

The value of independent Environmental Control Officers in responsible tourism: A Kruger National Park perspective

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ABSTRACT

Sustainable development has been realised as a way of practicing sustainability in protecting the environment, economy and the society from negative impacts. In order to curb damage to the natural environment, regulatory measures have been put in place. These include, the principles of responsible tourism incorporated into the SANS 1162 and Environmental Impact Assessments (hereafter EIAs) for specific geographic areas as provided for in the National Environmental Management Act (hereafter NEMA). In 2001, South African National Parks (SANParks) introduced the concept of lodges on 'private concessions' (privately-owned tourist lodges on state land) to bring social and economic benefits to the Kruger National Park (KNP) and the surrounding community. The environmental mandate and responsibilities of SANParks within the KNP in north-eastern South Africa had to be incorporated into the private concessions' initiative, in accordance with the Responsible Tourism Guidelines (DEAT, 2002:3).

Independent environmental control officers (ECOs) were appointed as per environmental authorisation (EA) to monitor compliance with EIA follow-up as prescribed by EA conditions and SANParks arrangements. However, it is not known how effective these independent ECOs are in ensuring sustainability.

Consequently, this research's aim was to gain a sound understanding of the intended function and effectiveness of ECOs who conduct EIA follow-ups at private concessions in the KNP with a view to promoting sustainable development and responsible tourism. In light of the above, the research questions that guided this study were: Firstly, what is the role of EIA follow-up and ECOs in relation to responsible tourism in KNP? Secondly, how and to what extent do independent ECOs add value to tourism development projects in the KNP?

A literature review was conducted to answer the first question. To answer the second question, the researcher conducted face-to-face and telephonic structured interviews (using questionnaires) with both SANParks personnel and concession staff at selected KNP concession projects. Thematic data analysis was performed to identify themes in the responses. There was sufficient evidence that ECOs added value in promoting responsible tourism in KNP by conducting bi-annual audits and checking for compliance through EIA follow-up. The results revealed that the majority of the respondents agreed

that the ECOs did add value by ensuring that EIA follow-ups was done in the KNP to promote responsible tourism. This indicates that independent ECOs are effective as verifiers of EIA implementation and EIA follow-up, thus ensuring that there is environmental compliance. These results were based on the assessment, evaluation, judgement and scoring of the respondents on those aspects that were under the scrutiny of the ECOs.

The main limitation of this study was that it is not generalisable to other contexts, because the mandate given to KNP ECOs is site-specific. Therefore, while future researchers might refer to this study as one assessment of the value of ECOs, further studies need to be done on their effectiveness in other contexts in which the ECOs are required to fulfil differing mandates. Although there were some limitations, it was recommended that future involvement of ECOs on EIA follow-up in responsible tourism should include namely, the economic, social and environmental aspects in order to achieve the objectives of sustainable development.

Key words: EIA follow-up; independent Environmental Control Officer (ECO); responsible tourism; sustainable development; Kruger National Park (KNP).

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ACRONYMS

DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
DT	Department of Tourism
DWAF	Department of Water Affairs and Forestry
EA	Environmental Authorization
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
GIS	Geographic Information System
GM	General Manager
IAIA	The International Association of Impact Assessment
KNP	Kruger National Park
NEMA	National Environmental Management Act No. 107 of 1998
NTSS	National Tourism Sector Strategy
ROD	Record of Decision
RWS	Rhino Walking Safaris
SANParks	South African National Parks
SANS	South African National Standard
SR	Section Ranger
UN	United Nations
UNEP	United Nations Environment Programme

CHAPTER 1: INTRODUCTION

1.1 Introduction

The notion of sustainable development has been developed into a broad theory that takes into consideration the environmental, social and economic factors being involved in two big problems of mankind: the capability to generate as well as to maintain (Duran *et al.*, 2015:814). Klarin (2018:68) argues that “the concept of sustainable development is based on the concept of development (socio-economic development in line with ecological constraints), the concept of needs (redistribution of resources to ensure the quality of life for all), and the concept of future generations (the possibility of long-term usage of resources to ensure quality of life for future generations)”. Duran *et al.*, (2015:812–814) further elaborates that sustainable development is aimed at supporting the sustainable use of natural resources by striking “a balance between economic growth, quality of life and medium- and long-term environmental preservation without increasing the consumption of natural resources beyond the capacity of the Earth” (Duran *et al.*, 2015:812).

In South Africa, sustainable development is provided for in Article 24 of the Constitution and elaborated on in the National Environmental Management Act No. 107 of 1998 (NEMA), which is the framework legislation for environmental management and environmental protection (South Africa, 1998). Section 2 of NEMA states that “everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation” (South Africa, 1998).

Environmental Impact Assessment (EIA) is globally viewed as the primary environmental management tool (Morgan, 2012; UNEP, 2018). EIA is a process whereby environmental, social and other significant effects are identified, predicted and assessed. The EIA process is also aimed at minimising the negative effects and promoting the positive effects of a planned development (Sadler, 1996:13). Listing Notice 3 in the EIA Regulations, under sections 24(2), 24(5) and 240 of NEMA, requires that an EIA be done for tourism activities and infrastructure developments that are undertaken in protected areas. This implies that an EIA is required before projects are developed in national parks,

including for tourism accommodation, so as to ensure that tourism takes place responsibly and sustainably.

Responsible tourism development has to be supported by sustainable environmental practices. In this regard, South Africa recognises responsible tourism as the key guiding principle for tourism development (South Africa, 1998) and a pathway to achieving sustainable development that is, environmental integrity, social justice and economic prosperity (SANS 1162:2011; UNEP, 2005). The 1996 *White Paper on Development and Promotion of Tourism in South Africa* of 1996 (hereafter referred to as the White Paper), defines 'responsible tourism' as "tourism that promotes responsibility for the environment through its sustainable use; responsibility to involve local communities in the tourism industry; responsibility for the safety and security of visitors and responsible government, employees, employers, unions and local communities" (Government of South Africa, 1996b:vi).

The South African National Minimum Standard for Responsible Tourism (SANS, 1162) of 2011 (2010:5) adds that responsible tourism is a tourism management strategy in which both the tourism industry and travellers make it their duty to protect and conserve the natural environment, respect and also assist in preserving the beliefs of the affected communities, to back local economies and provide a better quality of life for local people. In order to promote responsible tourism, it is important to address the negative effects of the tourism industry due to the increase in the number of tourists on the environment (Chettiparamba & Kokkranikal, 2012:4). In addition, responsible tourism implies that there is a need for all stakeholders in the tourism industry to be part of the solution by behaving in a responsible manner (Ford & Acott, 2015:3). Not only should the government sector be the one responsible for promoting sustainable development and responsible tourism, but the private sector needs to come to the party so that the two processes can be beneficial to everybody. This calls for measures to reduce the number of visitors and the magnitude of adverse tourism practices, which should be implemented by business to promote responsible tourism (Chettiparamba & Kokkranikal, 2012:4).

South Africa has historically been at the forefront of responsible tourism. This influenced the state to develop the White Paper of 1996, which identified responsible tourism as the key guiding principle for tourism development in the country. The responsible tourism guidelines were developed for the business sector to "ensure that the tourism sector in

South Africa keeps pace with international and national trends towards responsible business practice – trends that are increasingly manifesting in South Africa’s international originating markets as well as within the country’s domestic tourism market” (DEAT, 2002a:9). Following the White Paper, additional policy documents were developed, which included the *National Responsible Tourism Development Guidelines for South Africa* (DEAT, 2002a), the *Responsible Tourism Manual for South Africa* (DEAT, 2002b) and the *Responsible Tourism Handbook* (DEAT, 2003).

Despite the policy improvements in the tourism sector, South Africa as a country experiences challenges in conforming, in particular when it comes to the monitoring and execution of environmental management plans (EMPs) and environmental authorisation (EA) conditions after an EIA has been approved and issued by the relevant department and authorities (Wessels & Morrison-Saunders, 2012:2–3). The Department of Environmental Affairs and Tourism (DEAT) highlights that “while the management of environmental issues tends to be left to environmental departments and professionals, there are capacity limitations within the environmental sector in South Africa, let alone the more acute limitations outside the sector” (DEAT, 2014:52). Ultimately, these two concepts, namely EIA and responsible tourism, have a similar goal which is sustainable development.

As Wessels and Morrison-Saunders (2012:4) indicate, the NEMA stipulates that the South African developer must apply for EA for listed activities prior to developing a project. One of the conditions for approval from the regulator can be a mandate that the developer include the services of an Environmental Control Officer (ECO). According to Wessels and Morrison-Saunders (2012:3), some of the roles of the ECOs as outlined in an EA are to “oversee and monitor adherence to Environmental Management Plans conditions; implementation of the construction and EMP conditions; ensuring mitigation measures are complied with; and induction of all contractors on contents of EMP and EA”. An EA is considered to be an instrument that should be utilised to ensure that organisations adhere to the EIA regulations, as well as following the rules when it comes to implementing Chapter 5 of the NEMA; if there is no follow-up to ensure compliance, transgressions might occur. The DEAT (2002:9) therefore stipulates that, for responsible tourism development to advance, it has to be underpinned by sustainable environmental practices. The difference between the “role” and “value” is that the role is part played by

a performer, whereas value is the condition of being worthy. In this research the role is played by the ECO, and the value is the worth that the ECO adds during EIA follow-up.

1.2 Orientation

South African National Parks (SANParks) is one of the main providers of the tourism experience in the country. It provides accommodation and experiences of natural phenomena, while recognising the importance of implementing the principles of responsible tourism management (SANParks, 2018:143). According to Phillips (2012) SANParks is guided by the National Tourism Sector Strategy (NTSS) and has adopted the Responsible Tourism Policy, which dictates that SANParks will implement the SANS requirements for responsible tourism. Phillips (2012) also notes that “the Kruger National Park implements and monitors the SANS 1162 requirements through the Park Management Plan process”.

The South African government embraced its obligation to promote responsible tourism as early as in 2011 through the adoption of the NTSS, followed by the SANS for Responsible Tourism (SANS, 1162). Responsible tourism is at the core of the Tourism Act No. 3 of 2014, the objective of which is to ensure that responsible tourism is supported in order to benefit South Africa as a country, so that both local and international tourists receive some satisfaction when they travel in the country (DT, 2014).

The KNP transverses the Mpumalanga and Limpopo Provinces of South Africa, and is the largest and best-known park under SANParks’ management. The KNP is known for its rich biodiversity and is a prominent tourist attraction in South Africa. A sustainable and thriving tourism industry is reliant on conservation; thus the KNP constitutes a foundation for nature-based tourism. Traditionally, all development, accommodation and activities within the KNP are carried out and managed by SANParks. The KNP Management Plan highlights the objective of SANParks to uphold responsible tourism in order for the guests to experience nature in a comfortable setting, as well as to cherish and realise the worth of national parks (SANParks, 2018:14). Thus, in order for the KNP to benefit from responsible tourism, one of its main objectives is “to be a world class destination by providing nature-based responsible tourism experiences in promoting biodiversity,

cultural and wilderness qualities to grow revenue in support of the conservation mandate” (SANParks, 2018:49).

Most of the concession lodges were established on the fringes of the KNP, with the aim of reducing the visitors’ impact on the park’s natural environment (see Figure 1-1). Each concession has different soil types, vegetation, fauna and flora, affording each one its own uniqueness (see Annexure A). For example, Rhino Walking Safaris is an exclusive walking concession, because it is considered to be in a wilderness area; hence no game drives are allowed in the concession area, except on the KNP roads. Lukimbi Safari Lodge, Lion Sands Tinga and Imbali Safari Lodge, on the other hand, are allowed game drives in their concession areas. They can also do off-road driving. These concessions result in a variety of benefits to the community, including financial gains. The concessionaires pay quarterly concession fees to SANParks. These are determined by a certain percentage of turnover. These concessions appeal to an upmarket segment of the tourism industry, in order to encourage both social and economic benefits. However, SANParks has to conserve the environmental integrity of the park. As such, responsible tourism is promoted so that tourism can be sustainable. The seven (7) concessions as indicated in Figure 1-1 below.

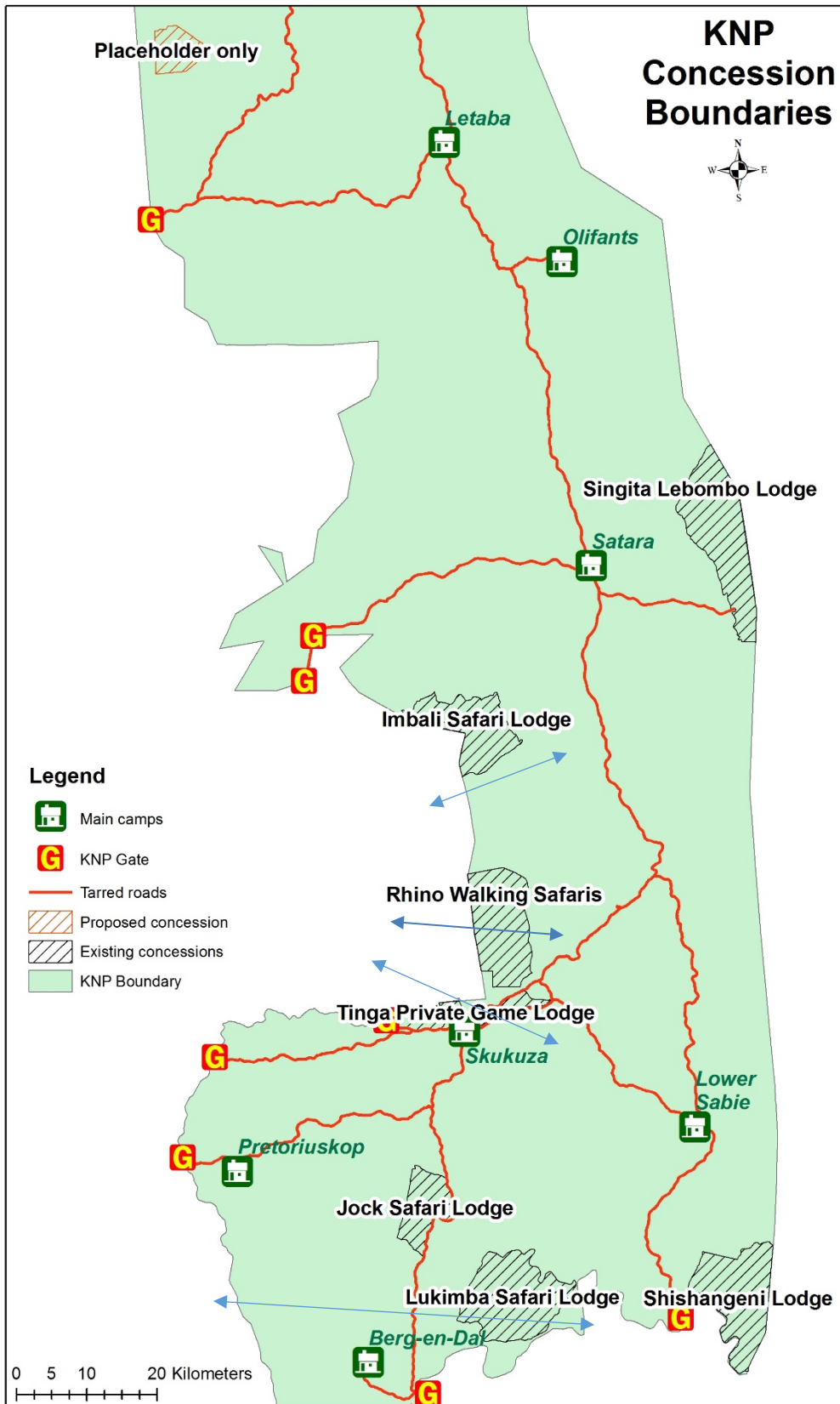


Figure 1-1: Map of concession lodges in the KNP (GIS, KNP:undated).

The project lifecycle for these concessions is illustrated below (Figure 1-2), including the EIA process, from the project planning to the construction and decommissioning phases. The bidding process, which is open and transparent, is based on a public-private partnership model (KNP, 2002:10).

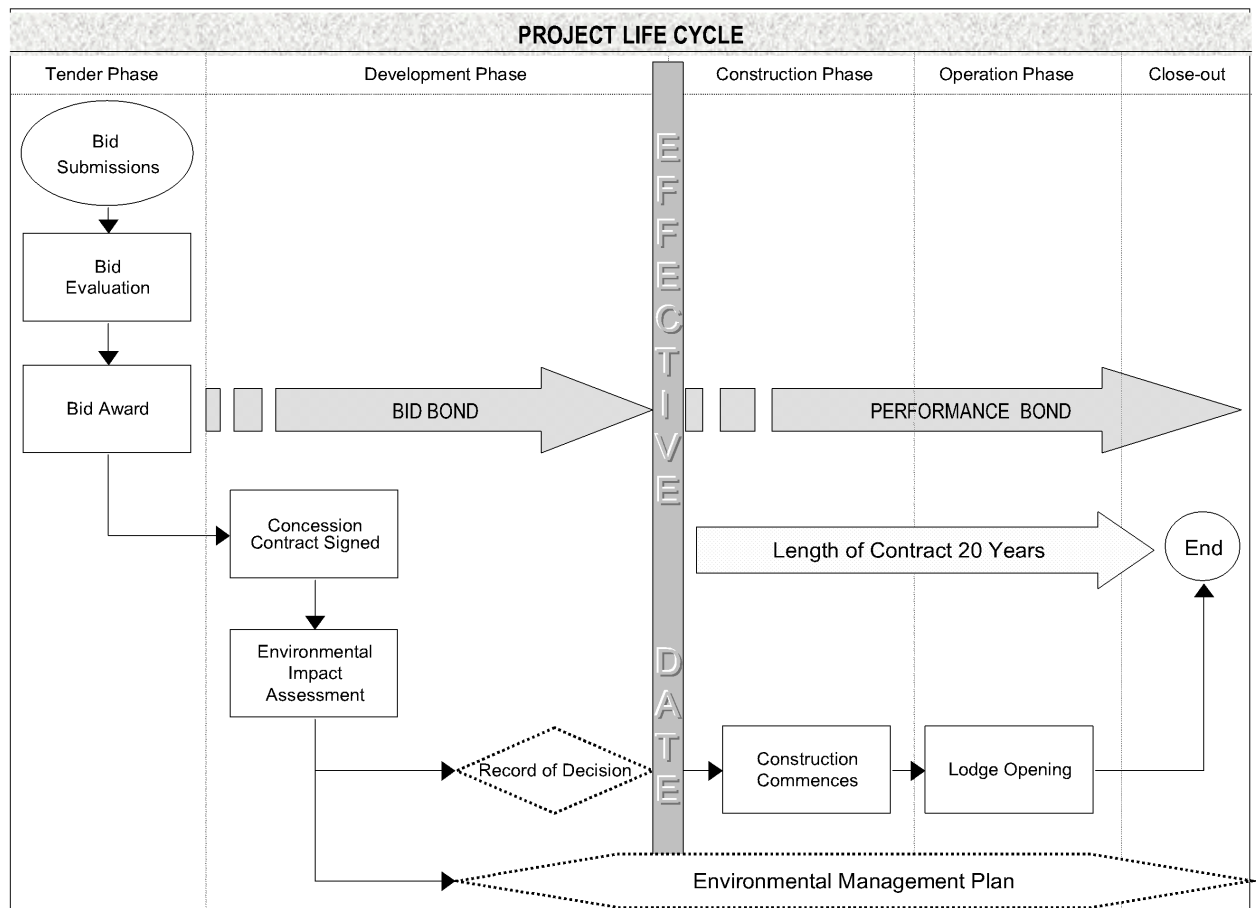


Figure 1-2: Summary of project lifecycle for concessions (Source: KNP, 2002:16).

Successful bidders are given the opportunity to develop appropriate offerings for specific target markets, while also assuming responsibility for the management of the surrounding area, in compliance with legislation and the SANParks' policies (SANParks, 2018:10). In line with the Responsible Tourism Guidelines (2002:9), the construction of these concessions should be such that, upon decommissioning, the dismantling of the buildings have minimal environmental impact, and that the areas of land from which buildings are removed can be rehabilitated. Thus, in relation to the KNP concessions, only the main camp is permitted to be built with bricks and mortar. The fly camps that are not permanent structures are not constructed with the same material as the main lodge, but are made of

canvas material in the form of tents. The concession fees paid to the KNP are meant to augment the government subsidies to SANParks for conservation in the KNP.

