collaboration;
- The potential of tourism growth is hindered by lack of prioritization of growth strategies in some municipalities;
- Unskilled human resources around tourism marine assets;
- Lack of funding for tourism projects;
- Lack of viability of coastal and marine businesses- for example lack of institutional arrangements or marine policies;
- Lack of tourism knowledge of municipality officials has resulted in inadequate capacity and budgeting for tourism projects;

- Lack of clear national strategy on coastal/marine tourism; and
- Lack of synergy amongst government departments (Ndlovu et al. 2018:112).

The gaps have led to ineffective coastal management which has an impact on the coastal environments of South Africa. As a measure to mitigate environmental impacts of coastal tourism in South Africa, policies for sustainable tourism and development have been put in place by the government (Lucrezi, Saayman and Van der Merwe 2016:3). The policies include banning of vehicles on beaches as well as a network of Marine Protected Areas (MPA). Twenty-three (23%) of the South African shorelines are formally included in Marine Protected Areas (MPAs).

Furthermore, the nation and municipalities have been involved in programmes that combat the environmental impacts like Operation Phakisa (Rogerson and Rogerson 2019:26; Department of Environmental Affairs 2019; Ndlovu et al. 2018:113). Operation Phakisa promotes coastal and marine tourism as a major source of future coastal development and economic contribution in South Africa (South African Tourism SAT 2017; Findlay 2018:248; Masie and Bond 2018:314). Operation Phakisa is a policy that supports the Blue Economy.

The governance of the marine ecosystem and marine resource use is increasingly being facilitated by the recently introduced concept known as the Blue Economy (Eikeset, Mazzarella, Daviosdottir, Klinger, Levin, Rovenskaya and Stenseth 2018:177). According to the European Commission (EC), Blue Economy is a long-term strategy to support sustainable growth in the marine and maritime sectors. Eikest et al. (2018:177) explain that the roots of the Blue Economy concept can be traced back to the conceptualization of sustainable development.

Blue Economy as a term was first defined at the fourth United Nations conference in 2012 as a parallel to green growth for the world's oceans (Howard 2018:375). Green Economy means promoting economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services (Eikeset et al. 2018:178). The Blue Economy has the same concept of fostering economic growth while maintaining sustainability for marine environments. Eikeset et al. (2018:179) explain that the aim of blue growth is to secure and restore the potential of

the oceans, lagoons and inland waters by introducing responsible and sustainable approaches.

The Blue Economy strategy emphasizes the importance of marine areas and combating any environmental impacts caused by the rapid growth of coastal and marine tourism. The Blue Economy also emphasizes marine spatial planning and coastal protection. According to Klinger, Eikeset, Daviosdottir, Winter and Watson (2018:357) there are four dimensions to a Blue Economy strategy:

1. Preserving the ocean's natural assets;
2. Improving coastal environments'
3. Capturing marine based economic opportunities; and
4. Sustainably increasing ocean productivity

Odeku (2020:3) emphasizes that in order for South Africa to achieve the Blue Economy, Operation Phakisa was born. Operation Phakisa is a policy that was put in place to promote coastal and marine tourism sustainably. Blue Flag has the aim of conserving the coastal environment and is therefore aligned to Operation Phakisa and the Marine Protected Areas (MPA) policy (van Wyk 2015:153; Sink 2016:2, Department of Environmental Forestry and Fisheries (DEFF) 2018).

2.9 The Blue Flag award in South Africa

The Blue flag award dates back to 17 years since it was introduced in South Africa in 2001 (Radchenko and Aleyev 2011:53, Lucrezi, Saayman and van der Merwe 2016:3). The Blue Flag Award in South Africa is managed by the Wildlife and Environment Society of South Africa (WESSA) and the participating municipalities. Lucrezi, Saayman and Van der Merwe (2016:3) explain that in South Africa non-profit organisations like Ocean Aware, Afri-Oceans, the Southern African Foundation of Coastal Birds (SANCCOB) and the South African Mineral Resource Committee (SAMREC) have emerged in creating awareness of the Blue Flag and conservation to beach goers. South Africa was the first African country outside of Europe, to have its beaches awarded with the Blue Flag in 2001. According to South African Tourism, South Africa has a total number of 64 sites up to date with the Blue Flag award and several others in their pilot stage. The number of awarded sites is down from 66 in the

previous season. The sites in the 2019/2020 season include 45 beaches, 9 marinas and 10 boats (Blue Flag 2020).

Table 2.5: Blue Flag awarded sites per province

Province	Beaches awarded	Marinas awarded	Boats awarded	Awarded sites
Western Cape	33	7	10	50
Eastern Cape	6	2		8
KwaZulu-Natal	6			6

Source: WESSA (2019:3)

The Western Cape has the largest number of Blue Flag sites and they mount up to 50 with 33 beaches, 7 marinas and 10 sustainable boats. The number of awarded sites in the Western Cape increased from 45 to 50 in the 2019/2020 season. The Western Cape has achieved the highest number of Blue Flag sites in the previous years. Eastern Cape had an increase from 7 to 8 Blue Flag sites whilst Kwa-Zulu Natal moved from 9 to 6 Blue Flag sites (WESSA 2020).

2.10 Blue Flag in KwaZulu-Natal

KwaZulu-Natal has a total of 65 beaches and only 6 have the full Blue Flag award (WESSA 2020). Brett (2019:2) explains that the South Coast of KwaZulu-Natal province contains the greatest concentration of coastal and marine facilities in South Africa. According to Petroman et al. (2010:426) the award is a high standard symbol of environmental protection and it also acts as a draw card for tourists to these ecosystems.

Table 2.6: Blue Flag awarded beaches and municipalities in Kwa-Zulu Natal

MUNICIPALITY	BEACH	PREVIOUSLY AWARDED BEACHES
Ray Nkonyeni	• Marina • Trafalgar • Southport • Umzumbe • Hibberdene	• Lucien • Ramsgate
EThekwini	• Ushaka	• Westbrook • North beach • South beach • Bay of Plenty • Addington beach

Source: WESSA (2020)

According to McKenna et al. (2010:576) in 2008 the Blue Flag award was withdrawn from four of Durban's six beaches because of water pollution and this drew a lot of media attention. The award was taken away from the beaches due to the water quality not complying with the Blue Flag standards. The loss of the Blue Flag status had massive repercussions for the tourism industry and there was an estimated loss of ZAR100 million per year from visitors that choose Blue Flag beaches.

In a study conducted by Nahman and Rigby (2008:730), Margate's loss of the Blue Flag status led to massive losses in terms of tourist numbers. The lack of consistency and continuity of the award shows a gap in terms of how the award is managed by responsible authorities (Lucrezi et al. 2014:212). The award features inconsistencies in environmental management practices. Lucrezi and Saayman (2015:1480) explain that there is a positive correlation between beach awards and beachgoers ratings of beach quality suggesting that beach users do perceive beaches with award status as being of good environmental quality.

In 2008, there was the withdrawal of the Blue Flag status in KwaZulu-Natal beaches like South beach, North beach, Addington, Bay of Plenty and Margate (McKenna, Williams and Cooper 2010:576). This highlights lack of continuity in the attainment of the award. In the 2020 season Westbrook lost the Blue Flag status whilst Ramsgate and Lucien returned to the pilot status (WESSA 2020). Three beaches in KwaZulu-Natal have lost the award in the current season and the Wildlife and Environment Society of South Africa (WESSA) explained that it was due to the fact that the beaches did not meet the water quality standards. Johnson (2015:71) contends that the water quality has deteriorated over the previous decade in Kwa-Zulu Natal and there is need for proper water quality management. The author explains that poor water quality has been due to poor sewage treatment management, polluted river water discharged, urban and industrial developments and human activities. Improvement in water quality monitoring and management is required.

The minimal number of beaches with the Blue Flag in Kwa-Zulu Natal highlight limited coastal zone management thus making it difficult to reduce environmental degradation. The status also highlights that there is minimal information dissemination to the public about environmental protection. Lucrezi and Saayman (2015:1479) state that researchers have acknowledged that the Blue Flag award remains only marginally

understood by the managing authorities whilst the beachgoers have little or no information about the award.

2.11 Conclusion

Tourism has seen a rapid growth in the previous years with coastal/marine tourism being the most common type of tourism. The continuous growth of coastal/marine tourism and uncontrolled activities on the coastal environment have led to numerous environmental impacts that include habitat destruction and loss, overdevelopment of the coastal area, solid waste and littering and pollution of coastal/marine water resources. The rising concern of environmental problems over the years resulted in sustainable tourism with the UNCED conference in 1992 paving the way for sustainable tourism. For coastal/marine tourism the Blue Flag award was established in 1985 in France with the aim of managing beaches and marinas by promoting sustainable development in coastal/marine areas. The award encourages cooperation between tourism and the environment. In South Africa, the award was established in 2002 and it is managed by WESSA. The award has brought numerous benefits in terms of conservation. However, the award also has loopholes that were discussed in this chapter with the main ones being the lack of knowledge and awareness of the award by the public as well as the lack of continuity especially in KwaZulu-Natal. Literature shows that the award has gaps but when properly implemented it has numerous benefits for both the environment and the societies that have Blue Flag beaches. The following chapter will explore the research methodology used in this study.

CHAPTER THREE: STUDY AREA AND RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the philosophical framework in which research is conducted (Brown 2006:26). According to Malhotra (2010:102), research methodology is a blueprint for conducting research and it details procedures necessary for obtaining the information needed to structure and solve research problems. In this chapter the researcher seeks to discuss the methodology that will be used in conducting this research, as well as the rationale for choosing the selected research methods. The research study area is also described in this chapter. In addition, the chapter also defines the population as well as the sampling frame that the study is based on. Furthermore, the data collection instrument and its administration is discussed. The last section of the chapter focuses on the data analysis, reliability and validity of the study.

3.2 Study area

Figure 3.1: Map showing Kwa-Zulu -Natal coastline
Source: Tourism Kwa-Zulu Natal (2018)

The research was conducted in the KwaZulu-Natal (KZN) province, a coastal South African province known for its beaches, mountains and savannah populated by big game. The province is known for its warm beaches (Wildlife and Environment Society of South Africa 2016). The Kwa-Zulu Natal coastline has Blue Flag and non-Blue Flag graded beaches. The total number of beaches in Kwa-Zulu Natal is 65, of which 9 have the Blue Flag status and 8 have the pilot status (WESSA 2019). Table 3.1 below shows the beaches with the Blue Flag award and the pilot status in Kwa-Zulu Natal. This research was conducted in August- September 2019 when Kwa-Zulu Natal had 9 beaches. Currently Kwa-Zulu Natal has 6 beaches with the award; 3 beaches lost the award.

Table 3.1: List of Blue Flag and pilot beaches in Kwa-Zulu Natal (WESSA 2020)

BLUE FLAG BEACHES	PILOT BEACHES
Marina	Blythedale
Trafalgar	Salt Rock
Southport	Willard
Umzumbe	Tinley Manor
Hibberdene	Dokodweni South
Ushaka	Tugela Mouth
	Amanzimtoti
	Umgababa
	Lucien
	Ramsgate
	Brighton
	Ansteys
	Durban North beach
	Durban South beach
	Vetchts beach
	Umhlanga main
	Umdloti
	Winkel
	Isipingo beach

KwaZulu-Natal is divided into one metropolitan municipality, which is eThekwini Metropolitan Municipality and 10 district municipalities which are further subdivided into 43 local municipalities (Statistics South Africa 2018). This study was conducted in two Municipalities that have the Blue Flag Beaches namely eThekwini Municipality and Ray Nkonyeni Municipality also known as Hibiscus Coast Municipality which are all local municipalities. The study areas were chosen after considering travel costs, time,

and convenience. The other reason why the researcher chose the two municipalities was because the two municipalities can give a comparative summary of both Blue Flag beaches and non-Blue Flag beaches as they comprise of both categories.

Nine beaches from both municipalities formed part of the study. The table below shows the beaches that were studied.

Table 3.2: List of beaches in the study

MUNICIPALITY	BEACH
Ray Nkonyeni	Marina
	Trafalgar
	Lucien
	Southport
	Umzumbe
	Ramsgate
	Hibberdene
eThekwini Municipality	Ushaka
	Westbrook

3.2.2 Images of beaches under study

Figure 3.2 below shows the beaches under study. The researcher went to the beaches physically to conduct the study.

KEY

1- Umzumbe
2- Trafalgar
3- Lucien
4- Ushaka
5- Westbrook
6- Marina
7- Hibberdene
8- Ramsgate
9- Southport

Figure 3.2: Blue Flag beaches in the study
Images source: (https://www.google.com/search?q=Blue+Flag+beaches+in+kzn&source)

3.3 Research design

According to Sekaran and Bougie (2013:95), a research design is the blueprint for collection, measurement and analysis of data. The quality of data depends on the research design chosen. This study utilized both the qualitative and quantitative methods of obtaining data which is referred to as a mixed methods approach to research. Thakkar and Teddie (2010:158), Greysen, Harrison, Kripalani and Qual (2017:203), and Turner, Cardinal and Burton (2015:195) agree that using a mixed method approach is favoured when different groups of participants are targeted, as this will ensure that the research goals are adequately met. According to Creswell and Creswell (2018:17), the mixed methods approach is based on the assumption that collecting various types of data provides a complete understanding of the research problem than using one method. The process of collecting data from several sources is called triangulation (Mayer et al. 2016:17). Using a triangulated research design allowed this research to obtain different, but complimentary, information and it assisted the researcher to meet the research objectives of this research successfully (Welman, Kruger and Mitchell 2005:97).

Figure 3.2 below shows triangulation of data. Triangulation refers to the use of multiple, different approaches of accumulating data to generate a better understanding of the given theory (Turner et. al 2015:1). Secondary data was used which is information from research papers, articles, journals, reports and textbooks. The study made use of journals, articles, research papers, reports and textbooks. The basic information on the Blue Flag award was from the reports on the Blue Flag website and WESSA, whilst literature was from journals and articles. The research also utilized the quantitative way of collecting data through structured questionnaires administered to beach goers. Qualitative data was collected by conducting interviews with Municipal managers.

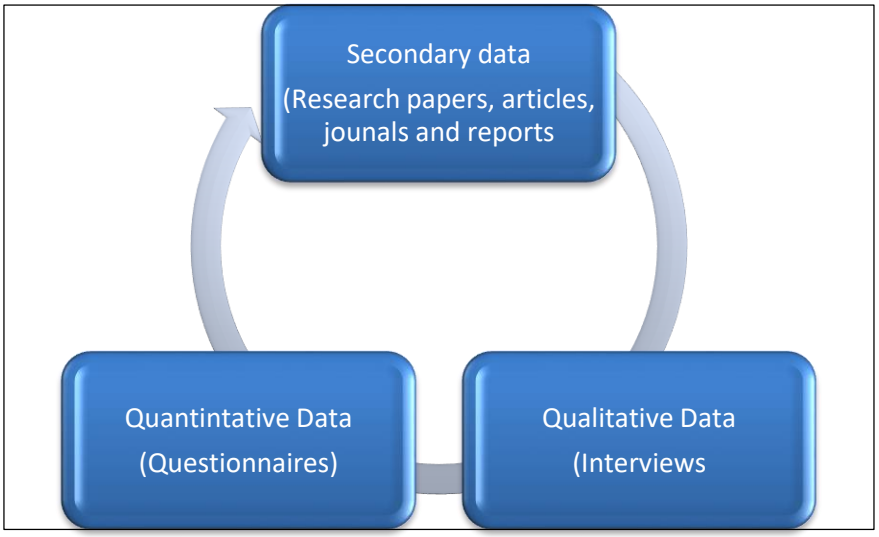

Figure 3.2 Triangulation of data
Source: Researcher

According to Sekaran and Bougie (2013:96-98) there are three types of studies which are descriptive, exploratory and causal. This study is a descriptive study. The data analysis for this research is based on primary data collection. Data was collected through survey questionnaires and interviews in natural settings. Moreover, the researcher describes feelings, attitudes, thoughts and behaviours of beachgoers and managers as they responded to the research instrument(s). There is a growing concern over environmental issues in KwaZulu-Natal hence a descriptive study helps to suggest areas for further research as well as to analyse municipal performances in coastline management (Goncalves and Marques 2017:141).

3.4 Population and sample selection

The study used different sets of population to obtain data. The first population comprised of beachgoers at the selected beaches in the study. The second population comprised of municipal officials of two municipalities in KwaZulu-Natal.

3.4.1 Population One: Beachgoers

According to Lohr (2009:3), a population refers to a complete collection of observations that are to be studied. Sekaran and Bougie (2013:240) define population as the entire group of people that the researcher wishes to investigate. One population of this study will be KwaZulu-Natal beachgoers of Blue Flag beaches in the two Municipalities that have the award. According to Statistics South Africa (STATSSA 2019) the total number of tourists that visit KwaZulu-Natal annually is about 485 775.

Out of the total number of people who visit KwaZulu-Natal, 75% visit the beaches, making the total population of beachgoers 364 331.

Burns and Bush (2010: 60) defined sample size as the number of the units that are chosen to take part in the study. The sample size of the population was 180 beachgoers. This was so due to time constraints as well as the availability of resources. These respondents were conveniently selected from nine Blue flag beaches. Blue Flag beaches studied include uShaka, Marina, Westbrook, Trafalgar, Lucien, Southport, Umzumbe, Ramsgate and Hibberdene. The researcher selected 20 respondents from each Blue Flag beach under study. This was due to time constraints and availability of resources.

Altinay and Paraskevas (2008:96) define sampling as the process of selecting units from a given population of interest, so that by studying the sample research can fairly generalize the results back to the population from which they were chosen. To obtain respondents to be included in the sample, the study used convenience sampling which is a type of non-probability sampling. In non-probability sampling, samples are selected based on the subjective judgement of the researcher (Guest, Namey and McKenna 2017:95)

Beachgoers were conveniently found at the beach; thus this technique has been chosen by the researcher. The researcher went to the beaches to self-administer questionnaires during the August to September 2019 period. Respondents were chosen according to their availability and willingness to partake in the study. This sampling technique was appropriate for the study because beach goers were easy to reach and contact at the beach. The fact that they were at the beaches that were under study made it easy for the researcher to get the appropriate information. According to Altinay and Paraskevas (2008:96) convenience sampling includes participants who are readily available and agree to participate. Although not constructed on probability sampling, convenient sampling is revealed to be particularly effective in drawing conclusions (Brewerton and Milward 2001:7). In addition, the elements in the population do not have equal probabilities of being selected as sample subjects (Sekaran and Bougie 2013:252) hence this study adopted non probability sampling. The researcher faced challenges with some of the beachgoers who were not interested in partaking in the study. The challenges were overcome by explaining that

the research was for academic purposes and it would be a learning curve for them. After the explanation they understood and participated.