1.3 Problem statement

There is increasing concern that there has been an increase in the development of private lodges in South Africa, especially in and around the natural habitats of the “Big Five” (the elephant, lion, leopard, rhinoceros and Cape buffalo). Regulatory measures have therefore been put in place to curb damage to the natural environment, which include the principles of responsible tourism. These measures have been amalgamated into the SANS 1162 and EIAs for specific geographic areas, as provided for in the NEMA.

Poor management and a lack of follow-up on EIAs during project development can result in a failure to achieve global responsible tourism goals. This issue is likely to impact the sustainability and integrity of many conservation and cultural heritage areas that are drawcards for the flourishing tourism industry of South Africa. According to Abebe *et al.*, (2007), if there is no proper and well-structured follow-up to decision making, then the purpose of granting EA prior to undertaking a project is defeated. As a way of protecting the environment, the concession lodges utilise the services of ECOs as a way of ensuring that the conditions of the EA are fulfilled as one of the ways to mitigate impacts, as indicated by individual environmental management plans (EMPs) during construction (KNP, 2002:21). Thus the development of concessions in the KNP are a prime example of establishing the link between EIAs, responsible tourism and ECOs.

There are ECOs who are currently monitoring and evaluating the KNP concessions on environmental compliance, but not much has been done to determine their effectiveness. It is therefore important to assess the effectiveness of independent ECOs in EIA follow-up as a project management tool. The inspiration behind this study was to assess whether SANParks’s motivation for involving ECOs in EIA follow-up as a way of promoting responsible tourism conducted has been beneficial or not. The way to appraise the value of ECOs in KNP will be applied based on whether they met the set targets in performing their roles or not. Similarly, a study was done in the construction industry whereby it was anticipated that an ECO might add value to both the pre-decision and the post-decision stages of a project (Wessels *et al.*, 2015:183).

1.4 Research aim and objectives

In light of the above, the aim of this study is to determine the value of ECOs in relation to responsible tourism, with a particular focus on the KNP in South Africa.

With a view to achieving the above aim, the following research objectives were formulated:

- To understand the role of EIA follow-up and independent verifiers (e.g. ECOs) in responsible tourism development; and
- To understand how and to what extent independent ECOs add value to tourism development projects in the KNP.

1.5 Research questions

Consequently, the following research questions guided this study:

- What is the role of EIA follow-up and ECOs in relation to responsible tourism in KNP?
- How and to what extent do independent ECOs add value to tourism development projects in the KNP?

1.6 Significance of the study

Sustainable and responsible tourism has been a hotly-debated topic among members of civil society, governments and environmental practitioners worldwide for several decades now. Of particular concern in this regard is the implementation of and follow-up on sustainability commitments made during the planning phases of projects. The use of independent ECOs is growing worldwide and schemes are implemented in some countries to increase the number of independent ECOs available. However, as Arts *et al.*, (2001:176) indicated, insufficient attention has been paid in the literature on how to conduct EIA follow-ups, good practice and future directions. This study, will contribute to filling that gap in the literature.

In the South African context, Wessels and Morrison-Saunders (2012:4) highlight that the NEMA prescribes that a developer must submit an application for an Environmental

Authorisation for listed activities as part of the conditions for developing a project. The developer is also required to contract the services of an ECO. He or she may fulfil various roles during EIA follow-up, such as compliance monitoring, ensuring and enforcing legal compliance, advising, or even consulting, communicating, reporting and raising awareness.

In terms of regulation 37(1) of the EIA regulations (South Africa, 1998), the ECO is responsible for the management, monitoring and reporting of the impacts of the activity on the environment throughout the lifecycle of the activity, as contained in the approved Environmental Management Programme (EMPr) (Wessels & Morrison-Saunders, 2012:4). Similarly, SANParks has made it compulsory for concessions to utilise the services of ECOs to conduct EIA follow-ups to monitor compliance. However, although the value of ECOs have been established in other sectors, the value of ECOs involved with follow-up of sustainability commitments in the tourism sector have to date not been determined. Based on the previous research in the construction industry, according to Wessels *et al.*, (2015:178), “the appraisal was done by: identifying and designing relevant performance standards, followed by measuring the performance of independent verifiers against the standards at four construction case studies”. This study will apply the same principle at the four (4) concessions. This research can contribute positively to the tourism sector, and could also be a reference point for SANParks when drafting contracts for new concessions on expiry of the existing ones. The findings of the study could possibly influence decision makers.

1.7 Dissertation overview

This section contains a brief description of the content of each chapter of this dissertation. The chapter division is as follows:

The **introductory chapter (Chapter 1)** constitutes an introduction to the study. Additionally, the problem statement is provided, followed by the research aim, objectives and questions that guided this study.

Chapter 2 comprises a review of the relevant literature with a view to answering the first research question, that is, to understand the role of EIA follow-ups and the role of independent verifiers in responsible tourism development.

Chapter 3 contains a description of the research design, approach and methods that were used to collect and analyse the data for this study.

In **Chapter 4** the data that was gathered empirically to answer the second research question, that is, how and to what extent independent ECOs add value to development projects in the KNP, is presented. The data from the interviews are presented, analysed and interpreted.

Chapter 5 is the concluding chapter of this dissertation. It provides the conclusions and demonstrate that the research objectives were reached. Furthermore, recommendations for future research and practice are presented.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In the previous chapter the concepts of sustainable development and responsible tourism, including Environmental Impact Assessment (EIA) follow-up and the involvement of independent Environmental Control Officers (ECOs) in these follow-ups, were introduced. This chapter comprises a review of the available literature on EIA follow-ups and the involvement of the ECOs in EIA monitoring, evaluation and compliance with respect to responsible tourism. The aim of this chapter is to answer research question one which is to understand the role of EIA follow-up and independent verifiers in responsible tourism development in the Kruger National Park (KNP).

The review begins with an outline of the literature on sustainable development and responsible tourism, followed by a discussion of previous research on the significance of monitoring EIAs by way of follow-ups. This is in turn followed by an exploration of the role of the independence of verifiers in EIA follow-ups.

2.2 Sustainable development and responsible tourism

The terms 'sustainable development' and 'responsible tourism' were defined in the previous chapter. Denbarch (2003:247) asserts that the benefit of the implementation of sustainable development is the protection and restoration of the environment, as opposed to damaging or contaminating it. In order to achieve sustainable development, all the sustainable development "pillars" have to be in mutual balance. In the process of building each individual pillar, respect for the other pillars must be observed in order not to cause an imbalance (Klarin, 2018:85).

Against this backdrop, tourism is held to be sustainable to the extent that tourism-specific planning and management systems take full account of current and future economic, social and environmental impacts (Øian *et al.*, 2018:14). Similarly, as Øian *et al.*, (2018:14) indicates, the negative impacts of tourism practices, including tourism development, can be reduced through sustainable tourism development.

2.2.1 Sustainable development and responsible tourism on concessions

Sustainable development and responsible tourism can be achieved in the concessions of national parks, provided there is monitoring by government (Øian *et al.*, 2018:53). Concessions can benefit all stakeholders, provided they are designed and implemented properly, while ensuring that natural resources and biodiversity are conserved (Spenceley & Casimiro, 2012:10). It is crucial to ensure that concession contracts include measures to reduce environmental impacts. For example, the contracts should incorporate certain measures and interventions such as management plans detailing ways of handling the disposal of waste, infrastructure development and recycling, among others (Spenceley & Casimiro, 2012:34). According to Wessels *et al.*, (2015:17), “there are many challenges to effective compliance, the rule of law, good governance and ultimately sustainable development”. There should be a signed agreement between the parties, in which all the term and conditions under which these concessions should operate are laid down (Øian, 2018:55).

Furthermore, in order to receive the benefits of sustainable development and responsible tourism, “the process of managing the business should be fully integrated with environmental management throughout the project lifecycle (from conceptualisation to decommissioning)” (DEAT, 2002:9). It should be borne in mind that these processes should be planned for even before construction. In the planning phase, it is vital to ensure that the intended structures can be dismantled and that the area in which the concession was built can be rehabilitated during decommissioning (DEAT, 2002:9).

SANParks specifies the importance of the concessions being built within a stipulated period and stipulates in the 20-year contracts signified that “the purpose of a project schedule is to enable SANParks to monitor the construction works from an environmental perspective” (KNP, 2002:13). Adhering to the project schedule makes it possible to reduce environmental impacts. The bottom line is that environmental and social practices should be promoted in protected areas as a way of ensuring that damage to the environment is prevented, despite the fact that the tourism industry relies on these areas for business operations (Spenceley & Casimiro, 2012:38). In addition, organisations such as SANParks, responsible for protected areas should go the extra mile in assisting concession holders to conform to these rules by developing concession manuals that can be utilised to guide them on how to promote sustainable development and responsible

tourism in protected areas (KNP, 2002:8; Spenceley & Casimiro, 2012:63). It is also mentioned in the concessions operations manual that “the section ranger will be responsible for inspecting the concessionaires in terms of the adaptive management process and submitting reports to the relevant conservation services specialist or environmental manager” (KNP, 2002:17).

Øian *et al.*, (2018:54) emphasise that research has shown that parks might benefit from the development of concessions in protected areas, for example by achieving their conservation goals from the income generated by concessions. Moreover, concessions are a mechanism for generating a range of social and economic benefits, without compromising the ecological integrity of a national park (KNP, 2002:9). However, it is important to indicate that, “conservation objectives should supersede tourism objectives, and concessions need to be managed within the integrated approach” (Spenceley & Casimiro, 2012:66). Thus, although concessions can be permitted to operate in protected areas, there has to be commitment from them to adhere to the rules, with the aim of promoting responsible tourism for sustainability (KNP, 2002:9–10). In dealing with the concessions, the managers of these concessions themselves have been given the responsibility of both caring for the environment and ensuring that the tourists were aware of and adhered to rules in the KNP as a protected area, which is a huge responsibility. The same was echoed by Gündling *et al.*, (2000:36), who stated that “at the level of the facilities themselves, the managers, who are not nature conservation officers, are charged with the preparation and implementation of effective business plans, and with controlling concessionaires who provide accommodation and associated catering service”.

2.3 The significance of EIA follow-up

EIA follow-up is a communication tool for the monitoring and evaluation of the impacts of assessed and approved development projects (Wood, 1999:56). The purpose of EIA follow-up is to improve the operations of projects in order to ensure that the environment is not damaged, as well as to evaluate and report on the procedures undertaken (Morrison-Saunders *et al.*, 2003:43). South Africa is experiencing some challenges regarding how to conform when it comes to the monitoring and execution of the EMP and

EA conditions after the EIA has been issued and approved by the relevant department and authorities (Wessels & Morrison-Saunders, 2012:2–3).

One of the benefits of EIA follow-up is that “it gives proponents and/or regulators the opportunity to implement measures to mitigate or prevent negative effects on the environment” (Marshall *et al.*, 2005:177–178). This process can be applied in many industries, including the tourism industry, to promote responsible tourism and sustainable development. However, Betey and Godfred (2013:45) and Ortolano and Sheperd (1995:10) demonstrate that, globally, there is not enough commitment to dealing with post-decision monitoring following the approval of developments.

2.3.1 The place of EIA follow-up in the project lifecycle

As indicated in Principle 17 of the UN Conference on Environment and Development (UNCED) report, it is vital to incorporate sustainable development principles such as those used in environmental assessment in order to ensure that the EIA adds value to sustainable development by protecting the environment (United Nations, 1992). Similarly, in order to achieve the objectives of responsible tourism in developing concessions, EIA is used as a tool to protect the environment. The practice of EIA and EIA follow-up has attracted contributions from practitioners globally, including from countries such as Australia, Brazil, Canada, Finland, the Netherlands, Portugal, the United Kingdom and South Africa (Morrison-Saunders *et al.*, 2007:170). Validations for EIA follow-up are well documented and clearly stated in the literature and in research reports (Jalava *et al.*, 2015:256). According to Marshall *et al.*, (2005:192), EIA follow-up comprises mainly four elements, namely:

1. *Monitoring* – refers to the gathering of data in relation to development and its environment prior to the physical development taking place (baseline monitoring), as well as during and after development (compliance and impact monitoring);
2. *Evaluation* – is measuring the degree to which the development adheres to the criteria, forecasts or potential environmental impacts of the development;

3. *Management* – is a consideration of the evaluation of data and any issues arising from this, or the actual development, assessing this and addressing relevant issues; and
4. *Communication* – the notification of all shareholders and interested parties on the outcome of the EIA follow-up to give feedback on the development and the EIA practices applied.

The aftermath of the EIA follow-up can assist in assessing whether the EIA is beneficial, based on the feedback from the public and government (Morrison-Saunders *et al.*, 2007:1). This knowledge can be used by EIA specialists and government to improve the EIA process (Arts *et al.*, 2001:184). Therefore, it is important for all parties involved with the development project to commit to and agree on how to undertake EIA follow-up, and to make sure that they make accountability a priority in whatever they do (Morrison-Saunders *et al.*, 2007:1). Based on this, environmental monitoring and evaluation is a vital means of determining compliance with the appropriate regulations and policies in dealing with the detected environmental problems (DWAF, 2004:1). Thereafter, a follow-up program needs to be drawn-up prior to the EA and implemented only after it has been authorised by the relevant authority (Morrison-Saunders *et al.*, 2007:1). Furthermore, there should be monitoring based on the set targets and stipulated conditions (DEA, 2014:40). In this regard, it is important to consider the significance of monitoring and inspection in EIA follow-up. The application of an EIA throughout the project's lifecycle, including EIA follow-up, is illustrated in Figure 2-1 below.

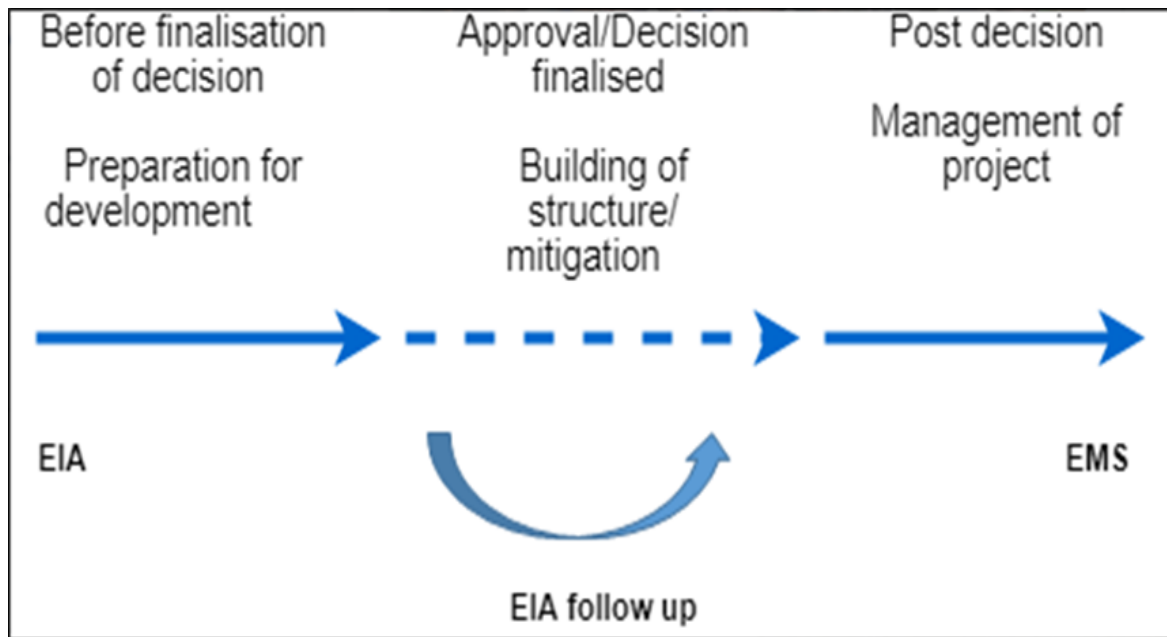


Figure 2-1: EIA follow-up bridging the implementation gap (Source: Marshall (2004), as cited by Marshall *et al.*, (2005:178).

The above figure illustrates how important it is for the EIA process to be continued even after EA is granted. The EIA process begins in the planning phase, when the developer or applicant has to determine whether to apply for a basic assessment (BA) or a full EIA. Once an EIA has been approved, the follow-up of the EIA process and its implementation becomes imperative. This connection entails compliance and monitoring, which is the cornerstone of adhering to the conditions of the Environmental Authorisation (EA) as prescribed by NEMA.

A pre-decision EIA is predictive because its focus is on an uncertain future. Follow-up can address the uncertainties and deficiencies that are intrinsic to the EIA planning and decision-making processes, thereby rationalising the EIA (Arts *et al.*, 2001). In this regard, it is important to consider the significance of monitoring and inspection in the EIA follow-up. Through the monitoring of the entire EIA process, important information and opinions can be shared amongst the relevant stakeholders, because it is people who manage the same EIA process during the entire project lifecycle (Betey & Godfred, 2013:45). In the following section the focus will therefore be on the significance of monitoring and inspection in EIA follow-up.

2.3.2 The significance of monitoring and inspection in EIA follow-up

The purpose of environmental monitoring and inspection, also referred to as auditing, is to verify that all relevant laws and policies are adhered to, that environmental management tools are used effectively, and to identify and correct environmental issues (DWAF, 2004:1). The success of an EIA depends on the adaptability of the follow-up (Marshall *et al.*, 2005:179). Additionally, monitoring must be conducted against the preferred aims and objectives as per the Environmental Authorisation (EA) “while enforcement should be triggered in response to non-achievement of set targets and conditions” (DEAT, 2014:40). The process of monitoring can include the following main aspects:

- *Baseline measuring*: This is a determination of the level and status of the environmental parameters before the beginning of a project;
- *Impact (or performance) monitoring*: This is a continuous process throughout the project’s lifecycle. It includes corrective measures to reduce negative impacts; and
- *Compliance monitoring*: This involves remedial measures in the event of non-compliance to ensure that prescribed mitigation measures have the desired effects (Lochner, 2005:18).

Environmental inspection is referred to as the use of EIA follow-up mechanisms such as checklists and questionnaires to understand how environmental measures can be implemented to improve systems (DEA, 2014:10). However, prior to conducting an environmental audit, consensus is necessary regarding what should be monitored and audited. This alleviates the negative perception that audits are aimed at detecting faults, but can instead be seen positively as a process of learning from experience (DEA, 2004:10). Moreover, since audits can either be conducted by external or internal parties, or both, there might be a need for specialists to conduct audits, such as environmental control officers (ECOs) (DEA, 2014:10).

2.4 The roles and responsibilities of the ECO

An ECO is “an independent, competent person or body in a position to influence people's behaviour during the construction phase of a project; with selected environmental monitoring instruments; in order to assure and at times to ensure, record and communicate compliance to applicable environmental conditions and performance specifications” (Wessels *et al.*, 2015:182). Most countries procure the services of ECOs based on the availability of resources (Weaver *et al.*, 2008:96). For example, in Singapore, people with particular skills, expertise and academic qualifications in this field may be consulted as ECOs, even prior to being registered as fully qualified. Furthermore, according to Wessels (2015:iii), there are conflicting opinions on the role, independence and value of ECOs because of roles, frequent interaction with persons responsible for delivering sustainability obligation, and association with third parties being unclear. In principle, it is said that “by defining the role of ECOs, identifying the factors that influence verifier independence and appraising their value, will contribute to understanding the worth of ECOs” (Wessels, 2015:3).

Hulett and Diab (2002:298) state that insufficient or even lack of EIA follow-up is a world-wide concern, because a few countries conform to the conditions of EA once issued. However, in Zimbabwe, for example, according to Gwimbi and Nhamo (2016:561), EIA follow-up was made obligatory in its 2003 Environmental Management Act. If government's regulations are not supervised, then it is not easy for developers to adhere to the rules and regulations stipulated. Likewise, should monitoring not be thorough, it can lead to a negative impact on projects. This will defeat the purpose of this process, which is to reduce the negative impacts of development projects. It is important for all parties involved with the project to commit and agree on how to undertake EIA follow-up, and to make sure that they make accountability a priority in whatever they do. However, when an ECO is involved, it can be beneficial and add value by fulfilling the role in a positive way. For example through monitoring as required by the EA, negative impacts can either be prevented, reduced or even detected at an earlier stage.

Since it is most effective for an ECO to be involved for the entire life-cycle of a proposed project, the ECO should have appropriate training and experience in executing the duties of managing the environment. However, these qualifications are not regulated in most countries, including in South Africa (Lochner, 2005:29–30). One of the major roles and

responsibilities of an ECO is to communicate and disseminate the necessary information to the project manager regarding all the environmental issues relating to the development project. For this reason, the developer is answerable to the ECO or the project manager, as stipulated by the contract. Lochner (2005:29–30) further elaborates that the responsibilities bestowed on an ECO during the project development include, amongst others:

- Putting together an environmental monitoring plan in order to ascertain that the mechanisms that are in place for managing the environment are practised and used for their intended purpose;
- Ensuring that the reports that are prepared and used by contractors for regular site inspections are certified; and
- Conducting regular audits to ensure that the coordination of executing the EMP is done in a successful way (Lochner 2005:29–30).

Rigorous and regular monitoring of tourism operators is required, and feedback needs to be provided to them regularly (Spenceley & Casimiro, 2012:62). Monitoring should take place against the desired targets and stipulated conditions, while enforcement should be triggered in response to non-achievement of set targets and conditions (DEAT, 2014:40). It is crucial that the ECOs need to be independent for the results to be credible. In the KNP it is important for the ECO to include the following in the audit report in line with the Operation Manual Plans and the results of the audit to reflect, among others:

- The general condition of the roads and the implementation of road maintenance and construction, as defined in the roads specification document.
- The availability of updated concession procedures, as required (after-hours travelling procedure, weapon control procedure, and off-road driving procedure).
- The general condition of waste management (solid and liquid).
- The general condition of generators and diesel tanks.
- The following records must be included:
 - Bed occupancy (average monthly and peak) and staff members residing on site (average and peak);
 - Water consumption on average;
 - Off-road driving incidents and detail;

- Permits of vehicles, staff and rangers issued;
- Incident reports;
- Procedures;
- Water and sewerage quality reports; and
- Legal permits (KNP, 2002:22).

When a concession is built in a national park and then run as a tourism business, there are stringent rules relating to operating this business after a particular area is allocated for individual concessions (KNP, 2002:9). In particular, they must abide by the KNP Code of Conduct, which, for example, prohibits them from off-road driving in a sensitive area. An EIA is a binding requirement as per the contract between SANParks and the concessions. As Gündling *et al.*, (2000:12) emphasises, as a matter of law, management measures should be strong as well as being complied with. In relation to responsible tourism in the KNP, this observation applied to how EIA follow-up was done by the ECO to ensure that monitoring and compliance was adhered to as per the ROD.

Similarly, Wessels and Morrison-Saunders (2012) indicate that not much can be done by the ECOs unless they are given certain mandatory responsibilities when monitoring and evaluating for compliance, for example as dictated by the EA or doing EMPs, over and above what has been stipulated by the contract. This notion was adopted by SANParks. The operations manual clearly states that “the concessionaire will face a schedule of monetary penalties for breaches of environmental, social or financial terms of the contract” (KNP, 2002:15).

2.5 Factors influencing the independence of EIA follow-up ECOs

The International Association for Impact Assessment (IAIA) stated that the credibility of an EIA depends on its level of proficiency, thoroughness, impartiality and neutrality (IAIA, 1999). What was further discussed at the IAIA workshop was that “there is a prevailing recognition of the importance of, and the need for, some form of follow-up to EIA activities” (Arts *et al.*, 2001:177). This EIA follow-up process enables an EIA to be scrutinised by an ECO, should there be some criticism. The ECO should adhere to the basic principles of the EIA process (IAIA, 1999) for the EIA follow-up to be credible. This means that the EIA

follow-up process should be carried out with professionalism, rigour, fairness, objectivity, impartiality and balance, and be subject to independent checks and verification (DEAT, 2014:46).

Furthermore, the unprofessionalism displayed by certain environmental practitioners causes some frustration, because such behaviour impacts the profession negatively by causing uncertainty (DEAT, 2014:46). Professionalism implies, amongst others, proper training, technical capabilities, relevant experience, impartiality, objectivity (in terms of know-how), impartiality (when it comes to making decisions), and moral behaviour (DEAT, 2014:46). In an evaluation of the South African National Environmental Impact Assessment and Management Strategy, it was emphasised that professionals had to ensure that compliance and enforcement were carried out in an independent manner (DEA, 2014:46). For this reason, it is necessary to identify the factors that influence the independence of EIA follow-up verifiers.

A study was conducted on ECOs as EIA follow-up verifiers in South Africa, during which concerns were raised about their independence (Wessels & Morrison-Saunders, 2012). Currently, ECOs engage with developers, the state and other parties when projects are being developed (Wessels & Morrison-Saunders, 2012). Wessels (2013) determined that financial, commercial, personal and professional factors were affecting verifiers' independence. Furthermore, according to the DEA (2011b; cited by Wessels, 2013:169), there are diverging views about the extent of the independence of verifiers, which compromises efforts to address these concerns. A development might be adversely affected by a lack of independence in the verification of the EIA follow-up.

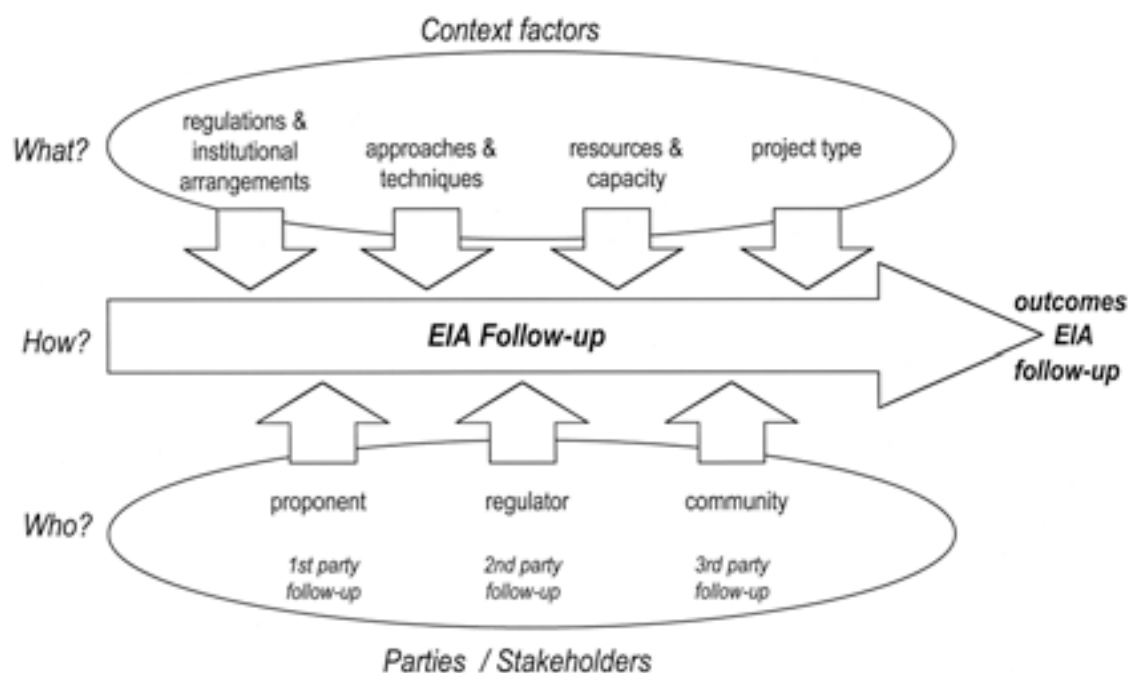


Figure 2-2: Contextual factors and parties relevant for successful EIA follow-up (Source: Morrison-Saunders *et al.*, 2003:45).

The level of collaboration between the proponent, regulator, locals and the ECOs is demonstrated in Figure 2-2. It highlights that EIA follow-up begins with the first party, who is the developer, and is based on the conditions of approval of the EA. Another follow-up is conducted by the regulator, who is the relevant public authority, and ends with the independent verifier, who is the ECO. The monitoring process in the EIA follow-up requires effective communication between these three parties. The independence of the ECO facilitates objectivity in the decision-making.

Wessels *et al.*, (2012:182) highlight that one of the problems of utilising the services of an ECO in South Africa is their tendency to overlook the interconnectedness of the three pillars of sustainable development, that is, the social, economic and environmental considerations of development projects. Consequently, the local communities are often negatively affected by project developments.

Certain factors determine the performance and independence of ECOs (Wessels, 2013), such as financial benefits and the relationships between ECOs and concessions, and how concessions fulfil their managerial roles. SANParks has indicated that the persons appointed as ECOs should perform their responsibilities in a neutral manner, irrespective of their remuneration from the concession (KNP, 2002:21). This means that ECOs are

inherently independent. Although ECOs perform their duties outside of SANParks control, they are mandated to involve and notify SANParks when decisions are made about the concessions, such as those related to adhering to the conditions of the record of decision when doing EIA follow-up. This is accounted for in the EIA guidelines and definitions in accordance with SANParks' standards (KNP, 2002:21).

For responsible tourism, the socio-cultural elements of project developments should be enhanced rather than be undermined. Therefore, to promote responsible tourism, Wessels *et al.*, (2015:182), suggest that ECOs should collaborate with experts from other sectors (such as social impact assessment and heritage impact assessment practitioners to name just a few) rather than working in isolation. In order to highlight the significance of including differing specialists in promoting responsible tourism, the government publicised laws such as the Biodiversity Act (Act No. 10 of 2004), amongst other applicable national and provincial acts and laws (KNP, 2002:9). Considering that most of the parks under SANParks are rich in biodiversity, the ECOs should not only be accountable for the tasks that impact on the biophysical environment during the EIA process. It is with this in mind that the role of ECOs in lodge concessions is considered in this study.

2.6 Conclusion

The aim of this chapter was to review literature on the role that independent verifiers play in checking for compliance during monitoring and evaluation in order to answer research question one (1). Literature indicates that EIA follow-up should be beneficial in addressing the negative impacts of development projects. However, the ECOs serve an important role in ensuring that the conditions of EIAs are adhered to, including in the tourism industry, as in the case of the KNP, where they monitor concessions. Another important function of the ECOs is to ensure that information such as what is entailed in an EMP is shared with key stakeholders in managing projects throughout their life-cycle so as to prevent, reduce and manage environmental impacts in promoting both sustainable and responsible tourism.

However, it is important for ECOs to be independent when making decisions in a neutral manner, the factors that influence the independence of ECOs were emphasized since

they need to be professional. In promoting responsible tourism, ECOs were given the mandate for example by SANParks to conduct bi-annual environmental audits as stipulated by the ROD issued by the DEA; hence the value of EIA follow-up was key so as to ensure that the EIA process becomes a valuable process and not a paper chase. This is in line with responsible tourism in the sense that natural resources such as water are preserved. The results of the bi-annual audits are then shared with concessions, SANParks and the DEA, but are also considered to be public documents. For example, each concession has a monthly water allocation, which is monitored, and the reports are submitted to the ECO to check for compliance. However, the literature reveals that the absence of EIA follow-up seems to be a worldwide challenge, compromising the effectiveness of the EIA as a tool or instrument for safeguarding sustainable development. Government also needs to realise that not only are ECOs, as independent verifiers, valuable to industries such as tourism, but that it should perhaps make it compulsory for ECOs to be involved in EIA follow-ups, since it is currently optional in South Africa to procure the services of independent verifiers to conduct EIA follow-ups. It was also recommended by Wessels *et al.*, (2015:188) “that developers utilize independent verifiers more creatively in pre-construction preparation, effective feedback of knowledge into the assessment of new projects, and performance evaluation”.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

As noted in the previous chapter, according to the reviewed literature, ECOs as independent verifiers play a specific role in ensuring that responsible tourism is promoted. They do so by ensuring that EIA follow-up is done by checking environmental compliance, monitoring, and enforcement. In order to better understand the role and magnitude of EIA follow-up through independent verifiers in responsible tourism, the aim of this study was to determine what value they added to responsible tourism projects in the KNP. As a way of appraising the value of ECOs, the four main components of EIA follow-up namely: monitoring, evaluation, management and communication as discussed in Chapter 2, were the cornerstone on how the research design and methodology will be discussed. Firstly, the research design and approach are explained. This is followed by a detailed description of the qualitative research methods employed in this study to determine the value of the ECOs in the EIA follow-ups conducted in tourism concessions in the KNP. Then the sampling techniques that were utilised are described, the final sample, and ethical considerations. Finally, the description of the methods and procedures used when analysing the data will also be included. The respondents recruited during the sampling process were all located within these concessions, which should have prevented external biases.

3.2 Research Design and Approach

When researching, a plan needs to be in place which serves as a sketch to be followed when collecting information for the study (Leedy, 1997:195). The research design “holds all of the elements in a research project together. In short, it is a plan of the proposed research work” (Akhtar, 2016:68). A research design is defined as “a framework of methods and techniques chosen by a researcher to combine various components of research in a reasonably logical manner so that the research problem is efficiently handled” (Bhat, 2019). It is a plan to answer a research question using particular or specific methods. The research methodology is the strategy used to implement the plan and collect data.

3.2.1 A Qualitative Approach

This study utilised a qualitative research approach to establish the value of ECOs in EIA follow-ups that are conducted in the KNP. According to Creswell (2003:20), a qualitative research approach is one in which the researcher often “makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences, meanings socially and historically constructed with the intent of developing a theory or pattern)”. Teherani *et al.*, (2015:669) supports this statement and confirms that the investigator is the major data collection instrument. In this study, an exploratory research design was adopted. Akhtar (2016:73) states that an exploratory research design is one in which minimal research or studies can be used as a means of reference for information and requires frequent periods of time conducting field work and observations (Stebbins, 2014). This approach was chosen because minimal information existed of the involvement of ECOs on EIA follow-up for KNP concessions in the context of responsible tourism. Data was gathered by means of questionnaires, which were filled in by the respondents during interviews with the respondents and audits.

Firstly, to answer the first research objective, i.e. understanding the role of EIA follow-up and ECOs in relation to responsible tourism in the KNP (Research Question 1), a qualitative method was used. A literature review was conducted in Chapter 2 to gain insight into the role of ECOs in EIA follow-up. Furthermore, in order to evaluate the perceptions of the eleven (11) respondents interviews were conducted by means of a questionnaire which will be discussed later in this chapter. Secondly, to answer the second research objective on how and to what extent do independent ECOs add value to tourism development projects in the KNP, the same questionnaire as was used as for the first research objective. Table 3-1 below highlights the links between the research objectives (questions) and the methods of data collection as well as stating why these methods were used.

Table 3-1: The link between research objectives and methods (Own contribution).

Research objective	Method	Justification
RO 1: To understand the role of EIA follow-up and independent verifiers (e.g. ECOs) in responsible tourism development.	Literature review Questionnaire Interviews	Literature reviews was used looking at previous researches conducted to gain more knowledge because of the scientific information. The methods used were used in order to get first-hand information from the respondents based on their experience. Documents were used to confirm the information from the respondents. For example ECOs were responsible for monitoring and compliance.
RO 2: To understand how and to what extent independent ECOs add value to tourism development projects in the KNP.	Questionnaire Interviews	Based on the role the ECOs played in the first objective, then it was determined to determine the value of ECOs. As outlined by (Arts <i>et al.</i> , 2001:176) “auditing is a periodic activity that involves comparing monitoring observations with a set of criteria (such as standards, predictions or expectations), and reporting the results”.

3.3 Sampling

Sampling in qualitative research is referred to as a way of choosing particular data sources from which information is collected (Gentles *et al.*, 2015:1775). This study made use of a purposive sampling technique, also known as judgement sampling. This sampling technique was utilised due to the fact that the respondents possessed qualities of interest to the research, such as an understanding of ECO involvement and concession management (Tongco, 2007:147). This sampling type is a non-probability sampling technique, in which the researcher selects data units to be sampled based on pre-existing knowledge and professional judgement. This sampling method is most effective when there is a limited number of individuals or units that hold data of interest.

Data was collected from members of four of the seven concessions in the KNP, namely Imbali Safari Lodge, Lion Sands Tinga, Lukimbi Safari Lodge and Rhino Walking Safaris. These four (4) were chosen due to their individualistic characteristics (see Annexure A). Again, these concessions had four (4) different ECOs monitoring the individual concessions, and it implied that respondents from each concession were not referring to

the same ECOs. For a well-represented sample, the respondents were selected from both SANParks personnel and staff of the four (4) concessions mentioned above. It was crucial to get input from both the KNP and concession personnel to create a balance of information within the sample represented in the study. They were chosen on the basis of their experience and involvement in the day-to-day operations of the KNP concessions. Additionally, these respondents were among the personnel involved with the EIA follow-up process. They usually also form part of the audit team when ECOs conduct their audits per concession every six (6) months. The respondents were selected for the purpose of outlining their first-hand encounters with the ECOs while monitoring compliance and in guiding the ECOs during EIA follow-up at the specified concessions. This selection criterion was in accord with Streubert and Carpenter's (2011:28) notion of the researcher entering a setting and choosing relevant respondents based on specific conditions.

It was easy for the researcher to access respondents due to her oversight position at the KNP. The respondents were firstly contacted telephonically to make them aware that the researcher has been granted permission by SANParks to conduct the research. Thereafter, an explanation of what the research was about was given to the respondents. Then, an email followed inviting them to take part in the research with the questionnaire attached. Some of the respondents completed the questionnaire, and the researcher then contacted them telephonically to further conduct the telephonic interviews. However, there were others who then opted to meet 'face to face' with the researcher when completing the questionnaire.

3.3.1 The final sample

Initially, twelve (12) respondents were invited to participate, but only eleven (11) respondents agreed to be interviewed, making this the final sample. The respondents included section rangers, strategic conservation planner and environmental manager who had an informed perspective of the operations at the concessions. The concession staff members were represented by the general managers (GMs) of the four concession, a head ranger from Imbali Safari Lodge and an ecologist from Lion Sands Tinga (the only ecologist from any of the four concessions). The ecologist at Lion Sands Tinga and the head ranger at Imbali were chosen because they were involved on the day to day

environmental aspect of the two concessions including during the bi-annual audits, and their input was considered to be of value to the researcher.

This mix was intended to yield differing perspectives based on expertise. The strategic conservation planner and environmental manager, who is responsible for the overall environmental management of all four concessions, was in a position to provide an unbiased perspective across all concessions. Each concession is isolated and therefore has its own unique concerns, which might differ across concessions. Interviewing the strategic conservation planner and environmental manager enabled the researcher to gain an overall impression of how ECOs monitor the concessions for environmental compliance.

Table 3-2 below indicates the four (4) concession stands, the concession areas and the respondents from each concession who participated in this study.

Table 3-2: Descriptions of KNP concession lodges and participants (Own contribution).

Concession Lodge	Description of the concession area	Respondents
Lion Sands Tinga	This concession is located near the Sand River in the southern region of the KNP. This concession area is approximately 4,427.5 ha. The carrying capacity is 48 beds. A reedbed serves as a means of sewage treatment. A new system was installed to replace the reedbed that was not functioning well.	GM; Section ranger; Ecologist; Strategic Conservation Planner and Environmental Manager.
Lukimbi Safari Lodge	This concession is positioned in the easily accessible southern portion of the KNP, covering 14,170.9 ha. The ROD was issued in 2001. There is also a reedbed for sewage treatment, which was designed for a higher number of people than the carrying capacity. The lodge accommodates a total of 32 beds, excluding staff.	GM; Section ranger; Strategic Conservation Planner and Environmental Manager.
Imbali Safari Lodge	Imbali Safari Lodge is in a central point within the 9,548.8 ha concession area. The contract was awarded in 2000, and has two other camps, namely Hoyo-Hoyo Traditional Camp and Hamiltons Tented Camp. This concession has a carrying capacity of 48 beds, including staff. There is also a reedbed for sewage treatment. The roads are soil and gravel.	GM; Section ranger; Head ranger; Strategic Conservation Planner and Environmental Manager.

Rhino Walking Safaris	This is one of the concessions situated in the southern part of the KNP. At Rhino Walking Safaris, guests are restricted to walks only because the concession area falls in a primitive area, according to the zoning plan. There is also a fly camp and a sleep-out camp with a total carrying capacity of 24.	GM; Section ranger; Strategic Conservation Planner and Environmental Manager.
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3.4 Data collection

The research method used was one-on-one interviews, in which the participants were asked to respond to a structured questionnaire. Interviews were conducted face-to face; however telephonic interviews were conducted with respondents who were unavailable for face-to-face interactions. The interviews were organized in accordance with their schedules. The interviews lasted for 30 minutes on different days depending on availability of the respondents. Notes were taken since all the interviews were conducted in English. Respondents who emailed the completed questionnaire were also contacted telephonically to clarify their answers and views, and the researcher then included more information to clarify their answers. The information was later incorporated in the respondents' questionnaire.