Information was solicited by the researcher from beachgoers who gave their opinions and answered questions. Together with the sample selected for this study convenient sampling enriched chances of success and reliability of findings which helped to achieve the study's objectives. The other reason for choosing convenient sampling was that there is no sampling frame, thus given the nature of the research, it studied unknown beachgoers found on the coastline. Lastly, the non-probability sampling technique was chosen due to time and budgetary constraints**.**

3.4.2 Population 2: Municipal managers

The second population for this study comprised of representatives of two KwaZulu-Natal municipalities. KwaZulu-Natal consists of one metropolitan municipality called eThekwini Metropolitan Municipality and ten district municipalities. The ten district municipalities are further subdivided into 43 local municipalities. Population two of this research will therefore be the local municipalities in KwaZulu-Natal.

Sekaran and Bougie (2013:251) describe sample size as the number of subjects in a population. The sample size for this population was two local municipalities that have both Blue Flag beaches and non-Blue Flag beaches namely eThekwini Municipality and Ray Nkonyeni Municipality. These municipalities were selected because they are the only ones in KwaZulu-Natal that have both Blue Flag and non-Blue Flag beaches. A Blue Flag manager from each municipality was interviewed and they were able to provide the required information.

For municipality managers the study adopted cluster sampling which is a probability sampling technique. Aidara (2018:92) describes probability sampling as a sampling technique where the samples are gathered in a process that gives all individuals in the population equal chances of being selected. According to Latham (2008:6) in cluster sampling survey population members are divided into unique non overlapping groups prior to sampling. In this instance coastal municipalities were divided into two groups; the municipalities with Blue Flag beaches and those without the Blue Flag award. Hence this differentiates municipal managers who have Blue Flag beaches in their municipalities from those that do not have the award. The Blue Flag municipal

managers were chosen as a sample. In cluster sampling all elements of the sample were chosen to participate and since this is a small population all managers will be included in the data collection process. According to Sekaran and Bougie (2013:252) data from probability sampling can be confidently generalized.

3.5 Data collection method

The research utilized primary and secondary sources of collecting data. Primary data refer to information obtained first hand by the researcher on the variables of interest for the purpose of addressing the problem at hand (Malhotra 2010:132). Secondary data refer to data that has been already collected. Sources of primary data were two research instruments which were structured questionnaires and semi-structured interviews. The structured questionnaires targeted beach goers and the semi structured interviews targeted two Municipality managers.

3.5.1 Data from beachgoers

Data from beachgoers was collected through the use of self-administered structured questionnaires. The researcher went to the study areas and self-administered the questionnaires to the respondents face to face. The respondents were given the questionnaire and a pen and were expected to take about 10 minutes to complete the questionnaire. Respondents were allowed to ask for clarity if they did not understand anything in the questionnaire. The questionnaires were then collected after completion by the researcher. According to Cargan (2007:117) self-administered questionnaires have numerous advantages. Questionnaires can be collected after completion within a short period of time and if the respondents do not understand questions on the questionnaire they can be explained to the respondents on the spot. In this population a structured questionnaire was used. The questionnaire contained a mix of scaled questions and open ended questions. The questionnaire for this research was designed in such a way that it was able to give an interactive experience to respondents. According to Ornstein (2013:47) a good questionnaire is designed with the purpose of leaving respondents with an unforgettable experience. The questionnaire for this study was designed using a funnel approach. In funnel approach the researcher begins with general, simple and non-threatening questions to more specific ones (Wilson 2013:63). The questionnaire used in this study begins with general questions that are simple and straight forward. This ensured that the

questionnaire became easy to complete and did not require the respondents to incorporate a lot of thinking during completion. The key themes of the questionnaire were demographic profiles of the respondents, Blue Flag awareness and knowledge, attitudes towards the Blue Flag and the assessment of beaches. An Information letter was provided to the respondents and participation was voluntary.

3.5.2 Data from municipal managers

Semi-structured interviews were conducted with the municipality managers. The researcher conducted the interviews telephonically with Ray Nkonyeni Municipality and face to face with eThekwini municipality. Using an interview schedule, managers were asked a series of open ended questions in order to efficiently meet the research objectives. The interviews, started on a light note with the researcher asking the Blue Flag managers questions about their demographics and then moving on to more specific questions. The key themes on the interview schedule were the role of municipalities in attaining the award, environmental management at Blue Flag and non-Blue Flag beaches, the benefits of the Blue Flag and the challenges faced. Semi-structured interviews gave the researcher the opportunity to retrieve as much information as possible and provide answers to uncertainty immediately. The interviewer was also able to use their own skill to overcome the resistance to answer sensitive questions in order to reduce non-response rates. There is also greater flexibility in this method because it allows the interviewer to rephrase questions to enhance understanding of the question (Sekaran and Bougie 2013:296).

3.5.3 Secondary data

According to Sekaran and Bougie (2013:116), secondary data refers to information gathered by someone other than the researcher conducting the current study. Data is rarely exhausted after its primary application and may be used more than once. There are several sources of secondary data including books, government publications, research articles and journals, statistical abstracts, annual reports and databases among many others. Secondary data enables the researcher to determine and address the research problem as well as identifying gaps in literature. It also helps with comparing previous and current studies. The author goes on to say the examination of available secondary data is a prerequisite to the collection of primary data. The researcher got the basic information about the Blue Flag from the Blue Flag

global website as well as WESSA. Literature was then gathered from research papers, articles, journals and text books.

3.6 Data analysis

Data collected from this research was analysed using the 'Statistical Package for the Social Sciences' (SPSS). Levels of measurement included ordinal and nominal scales. Data was illustrated in the form of graphs and tables. The data which was collected was edited for errors and omissions, of which these were few since the researcher administered the surveys. The qualitative data from interviews were analysed using content analysis. According to Krippendorff (2018:86) content analysis is an approach to quantify qualitative information by logically sorting and comparing information in order to summarize it. The information from the two interviews was sorted and compared and then summarized.

3.7 Reliability and validity

Validity refers to how well the research instrument used by the researcher measures the concept of the study. Validity is defined in two ways- internal validity and external validity. Internal validity refers to the authenticity of the study and external validity refers to the generalizability of the study to the external environment (Sekaran and Bougie 2013:227). Basically validity refers to the genuineness of the study or how true it is and also if the study can be done by another researcher and the researcher gets the same results. Gray, Jenkins and Andrews (2010:1320) expresses that validity refers to the ability of the research instruments to measure what it is intended to measure.

Reliability refers to the extent to which a study is without bias (Sekaran and Bougie 2013:228). Reliability and validity complement each other by ensuring that the research is genuine, generalizable and free from bias. To ensure all this the study made sure that there was adequate representation of Blue Flag beachgoers. This enabled both the internal validity and the external validity. Data was analysed thoroughly to ensure the validity of the study. Questions asked in the questionnaires and interviews were adopted from the literature review and the conceptual framework to ensure validity. Reliability of this study was ensured through the constant test- retest before data was analysed. Data was collected with extra caution to ensure minimal

errors. Tools used for data capturing and analysis prove reliable due to the popularity of the software used in research.

3.8 Ethical considerations

The participants of the study were given a letter of information which gave them reasons as to why the researcher was carrying out the research. The letter also informed the respondents about the aim of the study and the benefits that will be brought by the study they were taking part in. The research got ethical clearance from the Institutional Research Ethics Committee (IREC) at the Durban University of Technology. This enabled the research to be conducted in a responsible and ethically accountable way.

Ethical values were observed in this research. No respondents were forced to take part in this study. Participation in this study was on a voluntary basis. The respondents were given the right to privacy and confidentiality. Respondents were able to withdraw from the study at any time for whatever reason which they might have felt was necessary.

3.9 Conclusion

This chapter focused on making known the elements of the research methodology used for this study to obtain information necessary to address the research questions and objectives. The study area was disclosed and explained. The sample selection, that is the target population was revealed and scrutinized together with the sample size and the sample techniques. Research methods used to bring out the data were discussed. By discussing how data collection was administered, the chapter captured the scenario of the researcher in the field research. The validity and reliability of the study has been discussed. The following chapter will be the presentation, interpretation and discussion of results.

CHAPTER FOUR: DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF RESULTS

4.1 Introduction

In the forgoing chapter, the study discussed elements of the research methodology and the research design issues were identified and justified. This chapter discusses the data analysis and results for the study in the context of the study's aim and objectives. This chapter will begin by discussing the characteristics of the respondents in terms of gender, age, country of origin, highest level of education, marital status, frequency of beach visits and the activities that the respondents partake in. The beach aspects and assessment of beach facilities will be discussed and the Blue Flag awareness, attitudes and knowledge will be explored. Lastly, the results from interviews with municipality managers will be discussed.

4.2 Characteristics of respondents

This section required the respondents to indicate their profiles in terms of gender, age, type of tourist, highest education level, frequency of going to the beach and activities they usually partake in at the beach.

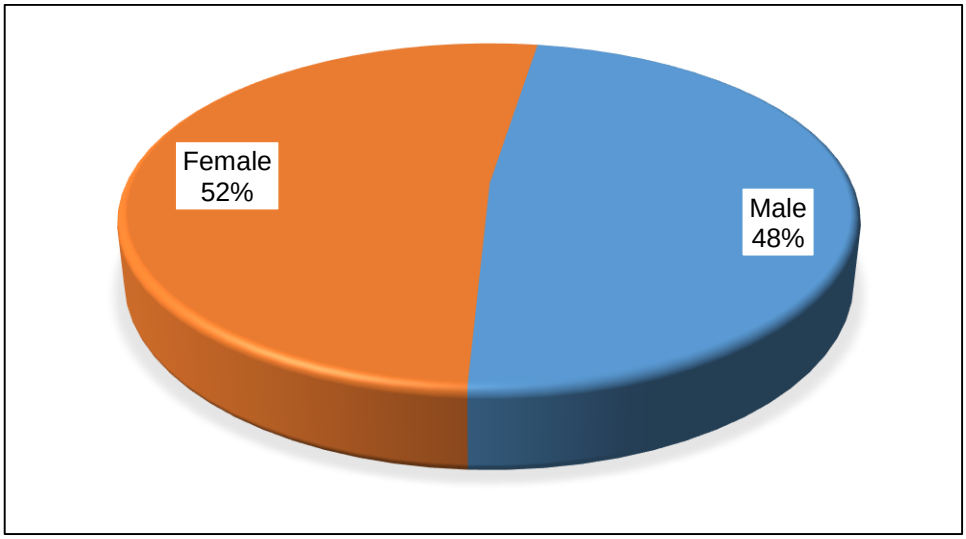

Figure 4.1: Gender of respondents(n=180)

Figure 4.1 presents the gender of the respondents that partook in this research, and the data reveals that 52% were female whilst 48% of the respondents were male. In a study conducted by Geldenhuys and Van der Merwe (2014:8) in KwaZulu-Natal

females constituted the greater portion of beach visitors with 62% visiting the beach. According to Dodds and Holmes (2018:125) demographics of beach users such as gender contribute to their selection of a beach destination. The authors explain that women visit beaches more as they seek relaxation and the 3S's (Sun, sea and sand). They claim that women are more concerned with relaxation and scenic beauty.

In the interviews conducted by the researcher with the Blue Flag managers in two municipalities the managers were both male. Stats SA (2019) states that in municipality management 62% are males and 38% are women. It is evident that men dominate the municipality management.

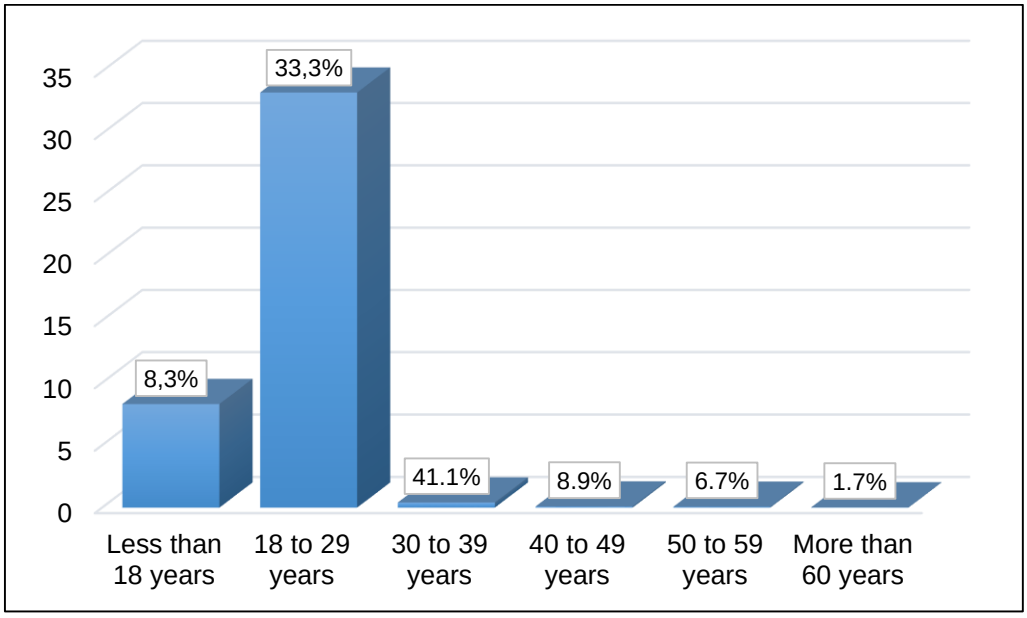

Figure 4.2: Age of respondents (n=180)

Figure 4.2 depicts the age of the respondents in the study. Evidently, 8.3% of the respondents were less than 18 years old, 33.3% were between the age of 18 years to 29 years old, 41.4% were between the age of 30 to 39 years, 8.9% were between the age of 40 to 49 years, 6.7% were between 50 to 59 years and 1.7 % were more than 60 years old.

The results show that the highest numbers of people that frequently visit the beach are those between 18 years and 29 years. According to Kinnear, Bernhardt and Krentler (1995:177) age influence the decision making of tourists. In a study conducted by Dodds and Holmes (2018:125) the researchers found out that younger individuals and individuals without children are most likely to visit a beach compared to the older

individuals. Moreover, Shivlani, Letson and Theis (2003:374) suggest that age can be a reflection of the amenities used at a beach. In the case of this study, research was conducted at Blue Flag beaches and the Blue flag award comes with coastal development that include the construction of resort cottages, waterways, recreational facilities and restaurants (Siciu 2017:3). This type of development attracts younger individuals as there are more recreational activities and entertainment at the beach.

In a study conducted by Fermani, Crespi and Stara (2016:87) it is also evident that older people are more motivated than the younger counterparts to choose sustainable environments. The authors explain that adults are more eco-centric and responsible compared to the younger individuals and they are very environmentally conscious. Lissner and Mayer (2020:21) agree with the view that older individuals are more environmentally conscious compared to the younger ones.

In the interviews conducted with municipal managers that manage the Blue Flag award, both managers did not disclose their age.

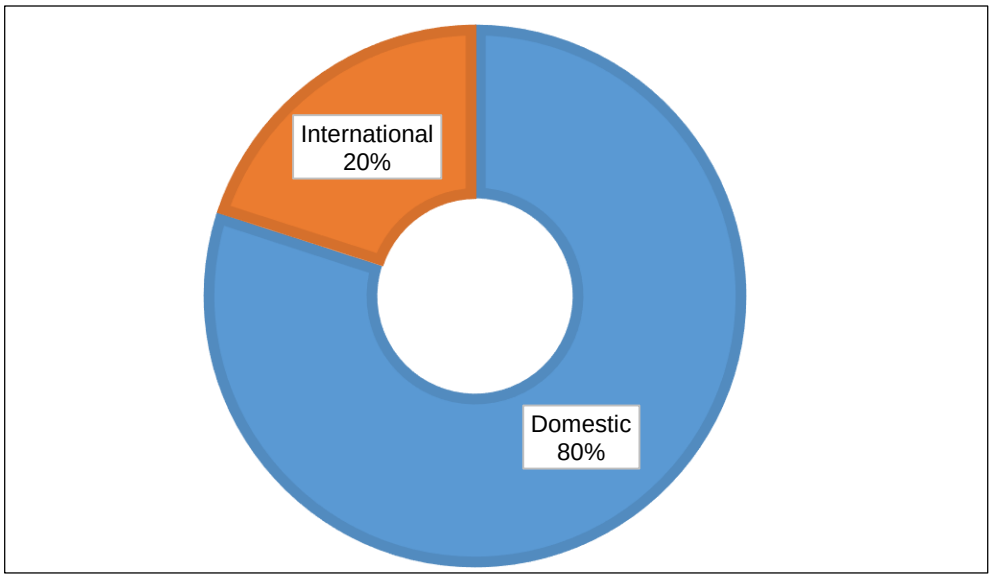

Figure 4.3: Type of tourist (n=180)

Figure 4.3 confirms that 80% of the respondents were domestic tourists whilst 20% were international tourists. This was due to the fact that the study was conducted in the duration of a public holiday which is Heritage day. Most South African families and individuals take time to visit the beach during such times. International tourists were fewer because it was low season for international visitors. The South African low

season is between April and September (Martín Martín, Salinas Fernández and Rodríguez Martín 2019:287).

Preziosi, Tourais, Acampora, Videira and Merli (2019:11) bring to light that guests or tourists from foreign countries have high levels of environmental awareness especially those from the European countries. In a study conducted by the researchers in Portuguese hotels guests from foreign countries gave positive feedback on sustainable environments. In a study conducted by Penz, Hofmann and Hartl (2017:10) it was evident that tourism establishments targeting local or national tourists struggled to get acceptance of sustainable environmental approaches. It is therefore evident that in most cases international tourists are more environmentally conscious compared to local tourists.