3.4.1 Description of the questionnaire

In its simplest form, a questionnaire is no more than a list of questions to which answers are being sought (Akbayrak, 2000:1). The questions were informed by data collected during the literature review. These questions were based on literature from a previous study which was conducted focusing on the construction industry, with the aim of defining the role of ECOs in compliance monitoring and enforcement (Wessels & Morrison-Saunders, 2012:1). The first part of the questionnaire was dedicated to determining the type of relationship between the respondents and the ECOs, as a way of establishing the independence of the latter, amongst others, and was included under the demography of the respondents. Again, the relevance of this information was because the research was based on the independence of the ECOs in making decisions during environmental audits at the concessions, thus determine its impact if any. A question about the respondents'

level of education was included in the questionnaire, since this could have had an influence on how they responded when interviewed.

The questionnaire comprised of ten (10) questions aimed at obtaining information about the role and the involvement of ECOs as independent verifiers throughout the lifecycle of the concessions' development in the KNP (Table 3-3 below) (also see Annexure B). Bird (2009) explains that the researcher needs to make a decision on the question format, since this will determine whether to use open questions, closed questions, or both. In this case, a mixture of both open- and closed-ended questions was used to take full advantage of the available question styles. Open-ended questions were used because the respondents had to provide detailed explanations of why they gave certain answers to the questions asked. The main advantage of using open-ended questions is that they enable respondents to provide additional information such as emotions, attitudes and understanding of the subject.

Another advantage of open questions is that it "allow time and space for free-form responses which invite participants to share their understandings" (Bird, 2009). Some of the questions were closed-ended, that is, where a "yes" or "no" was required, to facilitate an easy analysis of the responses and also provided a change of pace during the interviews. The respondents were asked to indicate their answers by choosing a rating on a Likert scale of statements. According to Jamieson (2004:1212), a Likert Scale is generally used when a researcher wants to assess people's opinions when conducting a study. This makes the responses easily quantifiable and subject to elementary analysis (Bertram, 2007). For example, Question 2 of the questionnaire had a scale of 'Agree/ Partly agree' to Disagree/ Strongly Disagree and then a choice of 'Unable to Judge'. Below in Table 3-3 is the questionnaire used as an instrument when collecting data from the respondents. However, the results will be presented in Chapter 4 based on analysed data.

Table 3-3: Questionnaire questions (Source: Adapted from Wessels (2015)).

Questionnaire Questions	
Name (optional):	
Position:	
Qualification:	
Relation to/ with ECO	
Date of interview:	
1.	Is this the first project that you have been involved in in which an ECO was required or part of the project team? If so, in your opinion, was there any need for an ECO?
2.	What do you think is the value of an ECO? (for this project)? In my opinion an ECO adds value to: a) Ensuring the project is completed as per project schedule? <i>Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.</i> b) Ensuring that the risks of the project are managed by avoiding environmental fines and liabilities? <i>Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.</i> c) Ensuring that the community surrounding the project is protected/ helped/ informed? <i>Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.</i> d) Ensuring that the environment is protected? <i>Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.</i> e) No value? <i>Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.</i>
3.	What do you think an ECO should be qualified/trained or experienced in?
4	What do you think the personal attributes of an ECO should be?
5	In your opinion, was the ECO able to make meaningful and workable recommendations, as required?
6.	Would you recommend that an ECO should be part of the professional team in a project?
7.	What authority does the ECO have?
8.	Do you report to the ECO?
9.	What information do you disclose/ report/ give to the ECO?
10	In your opinion, how independent is the ECO?

3.5 Ethical considerations

The researcher did consider the ethics part when conducting the research. This study adhered to the North-West University (NWU) requirements for ethics approval. The Research Ethics committee of the Faculty of Natural and Agricultural Sciences has accepted this study and ethics approval was granted. The respondent's participation in

the research was voluntary. This is one of the reasons why a copy of the questionnaire was first emailed to the respondents even before the commencement of interviews, in order for them to understand what the research would entail, including the questions to be asked. At a later stage, respondents were contacted individually, and the questionnaire contained information giving them an option of them remaining anonymous. Furthermore, nothing in a form of compensation or reward was promised to the respondents who agreed to partake in the research.

3.6 Data analysis

Kawulich (2004:96) asserts that there are various factors that should be taken into consideration before data is analysed, such as what the study is about, the questions asked, what method was used. All these determine the technique to be used for analysing data. In Chapter 4 the answers of the respondents will be described and represented in a number of figures and tables, followed by a thematic data analysis process. It was important for the researcher to try and identify themes and patterns after acquainting herself with the information provided by the respondents in answering the ten (10) questions in the questionnaire in Table 3-3. Again, Table 3-4 below provides a summary of the themes and subthemes to be discussed in the next chapter. What has been included is how the two (2) research questions are relevant to the themes. For the purpose of this paper, the questionnaire was to address the role of ECOs in responsible tourism and how this will then be used to determine whether their role did add value or not in KNP.

Table 3-4: Discussion themes, subthemes and contributing questions (Source: Own contribution).

Themes	Subthemes	Contributing Questionnaire questions	Contributing Research objective
Theme 1: Value	Advisory role and support; Auditing and Reporting role;	Questions 1, 2, 8 and 9.	RO 1 and 2.

	Ensuring Compliance, Monitoring and Adherence to Policy and Standards.		
Theme 2: Skills and training	Preserving and Conserving Environment; Coordination, Policy and Procedural knowledge.	Questions 3, 6 and 7.	RO 1 and 2.
Theme 3: Attributes	Attributes: Decision Making, Impartiality and independence;	Questions 3, 4, 5 and 10.	RO 1.

As indicated by Nowell *et al.*, (2017:1), thematic analysis is considered to be an appropriate qualitative method, although not much has been documented as a means of showing scholars on how to do a detailed thematic analysis. According to Braun and Clarke (2006:9), thematic analysis can be defined as a technique which can be used to categorise, examine and record patterns or themes within the data. When the respondents answered the questions on the ECOs, similar patterns and themes were found, which were depicted during the analysis of data. This was in accord with Braun and Clarke's (2006:10) assertion that "a theme captures something important about the data in relation to the research question, and represents some level of patterned responses or meaning within the data set".

What is key in thematic analysis is that when coding, it is important to determine what makes a pattern or theme, or what makes the theme in terms of the size (Braun & Clarke, 2006:10). This researcher followed the same process in compiling the information that made up the thematic map using an ATLAS.ti information management system. In conclusion, it is crucial when utilising this method to thoroughly examine a dataset – whether it is a number of interviews or even a series of texts – with the aim of capturing recurring patterns of meaning (Braun & Clarke, 2006:15). Similarly, the thematic method of analysing data was applied in this study, where coding was done under the themes, that is, attributes, skills and training, as well as determining the value of ECOs in responsible tourism in KNP, using concessions which offer accommodation to guests. Thus, the thematic map was based on the coding under Annexure D, namely the

Groundedness of a Code (number of quotations coded by a code) as well as a way to display the interrelatedness of those themes.

3.7 Conclusion

In order to answer the first research question, a literature review was conducted to discuss the role of independent verifiers in responsible tourism while doing their EIA follow-ups. Research question two was answered by means of a data analysis involving qualitative research and an activity breakdown analysis. In short, a qualitative research approach was adopted for this study. Data was gathered by means of a structured questionnaire, to which eleven (11) participants responded in the course of telephonic and face-to-face interviews. Again, literature review and documents were used as a way of collecting and verifying data. One of the limitations was that it took long for the respondents to take part in their research due to their involvement in KNP, especially the Section Rangers because of the challenges they face in doing their day to day responsibilities. Again, it was not easy drawing the line between the methods used in dealing with the research questions because the respondents were repeating their responses interchangeably. For example monitoring and compliance were mentioned very regularly.

Furthermore, quantitative data was obtained in the questionnaire by using closed ended questions in the form of a Likert scale as a way of providing information on the value of the ECO. The thematic analysis (using Atlas) lead to these three themes being identified and they emerged from the analysis). In analysis data, a thematic data analysis was done in order to get the results based on themes and subthemes. The chapter that will follow is Chapter 4, which will then discuss the results of the research. This will include an activity breakdown analysis of the results based on the responses received from the respondents during their interviews.

CHAPTER 4: RESULTS

4.1 Introduction

The objectives of this study were twofold: the first was to understand the role of EIA follow-up and independent verifiers in responsible tourism development, whereas the second research objective was to appraise how and to what extent independent ECOs add value to tourism development projects in the KNP. The purpose of the empirical research was to answer the question related to the second objective. This section deals with the evaluation of the value of verifiers, the research results and analysis. This section begins with an explanation of the results of the interviews conducted using the questionnaire.

4.2 Discussion of the results

The results obtained from the questionnaire demonstrated in Chapter 3 will be discussed in the sections to follow. The raw data of the findings is included in Annexure C at the end of the dissertation.

4.2.1 Results on the background of the respondents

The results and their analysis are presented in two sections, namely the demographic details of the respondents in, and the presentation and analysis of questions related to the role of ECOs including their attributes, skills and value needed. The participants' education levels influence their contributions when responding to questions. The three themes were identified based on the keywords only when the researcher was analysing data from the respondents. A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set (Braun & Clarke, 2006:10). Initially, there were no specific themes that were included in the questionnaire but only specific questions, but how the respondents answered, then created theme and subthemes as indicated according to the thematic data analysis as indicated in Section 3.6 of Chapter 3. The discussion to follow in Figure 4-1 provides results about the concessions' respondents as well as the KNP respondents.

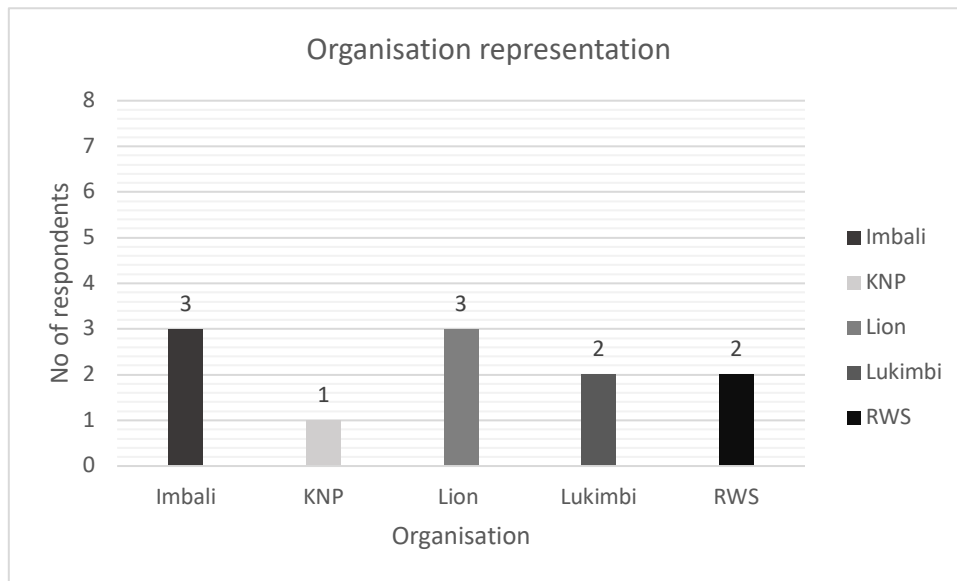


Figure 4-1: Bar graph depicting the representation of respondents.

Figure 4-1 above provides an indication of how the concessions and the KNP were represented when answering the questionnaire. The highest representation was from Imbali Safari Lodge and Lion Sands Tinga, since they included the head ranger and the ecologist, over and above the GMs and the section rangers. However, Rhino Walking Safaris (RWS) and Lukimbi had only the GMs, and section rangers who were deployed by the KNP to monitor individual concessions, because this process was mandatory. As stipulated in the KNP operations manual (KNP, 2002:20), individual section rangers deployed by the KNP to foresee the operations of the relevant concessions play a role of regularly inspecting the concession to ensure that they comply, and then submit their report to the environmental manager and the ECO. They also assist the ECO with bi-annual formal audits. Therefore, they could not respond in general terms, but only with respect to the concessions with which they worked.

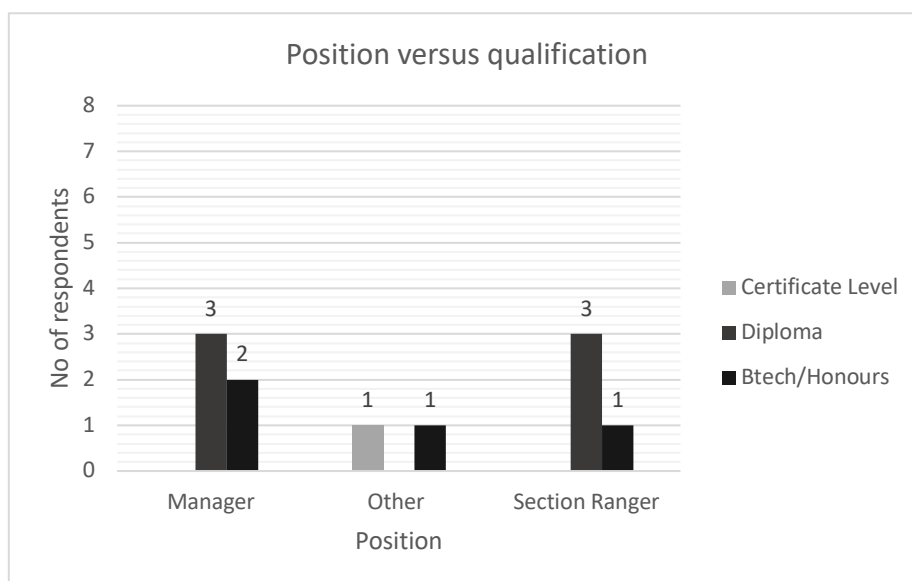


Figure 4-2: Bar graph showing the qualification/education level of the respondents according to their role/staff title.

Based on the data collected on the qualifications of the respondents, Figure 4-2 gives a clear picture of the respondents' backgrounds. Each respondent had a formal qualification, namely a certificate, diploma or degree. Of interest is that the concessions' GMs had formal qualifications in conservation, with 1 of them having either a Bachelor of Technology or an Honours in Conservation. Similarly, this applied to the Section Ranger responsible for Imbali and the KNP Strategic Conservation Planner and Environmental Manager who had had B-tech qualifications. This can contribute positively to promoting responsible tourism within a protected area because they have the necessary acquired knowledge and skill. Overall, all the respondents were well qualified.

4.2.2 Respondents' feedback on the role of ECOs

According to DEAT (2014:40), "monitoring should take place against the desired targets and stipulated conditions while enforcement should be triggered in response to non-achievement of set targets and conditions". It is important to highlight that the raw data of the response focusing on the role that ECOs played are included in Annexure C. This applies to Questions 1–10 of the questionnaire. In a research conducted in the

construction industry, there seems to be a link “between the role played by EIA follow-up verifiers, the value they are expected to add to environmental management, EIA, EIA follow-ups and the ethical considerations of being an independent functionary” (Wessels *et al.*, 2012:187). In Singapore, the ECO was responsible for ensuring that there is proper environmental control at the construction site (Singapore National Environment Agency, undated). In this research, respondents had to evaluate on how the ECOs do EIA follow-up in ensuring that the negative impacts are avoided in order to avoid fines from the regulator.

Earlier in Chapter 3 (Section 3.6) a summary of the themes to be discussed together with the input from the questions which contributed to the questionnaire questions to each theme was provided. This section will then discuss these together since they are linked. Some individual themes has subthemes, will also be discussed in Section 4.3 in detail.

4.2.2.1 Theme 1: Value of the ECO (Questions 1, 2, 8 and 9)

The main aim of the research, including the objectives were focused on determining whether the ECOs add value in responsible tourism in the KNP. Therefore, this theme is one of the most significant as a way of assessing whether both the aim and the objectives have been attained. Firstly, the responses to Question 1 in the questionnaire – Is this the first project that you’ve been involved with in which an ECO was required or participated; if so in your opinion was there any need for an ECO? – are represented below in Figure 4-3. Furthermore, this explains why especially Question 2 had subsections (a) – (e) questioning why the respondents thought the ECOs add value.

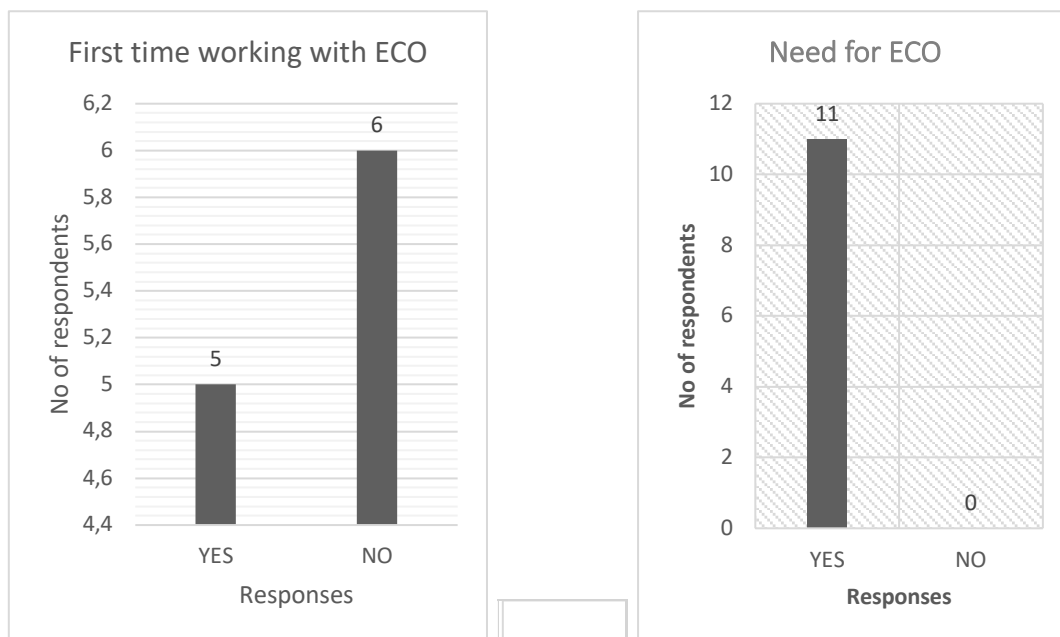


Figure 4-3: Bar graph depicting number of responses to the question about whether this was the first project that they have been involved with in which an ECO was required. Is there a need for ECOs.

A total of five (5) respondents stated that, “yes,” it was the first time, while six (6) of the respondents indicated that “no”, this was not the first time that they had been involved with a project in which the services of ECOs were involved. The majority of the respondents indicated that they had prior knowledge of how ECOs operated. The relevance of these findings is that six (6) of the respondents had previous knowledge of what the ECOs responsibilities were, thus they were able to reflect back and compare. This implied that they knew what they were talking about. Furthermore, all 11 respondents indicated that there is a need for ECOs as highlighted in the second Figure 4-3. For example, one of the respondents stated that:

“No, it is not the first time. We had an ECO when I worked at Lions Sands Tinga and Narina. I believe the ECO adds value and is necessary” (RP6). Similarly, another respondent added:

“No, it is not my first project. I was previously employed by the Department of Environmental Affairs as a criminal investigator investigating environmental crimes. I often had experience working with ECOs responsible for ensuring rectification and

rehabilitation following environmental damage and directives from the department. Therefore, my answer is yes; there is a need for an ECO to guide and offer expertise to the concessions in terms of environmental requirements and compliance with legislation” (RP1). Respondent 8 also agreed by stating: “Yes on both questions” (RP8).

The responses to Question 2 in Figure 4-4 below, namely: In your opinion/experience do you think the ECO adds no value to the project? This is the only question with subsections, relating to the value of ECOs.

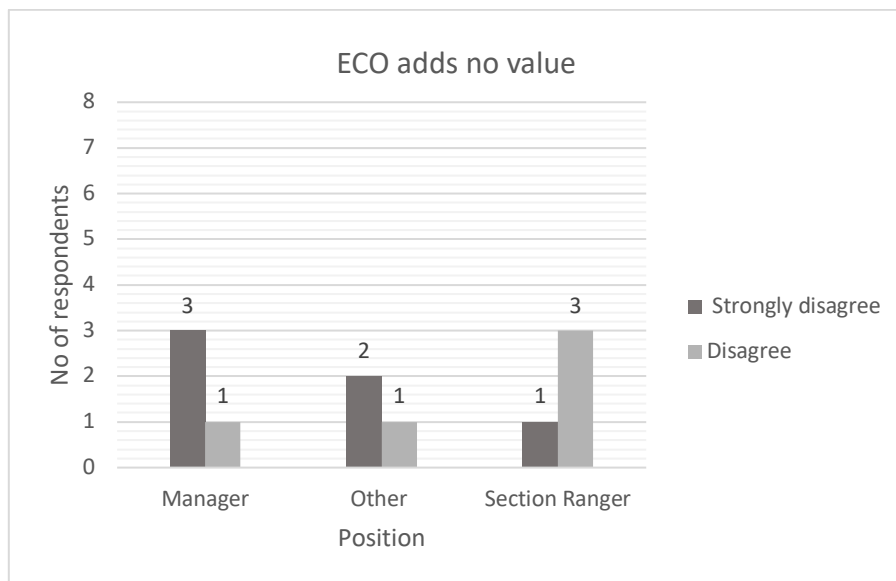


Figure 4-4: Bar graph depicting responses to the question of on your opinion/experience do you think the ECO adds no value to the project.

It was noted that some questions including Question 2 of the questionnaire were interpreted by the practitioners as having one of two meanings. According to the results in Figure 4-4, there was an overwhelming indication that the ECOs, as independent verifiers, played a vital role in internal capacity building, as well as in creating awareness when working and interacting with different stakeholders. As highlighted by the results of a study done by Morrison-Saunders (2007:3) indicated that “different approaches can be used in doing EIA follow-up, the main objective should be strengthen” the overall structure and process for EIA, contributing to the disciplines involved and improving EIA practice and systems. In response to Question 2, five (5) of the respondents disagreed that the ECO did not add any value, and six (6) of them strongly disagreed that the ECOs do not

add value. These results offer compelling evidence for ECOs to be involved in EIA follow-up since they did add value to the concession project in terms of ensuring responsible tourism in the KNP. What was of more interest was that no respondents agreed that the ECOs did not add value. This is an extremely important outcome, which supports the notion that ECOs do add value. All the respondents were of the opinion that the ECOs did add value to responsible tourism in the KNP. Respondent 8 also mentioned that:

“The ECO plays the role of firstly ensuring environmental legislation and ethics are observed and maintained. The ECO in this case, where a private organization operates within a National Park, also acts as a mediator between the private operator and SANParks, in as far as rules, regulations and the interpretation of the Environmental Management Act is concerned”.

The subsections to Question 2 are represented below in Figures 4-5 to 4-9.

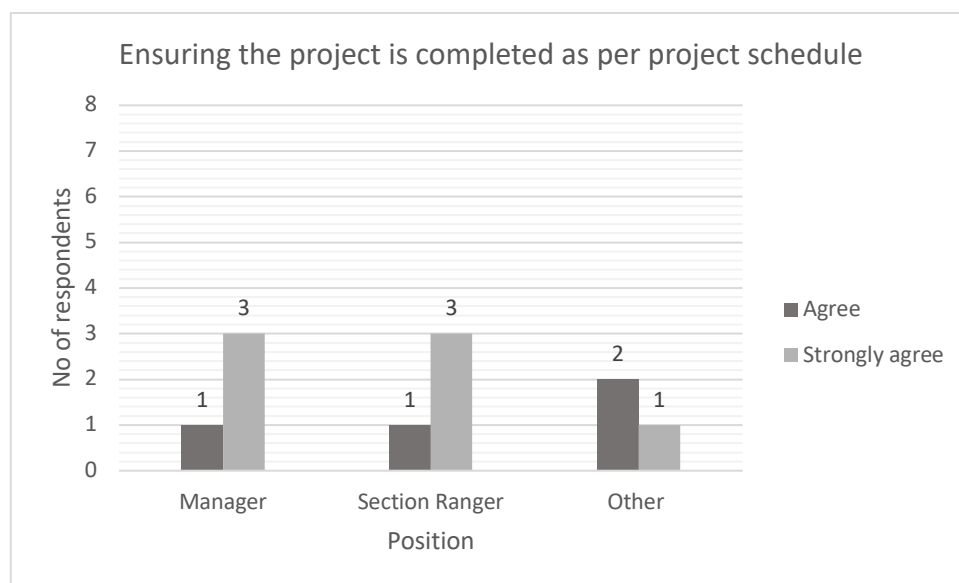


Figure 4-5: Bar graph depicting number of respondents to the question about the ECO helping to ensure that the project was completed as per project schedule.

As shown in Figure 4-5 above, one (1) Section Ranger and three (3) of the GMs agreed that the ECO had value in ensuring that the project was completed as per project schedule, whereas two (2) of the “other” category, represented by the Lion Sand Tinga Ecologist, head ranger and the KNP Strategic Conservation Planner and Environmental

Manager, agreed that the ECO had value in ensuring that the project was completed as per project schedule. Both of the three (3) Section Rangers' and three (3) of the GMs, and one (1) of the "other" respondents strongly agreed that the ECOs added value by ensuring that a project was completed as per the project schedule. It is important to highlight that, according to Figure 4-5, no respondent disagreed with the notion that the ECOs added value by ensuring that the project was completed as per project schedule. Especially that the Section Rangers were the ones monitoring the concessions as part of their main responsibilities on behalf of SANParks. Finally, although it is evident that ECOs are currently involved in the phases of construction projects, they may in some cases provide benefits to operational phases of such construction projects. There is a recommendation that in the future, this scenario be exploited (Wessels *et al.*, 2012:188). Then the question that followed is represented in Figure 4-6 below.

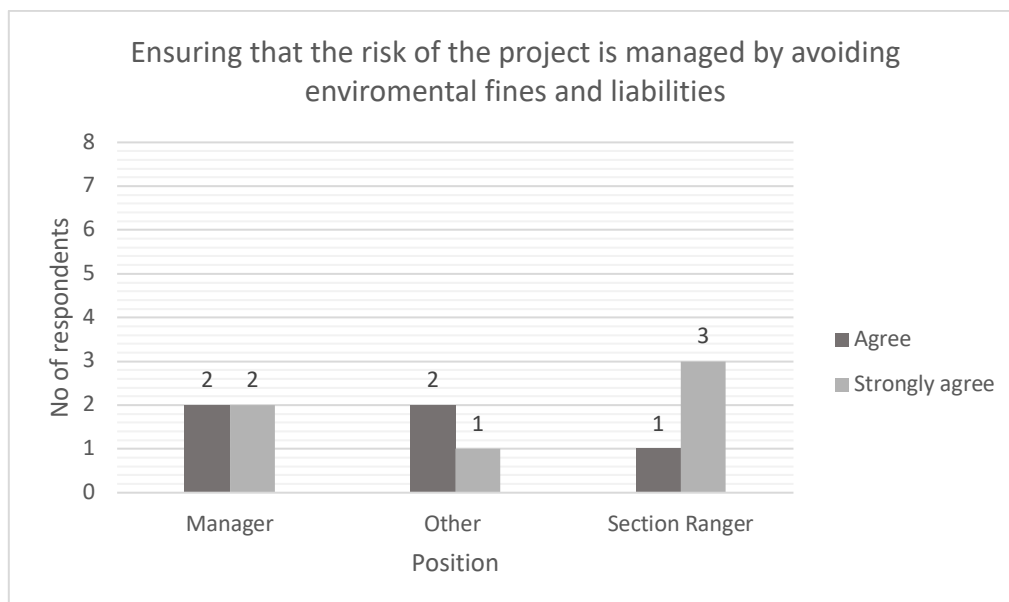


Figure 4-6: Bar graph depicting number of respondents to the question of whether the ECO ensured that the risks of the project were managed by avoiding environmental fines and liabilities.

It is of interest to note that, in Figure 4-6, no less than three (3) of the Section Rangers strongly agreed that ECOs ensured that the risks of the project were managed, enabling the concession managers to avoid environmental fines and liabilities. In the KNP, the section rangers are responsible for issuing fines and ensuring that corrective measures

are in place in case of non-compliance by concessions, their staff members and guests. Similarly, two (2) of the GMs agreed that the ECO ensured that the risks of the project were managed by avoiding environmental fines and liabilities, and similarly strongly agreed. It should be noted that none of the respondents disagreed with this question. This evidence strongly supports that protecting the environment is key since no fines and liabilities are encouraged; hence compliance is important. In addition, one of the respondents in the question about the authority that the ECO has in relation to the value add, stated that: “The ECO has to apply NEMA and all its facets of reporting transgressions, if not remedied as pertained to in the Act” (RP8). The latter supports the perception that ECOs are effective in ensuring that the risks of the project are managed, thus enabling them to avoid environmental fines and liabilities in the KNP. Furthermore, it was supported by Morrison-Saunders *et al.*, (2007:3) that “EIA follow-up actions or programs should cover not only the design and construction of a development, but also the operation and where relevant the decommissioning phase”.

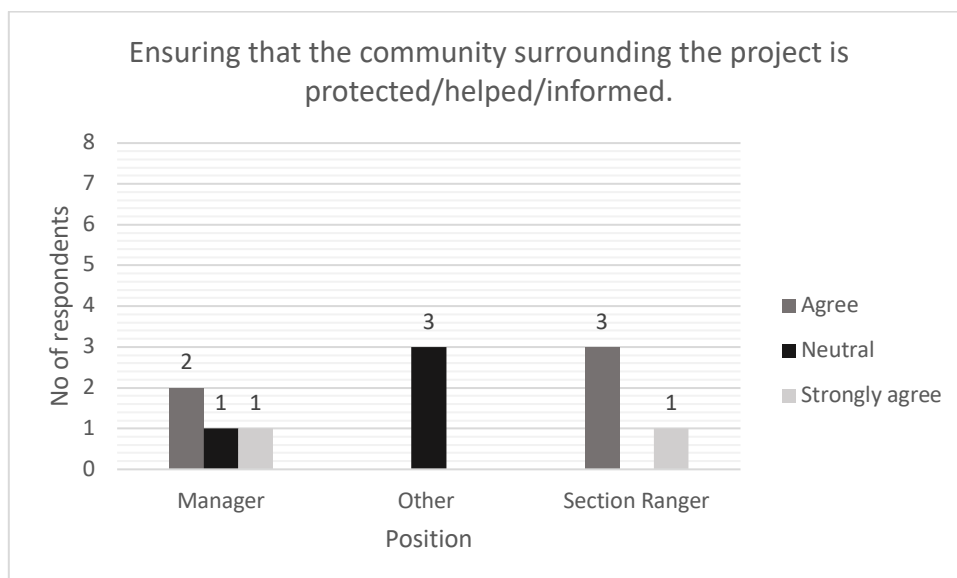


Figure 4-7: Bar graph depicting the responses to the question about ensuring that the community surrounding the project was protected/helped/informed.

As indicated in Figure 4-7 depicting the responses to the question about ensuring that the community surrounding the project was protected/ helped/ informed which less than half

of the respondents were neutral, because it was not part of the scope of the ECO to be involved with the locals directly according to the results. However, three (3) of the Section Rangers agreed that the ECO do add value in ensuring that the community surrounding the project was protected/ helped/ informed. Furthermore, one (1) of both General Managers and Section Rangers strongly agreed that the ECO did add value in answering this question; community surrounding the project was protected/ helped/ informed. This was due to the fact that whatever the ECOs are doing inside the KNP does have an influence indirectly on the communities, whether positively or negatively. For example, should the water test results show that there is contamination, then, this may affect communities outside the KNP negatively, including their environment.

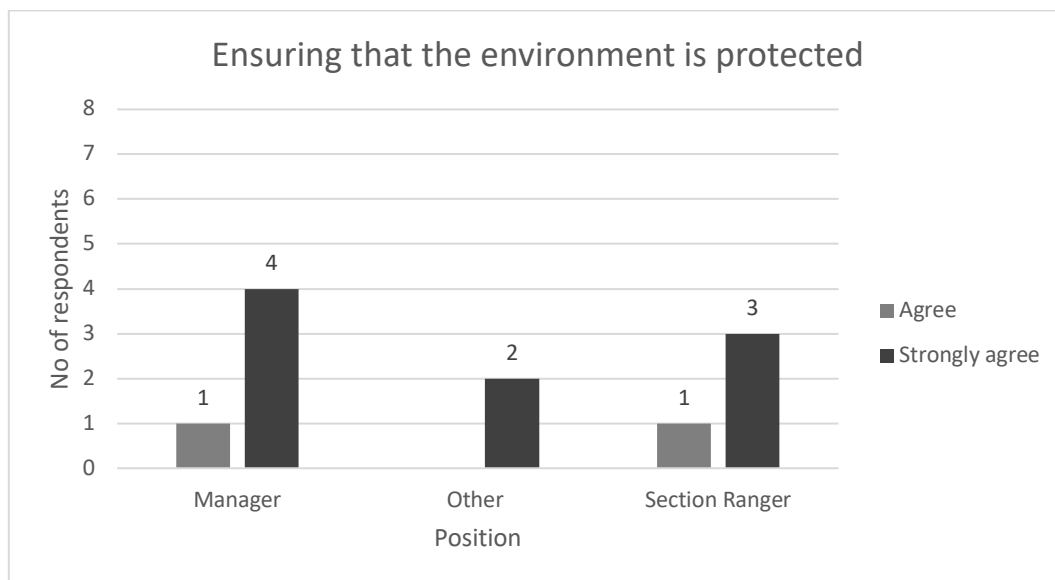


Figure 4-8: Bar graph depicting responses to the question about ensuring that the environment was protected.

Both the state and the public can give feedback on the importance of EIA follow-up based on its benefit (Morrison-Saunders *et al.*, 2007:1). As shown in Figure 4-8, it was indicated that two (2) of the respondents agreed that the ECOs ensured that the environment was protected during the entire project lifecycle of the concessions in the KNP. The most remarkable result to emerge from the data was that the respondents were in support of what the ECOs do in the KNP when it comes to responsible tourism. This was indicated when seven (7) of the respondents strongly agreed that the ECO ensured that the

environment was protected. Furthermore, two (2) of the respondents indicated the ECOs commitment to dealing with monitoring and compliance was in accord with EIA follow-up best practice.

Also included under Theme 1 is Question 8 - Do you report to the ECO? - as well as Question 9 - What information do you disclose/ report/ give to the ECO?. The two questions are inter-connected because they deal with whether the respondents report to the ECO, and what kind of information is reported to the ECO. The answers from some of the responses are indicated below:

“Definitely, yes. *The ECO* is excellent in his role and has added immense value to both concessions that he has been involved in the Kingfisherspruit section of KNP” (RP2).

“Yes, especially during an audit in case of both positive and negative findings, so as to make improvements” (RP7).

“Relevant environmental information contributing to best practice” (RP10).

“As the appointed independent ECO (as required by the ROD) the ECO has the authority to report any non-compliance to the DEA but does not have the authority to issue any administrative enforcement directive to the concessions” (RP1).

“All information that I believe they should be informed about, and I inform the concessionaire the same. Fortunately both Imbali and Ngala are very positive towards achieving compliance and I have never struggled, both are a pleasure to work with” (RP6).

Based on the results dealing with the value of ECOs, the next theme; ‘Skills and training of the ECOs’ follows, which arose from both concession and the KNP respondents’ responses.

4.2.2.2 Theme 2: Skills and training of the ECOs (Questions 3, 6 and 7)

The second theme dealt with the skills and training of ECOs in ensuring that their involvement in adding value is recognised. This was done as a way of answering the question on how the ECOs add value. In any project you need technical, human and sector knowledge; the ECO needs these skills, technical (dealing with legislation), human

(interacting with role players) and sector knowledge (understanding how the decisions he/she makes impact on the sector). Lochner (2005:28) also stated that the project proponent remains liable when projects are developed in making sure that EMPs are executed in such a way that the conditions of the ROD are adhered to. The ECOs therefore added value by applying these skills. For example, of ensuring that EIA follow-up is done in accordance with the ROD of the concessions, below are some of the responses from respondents in responding to Questions 3, 6 and 7 which when data was analysed highlighted that the ECOs need skills and training.

According to Question 3, the responses are as stated below: (What do you think should an ECO be qualified/ trained/ experienced in?).

“In my field of expertise I focus on the physical interactions between biotic and abiotic forces while ensuring that commercial operations are not negatively impacting this ecology. I am somewhat naïve to the legalities involved though, thus the ability to make use of an ECO who focusses on these aspects and highlights them in his/her assessment is of vital importance to me in ensuring that my mandate is met” (RP4).

“Yes. An ECO should have a formal qualification in the related fields of Natural Sciences/Management. Project Management would be an added advantage” (RP8).

According to Question 6, the some of the responses are as stated below: (Would you recommend that an ECO should be part of a professional team in a project?).

“Yes. Very much so, having the knowledge of the various legal acts makes the opinion of the ECO invaluable in the decision making process when deciding on the extent and possibility of various projects in conservation areas. Decision makers are sometimes dealing with many other factors such as budgets, needs of the business etc. and don’t always consider the conservation, legal and social impacts or opportunities which the ECO will be able to point out” (RP4).

According to Question 7, the responses are as stated below: (What authority does the ECO have?).

“I would most definitely suggest this in fact I have just registered for a Masters in Environmental management in order to have the ability to comment and take the role of

ECO in professional projects in my future career purely for the reason that I see their value” (RP4).

“The ECO has to apply NEMA and all its facets of reporting transgressions, if not remedied as pertained in the Act” (RP8).

“A professional person with people skills and the ability to facilitate and co-ordinate processes related to environmental auditing and environmental control” (RP1).

Based on the responses above, it is evident that ECOs will not be able to adequately execute their responsibilities and thereby add the necessary value if they are not equipped with the requisite skills. Theme 3 below will further deliberate on the value adding skills of ECOs.

4.2.2.3 Theme 3: Attributes of the ECOs (Questions 3, 4, 5 and 10)

Theme 3 dealt with the attributes of ECOs and comprised of responses from Questions 3, 4, 5 and 10. In order for the ECOS to ensure that there was compliance, the respondents mentioned that the ECOs needed to have people’s skills since they were engaged with different stakeholders and as such needed to be approachable for assistance on environmental issues. Also of importance is that this theme is also linked to the value of ECOs and their skills and training for them to add value in responsible tourism in the KNP. As indicated by the DEA (2014:39) in doing EIA follow-up, audits are to be conducted at regular intervals so as to ensure that monitoring is done. Similarly, in the KNP there were schedules done and adhered to by both the KNP and the concessions in making sure that biannual environmental audits were conducted by ECOs. Furthermore, ECOs were required to operate as independent verifiers; hence Question 10 dealt with the independence of ECOs. The respondents, highlighted that the ECOs should not be biased when making decisions. What was of interest was that nine (9) out of the 11 respondents stated that the ECOs were operating independently. However, one (1) GM and the KNP manager mentioned that ECOs are not totally operating independent. This was demonstrated in some of the responses below:

“In my opinion, the independence of the ECO is largely related to the integrity of the person appointed. Often, ECOs are not completely independent and do not report or disclose non-compliance to the KNP and the DEA. They also often assess proposed projects in favour of the concession and not according to the potential risk to the environment. There are, however, ECOs that do remain independent and assess potential risk associated with concession activities and operations with the environment and environmental damage as a prioritized concern and with strict compliance with environmental legislation” (RP1).

“Completely independent so as to report in a fair and unbiased manner. Presently we work as a team to check for the ECOs independence during an environmental audit; thus he does not work in isolation” (RP2).

“Completely, because he makes decisions in a neutral manner without taking any sides so as to give meaningful reporting” (RP6).

“Qualification/ training in environment management and legislation in Eco-Tourism, interpersonal skills, project management, report writing, among others” (RP3).

After discussing the results of the three themes and their related questions, it was also important to highlight and further discuss the themes, including their sub themes in overall, but expanding more on their involvement in line with the value add on the roles of ECOs in the next section.

4.3 Discussion on the value of ECOs

According to Wessels *et al.*, (2015:188), the researcher’s previous study “confirms the benefits of proponent and regulator follow-up in major construction projects, specifically in having independent verifiers that: disclose information; facilitate discussion among stakeholders; are adaptable and proactive; aid in the integration of EIA follow-up with other programs; and instil trust in EIA enforcement by conformance evaluation”. Based on the results from the respondents answering Questions 1-10 using themes, below in Figure 4-9 is an organogram of the thematic map which summarises the results on the attributes, skills, and training of the ECOs according to the respondents during interviews.

The answers in Annexure C from the respondents were used by the researcher to make both themes and subthemes. Firstly, the themes are displayed on top, and subthemes under each theme. Secondly, there were certain commonalities from the answers which made it possible for the themes and subtheme to be created, namely; Groundedness of a Code (number of quotations coded) as displayed in Annexure D. Also highlighting the same themes and subthemes captured in the thematic map under the organogram. For example words such as the qualification needed according to the respondents in Annexure C, would then fall under skills and training theme, subtheme will then be preserving and conserving. Finally, there were interlinkages between the subtheme which made the theme, that is there were some associations (see Figures 4-10, 4-11 and 4-12) below.