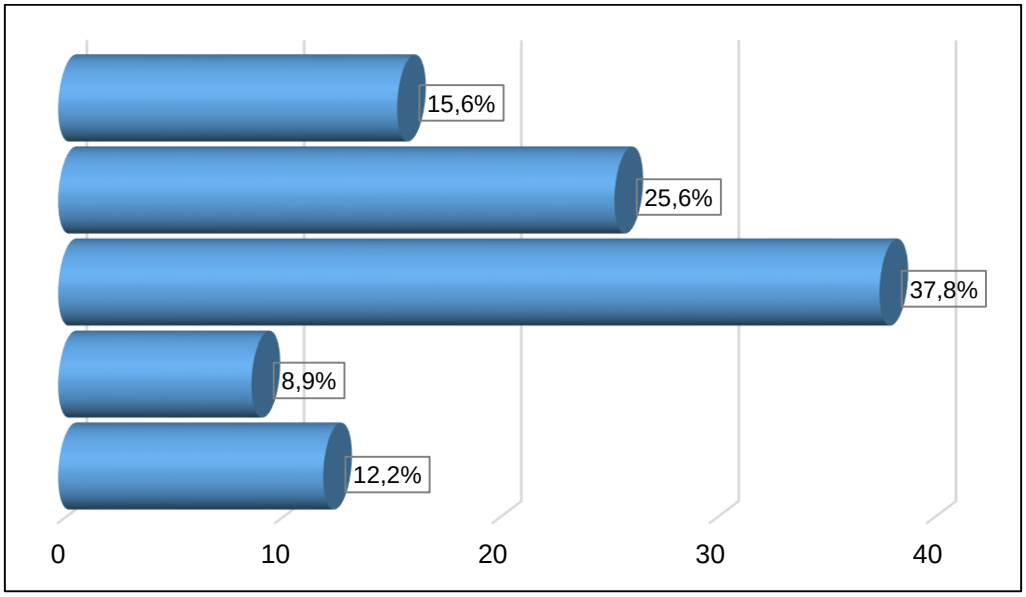

Figure 4.4: Respondents highest level of education (n=180)

Figure 4.4 presents the data on the respondents' highest level of education. The majority of the respondents (37.8%) had a diploma as their highest qualification, whilst 25.6% of the respondents had a degree, 15.6% has a post graduate degree as their highest qualification, 12.2% had at least a high school certificate and 8.9% had a post-school certificate.

Kinnear et al. (1995:177) explain that education has an influence on the decision making of tourists. In a study conducted by Alves, Benavente and Ferreira (2014:414), where the researchers investigated 681 beach goers, they found that individuals with

higher education levels were willing to pay entrance fees that would go towards beach clean-up and resource conservation. The researchers also concluded that the more educated individuals were, the more environmental conscious they were. Similarly, Leonidou, Coudounaris, Kvasova and Christodouldes (2015: 645) and Lissner and Mayer (2020:20) found that level of education strongly affects pro-environmental behaviour. Pro- environmental behaviour was evident in highly educated individuals, as they are more likely to learn about environmental sustainability. The municipal managers did not disclose their highest level of education.

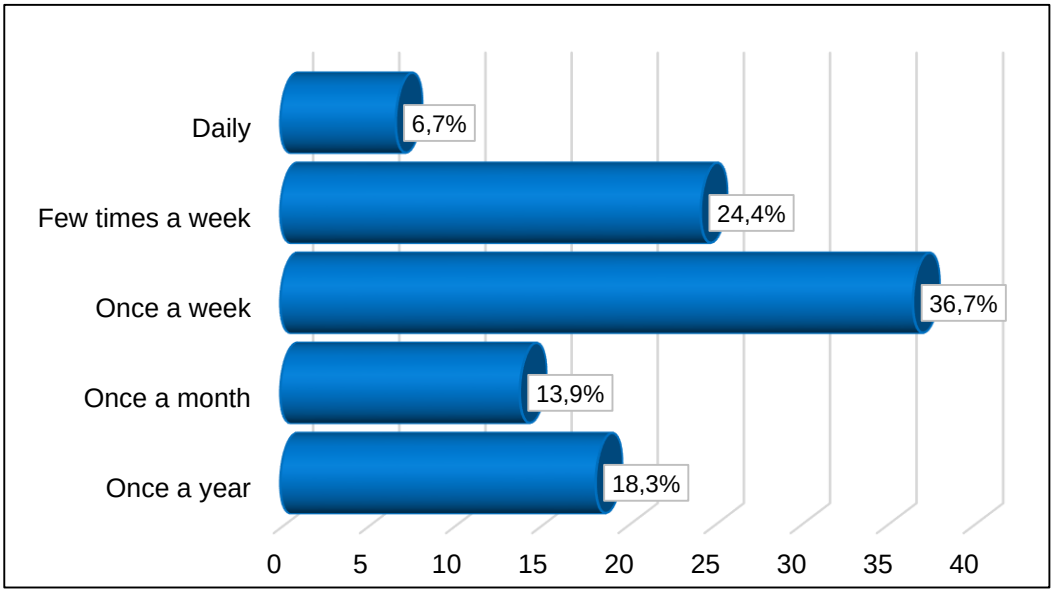

Figure 4.5: Frequency of beach visitation (n=180)

Data on the frequency of beach visitation by respondents is evident in Figure 4.5. The majority of the respondents (36.7%) visit the beach once a week, whilst 24.4% of the respondents stated that they visit the beach a few times a week whilst 18.3% stated that they visit the beach once a year. A small proportion of respondents (13.9%) visit the beach once a year and only 6.7% visit the beach daily. The frequency of the beach visitations helps in measuring the impact that beachgoers cause on the beach environment. According to Pouso, Uyarra and Borja (2018:456) the frequency of beach visitations is highly influenced by the quality of the beach and activities offered at the beach, as good quality beaches tend to have people visiting frequently. The authors explain that beaches that are clean, easy to access and have good water quality tend to attract a lot of tourists to them. Activities offered at the beach have an

influence on the frequency of beach visits. The more appealing the activities are, the more tourists frequently visit the beach.

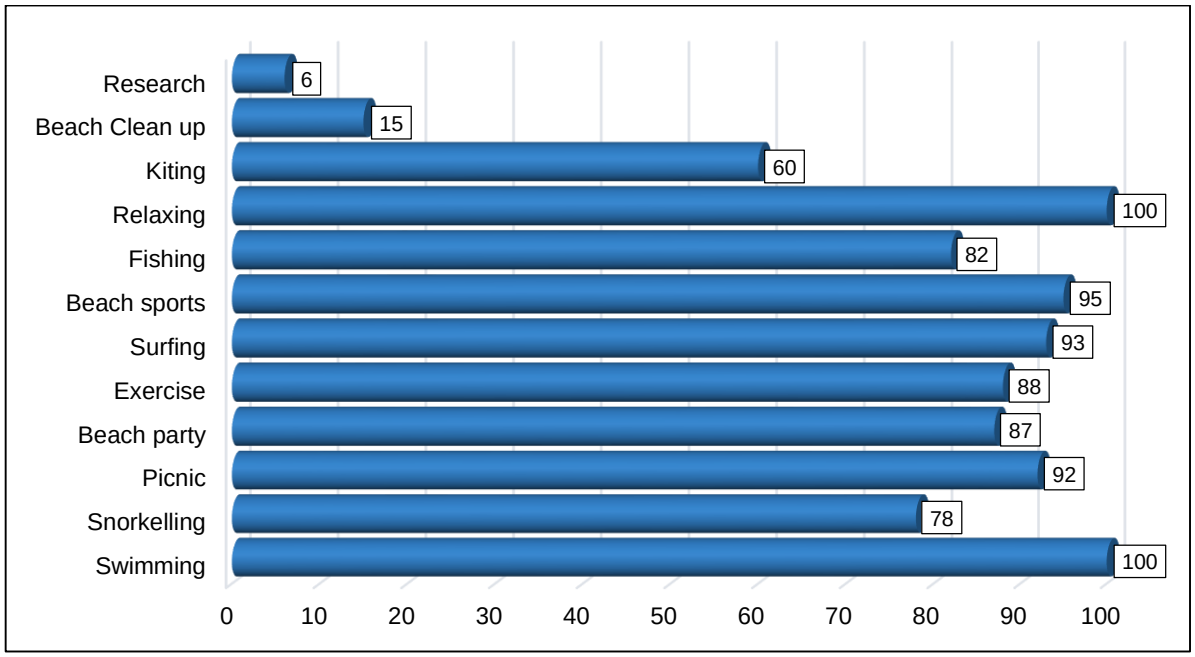

Figure 4.6: Activities usually undertaken at the beach (n=180)
(Multiple response)

Figure 4.6 shows the activities that are usually undertaken at the beach by the respondents. The respondents were permitted multiple responses for this question. All the respondents (100.0%) stated that they visit the beach for relaxation and swimming. Other beach activities that respondents engaged in were beach sports (95.0%), surfing (93.0%), picnicking (92.0%), exercise (88.0%), beach parties (87.0%), fishing (82.0%), snorkelling (78.0%) and kiting (60.0%). A relatively small proportion of respondents visited the beach to partake in beach clean-ups (15.0%), and research (6.0%).

Similarly, in a study conducted by Shivlani et al. (2003:376), a greater percentage of the beach goers participated in swimming, sunbathing (relaxing), fishing, jet skiing and walking. In another study conducted by Lozoya, Sarda and Jimenez (2014:401) in Spain, the main activities that beach goers partook in were swimming, sunbathing and surfing as in the above mentioned study as well as this study. In a study conducted in Cape Town at Blue Flag beaches the most common activities that the beach goers partook in included relaxing, sunbathing, swimming and beach sports (Lucrezi, Saayman and Van der Merwe 2016:7). Davenport and Davenport (2006:285)

emphasize that swimming, relaxation, beach sports, surfing, snorkelling and kiting are among the low to medium impact activities at the beach. However, these activities require substantial infrastructure to support them. This highlights that the Blue Flag award brings about extensive coastal development that has a negative impact on the coastal ecosystem. These activities are linked in choosing a Blue Flag beach because in most cases Blue Flag beaches are developed to suit the needs of the tourists.

4.3 Factors affecting beach choice and assessment of beach facilities

This section summarises the important factors that the respondents consider when choosing a beach. It also summarises the ratings that the respondents gave in relation to the beaches that they were at, at the time of this study. The factors and the characteristics of the beach are in line with the Blue Flag criteria.

4.3.1 Factors of importance when choosing a beach

Respondents were asked to indicate those factors that they considered as important when choosing a beach. For the purposes of this study, and aligned to the Blue Flag criteria, such factors focussed on: environmental education and information, water quality, environmental management, and safety and services.

Table: 4.1: Important factors in choosing a beach (n=180)

Factors of importance	Not important	Neutral	Important	Mean
ENVIRONMENTAL EDUCATION & INFORMATION				**1.92**
Rules and codes of conduct must be displayed	1.7	-	98.3	2.97
A map of the beach must be displayed	12.2	1.7	86.1	2.74
Information on bathing water quality	63.9	15.6	20.6	1.57
Environmental education activities must be offered	67.8	11.7	20.6	1.53
Provision of environmental education and information	71.1	12.8	16.1	1.45
Information on local ecosystems should be available	86.7	-	13.3	1.27
WATER QUALITY				**2.66**
No industrial waste water or sewage discharges	1.7	-	98.3	2.97
The water must be visually clean	1.7	-	98.3	2.97
Good waves for swimming	2.2	-	97.8	2.96
Good waves for surfing	3.3	-	96.7	2.93
Beach must comply with water quality sampling	70.6	8.3	21.1	1.51
ENVIRONMENTAL MANAGEMENT				**2.62**
Recycle bins must be provided	7.8	3.9	88.3	2.96
Sufficient ablution facilities	-	-	100.0	3.00
Clean ablution facilities	-	-	100.0	3.00
Adequate change room facilities	-	-	100.00	3.00
No litter on the beach	1.7	-	98.3	2.97
Well maintained beach buildings	2.8	-	97.2	2.83
No driving on the beach must be allowed	3.9	6.7	89.4	2.86
No camping on the beach must be allowed	3.9	8.9	87.2	2.83
Pets are allowed on the beach and well controlled	8.3	-	91.7	2.83
Adequate waste disposal bins	-	3.9	96.1	2.81
No algae vegetation or natural debris	17.8	5.0	77.2	2.59
More dunes or plants and less development	45.0	9.4	45.6	2.01
Sensitive areas of the beach must be managed	71.7	6.7	22.2	1.51
A sustainable means of transportation	70.6	10.6	18.9	1.48
SAFETY AND SERVICES				**2.66**
Adequate number of life guards	-	-	100.0	3.00
Variety of recreational activities must be offered	-	-	100.0	3.00
A supply of clean water	-	1.7	98.3	2.98
Safe access to the beach	1.7	-	98.3	2.97
Personal safety and security	2.8	-	97.2	2.94
Constant beach patrol	1.7	3.9	94.4	2.93
Child friendly	8.9	2.8	88.3	2.79
Wheelchair access on the beach	15.0	7.2	77.8	2.63
Less crowds on beach	55.0	6.7	38.3	1.83
The beach must have a Blue Flag award	65.6	13.9	20.6	1.55

Table 4.1 presents the respondents' rating of factors of importance when choosing a beach to visit. The respondents were asked to indicate their level of importance in choosing a beach on a 3-point Likert scale with 1 being unimportant and 3 being important. The purpose of this was to identify if the respondents were aware of what the Blue Flag entails and were also aware of the Blue Flag criteria. It also helped in identifying if they chose the beach they were at because of its Blue Flag status. Overall, respondents indicated that water quality and safety and services were the most important factors in choosing a beach (mean=2.66), followed by environmental management of the beach (mean =2.62). The least important factor in beach choice was environmental education and information (mean=1.92). The following section will examine the factors affecting respondent's choice in beaches, in more detail.

Environmental education and information

In terms of environmental education and information, the highest level of importance was rules and code of conducts displayed at the beach (mean= 2.97), followed by a map displayed (mean=2.74), followed by information on bathing water quality (mean=1.57). Environmental education activities were the fourth (mean=1.53), the fifth important factor was provision of environmental education and information (mean=1.45) and lastly information on local ecosystems (mean=1.27).

In Table 4.2 it is evident that the respondents prioritize more rules and codes of conduct whereas environmental education and information as well as information on local ecosystems is the least prioritized. Geldenhuys and Van der Merwe (2014:10) explain that environmental education plays a vital role in decision making for visitors that are aware that their visited beach has the Blue Flag award. In this study a smaller proportion of visitors were aware that their visited beach had the Blue Flag award which explains why environmental education and information was not a priority. The results show that in terms of information on local ecosystems the majority (86.7%) regarded the characteristic as being unimportant when choosing a beach, environmental education (71.1%) and information on bathing water (67.8%) were regarded as unimportant, respectively. In a study conducted by McKenna (2011:586) it was found that environmental education played a significant role in the decision making of beach goers who were aware of the Blue Flag programme and the fact that the particular beach had a Blue Flag status. In this study the respondents regarded

information about local systems, environmental education and information on bathing water as unimportant because most of the respondents were not aware of the Blue Flag award and the fact that the beach they were at had a Blue Flag status.

- **Water quality**

With regards to water quality the most important factor in beach choice, was the absence of industrial waste or sewage discharges (mean=2.97), the water being visually clean was the second important (mean=2.97), the third important factor was good waves for swimming (mean=2.96). The fourth important was good waves for surfing (mean=2.93) and the least important was the compliance of the beach with water quality sampling (mean=1.51).

The results show that the respondents find the above characteristics important when choosing a beach. Various authors explain that the characteristics that fall under water quality are classified as tangible aspects hence the beach goers consider them important (McKenna et al. 2011:583; Nelson et al 2000:93; Morgan and Williams 1995:88; Morgan Jones and Williams 1993:1090). The beach characteristics are aspects that are physical to the beachgoers and they can see them hence they consider them important. McKenna et al. (2011:582) and Morgan (1999:402) emphasize that the overall cleanliness of the beach is the most important characteristic for beach goers. Nelson et al. (1999:40) also explain that beach users find sewage left on the beach more offensive than the beach losing the Blue Flag status. The literature emphasizes how beach goers prioritize the physical and tangible beach aspects when choosing a beach to visit.

- **Environmental management**

Concerning environmental management, the respondents indicated that their highest level of importance was sufficient ablution facilities, clean ablution facilities and adequate change room facilities (mean=3.00). These aspects of the beach relate to hygiene and facilities available and not the natural environment. All the three factors had the same mean. The other important factors in beach choice that followed was the absence of litter at the beach (mean=2.97), recycle bins being provided (mean=2.96) and the prohibition of driving (mean=2.86). The next was the prevention of camping at the beach, pets being allowed at the beach and being well controlled

and well maintained beach buildings (mean=2.83). Adequate waste disposal bins (mean=2.81) and the absence of algae vegetation and natural debris (mean=2.59) were the next important factors. The least important factors when choosing a beach to visit that the respondents indicated were the presence of more dunes and plants and less development at the beach (mean=2.01), sensitive areas being managed at the beach (mean=1.51) and the presence of a sustainable means of transportation at the beach (mean=1.48).The presence of a sustainable means of transportation was probably rated the least important factor because it is not a common practice in the KwaZulu-Natal beaches hence the respondents did not see it as important.

Most of the characteristics were rated as being important in beach selection by the respondents. The aspects that were rated as important were the tangible elements of the beach such as sufficient ablution facilities, clean ablution facilities, adequate change room facilities, absence of litter, well maintained beach buildings, adequate waste disposal bins and absence of algae vegetation or natural debris. These aspects are regarded as important by beach goers because they are tangible characteristics (McKenna et al. 2011:583; Nelson et al 2000:93; Morgan and Williams 1995:88; Morgan Jones and Williams 1993:1090). Most of the characteristics are based on the cleanliness of the beach. According to Lozoya, Sarda and Jimenez (2014:402) in the study that they conducted, the respondents regarded cleanliness of the sea water and the beach environment as the main characteristics as highlighted in this study.

The respondents viewed the management of sensitive areas of the beach as unimportant (71.7%), sustainable means of transport (70.6%) unimportant and more dunes and less development (45.0%) unimportant. According to Gledenhuys and Der-Merwe (2014:2) the main role of the Blue Flag programme is the conservation of the natural environment as well the safety of marine life and the environment. Fraguell et al. (2015:883) further explains that the award ensures the protection of the natural ecosystem. The respondents viewed aspects of the natural environment and ecosystem conservation as unimportant whilst it is the main role of the Blue Flag award which shows that the respondents did not understand the meaning of the award and what it entails.

- **Safety and services**

With reference to safety and services the highest level of importance indicated by the respondents was an adequate number of lifeguards and a variety of recreational activities (mean=3.00), followed by the existence of a supply of clean water (mean=2.98), safe access to the beach (mean=2.97), personal safety and security (mean=2.94), constant beach patrol (mean=2.93), child friendliness (mean=2.79) and wheelchair access to the beach (mean=2.63). The least important factors indicated by the respondents were less crowds on the beach (mean=1.83) and the beach having a Blue Flag status (mean=1.55).

The characteristics of safety and services that were rated as important by the respondents were the tangible aspects. In a study conducted by Nelson et al. (2000:94) it was acknowledged that beach safety played an important role in the decision making of beach visitors to the beaches on the coast of Wales. McKenna et al. (2011:584) emphasize that life guards and beach safety are the most important to the holiday experience. Similarly, in this study respondents regarded the tangible aspects of safety and services as important when choosing a beach to visit.

South Africa has had a reputation of being an unsafe place to visit (George 2003:575; Mudzanani 2017:1). The country has the highest recorded crime rate in comparison to other countries in Southern Africa. South Africa has an exceptionally high level of violent crime. Hu, Li and Zhang (2020:2) argues that safety at a destination has a positive impact on tourism demand. George (2017:3) explains that South Africa has had a bad image because of crime and the use of responsible and sustainable tourism has been used to lure tourists to South Africa. Safety and security is very important when choosing a destination which is evident in this study.

The respondents highlighted that in factors affecting beach choice, the availability of a Blue Flag award was unimportant (65.6%) and less crowds on the beach (55.0%). In a contingent behaviour study conducted by Nahman and Rigby in South Africa it was evident that most beach users would continue to visit beaches even after the loss of the award (Nahman and Rigby 2008:729). Similarly, in a study conducted by McKenna, Williams and Cooper (2011:585) not more than 10% of the sample on Irish beaches cited the Blue Flag as an influencing factor in their decision to visit a beach.

The researcher found this fascinating because various authors have brought to light that the award has an impact in decision making and influence the choice of destination (Mir-Gual 2015:10; Lucrezi and Saayman 2015:1478; Pencarelli et al. 2016:28; Fraguell et al. 2015:882). However, this study proves otherwise due to the fact that the knowledge of the award was minimal, therefore it is difficult for the beach goers to perceive the award as important in the selection of beaches to visit. The results show that most beach goers do not prioritize the Blue Flag award in beach selection but instead they prioritize the tangible aspects of the beach.

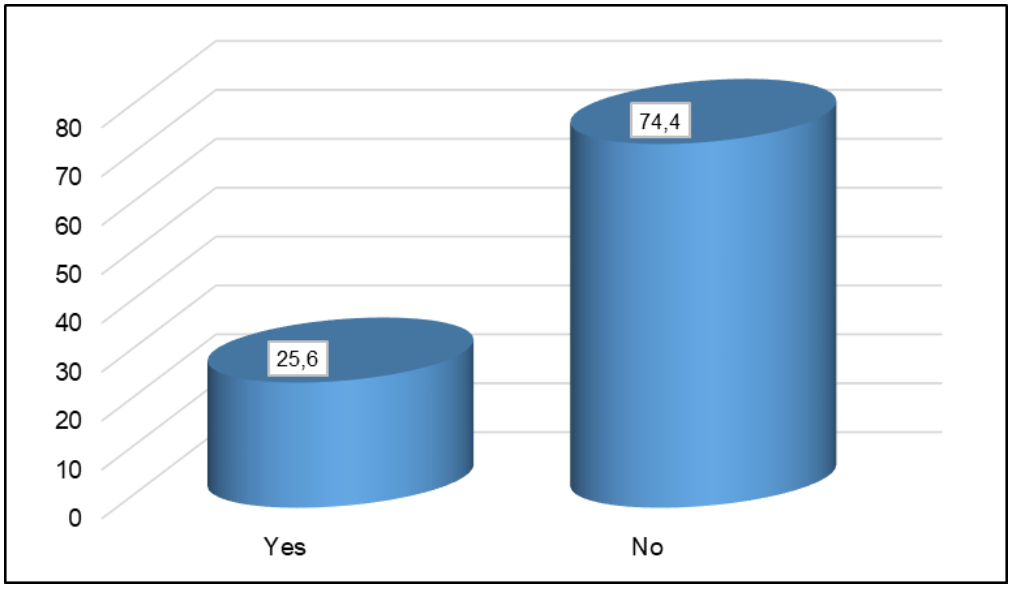

Figure 4.7: Awareness of Blue Flag Award (n=180)

Figure 4.7 presents the respondents' awareness of the Blue Flag award. The majority of respondents (74.4%) were unaware of the Blue Flag award whilst 25.6% were aware of the award. In a study conducted by Lucrezi, Saayman and Van de Merwe (2015:222), it was evident that awareness and knowledge on the Blue Flag award among beach goers was generally skewed. It is also evident in Table 4.2 where 72.2% of the respondents were neutral (unsure) whilst 10% of the respondents did not agree that the beach had a Blue Flag award. In a study conducted by the authors only 20% of the respondents were familiar with the beach awards and only 14% of the respondents were able to name the Blue Flag. In a study conducted in Turkey out of the 60 respondents that participated only 4 were aware of the Blue Flag award (McKenna et al. 2011:58). The authors further emphasize that awareness of the Blue Flag award is very limited which is evident in this study. Similarly, in a study conducted

in the Eastern coast of the Iberian Peninsula only 43.2% of the respondents were aware that their visited beach has a Blue Flag award (Cabezas-Rabadán, Rodilla, Pardo-Pascual and Herrera-Racionero 2019:224). The authors explain that the reason for the unawareness was due to the award having a low influence on beach choice as well as the award not being well marketed to the public and lack of proper educational techniques.

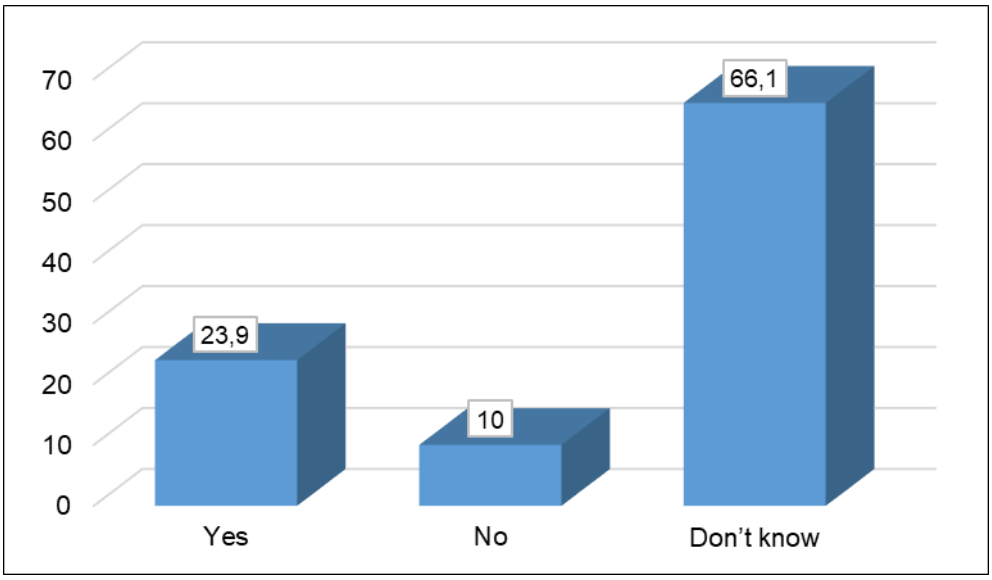

Figure 4.8: Visited a Blue Flag Beach before (n=180)

Figure 4.8 presents information on whether respondents had visited a Blue Flag beach before. The majority of the respondents did not know if they have ever visited a Blue Flag beach (66.1%), 23.9% indicated that they had visited a Blue Flag beach before, whilst 10% of the respondents indicated that they have never visited a Blue Flag beach.

The data was collected at Blue Flag beaches and the results show that most of the respondents were not aware of the Blue Flag status of the visited beaches. In studies conducted by House and Herring (1995:6); McKenna et al. (2011:580); Micallef and Williams (2009:459); Lucrezi and Saayman (2015:1479) and Cabezas-Rabadan et al. (2019:224) the Blue Flag award remains slightly acknowledged and understood by the public. The majority of the beach goers do not know about the award. Lucrezi and Saayman (2015:1479) explain that studies investing Blue Flag awareness conducted at Blue Flag beaches in Europe and South Africa have highlighted discouraging

results. Nelson, Morgan, Williams and Wood (2002:92); Nelson and Botterill (2002:162); Dolch and Schernewski (2002:4); Tudor and Williams (2006:161); Nahman and Rigby (2008:733) and McKenna, Williams and Cooper (2011:582) indicate in their studies that knowledge on the Blue Flag is minimal, only a minority of respondents could confirm that they had visited a Blue Flag beach before. It is also evident in this study that only a minority of the respondents knew that the beach that they were at was a Blue Flag beach whilst the majority did not know.

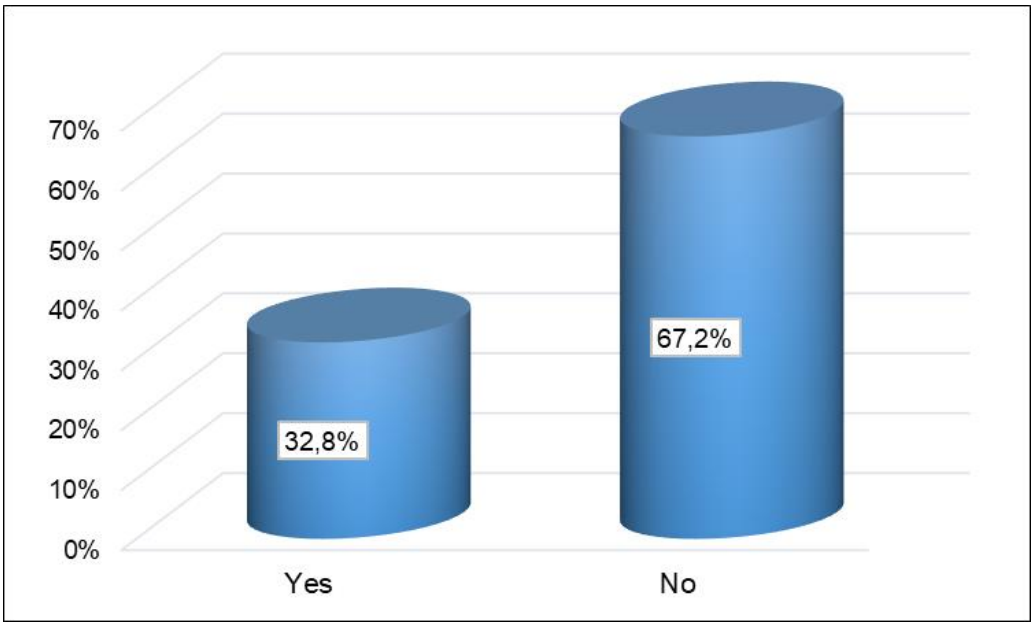

Figure 4.9: Awareness that the visited beach had a Blue Flag award (n=180)

Figure 4.9 depicts awareness of the Blue Flag beach at the visited beach. In terms of the awareness that the beach that they were at was a Blue Flag beach, 67.2% were not aware whilst 32.8% of the respondents were aware. In a study conducted by Cabezas-Rabadan, Rodilla, Pardo-Pascual and Herrera-Racionero (2019:224) in Western Mediterranean beaches, beach goers showed a significant lack of knowledge with regards to the beach's possession of the Blue Flag award. The study was conducted at beaches with the Blue Flag award. Only 43.2% of the respondents knew that the beach they had visited was a Blue Flag beach. Lucrezi and Saayman (2015:1479) explains that knowledge on the Blue Flag remains skewed as a lot of beach goers are not aware of the award.

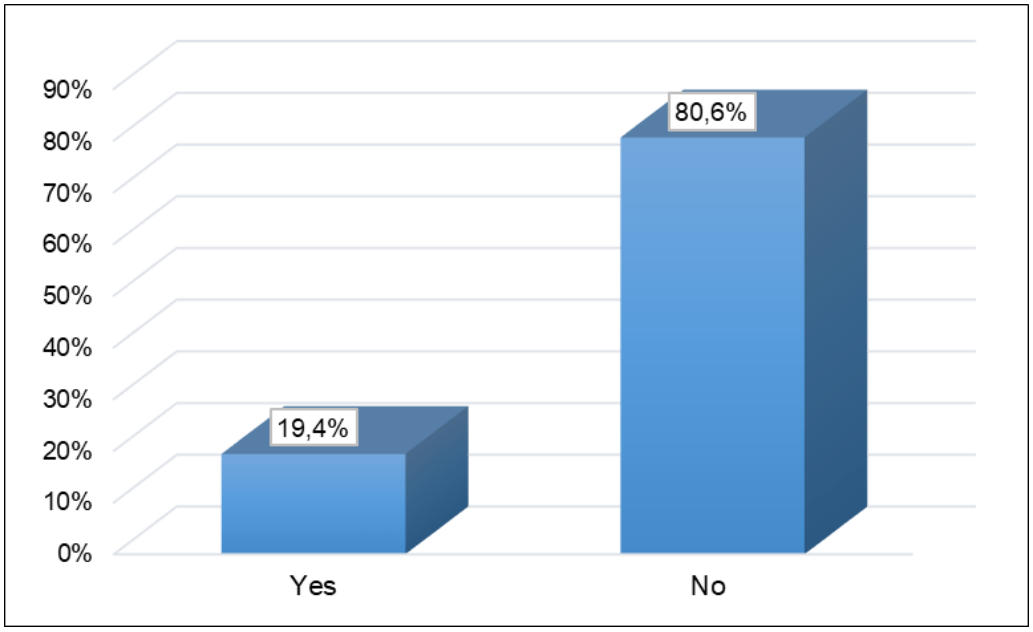

Figure 4.10: Awareness of KZN Blue Flag beaches (n=180)

Figure 4.10 indicates the awareness KwaZulu-Natal beaches. The respondents were asked if they were aware of the Blue Flag beaches in KwaZulu-Natal and 80.6% were not aware whereas 19.4% were aware. Nelson (2000:87) supports that the knowledge on the award is sparse which at the end defies the purpose of the award. The lack of knowledge on the award is influenced by the award not being well publicized to the public. Researchers further highlight that lack of knowledge is also in line with low influence that the award had in people's beach choice.

4.3.2 Perceptions of beach characteristics

Respondents were asked to state their perceptions on beach characteristics based on the Blue Flag criteria, on a 5 point Likert scale with 1 being strongly agree and 5 being strongly disagree. The respondents assessed the characteristics of the beaches they were at, at the time of the study. The assessment was according to four key themes: environmental education and information, water quality, environmental management and safety and services.

4.3.2.1 Environmental education and information

Table 4.2: Perception of environmental education & information (n=180)

Environmental education and information characteristics	1 Strongly agree	2 Agree	3 Neutral	4 Disagree	5 Strongly disagree	Mean
This beach has a Blue Flag Award	11.7	6.1	72.2	7.8	2.2	2.83
This beach displays adequate information on the Blue Flag Award	36.7	22.2	33.9	4.4	2.8	2.14
This beach displays adequate information on environmental education	45.6	36.7	15.0	2.8	-	1.75
This beach displays adequate information on water quality and management	42.8	43.9	10.6	2.8	-	1.73
This beach displays adequate information on local ecosystems	37.8	53.9	5.6	2.8	-	1.70
A map of this beach is displayed	60.0	37.2	2.8	-	-	1.43
Rules and codes of conduct is displayed at this beach	52.2	45.0	2.8	-	-	1.51

As displayed in Table 4.2, respondents strongly agreed with the fact that a map of the beach was displayed (mean=1.42), followed by the rules and conduct for the beach was displayed (mean=1.51), adequate information was displayed on local ecosystems (mean=1.70), and adequate information was displayed on water quality and management (mean=1.73). Marcelli, Cafaro and Mazza (2018:1) emphasize that education is the centre of the Blue Flag award. Its main aim is to educate the public with the aim to sensitize people and make them knowledgeable. It is therefore a requirement that beach managers display a map and adequate information on the local ecosystem and water quality as this was evident on the Blue Flag beaches under study.

Respondents showed high levels of disagreement with the fact that beaches displayed adequate information on the Blue Flag Award (mean=2.14), and the fact that the beach has a Blue Flag Award (mean=2.83). In fact, in terms of whether the beach had a Blue Flag the majority of the respondents (72.2%) were neutral. In a study conducted by Lucrezi et al. (2015:222) 20% of the respondents were familiar with the award. Awareness of the Blue Flag award among beach goers was poor. This is also evident in this study as respondents are not certain if the beach, they were at had a Blue Flag award. Similarly, in a study conducted by McKenna et al. (2010:58) in Turkey out of the 60 respondents that partook in the study only 4 were aware of the Blue Flag award. Nelson (2000:87) explains that the award remains marginally known and understood

by the public. Lucrezi et al (2015:225) explains that this is mainly because the award is not well marketed, and the managers are not utilizing effective ways of educating the public.

Municipality managers were asked on how the Blue Flag award is publicized in their municipalities and Ray Nkonyeni municipality reported that South Coast UGU Tourism is responsible for publicizing the award. EThekwini municipality stated that Durban Tourism is responsible for the publication of the award in eThekwini. South Coast UGU Tourism and Durban Tourism are Destination Marketing Organizations (DMO's). George (2010:404) explains that the role of Destination Marketing Organizations is to market an identifiable destination. Their role is to market the whole city and the attractions in the city. The organizations have a broader role and they do not provide any form of education about the award, instead they advertise for economic benefits. Ndlovu et al. (2018:110) explain that municipalities have ineffective structures that lead to ineffective management. There is need for strategies that will ensure that the award is publicized effectively.