The subsections of the thematic map, that is, attributes, skills and training, as well as value, will be discussed and explained individually in the next sections.



Figure 4-9: Organogram of the thematic map (Own contribution).

4.3.1 The value of the ECO

These were in turn linked to ensuring that compliance, monitoring and adherence to policy and standards were made possible, as indicated in Figure 4-10 below.

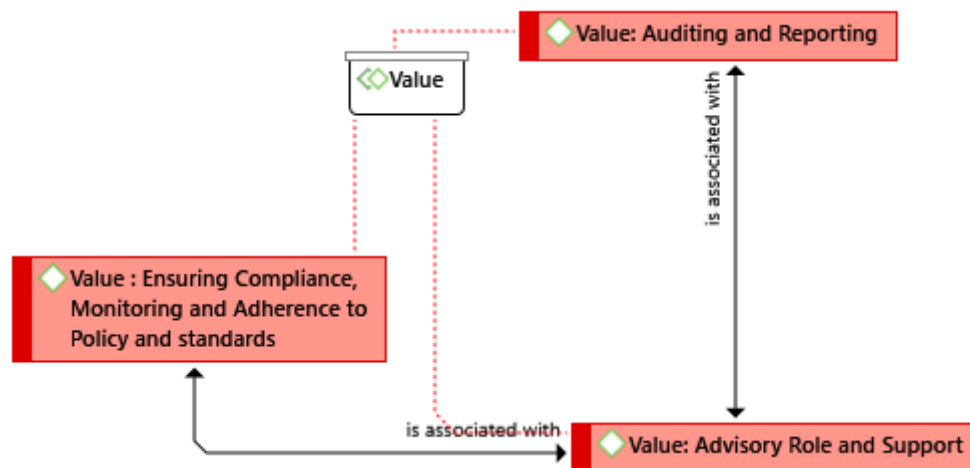


Figure 4-10: Value of ECOs (Own contribution).

4.3.1.1 Value: Advisory role and support

In terms of the advisory role, the respondents mentioned that the value of ECOs lay in advising and providing support to other stakeholders. For example, ECOs can guide and offer expert advice to the concessions in terms of environmental requirements and compliance with legislation. This was highlighted by respondents that the ECO for example:

“To guide the concessions and offer advice / assistance on any matters related to the environment” (RP1).

“Very much so. Having knowledge of the various legal acts makes the opinion of the ECO invaluable in the decision-making process when deciding on the extent and possibility of various projects in conservation areas. Decision-makers are sometimes dealing with many other factors, such as budgets, needs of the business, and so on, and don't always consider the conservation, legal and social impacts or opportunities that the ECO will be able to point out” (RP4).

“When he was contacted for advice especially on environmental issues e.g. compliance on when to do an EMP for a project, this was his responsibility” (RP6).

4.3.1.2 Value: Auditing and reporting role

The respondents mentioned that another value of ECOs related to their auditing role. The ECO is responsible for facilitating the audit process by ensuring that the monthly figures, documentation and maintenance information is being reported and audited. When the respondents mentioned:

“Should guide and support, but also report if concessionaire is not willing to strive for compliance or is negligent.” (RP2).

“Yes, especially during an audit in case of both positive and negative findings, so as to make improvements.” (RP7).

“Relevant environmental information contributing to best practice” (RP10).

“As the appointed independent ECO (as required by the ROD) the ECO has the authority to report any non-compliance to the DEA but does not have the authority to issue any administrative enforcement directive to the concessions” (RP1).

4.3.1.3 Value: Ensuring compliance, monitoring and adherence to policy and standards

The value of the ECOs can also be noted in terms of ensuring compliance, quality assurance and adherence to standards. The ECOs need to ensure that the objectives set by various stakeholders are also met. Their role is to ensure compliance with policy when dealing with projects and concessions. The value of ECOs can also be noted as a monitoring role, where they monitor the environmental compliance. It was also highlighted by Spenceley and Casimiro (2012,12) that “the policy and legal frameworks for tourism concessions in protected areas are changing worldwide, and particularly in Southern Africa as a result of national social needs and environmental and financial international, and regional commitments”. Therefore, it was of importance for ECOs monitoring

concessions to be updated with the relevant policies and standards in order to promote the necessary monitoring and compliance procedures. This was but one of the reasons why this question was included in the questionnaire. Examples of relevant responses from the respondents when asked about the value of ECOs in KNP are as follows:

“In my field of expertise, I focus on the physical interactions between biotic and abiotic forces, while ensuring that commercial operations are not negatively impacting this ecology. I am somewhat naive with respect to the legalities involved, though. Thus the ability to make use of an ECO who focuses on these aspects and highlights them in his or her assessment is of vital importance to me in ensuring that my mandate is met” (RP4).

“To perform environmental audits and report to KNP and the DEA and implement actions for rectification and rehabilitation if required” (RP1).

“To monitor compliance with environmental legislation, the Environmental Authorization (or ROD) as given by the Department of Environmental Affairs (DEA) and KNP Policy and protocols, the concession contractual agreement (PPP agreement) requirements and KNP standards and specifications” (RP1).

“Not in all aspects of my job, but only on what has been agreed as specified with by both concessions and KNP on environmental issues both positive and negative”(RP6).

4.3.2 Skills and training of the ECOs

The respondents' answers to Question 3 of the questionnaire, regarding whether an ECO has to be qualified /trained/ experienced, are indicated in Figure 4-11. In order to fulfil their roles in a professional manner, an ECO needs to have skills and the relevant training, according to the respondents. This is in line Wessels and Morrison-Saunders' (2011:27) statement that when it comes to South Africa, “compliance monitoring; implementation and enforcement; ensuring legal compliance; advising and/or consulting; communicating; reporting; and raising awareness” are considered to be the roles of an ECO. Therefore, this finding is in accord with the literature. Again, Morrison-Saunders *et al.*, (2007:3) stated that “EIA follow-up should not be static; it should always strive to maximise learning from experience through active feedback”.

Furthermore, the respondents' input in response to this question was divided into two areas based on their answers, namely skills and training: preserving and conserving the environment, and skills and training: co-ordination policy and procedural knowledge. However, it should be highlighted that the two are associated, as indicated in Figure 4-11, and interrelated.

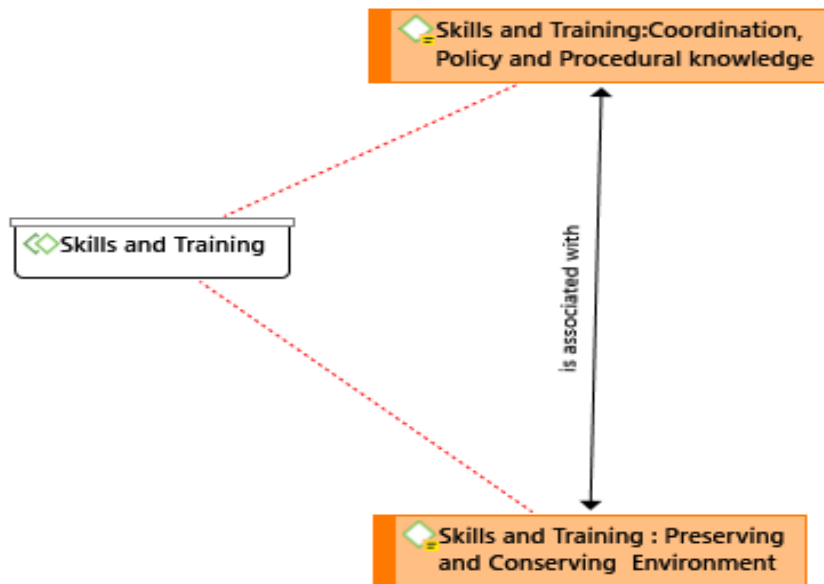


Figure 4-11: Skills and Training of ECOs (Own contribution).

4.3.2.1 Skills and Training: Preserving and conserving the environment

Some of the most important recommendations and observations related to the education requirements for ECOs. Most of the respondents mentioned that an ECO must have a professional qualification in environmental management, project management, or any nature or ecological qualification. The respondents indicated that it was important that this requirement be met; in particular, an ECO needs to be trained and experienced in issues relating to the environment. Thus, the value of the ECOs, in this case, relies on having the necessary education, experience and knowledge of issues related to environmental management. The necessary skills and training is also required from concession managers in making sure that management is also equipped with the necessary skills.

However, not only was a respondent expecting an ECO to have the necessary skill and training, but he was encouraged by the ECOs skill, responsible for their concession; hence according to respondent 3 below this made a positive impact on him to even think of doing Masters. This was mentioned by Spenceley and Casimiro (2012:91) that “many of the challenges can be resolved simply by recruiting appropriate personnel, and by providing adequate training for them (i.e. relating to understanding, leadership and management) because this was one of the challenges experience by concessions in Mozambique”. Examples of comments from respondents that support this conclusion were as follows:

“I would most definitely suggest this in fact I have just registered for a Masters in Environmental management in order to have the ability to comment and take the role of ECO in professional projects in my future career purely for the reason that I see their value” (RP3).

“Yes, because he/she is a person with more knowledge about how people should conserve and preserve the environmental” (RP11).

“Yes, because he is a specialist and can assist with the prevention and reduction of negative environmental impacts through our submission of reports monthly and during environmental audits” (RP6).

“Project management, conservation and ecological policy, because this is of primary importance with respect to how concessions should operate in KNP” (RP11).

“An ECO should have a formal qualification in the related fields of natural sciences/management. Project management would be an added advantage” (RP8).

4.3.2.2 Skills and Training: Coordination, policy and procedural knowledge

The results below have been integrated and then sketched in Figure 4-12 in order to explain the associated links, as explained in the thematic map.

The respondents reported that the value that ECOs bring related to coordination, providing clarity in terms of protocol, and hierarchy. The ECOs contribute by coordinating

the concession process, while also providing support for individuals who might not know the procedures that must be followed in the coordination process. This code also relates to the reporting structure that is followed by the ECOs. The respondents mentioned that ECOs also need to know about policies and procedures that must be followed during the concessions' auditing, reporting and monitoring. According to Ortolano and Shepherd (1995:9), although there are instances whereby EIAs conditions are not adhered to, there are many areas in which this is the opposites, thus ensuring compliance when projects are developed.

Furthermore, in doing EIA follow-up, as stated by Marshall *et al.*, (2005:177), this process "is essential in determining the outcomes of EIA". The ECOs are but part of a team in EIA follow-up in the KNP, their level of knowledge on policies and procedures was but one of the reasons why the researcher engaged the responses on indicating why they think ECOs should be part of the project team as indicated in Question 1 as per Annexure B.

For example, it was highlighted that "as the appointed independent ECO (as required by the ROD) the ECO has the authority to report any non-compliance to the DEA but does not have the authority to issue any administrative enforcement directive to the concessions" (RP1).

"No, but indirectly yes because as a head ranger I do liaise with both the GM and the ECO especially when I deal with guides or ranger" (RP11).

"To be the liaison between the concession and the relevant KNP departments on matters related to the environment" (RP1).

4.3.3 Attributes of the ECO

This section comprises an explanation of the findings that were integrated and then sketched in Figure 4-12. For example Question 4 in Annexure B was about what the respondents thought the personal attributes of an ECO should be. Since ECOs interacting with different stakeholders, his attributes are but key in making the two themes above workable.

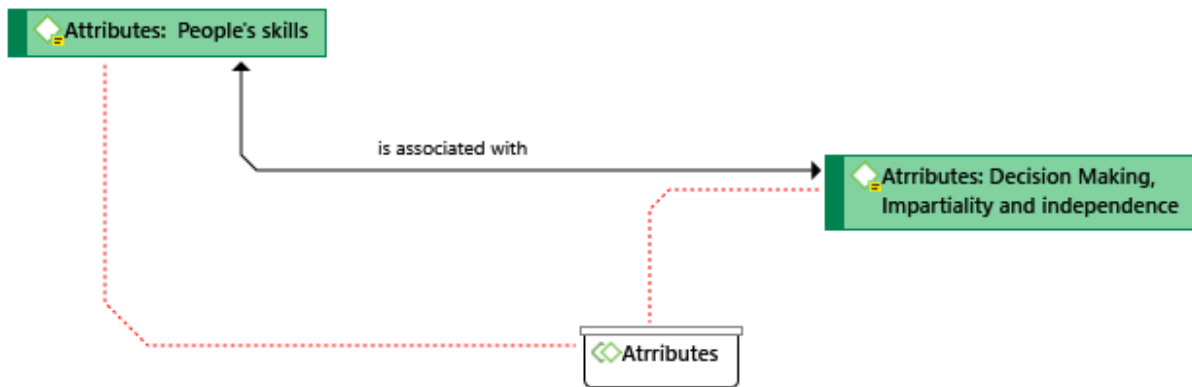


Figure 4-12: Attributes of ECOs (Own contribution).

What was covered by the researcher in trying to capture what the attribute of ECOs needed to be was for example a question particularly on this topic on its own. For example Question 5 dealt with whether the ECOs were able to make meaningful and workable recommendations as required. This ties in very well with determining whether ECOs can interact with team members when projects are developed.

Examples of their responses were then captured, as demonstrated below:

“Yes. As they have the necessary expertise and experience as an independent control officer to make unbiased recommendations for the benefit of environmental protection (RP1).

“Committed to ensure that objectives are met in making sure that there is compliance” (RP5).

“Involved, engaging with a firm but fair management style” (RP6).

“Independent, competent and ethical. Also peoples person since he should assist concessions on how to deal with issues of compliance and reduce negative impacts” (RP7).

It is important to highlight that the answers from the respondents were then used to form links. Most importantly, Figure 4-12 above shows how and why the ECOs attributes can be linked to peoples skill, decision making, impartiality and independence. Based on the responses from the respondents, the following conclusions were drawn:

4.3.3.1 Attributes: People skills

Most of the participants mentioned that ECOs should have soft or interpersonal skills. One of the reasons for this was that they worked with multiple stakeholders and, as such, they needed to be able to manage human relationships in order to acquire information from various individuals. The value they bring is a sense of direction in working with stakeholders. One of the important attributes mentioned in this regard is that they should be approachable, good communicators, good listeners and patient. The following statements were from respondents:

“In his opinion he feel that an ECO should be an approachable person who is confident in his/ her knowledge and has the ability to convince high end role players on aspects relating to environmental legislation and impacts. He / she should be able to stand steadfast behind his/ her opinions and findings” (RP4).

“Good listener, patient, with good communication skills” (RP8).

“Independent, competent and ethical. Also peoples person since he should assist concessions on how to deal with issues of compliance and reduce negative impacts” (RP7).

4.3.3.2 Attributes: Decision making, impartiality and independence

The respondents articulated the importance of the impartiality or independence of the ECOs when making decisions. Most of them said they believed that ECOs had to be impartial and independent, although a few participants had a different opinion. The independence of the ECOs is important, since it relates to the value of the ECO in providing support for concessions. One of the observations in this regard was the sense of ethical awareness, boundaries and competence, which need to be upheld at all times. The ECOs play an important role and thus their judgement needs to be objective and not influenced by other stakeholders' views. Also according to the raw data included in Annexure C, no respondent was related to the ECO. The issue of factors that can influence the independence of ECO was thoroughly discussed in Chapter 2.

“Completely independent so as to report in a fair and unbiased manner. Presently, we work as a team to check for the ECOs independence during an environmental audit; thus he does not work in isolation” (RP3).

“Completely independent and has to be, because the ECO has to apply and abide by NEMA” (RP8).

“Very independent so as to make sure that concessions are run as indicated by legislation” (RP11).

“In my opinion, the independence of the ECO is largely related to the integrity of the person appointed. Often, ECOs are not completely independent and do not report or disclose non-compliance to the KNP and the DEA. They also often assess proposed projects in favour of the concession and not according to the potential risk to the environment. There are, however, ECOs that do remain independent and assess potential risk associated with concession activities and operations with the environment and environmental damage as a prioritized concern and with strict compliance with environmental legislation” (RP1; Q10).

4.3.4 Findings on monthly reports and bi-annual audit reports

As indicated by Gwimbi and Nhamo (2015:564), data gathered during the monitoring of the environment as well as “documented mitigation measures provided the basis for discussing the quality of the environment and the extent to which implemented mitigation measures were effective in protecting the environment from mining-related activities”. According to the KNP (2002:21), the ECOs are mandated to submit monthly reports to concessions during the construction phase, and bi-annual environmental reports during the operation phase to both the concessions and SANParks. Similarly, one of the obligations that SANParks imposes on the concessions is that they submit monthly reports to all the relevant parties in the KNP, including the ECOs, in order to monitor for compliance. Over and above that, environmental audits are to be conducted bi-annually so as to ensure that what is submitted in monthly reports is consistent with what is happening in the real situation. The fact that independent verifiers may add value during both the pre-decision stage (actions prior to implementation) and post-decision stage

(actions for post proposal implementation) of a project was foreseen (Wessels *et al.*, 2012:183). In supporting this statement, the KNP Strategic Conservation Planner and Environmental Manager answered Question 7 – What authority does the ECO have? – by stating that the ECO has the responsibility to “perform environmental audits and report to KNP and the DEA, and implement actions for rectification and rehabilitation if required”. She continued: “As the appointed independent ECO (as required by the ROD), the ECO has the authority to report any non-compliance to the DEA but does not have the authority to issue any administrative enforcement directive to the concessions”.

According to Arts *et al.*, (2001:176), “auditing is a periodic activity that involves comparing monitoring observations with a set of criteria (such as standards, predictions or expectations), and reporting the results”. Environmental auditing may be carried out to facilitate management control and to assess compliance (Arts *et al.*, 2001:176). Lochner (2005:24) refers to another obligation of the ECO: to collect and manage information prior to, during and post-audit because EIA follow-up should be an ongoing process for it to be successful. To mention only a few examples, according to the ECO at RWS, the report that is compiled after the audit is conducted on the basis of the inspection done. This is important because of its application to the conditions of the ROD and specification. Furthermore, it then includes the terms and performance requirements stipulated by the EMP, that is, actionable elements of the operational EMP, as a checklist against which compliance is measured (RWS Audit report, 2018).

Auditing is a periodic activity that involves comparing monitoring observations with a set of criteria (such as standards, predictions or expectations), and reporting the results. In contrast to the continual activity of monitoring, audits are single or periodic events. Environmental auditing may be carried out to facilitate management control and to assess compliance (Arts *et al.*, 2001:176). Another example of what an environmental audit entails was when an ECO at Imbali made a negative finding when doing an audit (Imbali Safari Lodge report, 2018), and raised concerns about the Hamiltons’ reedbed. He stated that the reedbed had not recovered since the last audit because the effluent water was still accumulating on the surface. He recommended that the GM rectify the situation by doing the following:

- install more plates in the outflow sumps;
- re-plant the reeds; and

- ensure that no foreign liquids (e.g. paints, varnishes etc.) are dumped into the drainage system.

Similarly, according to the theory of Booyens and Rogerson (2016:390), water management, energy saving measures, waste management and proper conservation are but some of the innovations used in managing resources and safeguarding the environment. In support of this philosophy, SANParks made it compulsory for both the concessions and the ECO to record the following aspects monthly and during the audits:

- Bed occupancy allocated and guests accommodated in the concession.
- Staff members residing on site.
- Average monthly water consumption in comparison to what was allocated.
- Water and sewerage quality reports of tests done.
- Report of off-road driving incidents and details, including rehabilitation measures.
- Vehicle permits for personnel and rangers, as required by KNP.
- Incident reports that took place in the concession.

This was in line with principles of responsible tourism in terms of managing the natural resources in a sustainable way by monitoring for their over utilization. For example, two of the concessions (Imbali Safari Lodge and Lion Sands Tinga) were over the monthly allocations of water on more than one occasion, in spite of installing water saving devices. This impacted on their environmental audit score, because this practice had a negative impact environmentally. Lion Sands Tinga was the only concession using energy from Eskom, whereas Imbali Safari Lodge, RWS and Lukimbi were using diesel generators, which had an impact on the environment due to the carbon footprint. However, most concessions using diesel, are contemplating moving away from using diesel and using renewable energy in a long term with a view to reducing their contribution to climate change.