4.3.2.2 Water quality

Table 4.3: Perception of water quality (n=180)

Water quality characteristics	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
The water is clean and free from pollution at this beach	57.2	42.8	-	-	-	1.43
There is no oil visible on the surface of the water and no odour is detected	64.4	35.6	-	-	-	1.36
There is no industrial waste water or sewage related discharges	47.8	50.0	2.2	-	-	1.54
There is no floatables such as wood, plastic bottles, containers, glass and so on	53.3	43.9	2.8	-	-	1.55

Table 4.3 depicts characteristics of water quality that were assessed by the respondents. The respondents strongly agreed with the fact that there was no oil visible on the surface of the water and no odour detected (mean=1.36) followed by the cleanliness of the water and absence of pollution at the beach (mean=1.43). There was moderate agreement with the fact that there was no industrial waste water or sewage discharges (mean=1.54) and the fact that there were no floatables such as wood, plastic bottles, containers and glass (mean=1.55).

The majority of the respondents were in agreement with all the characteristics on water quality. The beach that they were at compiled with the criteria; this is evident from the assessments of the beach goers. Likewise, in a study conducted by Pencarelli, Splendiani and Fabroni (2016:34) in Italian Blue Flag beaches the respondents indicated that the water quality was good and met the Blue Flag criteria as the water was clean, odour free, did not have oil or industrial waste water as well as floatables. The majority of beach goers often view Blue Flag as an award that represents water cleanliness (Lucrezi and Saayman 2015:3). The award emphasizes water quality therefore making the beach environment clean and safe.

Lucrezi and Saayman (2015:1478) emphasize that water quality is the most emphasized and prioritized criterion in the Blue Flag award. According to Blue Flag (2020) water samples are taken fortnightly to ensure that the beach meets the standards of water quality. It is therefore imperative that water quality is always up to standard at beaches as evident in this study. Municipalities are therefore ensuring that the water is clean and free from pollution; there is no oil visible on the surface; the absence of industrial waste and sewage related discharges and the absence of floatables.

4.3.2.3 Environmental management

Table 4.4: Perception of environmental management (n=180)

Environmental management characteristics	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
Sensitive areas of this beach are managed	24.4	13.9	53.3	8.3	-	2.46
This beach is litter free and clean	56.7	40.0	1.7	1.7	-	1.48
There is no algae vegetation or natural debris on this beach	30.0	33.9	27.8	8.3	-	2.14
Recycle bins are provided at this beach	62.2	37.8	-	-	-	1.38
There are adequate waste disposal bins on this beach	62.8	37.2	-	-	-	1.37
There are recycle bins available	60.6	39.4	-	-	-	1.39
The ablution facilities at this beach are adequate	60.0	37.2	2.8	-	-	1.46
The ablution facilities at this beach are clean and well maintained	63.9	33.3	2.8	-	-	1.42
There are adequate change room facilities at this beach	65.0	32.2	2.8	-	-	1.41
There is adequate bathing areas at this beach	55.6	35.0	6.7	2.8	-	1.57
No camping is allowed on this beach	55.6	21.1	17.8	5.6	-	1.73
No driving is allowed on this beach	57.8	33.3	4.4	4.4	-	1.56
The access to dogs and other pets is strictly controlled in this beach	56.1	31.1	8.3	4.4	-	1.61
Buildings on this beach are well maintained	66.7	28.9	4.4	-	-	1.42
A sustainable means of transportation is promoted in this beach	10.6	8.9	58.9	21.7	-	2.92

As displayed in Table 4.4 respondents strongly agreed with the fact that there were adequate waste disposal bins on the beach (mean=1.37); recycle bins were provided at the beach (mean=1.38); the availability of recycle bins (mean=1.39); there were adequate change room facilities at the beach (mean=1.41); the ablution facilities were clean and well maintained (mean=1.42); buildings at the beach were well maintained (mean=1.42); the ablution facilities were adequate (mean=1.46) and the beach was litter free and clean (mean=1.48). There was moderate agreement with no driving is allowed at the beach (mean=1.56); there were adequate bathing areas at the beach (mean=1.57) and the access to dogs and other pets was strictly controlled (mean=1.61).

The results show high ratings of tangible elements at the beaches under study. McKenna et al. (2011:583) explain that tangible elements at the beach are usually the most important for beach goers and managers. This is so because these are the elements that the beachgoers can feel and touch hence the need to keep them up to standard. Lozoya et al. (2014:402) highlights that most of the tangible elements are based on the cleanliness of the beach. The managers ensure that Blue Flag beaches are clean and that there are adequate surfaces to meet the needs of the tourists. In interviews conducted with municipality managers they indicated that environmental management on beaches is monitored weekly by the WESSA representative appointed to monitor the programme on behalf of the Department of Tourism. The managers therefore stated that the environmental management of the beach is up to standard. Respondents showed high levels of disagreement with the fact that no camping was allowed at the beach (mean=1.73); there was no algae vegetation or natural debris at the beach (mean=2.14); sensitive areas of the beach were managed (mean=2.46) and a sustainable means of transportation was promoted at the beach (mean=2.92).

The results indicate that the respondents were in agreement with most of the characteristics of environmental management with the exception of sensitive areas of the beach being managed on which they were 53.3% neutral; a sustainable means of transportation being used (58.9% neutral); the absence of algae vegetation and natural debris on the beach and camping not allowed at the beach. According to Marcelli, Cafaro and Mazza (2018:1) Blue Flag promotes sustainable management practices, achieving environmental improvement. However, in ensuring that the beach ecosystem is clean and the tangible elements of environmental management are kept up to standard, the beaches end up losing sustainability. Cabezas-Rabadan et al. (2019:223) explain that the tangible elements of the beach attract an influx of tourists which leads to limited sustainability and sensitive areas being managed due to mass tourism. Lucrezi and Saayman (2015:1479) also explain that the cleaning at the beach is done at the expense of the natural ecosystem which then defies sustainability and managing sensitive areas at the beach.

4.3.2.4 Safety and services

Table 4.5: Perception of safety and services (n=180)

Safety & services characteristics	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
This beach ensures high levels of personal safety and security	57.8	40.6	1.7	-	--	1.46
There is first aid equipment at this beach	25.0	25.6	47.8	1.7		2.26
There is a supply of clean water	65.6	34.4	-	-	-	1.34
Access to this beach is safe	60.0	40.0	-	-	-	1.40
This beach is less crowded	33.3	35.0	6.1	21.7	3.9	2.28
There is constant security patrols at this beach	48.3	48.3	8.3	-	-	1.60
This beach has wheelchair access	42.2	47.2	9.4	1.1	-	1.69
This beach offers a variety of recreational facilities	60.0	30.6	6.7	2.8	-	1.52

Table 4.5 indicates that the respondents were in strong agreement with there being a supply of clean water (mean=1.34); access to the beach was safe (mean=1.40); the beach ensured high levels of personal safety and security (mean=1.46); the beach offered a variety of recreational facilities (mean=1.52); there were constant security patrols (mean=1.60) and the beach had wheelchair access (mean=1.69).

The respondents were satisfied with the beach characteristics that had to do with their safety and security. They were in agreement with the beach having a supply of clean water; a safe access to the beach; the beach ensuring high levels of safety and security and constant security patrols. According to Geldenhuys and Van De Merwe (2014:2) the Blue Flag award helps ensure the safety of the environment as well as to beach goers. Safety and security is an important factor for beachgoers. In a study conducted by Nelson et al. (2000:94) it was identified that beach safety was of paramount importance to beach goers and beaches under study ensured safety as well as good service as evident in this study. It is the role of the award to ensure safety and good service to beach goers. The beaches in this study were able to ensure that there was safety and good service therefore meeting the Blue Flag criteria. George (2003:576) emphasizes that safety at a destination has an impact on tourism demand and satisfaction. It is therefore the role of destinations to ensure that tourists are safe so as to aid to their satisfaction.

Respondents showed higher levels of disagreement with the fact that there was first aid equipment at the beach (mean=2.26) and the beach was less crowded (mean=2.28). According to SABC News (2019) Durban beaches were flooded during the festive season with about 300000 beach goers. The Blue Flag award increases competitiveness of a destination hence luring a lot of tourists (Pancarelli et al. 2016:35; Zeliha 2013:455). The authors highlight that the award aids mass tourism. Fraguell et al. (2016:898) further point out that the award has nowhere in the criteria were the number of tourists that come to the Blue Flag beaches is controlled. This therefore leads to the overcrowding of Blue flag sites as evident in this study.

4.4 Blue flag awareness, attitudes and knowledge

This section summarizes the Blue Flag awareness, attitudes and knowledge of the respondents.

Table 4.6: Cross-tabulation: Awareness of the Blue Flag Award and Gender (n=180)

	Aware of Blue Flag	Not aware of Blue Flag	Pearson Chi-Square
Male	48.6%	48.3%	.975
Female	51.4%	51.7%	
Total	100%	100%	

Table 4.6 shows the Pearson chi-square analysis on the awareness of the Blue Flag award and gender. The results show that there is no significant relationship between the awareness of the Blue Flag award and gender. This is because there is not much of a difference in the female respondents that are aware of the Blue Flag award and the male respondents. Prati et al. (2016:42) bring to light that there is not much of a difference in the awareness of the Blue Flag in relation to gender.

Table 4.7: Cross-tabulation: Awareness of the Blue Flag Award and Age (n=180)

	Aware of Blue Flag	Not aware of Blue Flag	Pearson Chi-Square
Less than 18 years old	22.9%	4.8%	.000
18 to 29 years old	65.7%	25.5%	
30 to 39 years old	0%	51.0%	
40 to 49 years old	5.7%	9.7%	
50 to 60 years old	5.7%	6.9%	
More than 60 years old	0%	2.1%	
Total	100%	100%	

Table 4.7 depicts the cross-tabulation on the awareness of the Blue Flag award and age. The Table also illustrates the Pearson chi-square of the two variables. The results show that there is a significant relationship between the awareness of the Blue Flag award and age. The table shows that respondents between the age of 18-29 were more aware of the Blue Flag award in comparison to the other age groups. In this study, the majority of the respondents belonged to the 18-29 years' age group. Dodds and Holmes (2018:125) also explains that the younger individuals tend to visit the beach more frequently. These frequent visits help in the younger respondents familiarising more and learning about the Blue Flag award at the beaches that they visit.

Table 4.8: Cross-tabulation: Awareness of the Blue Flag Award and Level of Education (n=180)

	Aware of Blue Flag	Not aware of Blue Flag	Pearson Chi-Square
High school certificate	22.9%	9.7%	.000
Post school certificate	14.3%	7.6%	
Diploma	8.6%	44.8%	
Degree	22.9%	26.2%	
Post-graduate degree	31.4%	11.7%	
Total	100%	100%	

Table 4.8 portrays the Pearson chi-square analysis on awareness of the Blue Flag and level of education. The results show that there is a significant relationship between the awareness of Blue Flag and the level of education of the respondents. The more educated the respondents, the more they are aware of the Blue Flag award. In this study respondents with a post graduate degree were the group most aware of the Blue

Flag award. Leonidou et al. (2015:645) reports that the level of education strongly affects pro-environmental behaviour. The more educated respondents are, the more environmentally conscious they are. This also evident in this study as the individuals with a post graduate degree constituted 15.6% of the respondents which explains the low level of awareness of the Blue Flag award.

Table 4.9: Cross-tabulation: Awareness of the Blue Flag award and frequency of beach visit (n=180)

	Aware of Blue Flag	Not aware of Blue Flag	Pearson Chi-Square
Once a year	2.9%	22.1%	.001
Once a month	28.6%	10.3%	
Once a week	22.9%	40.0%	
Few times a week	37.1%	21.4%	
Daily	8.6%	6.2%	
Total	100%	100%	

Table 4.9 represents the Pearson Chi square analysis on the awareness of the Blue Flag award and the frequency of beach visits. The results show that there is a significant relationship between the awareness of the Blue Flag Award and the frequency of beach visits. It is evident in this study that the more frequent beach goers visit the beach the more aware they are of the Blue Flag award. The highest number of people who were aware of the Blue Flag award were those who frequently visited the beach, that is those who visited a few times a week (37.1%). Pourso et al. (2018:456) claim that the more the beachgoers visit the beach the more familiar they are with the beach. It then becomes easier for the frequent beachgoers to be aware that their frequently visited beach has a Blue Flag award.

Table 4.10: Medium through which respondents were made aware of the Blue Flag Award (n=180)

Medium	Number (n)	Percentage
Radio	3	1.7
Internet	16	8.9
Local municipality	3	1.7
Social media	3	1.7
Word of mouth	16	8.9
Tour operators	5	2.7
Not applicable	134	74.4
Total	180	100

Table 4.10 presents the medium in which the respondents were made aware of the Blue Flag award. The majority of the respondents indicated that the question was not applicable to them which means that they were not aware of the Blue Flag (74.4%). Of those respondents that were aware of the Blue Flag award, majority were informed by the Internet (8.9%) and word of mouth (8.9%). Some respondents were made aware by tour operators (2.7%), radio (1.7%), the local municipality (1.7%) and social media (1.7%).

According to Dodds and Holmes (2019:163) there are different factors that influence the perceptions of the beach environment and they have relevant implications for management. For example, the need to develop different communication for different user groups. Managers have to develop communication strategies that will reach a wide range of beach goers. In this study the majority of the respondent had not heard of the Blue Flag award which indicates that the relevant authorities are not using a medium of communication that reaches a lot of people. The Internet and word of mouth were the next mediums that respondents heard about the Blue Flag award. Chen, Lai and Hua (2019:291) highlight that the use of the internet has seen a rapid growth in the previous years. It is therefore important for managers to research and use communication mediums that reach a greater audience.

In South Africa, the Blue flag is mostly advertised on the Wildlife and Environmental Society of South Africa (WESSA) website (WESSA 2020). WESSA in KwaZulu-Natal has an Instagram page with 582 followers which is a very small number considering that it is a big organisation (Instagram 2020). Their Facebook page has 900 likes which

is also a small number (Facebook 2020). According to Stats SA (2020), KwaZulu-Natal has a total population of 11.3 million people. Considering the KwaZulu-Natal population, the followers on social media sites are minimal.

In interviews conducted with the two Blue Flag municipalities in Kwa-Zulu Natal, Ray Nkonyeni Municipality confirmed that the Blue Flag award is advertised to the public by WESSA and the South Coast Ugu Tourism. EThekwini Municipality acknowledged that the Blue Flag beaches in eThekwini Municipality are advertised by WESSA and Durban Tourism.

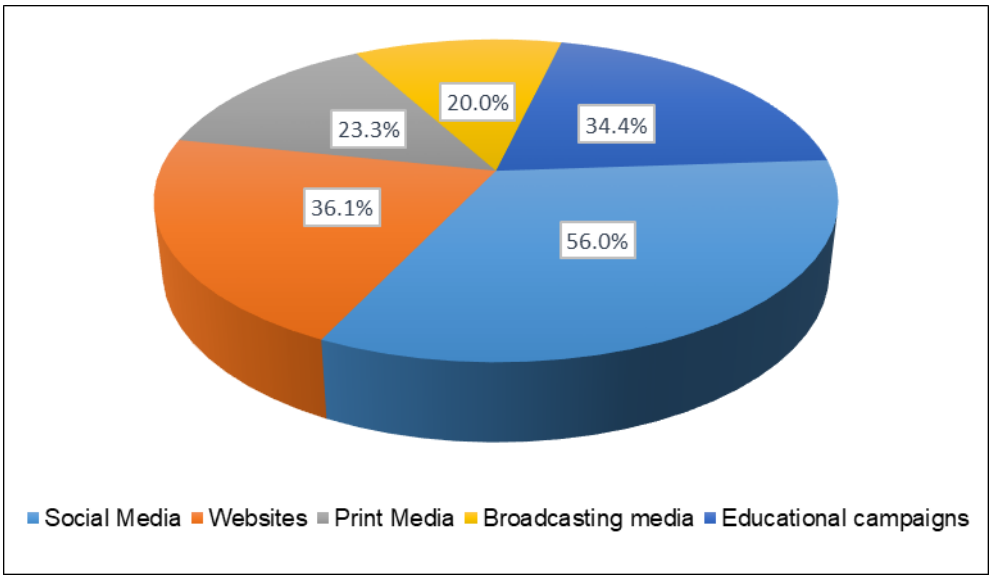

Figure 4.11: Preferred method to disseminate information on the Blue Flag Award (n=180)

Figure 4.11 shows the preferred methods to disseminate information on the Blue Flag Award. The respondents were asked to indicate their preferred methods of information dissemination and multiple responses were permitted. The majority of the respondents highlighted that they prefer social media as a method of information dissemination (56.0%), followed by websites (36.1%), educational campaigns (34.4%), print media (23.3%) and broadcasting media (20%). The current means of information sharing for the Blue Flag does not conform to the preferred methods of information dissemination. This has a disadvantage as the information about the Blue Flag ends up not reaching the targeted audience.

Chen, Lai and Hua (2019:291) indicate that the use of the internet has seen a rapid growth in the previous years. The authors explain that internet technologies have been adopted by the majority of tourism organizations. D'Ambra and Mistilis (2010:207) explain that the use of the internet as a commercial tool has increased in recent years. Improvements in internet marketing helps tourism products positively. According to Xiang (2018:149) the internet is an effective way of marketing tourism products and offerings. The authors further explain that internet platforms include social media, websites, search engines and artificial intelligence. Lucrezi et al. (2015:225) indicate that the Blue Flag award is usually publicized on websites such as WESSA and the Blue Flag, however the managing authorities should keep up with the time and use platforms that are used by the majority of people.

Recent studies of consumers show that the time spent on social networks such as Facebook, Linked in, twitter, Instagram and YouTube has increased and there has been a considerable decrease in time spent with email and traditional websites (Bigne, Andreu, Hernandez and Ruiz 2018:1015). According to Xiang and Gretzel (2010:179) social media has changed the rules and marketing practices of the tourism industry. The authors further explain that social media plays a critical role in the way consumers plan their trips and tourism should use social media to better promote their products and services. Tham, Croy and Mair (2013:148) further insist that for tourists, social media is becoming a very important information source that shapes tourist preferences, feelings, behaviours and choice of travel providers and destinations.

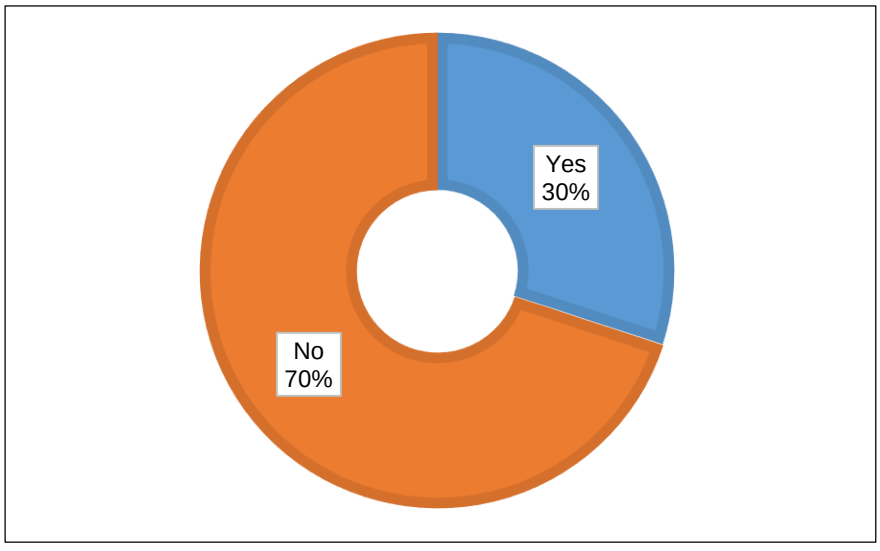

Figure 4.12: Respondent's understanding of what the Blue Flag Award entails (n=180)

Respondents were asked to indicate whether they understand the Blue Flag Award. Figure 4.12 depicts the respondents' understanding of the Blue Flag Award. The majority of the respondents (70%) did not understand what the Blue Flag award entails whilst 30% of respondents indicated that they understood what the award entails. It is evident that most of the beach goers do not have a clear understanding of what the Blue Flag award entails (McKenna et al. 2008:580; Lucrezi et al. 2015:222). Mir-Gual, Pons, Martin-Prieto and Rodriguez-Perea (2015:108) further explain that the majority of beach goers do not know and understand the meaning of the award. They do not have the knowledge and understanding of what the award entails.

In a study conducted in Europe and South Africa discouraging results were yielded (Lucrezi and Saayman 2015:1479). In Europe 35% of the respondents understood what the Blue Flag entailed whilst 65% of the respondents did not understand what the award entailed. In South Africa only 31% of the respondents understood what the award entailed. The authors attributed the reason for the respondents not understanding the award to be due to the poor publicization of the award. McKenna, Williams and Cooper (2011:570) insists that the reason for the beach goers not understanding the award is because coastal managers use the top down approach and they do not involve and educate the beachgoers fully on the Blue Flag award. The award remains only understood by the coastal managers and the management teams.

Marin, Palmisani, Ivaldi, Dursi, Fabiano (2009:272) report that in a study conducted in Italy, only 6.5% of the respondents could define what the Blue Flag award entails. The authors express that the results were disappointing and they were due to the poor marketing of the award and inadequate education of the award to the beachgoers. Lucrezi and Saayman (2015:1486) emphasize that education, promotion and managerial efforts of the award need to be flawless for the beachgoers to understand fully what the award entails.

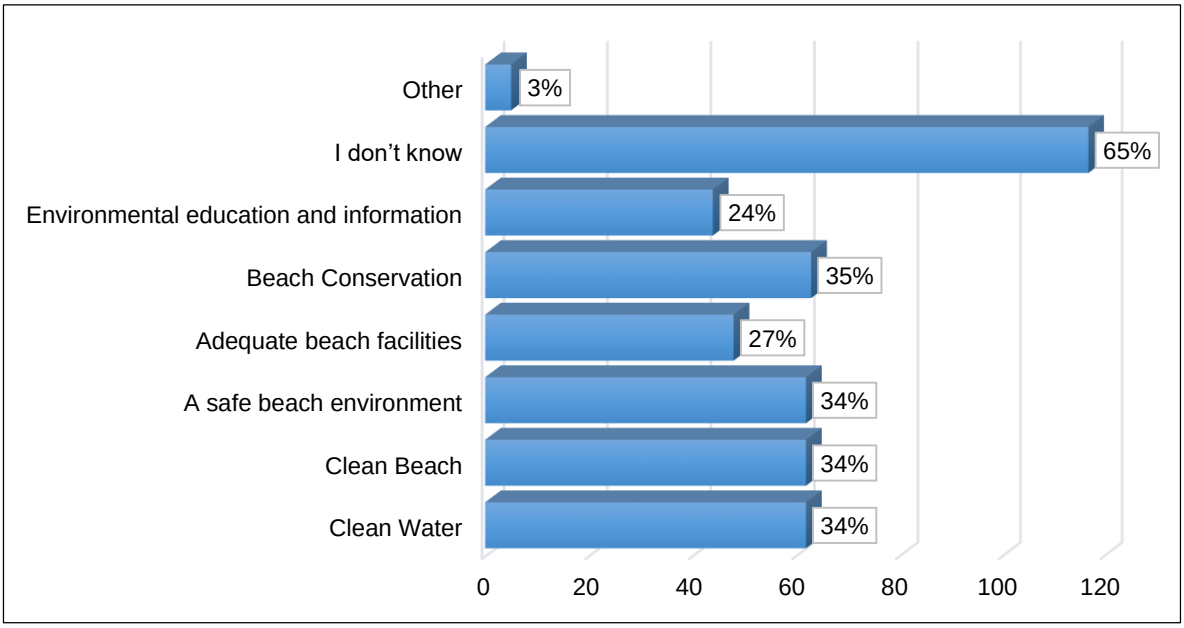

Figure 4.13: Aspects that respondents believe the Blue Flag Award entails (n=180)

Figure 4.13 presents the aspects that respondents believe the Blue Flag entails. For this question multiple responses were permitted. The total number of respondents was 180. The bulk of the respondents did not know what the Blue Flag award entails (65%). There is overwhelming literature on the lack of knowledge that the beachgoers have concerning the Blue Flag award (Nelson et al. 2000:87; Lucrezi et al. 2014:216; Radchenko and Aleyev 2011:56; McKenna, Williams and Cooper 2010:58).

Thirty-five percent (35%) of the respondents believed that the award means beach conservation. Thirty-four percent (34%) of the respondents indicated that they believed that the Blue Flag award entails clean water, a clean beach and safe beach environment, 27% believed that the award entails adequate beach facilities whilst 24% of the respondents indicated that it entails environmental education and information.

All the aspects that the respondents were expected to choose from were what the Blue Flag entails. The results show that the majority of the beachgoers were not aware of what the Blue Flag award entails. Beach goers viewed the award as primarily representing beach conservation, water cleanliness and safety. In a study conducted by Lucrezi et al. (2015:222) it was evident that beachgoers predominantly viewed the Blue Flag award as an award that represents cleanliness and safety with lower recognition of environmental education and information as evident in this study.

Lucrezi and Saayman (2015:3) bring to light that the Blue Flag award is still misconceived by beach goers under many circumstances with most of them identifying it as a water cleanliness award. The results show that most of the respondents do not know what the award entails whilst those who have knowledge on the award do not fully understand what the award entails.

Table 4.11: General perceptions of the Blue Flag Award (n=180)

	Yes	No
Would you like to learn more about the Blue Flag award?	86.1%	13.9%
Would you like to see other beaches in KZN with the Blue Flag?	85.0%	15.0%
Is there sufficient awareness created on the Blue Flag in KZN?	8.3%	91.7%
Is there a need for greater awareness of the Blue Flag?	86.1%	13.9%

Table 4.11 depicts the general perceptions of the Blue Flag award. The respondents were asked on whether they thought that the Blue Flag Award attracts tourists and 64.4% agreed on the notion that the award attracts tourists whilst 35.6% disagreed. Lucrezi and Saayaman (2015:1478) emphasize that the award has a dual aim of conservation and attracting tourism. Pencarelli et al. (2016:35) explains that the Blue Flag award serves as an indicator for clean, safe and quality beach environments which acts as a draw card to tourists. Mir-Gual (2015:107) highlights that consumers have become environmentally conscious and because of the Blue Flag aim of sustainability, the award has had the purpose of luring tourists to beaches and destinations that have the award.

The respondents were asked if they would like to learn more about the Blue Flag Award and 86.1% wanted to learn more about the award whilst 13.9% were not interested. According to Orams (1997:298); Padua (1994:194) education and public awareness have been proved as effective tools for handling the relation between tourists with the environment. Education helps tourists with having knowledge on the award and awareness about the environment which helps in tourists valuing and understanding the award. They were also asked if they would like to see other beaches with the Blue Flag Award and 85% would like to see more beaches in KwaZulu-Natal whereas 15% said no.

In terms of whether there is sufficient awareness created on the Blue Flag in KwaZulu-Natal, the bulk of the respondents indicated that there is no sufficient awareness on the award (91.7%) whilst the minority indicated that the awareness is sufficient (8.3%). The respondents were asked if there is need for greater awareness and the majority (86.1%) agreed whilst the minority (13.9%) disagreed. According to Lucrezi, Saayman and Van de Merwe (2015:222); McKenna et al. (2010:58) and Mir-Gual, Pons, Martin-Prieto and Rodriguez-Perea (2015:108) the majority of beach goers are not aware of the award hence the need for greater awareness. Lucrezi et al. (2016:20) explain that to enhance the image of the Blue Flag award and to ensure sufficient public awareness of the award and its benefits, it is necessary that beach goers are educated on the award. The authors explain that municipalities should advertise on a wider basis to ensure that the information reaches a wide range of people.

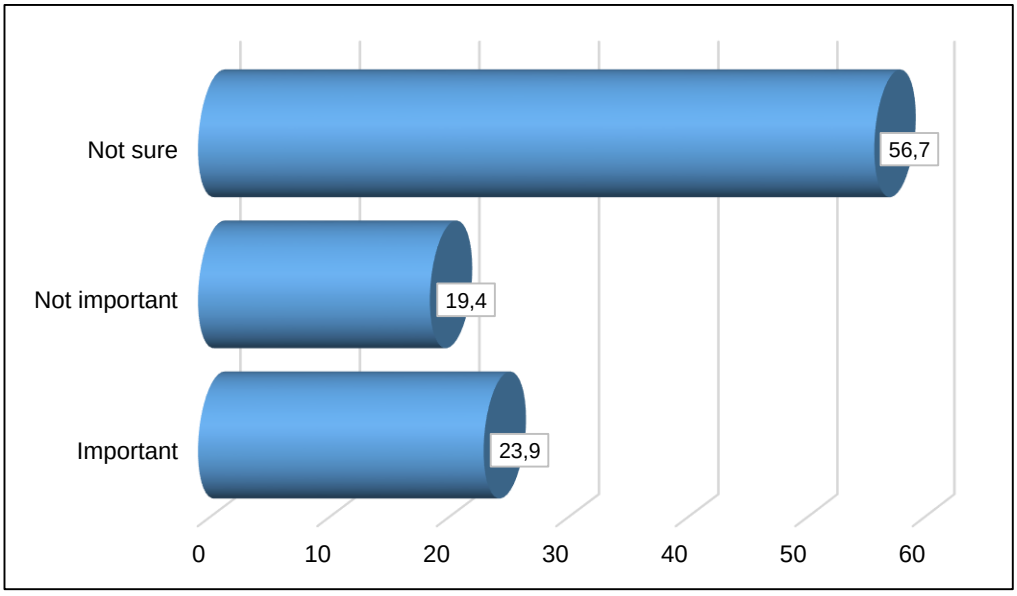

Figure 4.14: Importance of the Blue Blag Award to respondents (n=180)

Figure 4.14 presents the importance of the Blue Flag Award to the respondents. Most of the respondents (56.7%) were not sure as to whether the Blue Flag was important to them, whilst 23.9% stated that the award was important to them. The data reflects that 19.4% of the respondents stated that the Blue Flag award was not important to them. Studies have shown that the Blue Flag award is not important to beach goers especially when choosing a beach to visit (Geldenhuys and Van der Merwe 2014:12; Cabezas-Rabadan 2019:228). The authors explain that this is due to the fact that

beach goers have no knowledge on the award hence most of the respondents do not know the importance of the award. The results are also as a result of the fact that knowledge on the Blue Flag award is skewed amongst beach goers. The beach goers are therefore not sure of the importance of the award as highlighted in this study.

Table 4.12: Chi-Square analysis: Perceptions of the Blue Flag by Age of Respondents (n=180)

	Chi-Square
Heard of Blue Flag beaches before	.000*
Understanding of what the Blue Flag entails	.001*
Awareness of Blue Flag Beaches in KZN	.000*
Willingness to learn about Blue Flag Beaches	.149
Need for greater awareness of Blue Flag beaches	.018

Table 4.12 depicts chi- square analysis on the perceptions of the blue flag award by age. The findings show that there is a significant relationship between age and whether the respondents have heard of Blue flag beaches (p=.000). There is also a significant relationship between age and understanding what the Blue Flag entails (p=.001). A significant relationship between age and awareness of Blue Flag beaches is evident (p=.000). There is however no significant relationship between age and the willingness to learn about Blue Flag beaches (p=.149) as well as age and need for greater awareness (p=.018) as almost all respondents highlighted that there is need for greater awareness. The majority of the respondents were willing to learn about the Blue Flag award despite their age. In a study conducted by Lucrezi and van der Walt (2015:88) values of the beach were strongly favoured by older and educated people. In their study it is evident that older beach goers are more environmental conscious and aware of beach certifications compared to younger beach goers. However, in terms of the willingness to learn about Blue Flag and need for greater awareness all age groups were willing to learn more which is also evident in this study.

4.5 Cross tabulation of the perceptions of Blue Flag by type of tourist

Table 4.13: Cross-tabulation: Perceptions of the Blue Flag by Type of Tourist (n=180)

		YES	NO
Heard of Blue Flag beaches before	Domestic	23.6%	76.4%
	International	33.3%	66.7%
Understanding of what the Blue Flag entails	Domestic	29.2%	70.8%
	International	33.3%	66.7%
Awareness of the Blue Flag Award	Domestic	29.2%	70.8%
	International	47.2%	52.8%
Awareness of Blue Flag Beaches in KZN	Domestic	21.5%	78.5%
	International	11.1%	88.9%
Willingness to learn about Blue Flag Beaches	Domestic	84.7%	15.3%
	International	91.7%	8.3%
Need for greater awareness of Blue Flag beaches	Domestic	87.5%	12.5%
	International	80.6%	19.4%

Table 4.13 shows cross tabulations between perceptions of Blue Flag by type of tourists. In terms of whether the respondents had heard of the blue Flag award 23.6% of the domestic respondents had heard of the Blue flag whilst 76.4% had never heard of Blue Flag beaches before. One third (33.3%) of international tourists had heard of the award whilst 66.7% had never heard of Blue Flag beaches before. With regards to understanding what the Blue Flag entails 29.2% of domestic tourists had an understanding of what the award entails whilst 70.8% had no understanding. One third (33.3%) of international tourists understood of what the award entails whereas 66.7% had no understanding of the award. Regarding awareness of the Blue Flag award 29.2% of domestic tourists were aware while 70.8% were not aware; 47.2% of international tourists were aware of the Blue Flag whist 52.8% were not aware of the award.

With regards to awareness of the Blue Flag 21.5% of domestic tourists were aware of the Blue Flag in KwaZulu-Natal whilst 78.5% was not aware. Eleven percent (11.1%) of international tourists were aware of Blue Flag beaches in KwaZulu-Natal whilst 88.9% were unaware. Almost eighty-five (84.7%) of domestic tourists were willing to learn about Blue Flag beaches while 15.3% was unwilling. A significant proportion (91.7%) of international tourists were willing to learn about Blue Flag whereas 8.3% were not. In terms of the need for greater awareness 87.5% had a need for greater

awareness whilst 12.5% of the domestic tourists were not in need for greater awareness of Blue Flag beaches. Many (80.6%) international tourists were in need of greater awareness of the Blue Flag whilst 19.4% had no need for greater awareness.

The results indicate that international tourists were more aware and understood the Blue Flag award compared to domestic tourists. In a study conducted by Lucrezi and van der Walt (2015:91) in the Western Cape, international tourists favoured passive recreation and were more critical of beach quality, water quality and pollution. International tourists that were part of the study had strong environmental awareness and were willing to pay more for environmental conservation.

4.6 Role of managers in attaining the Blue Flag award

In the interviews conducted with Blue Flag managers of two municipalities in KwaZulu-Natal that have the Blue Flag award, they expressed that as Aquatic Safety managers their function is to ensure that the municipalities comply with all Blue Flag criteria throughout the year. They also highlighted that Aquatic Safety on its own cannot uphold the Blue Flag award without the assistance of various other departments within the municipality which are Safety and Security, Cleansing and Waste, Waste Minimization and the Maintenance section. The role of the managers is to ensure that the mentioned departments fully support the Blue Flag programme and continually ensure that the functions that they provide on behalf of the Municipality and are responsible for are continually being met. It was highlighted that the Aquatic Safety section is also responsible for liaising with the independent Laboratory appointed to monitor water samples as well as WESSA whenever required. All annual Blue Flag applications are completed and submitted to WESSA by the Aquatic Safety section.

To summarise, they elaborated that the Aquatic Safety section is the actual driving force responsible for the sustainability of the Blue Flag programme within the two municipalities. Philip and Jones (2006:552) explain that the primary role of municipality managers is conservation of the coastal ecosystems in their natural state. The authors also highlight that it is the role of municipality managers to facilitate enjoyment in coastal areas whilst preserving the natural environment. The managers in their responses did not highlight anything about controlling activities at the coastal

environments. Ndlovu et al. (2018:112) confirm that coastal management in South Africa has been accompanied with ineffective coordination and collaboration.

4.7 Benefits of the Blue Flag award

Blue Flag managers were asked to explain the benefits of the Blue Flag award and they highlighted that the award ensures that all care is provided by the municipality to ensure that one of its most important natural assets is protected as required by the Integrated Coastal Management Act and that its coastal areas remain sustainable for future generations. The managers highlighted that the award ensures conservation. Geldenhuys et al. (2014:2) highlights that the main benefit of the Blue Flag award is conservation of the marine environment

They also indicated that various businesses in the vicinity of a Blue Flag beach are using the Blue Flag status in their advertising campaigns for example hotels, holiday accommodation agencies and Estate Agents. Pencarelli et al. (2016:35) confirms that the award sends signals to the market about the high standards that a destination offers. The authors further elaborate that the award increases competitiveness of tourism destinations and enhances the territory's touristic brand. Hotels and other businesses in the vicinity of Blue Flag beaches have used the Blue Flag status to market their businesses.