4.4 Conclusion

The ground covered in this chapter deals with the results based on the information that was provided by respondents when a questionnaire was used in gathering data for this

study. After semi-structured interviews were conducted with the respondents, data was then collected. A qualitative method was used for the investigation. The researcher then used a thematic data analysis by categorising common themes and patterns in order to reach a conclusion based on the findings. In summary, thematic analysis involves searching across a data set, the number of interviews or focus groups conducted or a range of texts to identify repeated patterns of meaning (Braun & Clarke, 2006:15). The conclusions arising from the findings indicated in this chapter and corresponding recommendations are presented in Chapter 5.

CHAPTER 5: CONCLUSION

5.1 Introduction

The main aim of this research was to determine the value of independent Environmental Control Officers (ECOs) in responsible tourism in the Kruger National Park (KNP) in South Africa. In this concluding chapter, the final conclusions will be presented in relation to the research questions and the research problem presented in Chapter 1 of this research. That is, based on the reviewed literature presented in Chapter 2, and the interviews conducted with the respondents from both the KNP and the four concessions, as described in Chapter 3, and results outlined in Chapter 4. Moreover, the limitations of the research and its practical contributions will be noted, including recommendations which will be made on what future researchers might investigate in order to determine how ECOs can make further improvements to adding value to responsible tourism.

5.2 Summaries of the different chapters

In Chapter 1 the research was introduced. The problem statement was presented, in which a gap in the literature was identified regarding the involvement of ECOs in EIA follow-up in responsible tourism. The aim of the research and the objectives were outlined namely; to understand the role of EIA follow-up and independent verifiers (e.g. ECOs) in responsible tourism development; and to understand how and to what extent independent ECOs add value to tourism development projects in the KNP. Two research questions were posed to guide the researcher to attain the set objectives, namely: What is the role of EIA follow-up and ECOs in relation to responsible tourism in KNP and how and to what extent do independent ECOs add value to tourism development projects in the KNP? Finally, an outline of this paper was presented, highlighting what each chapter contained.

In the literature review (Chapter 2), sustainable development and responsible tourism were discussed in detail, including how the development of concessions can benefit from the integration of the sustainable development and responsible tourism throughout the project development. The researcher also examined how ECOs were involved in monitoring and compliance when conducting EIA follow-up. The services of ECOs, according to the reviewed literature related to conducting EIA follow-up are significant in

ensuring that monitoring, management, evaluation and communication take place as a way of guaranteeing compliance. The literature indicates that EIA follow-ups should be beneficial in addressing the negative impacts of development projects. The ECOs thus play an important role in ensuring that the conditions of EIAs are adhered to, including in the tourism industry, as in the case of the KNP, where they monitor concessions.

Chapter 3 includes a description of the methodology utilised in this research. A qualitative approach was adopted for the investigation. In light of information from the reviewed literature, data was collected with a focus on the roles and responsibilities of ECOs as independent verifiers. Interviews were conducted with both respondents from the concessions and KNP personnel. The interviews were conducted using a questionnaire which was formulated and consisted of ten (10) questions. The researcher conducted a thematic data analysis by categorising common themes and patterns in order to reach a conclusion based on the findings.

In the fourth (4) chapter the results, based on the information that was provided by the respondents, were presented. According to this chapter, all eleven (11) respondents indicated that the ECOs did add value when doing EIA follow-up, as a way of ensuring that there is overall monitoring and compliance. Furthermore, all 11 respondents also stated that “yes”, there is a need for ECOs to be involved as highlighted in Question 1 of the questionnaire. However, even though there was overwhelming evidence that ECOs did add value in responsible tourism, there is still room for improvement in making sure that they fully get involved when it comes to all three aspects of sustainable development and responsible tourism, and not only the environment. The conclusions arising from the findings are indicated in the current chapter, along with corresponding recommendations.

5.3 Summary of findings in relation to the research questions

The feedback from the respondents highlighted that tourism as an industry can be important and valuable to national parks such as the KNP. In the following sections, the research questions will be answered.

5.3.1 What is the role of EIA follow-up and ECOs in relation to responsible tourism in KNP? (Research Question 1)

In order to answer this question, it is important to highlight the role of ECOs in conducting EIA follow-ups in relation to responsible tourism in the KNP. As stated by Wahaab (2003:67), “even if a decision has been made to accept a project that agrees with the criteria for sustainable development, there have to be some procedures to make sure that all mitigation measures will be implemented during the operation”. In order to achieve this objective, the EIA follow-up process should be focused on how an approved project, as per the EIA regulations stipulated by the Department of Environmental Affairs (DEA), should be managed during the entire project lifecycle with the aim of avoiding, minimising and managing negative impacts.

The literature reviewed in Chapter 2 indicated that sustainable development and responsible tourism were among the best ways of ensuring that the environment was protected when tourism projects were developed. Similarly, SANParks, as a custodian of the national parks, promotes both sustainable development and responsible tourism during the development of concessions through the process of EIA follow-ups and the involvement of ECOs. Contractually, concessions are obligated to appoint ECOs as a way of ensuring that EIA follow-ups are done in line with the Environmental Authorisation (EA), wherein ECOs have specific roles and responsibilities assigned to them by SANParks.

Although the government plays an important role in terms of the preservation and the upkeep of national parks, governments do not have the financial resources and the expertise to operate tourism businesses in a profitable way (Spenceley & Casimiro, 2012:20). One of the reasons is that developing countries might have financial constraints due to the fact that looking after the environment is not as important as providing necessities for the communities (Wahaab, 2003:67). However, ultimately, there is a need to effectively implement plans to simultaneously manage tourism and integrate conservation imperatives, and to determine the acceptable size and type of tourism in protected areas (Tapper, 2010:32). The respondents' answers in Chapter 4 indicated that EIA follow-up reports were submitted monthly and environmental audits were done bi-annually, to ensure that the above objectives are achieved.

In the case of the KNP ECOs, they were only mandated to ensure that the conditions of the EA were adhered to. For example, the Section Ranger responsible for Imbali mentioned that the current level of compliance would not have been achieved without ECOs driving the process. He said that, in order to identify issues that require attention and to guide concessionaires to achieve compliance, the ECOs ensure that concessions are continually aware of where they stand in the auditing process and how they are progressing in terms of compliance with the EA. He added that this is a means of applying mitigating measures to prevent and reduce negative impacts on the environment. Furthermore, the ECOs clearly identify and differentiate between issues that need immediate attention and those that for which longer-term plans are required. This was indeed an extremely strong statement in relation to what ECOs do in the KNP. The following were the aspects highlighted in terms of what the ECOs' roles and responsibilities were, as specified in the KNP concessions operations manual:

- Ensuring that the conditions of the roads were constructed and maintained as stipulated per contract;
- Proper management of waste;
- Ensuring that concession personnel complied with the KNP code of conduct;
- Making sure that the concessions' records were up to date. The latter comprise the number of both staff and guests in the concessions; the conditions of the generators; water usage; and the reporting of incidents, such as off-road driving, among others;
- Vehicle permits for personnel and rangers, as required by KNP;
- Water tested; and
- Sticking to the amount of water allocated on a monthly basis (KNP, 2002).

Based on the conclusions outlined in section 5.3.1, it was evident that by achieving the research objective, the first research question was answered in a satisfactory manner. The second research question will be explored in section 5.3.2 below.

5.3.2 How and to what extent do independent ECOs add value to tourism development projects in the KNP? (Research Question 2)

Based on the research conducted by Wessels *et al.*, (2012: 188) in the construction industry, appraising the value of ECOs in EIA follow-ups, “it is recommended that this scenario be explored in the future”, since according to this study there was value added. Empirical research was conducted with the aim of determining how and to what extent independent ECOs add value to development of tourism projects in the KNP. The empirical findings highlighted how well the ECOs at the KNP fulfilled these functions, and consequently how much value they added to project development, especially when dealing with concessions as private lodges. This was indicated in the results of the questionnaire.

The answers to Question 1 indicated that seven (7) respondents had previously worked with ECOs, and only five (5) of them were doing so for the first time. They highlighted the important role that ECOs played based on their personal experiences. The second question dealt with determining the value that ECOs added. All the respondents indicated that the ECOs did add value.

As shown in Annexure C, themes and subthemes were identified for the answers to Questions 2–10 and recorded in a thematic map. Three themes were identified, namely: attributes, skills and value. The three themes were used to achieve research objective 2. The respondents highlighted how important it was for ECOs to be impartial. The ECOs’ independence was seen as important because it determined the value they added, since they needed to be professional and competent in order to behave in an ethical way. The majority of the respondents also indicated that ECOs should have good interpersonal skills because they formed part of a team; thus, they added value by being exemplary when they worked with the various stakeholders. This ties in well with all the respondents mentioning that they saw it as important for ECOs to be part of a project team.

Furthermore, due to their acquired skills and training, the ECOs would add value by advising, auditing the concession and ensuring that there was compliance. This was in line with the results, which indicates that research objective 2 was achieved in Chapter 4. Furthermore, ECOs, as verifiers, had to be independent. Consequently, literature was reviewed on factors that influenced the independence of verifiers. These factors included

financial, relational and economic factors in order to exclude any conflict of interest in making decisions. More than half of the total number of respondents were of the opinion that the ECOs were independent.

Based on the results, there is no doubt that the aim and objectives of the research was achieved. The evidence from this study suggests that ECOs were able to add value to the promotion of responsible tourism by conducting EIA follow-ups. This also indicates that research objective 2 was achieved, based on the results. Again, based on the results when answering the two questions, there was a link between the two research questions. The results were in line with the role that ECOs should play in the KNP to advance responsible tourism and also when doing the EIA follow-ups as part of looking after concessions. Taken together, these findings highlight the role played by ECOs in monitoring and compliance, following approval of EIAs, in running concessions in the KNP.

These values correlate favourably with Wessels *et al.*'s (2015:178) research, which provided some understanding of how to embrace the learning opportunities arising from EIA follow-ups when independent verifiers, for example ECOs, were involved. However, he indicated that there were some significant challenges in accessing existing information in relation to how sustainable development and responsible tourism could be achieved when using ECOs for EIA follow-ups, if they are done at all. In the next section, the limitations experienced during this research will be indicated.

5.4 Limitations of this study

There were some limitations, considering what has been highlighted above, to assessing whether ECOs as independent verifiers added value when doing EIA follow-ups in the sphere of responsible tourism. It became evident that this research also had some limitations. The most important limitation of this study is that the findings are not generalizable, as indicated in Chapter 1, because they are context-specific, although the findings could perhaps be used as one contextual example of the phenomena under study. An important aspect of this limitation relates to the role that the ECOs play in this context, as stipulated by the contract between SANParks and the individual concessions. In particular, Spenceley and Casimiro (2012:10) mentions that models for tourism

concessions can differ across Southern Africa, although best practice models are used in countries such as Namibia, South Africa and Botswana. This also applies to SANParks when it enters into contracts with the concessions in the KNP. This is also observed by Wessels (2015:126), who states that it was apparent when he did his research that there was no single way of determining the value that verifiers add, and that they had differing roles and responsibilities, depending on the contextual factors of individual projects.

Moreover, there were not enough sources of literature available to the researcher, in particular concerning the role that ECOs play in responsible tourism in protected areas such as the KNP. Moreover, in terms of the KNP, the information from the respondents was based mostly on the first concessions that had agreements with SANParks, which will start expiring from next year. Therefore, there was no existing data to benchmark how the ECOs had performed in comparison to any other concession in the KNP falling under SANParks. One of the major practical limitations was that the concession areas were not easily accessible, making it challenging to access the respondents. Furthermore, the respondents based their answers on the South African context rather than on their previous experiences in other countries as well.

According to KNP (2002), in order for sustainable development to benefit the tourism industry in achieving the objectives of responsible tourism, the social, environmental and economic responsibilities of concessions should all be monitored and evaluated for compliance. However, the roles and responsibilities of ECOs were more focused on the environment than on the other two areas. Most ECOs emphasise the biophysical environment, but this does not imply that they do it at the expense of the other two pillars.

However, NEMA requires “the integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations” (South Africa, 1998). Since the ECOs were not obliged to monitor the social and the economic responsibilities assigned to concessions, they could not influence and guide the concessions in dealing with these two aspects. As also highlighted by Vargase 2008 (cited by Spenceley & Casimiro, 2012: 24), concessions have a duty to include the financial aspect, environmental management and social objectives as a way of promoting responsible tourism. This problem was also reiterated by Wessels and Morrison-Saunders (2015:187), who asserts that the surrounding communities should be given an opportunity to be included as the stakeholders in EIA

follow-up, and that ECOs need to be involved with community participation as part of their responsibility.

Most of the respondents referred to NEMA, the legal environmental mandate and obligation, as well as conserving and preserving the environment. As Wessels and Morrison-Saunders (2012:4) argue, “the confusion surrounding the role of an ECO may be fuelled by the fact that the ECO concept, although widely used in the past 20 years, has not been explicitly and formally defined in South African legislation and, where it was attempted, the definitions do not reflect practitioner sentiment and reality”.

5.5 Practical recommendations

It is recommended that in business partnerships such as public-private partnerships, the roles and responsibilities of independent verifiers such as ECOs should be clearly and definitively outlined as part of the responsible management of projects in the tourism industry, such as those in KNP. More broadly, this should include how staff members from both parties engage to make the environment conducive to enabling the realisation of the objective of responsible tourism. Concessions have the financial and human resources to ensure that responsible tourism is achieved. Hopefully, future research will confirm the findings from this study, which has underlined the value of ECOs as independent verifiers in responsible tourism in KNP. Another recommendation is that the value that ECOs add needs to be determined in other areas, as mandated by different contracts. This meant that, during this research, the ECOs’ value could not be fully determined in relation to the other two areas of both sustainable development and responsible tourism, namely the social and the economic aspects as part of the triple bottom line.

Another recommendation is that future tourism projects that are developed and require EIAs prior to being developed, even outside a protected area, should consider ensuring that EIA follow-ups are done to guarantee that sustainable development and responsible tourism is promoted. What this implies is that both sustainable development and responsible tourism should be promoted throughout the project’s lifecycle to prevent, reduce and manage negative impacts with the aim of ensuring that future generations benefit from tourism. A question that remains to be asked is what happens to the EIAs

once they have been approved in the tourism sector in particular? This is a serious concern, and needs to be explored further.

In light of the above, the viability of including the social and the economic aspects in the duties of ECOs in responsible tourism should be evaluated in future studies. The details therein form the basis on which to examine how ECOs performed their roles and responsibilities (SANParks, undated).

5.6 Possible practical applications

Guided by the results of this research, there are possible practical applications to other national parks around South Africa. One suggestion would be that organisations involved in tourism industry add checks related to the economic and social dimensions. On a positive note, although there have been some challenges, the results do indicate that there have been successes. Similarly, this was highly suggested by for example Morrison-Saunders *et al.*, (2007:4) who stated that “there is no single ‘right’ way to conduct an EIA follow-up; it can and should be adapted to suit the evolving needs of stakeholders, the activity type and EIA system in question”. In addition, what is key is that whichever way this is done, the main aim and objectives of doing EIA follow-ups, as guided by the ROD, should be managed so as to advance EIA practices (Morrison- Saunders *et al.*, 2007:4).

5.7 Further research

The following possible areas for further research can contribute to highlighting how concessions can add value to responsible tourism by procuring the services of ECOs in order to ensure compliance through monitoring, communication and feedback. For example, among others, water had to be limited to concessions at 350 litres per person per day and off-road driving was not allowed on rainy days in KNP. As highlighted by Wahaab (2003:58), in line with responsible tourism, it is important to realise that developments can achieve the objectives of sustainability when resources are managed in an efficient way.

Undoubtedly, as indicated above, evidence gathered from studies in which monitoring is examined can be of value in cases where similar tourism developments are being developed in the same areas as the previously monitored ones (Glasson *et al.*, 2005:213). This will be the case when SANParks deals with the same concessions when their 20-year contracts expire. In this context, this research can help to guide future enhancement and direction for the ECO profession, both in KNP and in South Africa as a whole, as well as other underdeveloped and developing countries when broadening their responsibilities in terms of ensuring some level of compliance. Furthermore, the researcher is confident that the research will serve as a basis for further studies, and hopes that the lessons learnt may be of value to individuals and businesses involved with EIA and EIA follow-up, particularly in the tourism industry. Furthermore, Wessels and Morrison-Saunders (2012:188) also indicated that “this may open the door to information that is not always readily available to the academic community and may lead to the generation of new knowledge within the EIA follow-up field”. It is also suggested that related research in the future focuses on the potential indirect value outputs of verifiers.

5.8 Final comment

The independence of ECOs was also highlighted by the respondents, because this was important in terms of how they made their decisions, including any reporting on non-compliance and the concessions’ bi-annual environmental audits. The evidence from this study points towards the idea that the four concessions promoted responsible tourism based on the value that the ECOs added when doing EIA follow-ups. Taken together, these findings highlight the role played by ECOs in monitoring, evaluating, communicating and ensuring that there was compliance, following the approval of EIAs in running concessions in the KNP, where the ECOs were deeply committed.

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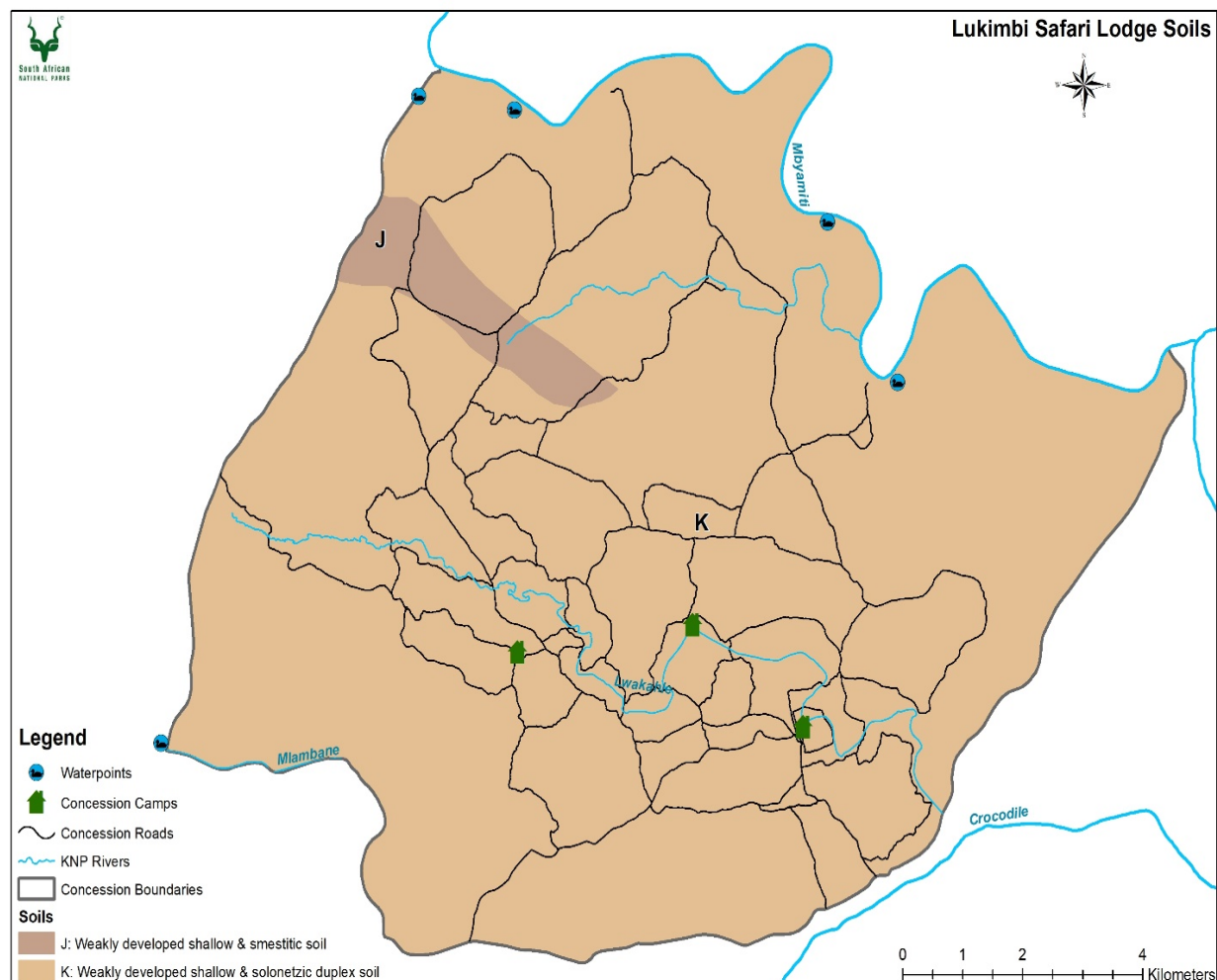
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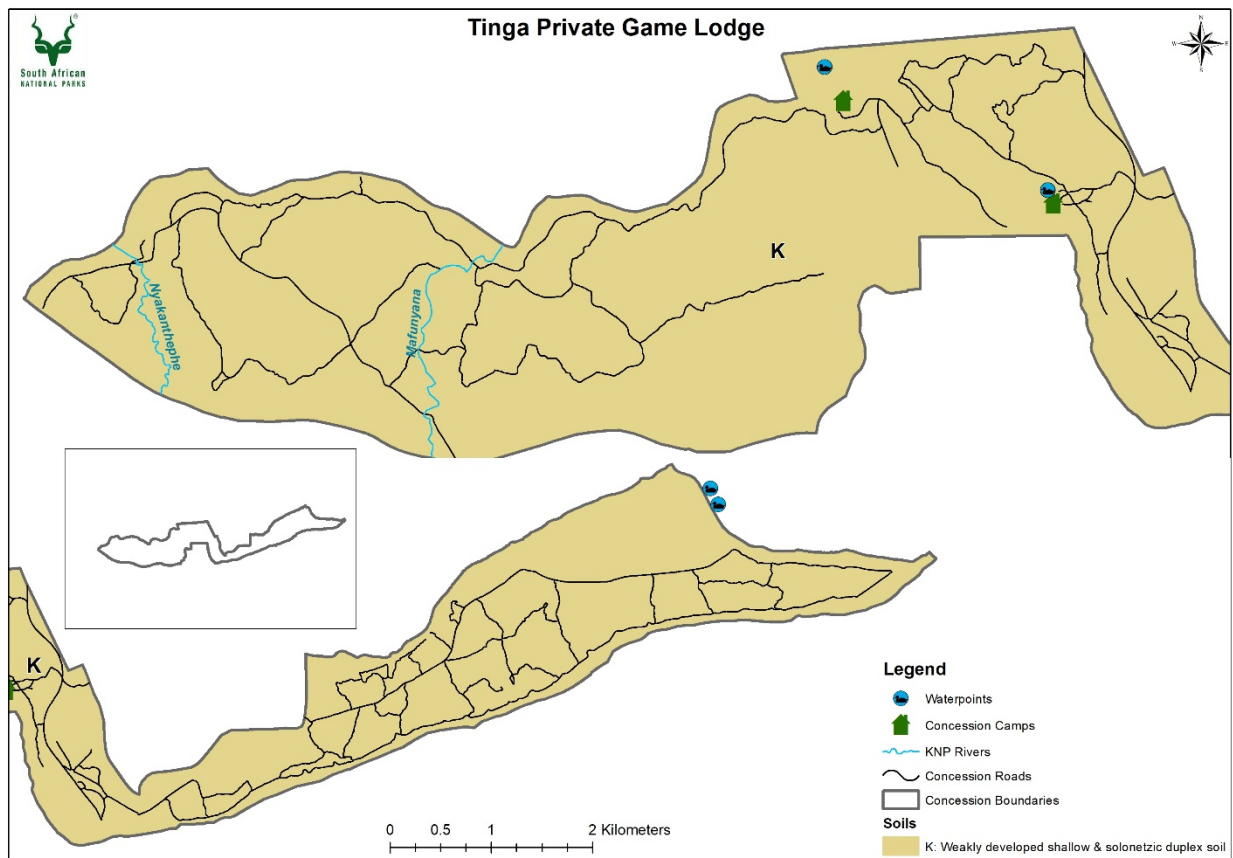
Wood, C. 1999. Pastiche or Postiche? Environmental Impact Assessment in South Africa. *South African Geographical Journal*, 81(1):52-59.