They explained that the Blue Flag award has assisted informal traders with more exposure of their handmade crafts to the public as well as opening various opportunities for new business ventures. Eagleton and du Plessis (2019:209) confirm that the Blue Flag award has brought about job creation to local community members through homemade crafts that have become very popular in South Africa. Chamorro-Mera, de Oliveira and García-Gallego (2019:255) also indicate that the business opportunities that the Blue Flag award brings to the local community has improved their quality of life and has opened new business opportunities for them.

The managers also indicated that the municipality itself has benefited immensely from the exposure it has received from owning Blue Flag beaches with regards to tourism and the positivity from its own local populace. The fact that the municipality is a fully functioning entity which is closely protecting its natural assets for future generations to enjoy has also put the municipality in a positive light. Mir-Gual et al. (2015:107)

explains that the Blue flag award preserves the natural environment hence ensuring conservation at coastal environments. Lucrezi and Saayman (2015:1478) confirm that the Blue Flag award has a dual aim of ensuring environmental conservation as well as attracting tourism. The award attracts tourism due to the fact that it is a key indicator for quality assurance hence luring a lot of tourists (Pencarelli et al. 2016:35).

Lucrezi et al. (2015:212) acknowledge that the Blue Flag award embodies very important principles such as environmental education. Silwani (2015:19) confirms that the Blue Flag award is an educational programme and its core value is environmental education. In the question that researcher asked concerning the benefits of the Blue Flag award, the managers did not mention anything on environmental education. Dodds and Holmes (2018:125) explain that environmental education and awareness are significant drivers of change in behaviour in the environment. Environmental education and awareness influence tourists to act responsibly in natural environments. If tourists are not offered environmental education, it defies the purpose of the Blue Flag award. The fact that Blue Flag managers did not see environmental education and awareness as a benefit means that it is not a priority to them. This also explains why the beachgoers were not aware of what the Blue Flag entails and that their visited beach had the Blue Flag award. It is therefore imperative that environmental education is prioritized at Blue Flag beaches.

4.8 Challenges of the Blue Flag

In the interviews conducted with municipal managers they indicated that the main challenge that they face as municipalities is maintaining water quality. They indicated that when a municipality decides to apply for a specific beach to become a Blue Flag beach it is essential to choose wisely with regards the layout of the beach. It is also important to verify if there are any major rivers that flow onto the beach or any major storm water outlets leading directly onto the beach or into the river. They indicated that these issues mentioned above have a major impact on water quality results especially during rainy months.

McKenna et al. (2010:576) indicate that in 2008 the Blue Flag award was withdrawn from six of Durban’s beaches due to water pollution. In the same year Margate lost its Blue Flag status as a result of the water quality not meeting the Blue Flag criteria (Nahman and Rigby (2008:730). In 2015 eThekwini Municipality regained the award

for Ushaka beach and Westbrook beach. In the 2019/2020 season Westbrook lost its award due to water quality not complying with the Blue Flag criteria (WESSA 2020). When asked whether Ray Nkonyeni Municipality has lost the Blue flag award. The manager expressed that the municipality has been involved with the Blue Flag programme since its inception in South Africa, that was, ± 18 years ago. During this time the municipality has lost three Blue Flag beaches all due to water quality issues not complying with international standards. In the 2019/2020 season two of the municipality beaches lost the award due to water quality not complying with the Blue Flag criteria (WESSA 2020).

There has been a lack of continuity and consistency regarding of the Blue Flag award in Kwa-Zulu Natal mainly because of water quality not meeting the Blue Flag standards (Lucrezi et al. 2014:212). Johnson (2015:71) explains that water quality in Kwa-Zulu Natal beaches has deteriorated over the years and there is need for proper water quality management. The author explains that poor water quality has been due to poor sewage treatment management, polluted river water discharge, storm water outlets that directly go to the beach, urban and industrial developments and human activities. Improvement in water quality monitoring and management is required.

When asked what the municipalities are doing to resolve the poor water quality issue the managers indicated that the municipalities are continually working with the regional municipalities (eThekwini and Ugu) responsible for all wastewater reticulation services within their municipalities in an effort to identify and resolve the problems. They explained that it is a mammoth task that has to deal with antiquated wastewater systems and limited budgets. However, both municipalities expressed that they are committed to resolve the problems.

The second problem highlighted by the municipalities was budget constraints. The managers were asked the reason why other beaches within their municipalities did not have and have never attained the award and they indicated that it was due to budget constraints. They indicated that the award requires a lot of maintenance of the beach ecosystem and facilities as well as water quality testing every fortnight. Therefore, municipal Councils decide on a certain number of beaches that should carry the award. They decide on a sustainable amount of beaches that will be covered by their annual budget adequately without having to deprive other departments from funds. It

should however be noted that this applies only to beaches that comply with the Blue Flag criteria. Fraguell et al. (2016:898) explain that the imperatives of implementing the Blue Flag award and maintaining it entails great economic effort for coastal regions to equip their beaches with the services required by the Foundation for Environmental Education (FEE).

The managers were also asked to air their thoughts on the fact that KwaZulu-Natal has a total number of 65 beaches but only six of the beaches have the Blue Flag award. They expressed that the lack of anyone employed in the municipality actually having the drive to take a successful international programme on-board to make the municipalities he or she works for to stand out above the other coastal municipalities within KwaZulu-Natal has led to a minimal number of beaches with the award. They also stated that there was need for people who are enthusiastic to take the award in KwaZulu-Natal to the next level. Ndlovu et al. (2018:112) explain that in municipalities there are unskilled human resources around tourism marine assets and there is lack of tourism knowledge amongst municipal officials and this hinders progress in terms of the growth of the Blue Flag award.

4.9 Conclusion

Conclusively, the chapter presented results of the study using SPSS and content analysis from interviews. Since the purpose of the study is descriptive, data presented was described and illustrations were given. The chapter was also dedicated to interpretation and discussion of results. The chapter focused on establishing linkages between the primary data, secondary data and the goals of the study. In the interpretation of the data, primary and secondary data were significant factors. Conclusions from the literature review were used to support the findings discussed. This chapter assisted the researcher to draw the appropriate conclusions and recommendations. The outcome of the data met the aims and objectives of the study successfully. The following chapter focuses on suggestions, recommendations, limitations, future research and a general conclusion for this study.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

1.1 Introduction

The aim of this study was to examine beach goers and Blue Flag municipal managers' awareness, attitudes and perceptions of the Blue Flag award. This was achieved through surveying and interviewing beach goers at nine Blue Flag beaches and municipal managers that have the Blue Flag award. This chapter will present the conclusions derived from the data analysed and recommendations will be provided in relation to the study objectives. The structure of the chapter is presented according to the four key objectives of the study, which were:

- To examine the beachgoers awareness, knowledge and attitudes towards the Blue Flag award in KwaZulu-Natal;
- To determine the role of municipalities in attaining the Blue Flag and their attitudes and perceptions of the award in KwaZulu-Natal;
- To ascertain the benefits of the Blue Flag award in KwaZulu-Natal and
- To determine the challenges of the Blue Flag on municipalities in KwaZulu-Natal.

The overall results of the study indicate that the Blue Flag award comes with a lot of benefits for the beach ecosystem and the communities with Blue Flag beaches. The study indicates that the benefits of the Blue Flag include the marine ecosystem conservation, economic benefits for businesses and community members, marketing and positive brand image. However, a considerable number of challenges were identified in KwaZulu-Natal. These include lack of knowledge and awareness of the Blue Flag by beach goers, budget constraints in municipalities and the lack of enthusiastic and committed personnel in the municipalities to take the award to the next level. The inconsistency and lack of continuity of the award in KwaZulu-Natal was also identified in this study. This has resulted in the water quality of beaches not meeting the Blue Flag international standards. The managers and beach goers in this study mentioned that there is need for improving the number of awards attained, continuity and publication of the award.

1.2 Summary of key findings

This section aims to summarize the key findings of this research in relation to each research objective mentioned above. The intention is to address and give answers to the research questions. These findings will make provision for the recommendations and accomplish the purpose of this research.

5.2.1 Objective one: awareness, knowledge and attitudes towards the Blue Flag award in KwaZulu-Natal.

The purpose of this objective was to ascertain the awareness, knowledge and attitudes towards the Blue Flag award. The focus on the beachgoers and how they related to the Blue Flag award.

5.2.1.1 Awareness and knowledge

The majority of the respondents were not aware of the Blue Flag award. They could not identify that the beaches that they were at had the Blue Flag award. This study was conducted at Blue Flag beaches and it was unfortunate that most of the respondents were not aware of that. This can be attributed to the award not being well publicized in KwaZulu-Natal. The majority of respondents did not have knowledge of what the Blue Flag award entailed and this was also as a result of the award not well publicized

The bulk of the respondents did not also know whether they had visited a Blue Flag beach before. This was disappointing because the beach that they were at had the Blue Flag award. The reason for them knowing is probably because even at the beach there is not enough information to inform the beachgoers that the beach possesses the Blue Flag status. Moreover, respondents also did not know of Blue Flag beaches in KwaZulu-Natal. This suggests that even at a provincial level the award is not well publicized and not enough is being done to publicize the award to the users.

Of the few respondents that knew about the Blue Flag award, the majority of them did not know what the award entailed. The beachgoers were not knowledgeable about the award. They could identify it but could not explain what the award entailed. This is however disappointing because what is important is that the beach goers understand

what the award is about so that it yields benefits and also understanding what the award really means leads to change of attitudes and perceptions towards the award.

5.2.1.2 Attitudes

In terms of the attitudes of the respondents towards the Blue Flag award, the results of the study indicated that the Blue Flag award was insignificant in respondents choosing the beach. Most of the respondents did not choose the visited beach because of the award as they were not even aware that their visited beaches had the Blue Flag award. This calls for attention for beach managers and other managing authorities such as WESSA to promote the award effectively to address the issue of unpopularity of the Blue Flag award.

In terms of the quality of the beaches, the respondents were happy with the beach attributes regardless of them not being aware that the beach had the Blue Flag award. This therefore indicates that the award comes with conservation of the beach and municipalities should strive to attain the award in most of their beaches. Nevertheless, a strong correlation between the beachgoers perceptions of beach attributes, knowledge of the award and perceptions of the Blue Flag award is still missing. This prompts the suggestion that the Blue Flag award only influences beach selection slightly. A possible explanation is that while beach goers are mostly attracted by Blue Flag criteria such as ‘cleanliness’ and ‘safety and access’ as highlighted in this study they are deterred by the issues such as crowding which can be a by-product of the Blue Flag award. Another explanation is that beach goers do not perceive differences between beaches with and beaches without the award and therefore feel neutral towards the award as was evident in this study.

5.2.2 Objective two: role of municipalities in attaining the Blue Flag award and their attitudes and perceptions of the award in KwaZulu-Natal.

The purpose of this objective was to determine the role of municipalities in attaining the Blue Flag award and how they felt about the award. It had the purpose of identifying how the managers perceived the award and to ascertain whether they thought of the award in a positive light or not.

The beach managers highlighted that the role of municipalities in attaining the Blue Flag award is to ensure that their municipalities comply with the Blue Flag criteria

throughout the year. They also brought to light that it is their role to liaise with the independent laboratory to monitor water samples of the applying beaches. All Blue Flag applications are completed and submitted by the municipality to WESSA. They indicated that they are generally the driving force responsible for the sustainability of the award.

The municipal managers saw the Blue Flag award in a positive light and expressed that the award brings with it conservation and the sustainability of the beach ecosystem. Economically, they highlighted that the award brings about economic growth in the local community and the province at large. However, the municipal managers did not mention anything about the award being an educational tool for the community and the tourists. This indicates that the award and the role that it has is not understood. The fact that the municipal managers did not mention the education aspect of the award indicates that they do not prioritize it hence explaining why the beach goers were not aware of the award. It could also be due to the fact that the municipalities themselves do not understand what the award fully represents. Instead they focus on the award complying with the international criteria and the economic benefits that the award brings. It is therefore imperative that the municipalities understand what the Blue Flag entails fully for it to be effective in their respective municipalities.

The managers were asked who publishes the award for the municipality and they indicated that it is the role of Destination Marketing Organizations (DMOs) to market the award. This could be the reason why the award is not well published as Destination Organizations have a broader role of advertising the whole destination and might not go to the extent of educating the public about the award. The organisation instead markets the award for economic benefits.

5.2.3 Objective three: the benefits of the Blue Flag award in KwaZulu-Natal.

The intention of this objective was to determine the benefits of the Blue Flag award. It is known that the Blue Flag award brings with it a lot of benefits environmentally and economically. The purpose of this objective was to establish the benefits that the award has specifically in KwaZulu-Natal.

Managers believe that there are many benefits that the Blue Flag award has in KwaZulu-Natal. The managers indicated that the Blue Flag award has a dual aim of

ensuring conservation of the beach ecosystem whilst luring a lot of tourists to the beaches. The respondents expressed that the award ensures that there is sustainability at the beach ecosystem. It is acknowledged that the award has economic benefits on local communities and the nation at large. The award creates job and business opportunities for local communities which improves their lifestyle whilst generating income for the nation at large. The managers highlighted that their municipalities have benefited immensely from the exposure it has received from owning Blue Flag beaches with regards to tourism and the positivity from its own local populace. Additionally, the municipality is a fully functioning entity which is closely protecting its natural assets for future generations to enjoy. It is therefore evident that the Blue Flag award has environmental and economic benefits and communities with the award have benefitted immensely.

These benefits should be experienced and enjoyed by all municipalities in KwaZulu-Natal. Having more beaches with the award also leads to more environmental conservation of the beach ecosystem, having the public that is environmentally conscious while enjoying economic benefits that tourism brings

5.2.4 Objective four: challenges of the Blue Flag award on municipalities

This objective aimed at determining the challenges that the municipalities face in attaining the award as well as challenges faced once they have attained the award. The Blue Flag managers were able to provide the challenges that they face as municipalities.

The challenges that are faced by the municipalities are the inability to maintain water quality to meet the international standards, budget constraints and lack of trained and motivated personnel to drive the programme successfully within municipalities. In KwaZulu-Natal, the major challenge that has been faced has been the inability to maintain water quality by municipalities which has led to lack of continuity of the award in the province. Most beaches have lost the award as a result of water quality not meeting the water quality standard and this problem has been persistent in KwaZulu-Natal from 2010. This has led to the inconsistency of the award in the province as indicated by the municipal managers. The award has a lot of benefits hence the inconsistency of the award defies the purpose of the award at the KwaZulu-Natal beaches.

The managers also highlighted that budget constraints are a major challenge of the Blue Flag award. Budget constraints in terms of attaining the award as well as maintaining it. They indicated that for municipalities to attain the award a lot of money is needed and also to keep up with the award through waste management, infrastructure development and clean ups. This could be attributed to municipalities not budgeting properly at the beginning of each financial year or the unavailability of funds.

Lack of trained and motivated personnel was another challenge that was raised. It was evident in the municipalities that the personnel were not well trained and motivated. The municipalities indicated that there is no one designated or employed specifically for the Blue Flag. They indicated that lack of trained and motivated personnel to facilitate the award has led to it not being successful. It was even difficult to determine who would answer the interview questions because the municipalities kept sending the researcher back and forth. This was probably because no one is really designated for the award specifically.

5.3 Recommendations

Results and key findings indicate that the Blue Flag award comes with a lot of benefits which are environmental management and conservation and economic benefits. However, the bulk of the key findings indicate that the award had loop holes in terms of management, education and implementation to maintain the award. This section will forward recommendations derived from the key findings.

5.3.1 Facilitating education programmes

It is recommended that the municipalities that have the award have programmes that are appealing to the public and attempt to convince them to attend and learn more. It is recommended that they have beach clean-up campaigns with celebrities and well-known DJs to lure a larger audience and they would be eager to learn more. This can be done especially during the peak season, public holidays and the festive season. By so doing these campaigns could draw a large number of people and it becomes fun and educational. The use of guest speakers at beach events as well as at nearby businesses such as restaurants and accommodation facilities can be valuable in the marketing and publicizing of the Blue Flag award.

The municipalities with the award can also publicize the Blue flag award on social media platforms. The majority of the respondents in this study indicated that they preferred social media as a method of information dissemination. The municipalities can make use of interactive and engaging Facebook, Instagram, twitter pages as well as other social media platforms. Promotions and competitions can be held on the social media platforms with the aim of educating the public about the award. Social media has become very popular and can be used to lure a large number of people hence educating them in an enjoyable and interactive way.

The award can also be publicized on television, through the use of adverts that are appealing and would lure tourists to KwaZulu-Natal. Radios, newspapers, magazines, tourism websites, research (journals and articles), school campaigns, workshops and tutorials on the Blue Flag award can be utilized to publicize the award to the public. Municipalities can also make use of billboards at airports and in the city to help educate the public on the Blue Flag award.

It is recommended that at the beaches there are continuous programmes to educate the public on the award. The information about the award and the local ecosystem is published at Blue Flag beaches in the form of writing and typical notice boards and this has proven not to be enough. Municipalities with the award can appoint ambassadors at the beaches to educate the public on the award and hold educative programmes. It is imperative that there is always activity at the Blue Flag beaches that aids in the education of the public. Beach guides, tour guides and life guides can be used to publicize the award at Blue Flag beaches. Due to budget constraints mentioned by the municipal managers, municipalities can make use of students as ambassadors of the programme especially those doing their in-service training as this also becomes a learning curve for them.

The Blue Flag award should be used to engage both local communities and tourists in educational and monitoring activities to protect assets of the beach rather than municipalities focusing on complying with the international criteria. The primary purpose of the award is to shift the behaviour of the public through education. Education on the award and the value that it adds to the environment will give local people agency in protecting their environmental assets and gives the tourists a

sympathetic attachment to the beach hence ensuring that there is conservation and sustainability of the beach ecosystem**.**

It is recommended that municipalities have a division in the Aquatic Safety Department that focuses on strategies to educate the public on the award since they have all the information on the award. The department should train motivated people who are excited to take the award to the next level through education strategies.

5.3.2 Motivation of municipalities without the award

Reports that provide information on the benefits of the award should be made public to encourage municipalities that do not have the award and to encourage municipalities with the award to attain the award in more beaches. WESSA can also hold workshops with municipalities to educate them about the award and encourage them to attain the award in as many beaches as possible. Training and development of enthusiastic people is also imperative for the Blue Flag award. There is need for enthusiastic and well-trained personnel in the municipalities to help in the implementation and continuity of the Blue Flag award.

It is imperative for the driving force to be well trained and motivated in order for the award to be a success. When the driving force is motivated it leads to success. This then motivates municipalities without the award to want to have the award. Municipalities without the award can also have personnel that are trained and motivated so that they have a driving force that is enthusiastic to attain the award. Training and development should then be done for all coastal municipalities.

5.3.3 Planning and Management

It is recommended that municipalities ensure that there is proper sewage treatment to avoid the water quality from being compromised. There is need for strategies and initiatives to ensure that sewage is treated efficiently to enable the award to run continuously. In terms of budget constraints, it is recommended that municipalities give serious attention to, and include sustainable measures and practices in its early year budget so as to eradicate the strain of implementing and maintaining the Blue Flag award. It is also recommended that the government create an incentive for municipalities that would like to attain the award and for those who already have the

award to maintain it. For lack of trained and motivated personnel within the municipalities it is imperative that personnel with a tourism background are hired to run such an initiative. Moreover, government funded training with regards to the Blue Flag award and sustainable tourism practices should be available for coastal municipalities. To motivate the staff responsible for the Blue Flag award, awards and incentives can be given. Incentives can help with motivating employees. Constant training and development of staff can also help in ensuring that they are aware of what is required of them as well as wanting to yield good results.

5.4 Implications for future research

Based on the findings of this study, it is recommended that future research in relation to the Blue Flag award in KwaZulu-Natal focus on the following:

- Management of water quality in KwaZulu-Natal beaches to ensure the continuity of the award in the province;
- The impacts that the Blue Flag award has and its influence on the choice of beach and the willingness of the public to learn more about the award;
- Challenges experienced by WESSA in terms of compliance with the criteria issues, revoking of ecolabel and repeat attainment of the award in KwaZulu-Natal; and
- Information on whether the Blue Flag award brings conservation at beaches with the award and if there has been results at beaches that have the award.

5.5 Concluding remarks

This study identified the knowledge, awareness and perceptions of beach goers on the blue Flag award in KwaZulu-Natal. The perceptions, challenges and benefits of the award on municipalities were explored. The study also identified strategies to improve the education and publicizing of the award to the public as well as ways to combat challenges that the award brings. It is anticipated that this study will contribute to the South Africa literature, KwaZulu-Natal in particular in the tourism industry where there is a current lack of literature with regards to the Blue Flag award. Additionally, it is anticipated that this study promotes more research of this nature in the province as further exploration will benefit the province and the nation at large. Finally, the Blue

Flag award has a lot of benefits, both environmentally, economically and socially. However, it requires proper management and implementation to ensure that its benefits come to fruition and challenges are overcome.

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APPENDIX 1

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF HOSPITALITY AND TOURISM

Dear Respondent

I, Lesleen Chenesai Mukaronda am a Masters student, at the Durban University of Technology. You are kindly invited to participate in an academic research entitled: Perceptions of beachgoers and beach managers on the Blue Flag Award: The case of KwaZulu-Natal beaches. The research seeks to find out the perceptions, attitudes, awareness and knowledge of beach goers on the Blue Flag award.

The information and ratings you provide will go a long way in helping the researcher assess the awareness and knowledge of the Blue Flag amongst beachgoers. Through your participation, the researcher hopes to examine the effects of the current problem facing the Blue Flag in terms of low popularity amongst beach users. The researcher also hopes to examine the role of municipalities in informing and educating the beachgoers on the award.

Your participation in this project is voluntary. All information shared is subject to confidentiality clause. This serves to note that the information you will share in this questionnaire will not be shared with anyone under any circumstances.

Thank you for your assistance.

Yours Sincerely

Researcher Signature…… Date…….....

[redacted]

Supervisor/ Promoter ..... Date.....

Dr Reshma Sucheran

[redacted]

Respondent Signature…… Date…….

BEACH -GOERS QUESTIONNAIRE

SECTION A: GENERAL

Please tick or fill the appropriate answer

1. Gender

Male ☐ Female ☐

2. Age

Less than 18 years old	
18 to 29 years	
30 to 39 years	
40 to 49 years	
50 to 59 years	
More than 60 years old	

3. Type of tourist

Domestic ☐ International ☐

4. If an international, please indicate your country of origin

_____

5. Please indicate your highest level of education

No schooling	
Primary school	
High school	
Certificate	
Diploma	
Degree	
Post-graduate degree	
Other, please specify	

6. Please indicate your current marital status

Single ☐ Married ☐ Divorced ☐

7. How often do you visit a beach?

Once a year	
Once a month	
Few times a month	
Once a week	
Few times a week	
Daily	
Other Please specify	

8. What activities do you usually partake in at the beach (multiple responses are permitted)

Fishing	
Swimming	
Snorkelling	
Picnic	
Kiting	
Surfing	
Exercise	
Beach party	
Beach Bowling	
Beach soccer	
Beach volleyball	
Events	
Beach clean up	
Research	
Other, please specify	

SECTION B: BEACH ASPECTS AND ASSESSMENT OF BEACH FACILITIES

9. When choosing a beach, which factors are of importance to you? Please indicate by choosing from a scale of 1 (least important) to 5 (most important)

1 – Very unimportant
2 – Unimportant
3 – Neutral
4 – Important
5 – Very important

	NU	U	N	I	VI
	1	2	3	4	5
ENVIRONMENTAL EDUCATION AND INFORMATION					
Provision of environmental education and information					
Information on bathing water quality and management					
Environmental education activities must be offered					
Information relating to local ecosystems should be available					
A map of the beach must be displayed					
Rules pertinent and codes of conduct must be displayed					
WATER QUALITY					
Beach must comply with water quality sampling					
Good waves for swimming					
Good waves for surfing					
There must be no industrial waste water or sewage related discharges					
The water must be visually clean with no odour and oil visible					
There has to be the absence of wood, plastic bottles, containers, glass or any substance floating					
ENVIRONMENTAL MANAGEMENT					
Sensitive areas of the beach must be managed					
Cleanliness of the beach					
No algae vegetation or natural debris					
No litter on the beach					
Adequate waste disposal bins must be provided and well maintained					

Recycle bins must be provided					
Sufficient ablution facilities					
Clean ablution facilities					
Adequate change room facilities					
No camping on the beach must be allowed					
No driving on the beach must be allowed					
Pets are allowed on the beach and well controlled					
Buildings in the beach vicinity must be properly maintained					
More dunes or plants and less development on the beach					
A sustainable means of transportation should be promoted in the beach area					
SAFETY AND SERVICES					
Adequate number of life guards					
Personal safety and security					
Safe access to the beach					
Wheelchair access on the beach					
Less crowds on beach					
Constant beach patrol					
A supply of clean water					
Child friendly					
Variety of recreational activities must be offered					
The beach must be popular					
The beach must have a Blue Flag award					

10. Please rate your level of agreement with the following statements in relation to the characteristics of this beach. Indicate the level of your agreement with the following statements using this scale of measurement:

1 STRONGLY AGREE (SA)
2 AGREE (A)
3 NEUTRAL (N)
4 DISAGREE (D)
5 STRONGLY DISAGREE (SD)

BEACH CHARACTERISTICS	**SA**	**A**	**N**	**D**	**SD**
	1	**2**	**3**	**4**	**5**
ENVIRONMENTAL EDUCATION AND INFORMATION					
This beach has a Blue Flag Award					
This beach displays adequate information on the Blue Flag Award					
This beach displays adequate information on environmental education					
This beach displays adequate information on water quality and management					
This beach displays adequate information on local ecosystems					
A map of this beach is displayed					
Rules and codes of conduct is displayed at this beach					
WATER QUALITY					

The water is clean and free from pollution at this beach					
There is no oil visible on the surface of the water and no odour is detected					
There is no industrial waste water or sewage related discharges					
There is no floatables such as wood, plastic bottles, containers, glass or any other substance					
ENVIRONMENTAL MANAGEMENT					
Sensitive areas of this beach are managed					
This beach is litter free and clean					
There is no algae vegetation or natural debris on this beach					
Recycle bins are provided at this beach					
There are adequate waste disposal bins on this beach					
There are recycle bins available					
The ablution facilities at this beach are adequate					
The ablution facilities at this beach are clean and well maintained					
There are adequate change room facilities at this beach					
There is adequate bathing areas at this beach					
No camping is allowed on this beach					
No driving is allowed on this beach					
The access to dogs and other pets is strictly controlled in this beach					
Buildings on this beach are well maintained					
A sustainable means of transportation is promoted in this beach					
SAFETY AND SERVICES					
This beach ensures high levels of personal safety and security					
There is first aid equipment at this beach					
There is a supply of clean water					
Access to this beach is safe					
This beach is less crowded					
There is constant security patrols at this beach					
This beach has wheelchair access					
This beach offers a variety of recreational facilities					

SECTION C: BLUE FLAG AWARENESS, ATTITUDES AND KNOWLEDGE

11. Have you heard of the Blue Flag Award for beaches before?

Yes ☐ No ☐

12. If yes, where did you hear about it?

Radio	
Television	
Internet	
Local Municipality	
Social Media	
Word of Mouth	
Tour Operator	
At the beach	
Other, please specify	

N/A	

13. Do you understand what the Blue Flag Award entails

Yes ☐ No ☐

14. If yes, which of following aspects does the Blue Flag entail? (multiple responses permitted)

Clean Water	
Clean Beach	
A safe beach environment	
Adequate beach facilities	
Beach conservation	
Environmental education and information	
I don't know	
Other, please specify	

15. Have you ever visited a Blue Flag Beach before?

Yes ☐ No ☐ I don't know ☐

16. Are you aware that this beach is a Blue Flag beach?

Yes ☐ No ☐

17. How important is a Blue Flag Beach to you?

Important	
Not important	
Unsure	

18. Are you aware of which beaches in KwaZulu-Natal have the Blue Flag status?

Yes ☐ No ☐

If yes, please list them

_____

_____

_____

19. A Blue Flag beach is a beach that has excellent water quality and coastal zone management. Blue Flag promotes sustainable development of coastal areas, encourages cooperation between tourism and the environmental sectors and good environmental practices among users of the beach. Do you think that a Blue Flag beach can help attract tourist?

Yes ☐ No ☐

If yes, elaborate

20. Please indicate your perception of a Blue Flag Beach. Indicate the level of your agreement with the following statements using this scale of measurement:

1 STRONGLY AGREE (SA)
2 AGREE (A)
3 NEUTRAL (N)
4 DISAGREE (D)
5 STRONGLY DISAGREE (SD)
6 DON'T KNOW (DK)

PERCEPTION	SA	A	N	D	SD	DK
	1	2	3	4	5	6
The Blue Flag attracts tourists to beaches						
The Blue Flag keeps beaches safe and clean						
The Blue Flag helps educate on the importance of a beach environment.						
The Blue flag commercializes beaches						
The Blue Flag results in the overdevelopment of beaches						
The Blue Flag is an educative programme						
The Blue Flag helps in the marketing of beaches						
The Blue Flag helps in the conservation of beaches						
The Blue Flag is not important when choosing a beach to visit						
The Blue Flag is not that important as I like other non-Blue Flag beaches						

21. Would you like to learn more about the Blue Flag Award

Yes ☐ No ☐

22. Would you like to see other beaches in KZN with the Blue Flag?

Yes ☐ No ☐

23. Do you believe that there is sufficient awareness created on the benefits of Blue Flag Beaches in KZN?

Yes ☐ No ☐

24. Do you believe that there is a need for greater awareness on Blue Flag beaches?

Yes ☐ No ☐

25. Has your beach experience on the Blue Flag improved?

Yes ☐ No ☐

26. If yes how has it improved?

_____

_____

27. **What do you think should be done in order to efficiently relay information about the Blue Flag?**

_____

_____

28. **Any further general comments on the Blue Flag Award for beaches?**

_____

_____

Thank you for participating in this research

APPENDIX 2

INTERVIEW

1. Name of Municipality
2. Gender
3. Age
4. Level of Education
5. What is your role in terms of the Blue Flag award?
6. How many beaches have the Blue Flag award in this municipality?
7. Do you have beaches that have lost the award?
8. What was the reason for losing the award?
9. What is the municipality doing to regain the award?
10. What is the reason of other beaches not having the award?
11. What is being done for those beaches to attain the award?
12. How is the Blue Flag publicized in your beaches?
13. How is environmental management ensured at Blue Flag beaches?
14. How often do you monitor environmental activities at the beaches?
15. What are the reasons for not obtaining the Blue Flag in some of the beaches within your municipalities?
16. Is there a difference in terms of environmental management and tourist numbers at Blue Flag beaches and non- Blue Flag beaches?
17. What are the barriers of the Blue Flag?
18. Does the award help in environmental management and environmental education?
19. Does the municipality have a budget for the award?
20. If yes, how much?
21. Is the budget sufficient?
22. If no what is the reason for them not to have a budget for the Blue flag?
23. Is the award supported by mayoral committee or the provincial government?
24. How has the municipality received support from the provincial or national government?
25. Is there a benefit in having the Blue flag award in the Municipality?
26. What is the benefit?
27. Does having the ward have an impact on tourism in the area? How?
28. What are the challenges faced?
29. In KwaZulu-Natal there are 65 beaches and out of those only 9 have the Blue Flag award. What is your take on that?
30. How can other municipalities that do not have the Blue Flag be motivated to attain the award?

APPENDIX 3

BUSINESS SUPPORT, TOURISM & MARKETS UNIT
DURBAN TOURISM DEPARTMENT
90 Florida Road, Morningside, Durban, 4000
P O Box 1044, Durban, 4000
Tel: 031 322 4164 Fax: 031 303 9134
Web: http://www.durbanexperience.co.za

22 July 2016

LETTER OF PERMISSION TO CONDUCT ACADEMIC RESEARCH

To whom it may concern

Lesleen Chenesai Mukaronda, a Masters student of Hospitality and Tourism at the Durban University of Technology has formally requested permission to administer questionnaires at eThekwini Municipality beach fronts and to interview relevant authorities in Durban. She would like to use the data collected for her Masters dissertation entitled **"Examining KwaZulu Natal's Blue Flag status from a Sustainable Development Perspective"**. The dissertation will acknowledge Durban Tourism and eThekwini Municipality and will be shared after completion.

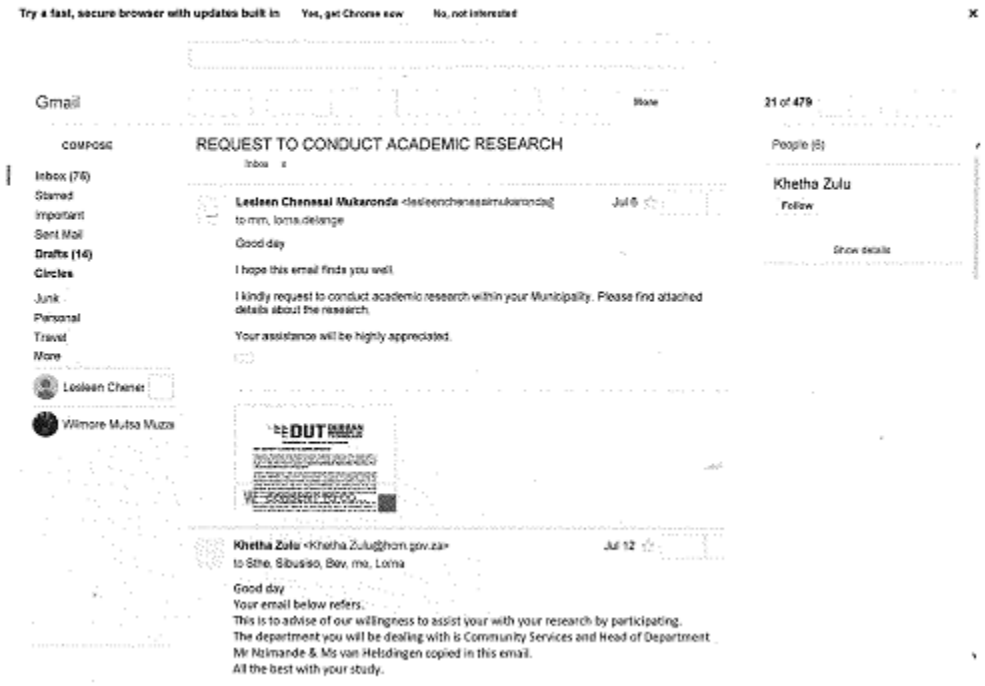
This certifies that Durban Tourism and eThekwini Municipality have granted permission to Lesleen Chenesai Mukaronda to conduct the research and therefore requests that you assist her with her studies.

Should you have any questions you are welcome to contact me.

Yours in Tourism
Roshni Mehta
Researcher: Business Intelligence and Product Quality
Durban Tourism
eThekwini Municipality
Tel: +27 31 322 4181
Mobile: +27 83 701 4967
Email: roshni.mehta@durban.gov.za

Signatu

APPENDIX 4



Try a fast, secure browser with updates built in Yes, get Chrome now No, not interested

Gmail

COMPOSE

Inbox (76)
Starred
Important
Sent Mail
Drafts (14)
Circles
Junk
Personal
Travel
More

Lesleen Chenes
Wilmore Mutsa Muzira

REQUEST TO CONDUCT ACADEMIC RESEARCH

Lesleen Chenesai Mukaronda <lesleenchenesaimukaronda@ to mm, lorna.delange Jul 6

Good day

I hope this email finds you well.

I kindly request to conduct academic research within your Municipality. Please find attached details about the research.

Your assistance will be highly appreciated.

DUT

Khetha Zulu <Khetha.Zulu@hom.gov.za> to Sthe, Sibusiso, Bev, me, Lorna Jul 12

Good day
Your email below refers.
This is to advise of our willingness to assist your with your research by participating.
The department you will be dealing with is Community Services and Head of Department Mr Ntimande & Ms van Helsdingen copied in this email.
All the best with your study.

People (8)

Khetha Zulu
Follow

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