ANNEXURE A: MAPS OF THE FOUR INDIVIDUAL CONCESSIONS

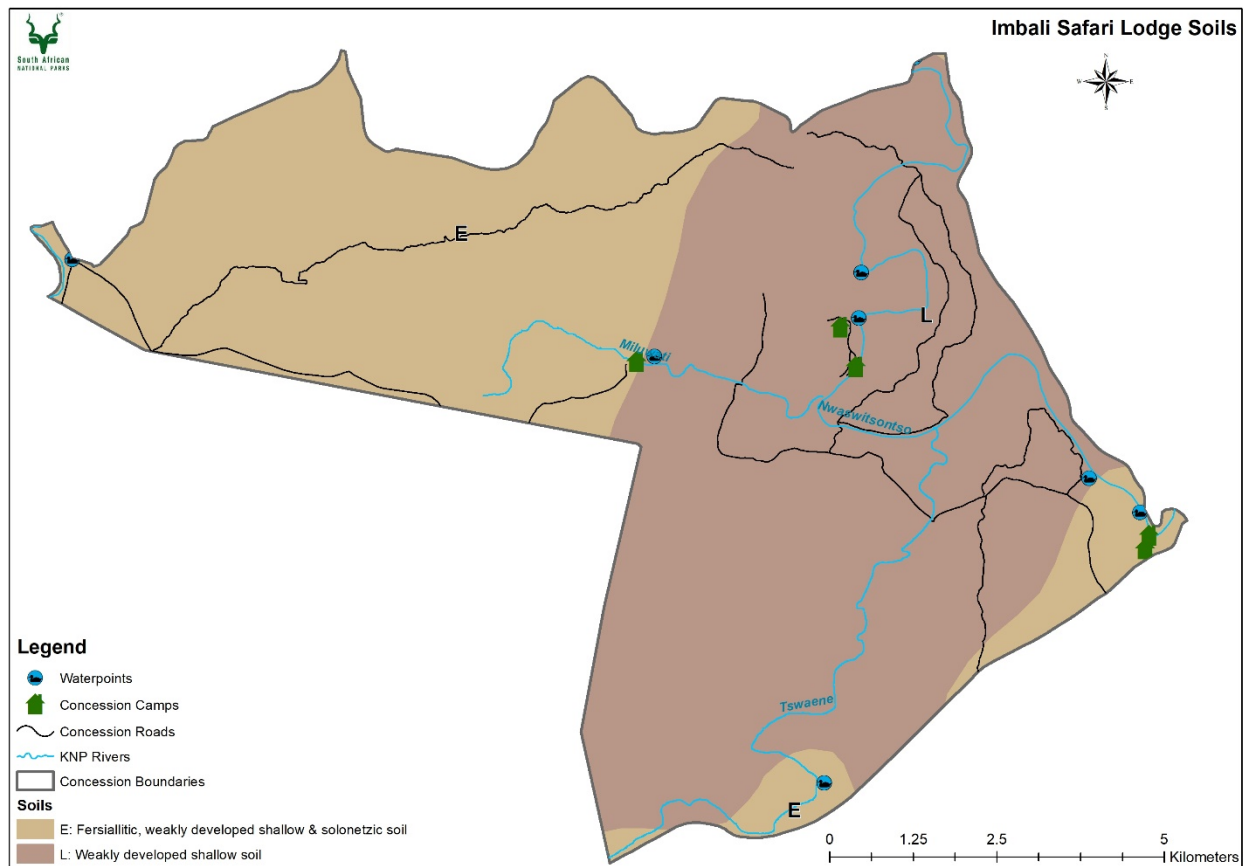
Map of Lukimbi concession in the Kruger National Park (KNP) (GIS, KNP: undated).



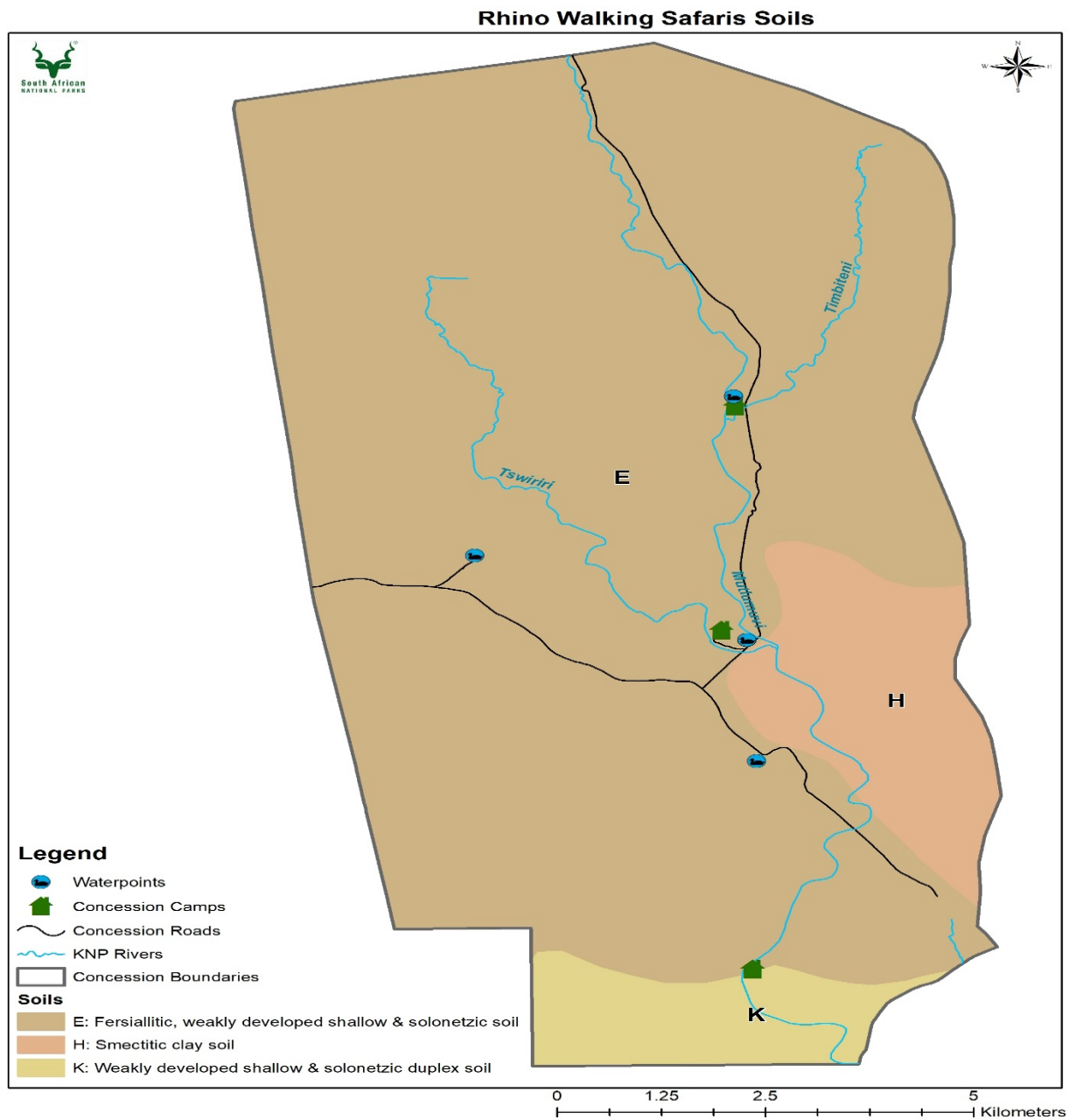
Map of Lion Sands Tinga concession in the Kruger National Park (KNP) (GIS, KNP: undated).



Map of Imbali concession in the Kruger National Park (KNP) (GIS, KNP: undated).



Map of RWS concession in the Kruger National Park (KNP) (GIS, KNP: undated).



ANNEXURE B: QUESTIONNAIRE RESEARCH QUESTIONS

Name (if want to disclaim):

Position:

Qualification:

Relation to/with ECO:

Date of interview:

1. Is this the first project that you've been involved with where an ECO was required or part of the project team, if so in your opinion was there any need for an ECO?
2. In your opinion/experience do you think the ECO add no value to the project?
 - a) Ensuring the project is completed as per project schedule?
Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
 - b) Ensuring that the risks of the project are managed by avoiding environmental fines and liabilities? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
 - c) Ensuring that the community surrounding the project is protected/ helped/ informed?
Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
 - d) Ensuring that the environment is protected?
Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
 - e) No value?
Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
3. What do you think should an ECO be qualified/trained or experienced in? Project management, conservation and ecological policy.
4. What do you think should be the personal attributes of an ECO
5. In your opinion was the ECO able to make meaningful and workable recommendations as required?
6. Would you recommend that an ECO should be part of a professional team in a project?
7. What authority does the ECO have?
8. Do you report to the ECO
9. What information do you disclose/report/give to the ECO?
10. In your opinion, how independent is the ECO?

ANNEXURE C: RAW DATA

Personal Qualifications

Raw Labels	Certificate Level	Diploma	Btech/Honours	Grand Total
Manager	0	3	2	4
Other	1	0	1	3
Section Ranger	0	3	1	4
Grand Total	1	6	4	11

Relation to/with ECO:

ORGANISATION	POSITION	RELATION
Imbali	Section Ranger	Colleague
Imbali	Head Ranger	Auditor
Imbali	General Manager	Ecological compliance
Lion Sands	Section Ranger	None
Lion Sands	Other	Colleague
Lion Sands	Manager	None
Lukimbi	Manager	Concession
Lukimbi	Section Ranger	Concession
RWS	Manager	Concession
RWS	Section Manager	Professional
KNP	Manager	None

RESEARCH QUESTIONS 1 TO 10

1. Is this the first project that you've been involved with where an ECO was required or part? , if so in your opinion was there any need for an ECO?	
1	"No. No, it is not my first project. I was previously employed by Department of Environmental Affairs as a Criminal Investigator investigating environmental crime. I often had experience working with ECOs responsible for ensuring rectification and rehabilitation following environmental damage and directive from the department. Therefore my answer is Yes, there is a need for an ECO to guide and offer expertise to the concessions in terms of environmental requirements and compliance with legislation".
2	"Yes, but thereafter Ngala. Yes there was a need".
3	"No. Yes there is a need".
4	"No it is not the first time I have been involved with an ECO on a project. I believe that the services of an ECO are essential in projects planned whereby there is any risk that the environment may be negatively impacted".
5	"No, have work with ECO in different Parks and sections."
6	"No it is not the first time. We had an ECO when I worked at Lions Sands Tinga and Narina. I believe the ECO adds value and is necessary".
7	"No I have worked with an ECO before. Yes, there is a need".
8	"Yes on both questions".
9	"Yes". Yes, there is a need".
10	"No. Yes, there is a need"
11	"Yes. Yes there is a need".

2. In your opinion/experience do you think the ECO add no value to the project?	
a)	Ensuring the project is completed as per project schedule? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
b)	Ensuring that the risks of the project are managed by avoiding environmental fines and liabilities? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.

	c) Ensuring that the community surrounding the project is protected/ helped/ informed? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
	d) Ensuring that the environment is protected? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
	e) No value? Answer: Agree/ Partly Agree/ Partly Disagree/ Agree/ Strongly Disagree/ Unable to judge.
1	“To monitor compliance with environmental legislation, the Environmental Authorization (or ROD) as given by the Department of Environmental Affairs (DEA) and KNP Policy and protocols, the concession contractual agreement (PPP agreement) requirements and KNP standards and specifications”; To perform environmental audits and report to KNP and the DEA and implement actions for rectification and rehabilitation if required”; To ensure environmental best practice in the concessions’ operations and activities” “To guide the concessions and offer advice / assistance on any matters related to the environment; To facilitate the process of license applications and authorizations with competent authorities”; To be the liaison between the concession and the relevant KNP departments on matters related to the environment”.
2	“Definitely YES, added a lot of value. Without an ECO driving the process there would not be nearly the same level of compliance that has been achieved. To identify issues that need attentions and guide concessionaire in achieving compliance. The ECOs ensure that concessions are continually aware as to where they stand in the auditing process and how they are progressing with compliance of the ROD. The ECOs clearly identify and differentiate between issues that need immediate attention and those that need longer term plan to address”.
3	“Yes”.
4	“In my experience the role of the ECO is to make it clear to the applicant what impacts the intended project will have on the environment by looking at not only best practice, ecological principles and most importantly the relevant legislation relating to the protection of the environment which most managers are naïve too”.
5	“Yes, monitor and keep record, mediate with role players, chair meetings and problem solving”.
6	“Yes Ensuring that we comply with the environmental regulations as required”.

7	"To guide all parties to work according to best practice and advise accordingly".
8	"The ECO plays the role of firstly ensuring environmental legislation and ethics are observed and maintained. The ECO in this case, where a private organization operates within a National Park, also acts as a mediator between the private operator and SANParks, in as far as rules, regulations and the interpretation of the environmental Management Act is concerned",
9	" I can see that they will play an important role both in the beginning of the concession and if there are new managers".
10	"Yes".
11	"To ensure there is compliance with SANParks and concession agreement regulation".

3. What do you think should an ECO be qualified/trained or experienced in?	
1	"Yes, be qualified/trained or experienced in environmental management ECO should have the relevant qualification related to environmental management / sciences and have experience in working in protected areas specifically".
2	"The person needs to be practical w.r.t to understanding operations and experienced in a broad number of fields. Environmental management or similar qualification".
3	"The ECO should be qualified, trained and experienced in the field of environmental or conservation management because he is responsible for monitoring the environment as well as ensuring that there is compliance according to NEMA".
4	"In my field of expertise I focus on the physical interactions between biotic and abiotic forces while ensuring that commercial operations are not negatively impacting this ecology. I am somewhat naïve to the legalities involved though, thus the ability to make use of an ECO who focusses on these aspects and highlights them in his/ her assessment is of vital importance to me in ensuring that my mandate is met".

5	"All because they are all important that the ECO should have so as to make informed decisions. All be qualified/trained or experienced in environmental management".
6	"Yes. Environmental management or similar qualification".
7	"Yes. Environmental law and management".
8	"Yes. An ECO should have a formal qualification in the related fields of Natural Sciences/Management. Project Management would be an added advantage".
9	"A point of communication between SANParks and the concession".
10	"Environmental compliance".
11	"Project management, conservation and ecological policy. Because this is mainly important on how concessions should operate in KNP".

4. What do you think should be the personal attributes of an ECO?	
1	"A professional person with people skills and the ability to facilitate and co-ordinate processes related to environmental auditing and environmental control".
2	"Practical and passionate about their field".
3	"Approachable, peoples person and qualities of a person with authority because if there are negative findings, he needs to follow-up for these findings to be corrected".
4	"In his opinion he feel that an ECO should be an approachable person who is confident in his/ her knowledge and has the ability to convince high end role players on aspects relating to environmental legislation and impacts. He / she should be able to stand steadfast behind his/ her opinions and findings".
5	"Committed to ensure that objectives are met in making sure that there is compliance".
6	"Involved, engaging with a firm but fair management style".
7	"Independent, competent and ethical. Also peoples person since he should assist concessions on how to deal with issues of compliance and reduce negative impacts".
8	"Good listener, patient with good communication skills".

9	"They should be good communicators".
10	"Unbiased".
11	"Understanding, observant and impartial".

5. In your opinion was the ECO able to make meaningful and workable recommendations as required?	
1	"Yes. As they have the necessary expertise and experience as an independent control officer to make unbiased recommendations for the benefit of environmental protection".
2	" <i>Definitely</i> Yes. Ralf Kalwa is excellent at the role and has added immense value to both concessions that he has been involved in on Kingfisherspruit Section, KNP. Yes The ECO is excellent and adds value".
3	"Yes. He did. For example when the concession use allocated water, they are advised to reduce unnecessary water wastage by installing water saving devices. Also monitor off road driving".
4	"In my opinion I feel that an ECO should be an approachable person who is confident in his/ her knowledge and has the ability to convince high end role players on aspects relating to environmental legislation and impacts. He / she should be able to stand steadfast behind his/ her opinions and findings".
5	"Yes, the ECO forms part of a team".
6	"Yes. When he was contacted for advise especially on environmental issues e.g. compliance on when to do an EMP for a project, this was his responsibility".
7	"Yes, especially during an audit in case of both positive and negative findings. So as to make improvements".
8	"Yes"
9	"Yes"

10	"Yes, because he is the contact person between KNP and the concessions in making sure that there is compliance".
11	"Yes, because he/she guides us on certain issue on how to comply".

6. Would you recommend that an ECO should be part of a professional team in a project?	
1	"Yes, It is of critical importance that an ECO be part of the project team as they add value to environmental practice and ensure compliance with legislation and all relevant policy".
2	"Yes. Should guide and support, but also report if concessionaire is not willing to strive for compliance or is negligent".
3	"Yes, because when dealing with projects in KNP, even during EIA application and follow-up with the ECO. Environment environmental specialists and ECOs for example are needed throughout the project life cycle even according to legislation".
4	"Yes. Very much so, having the knowledge of the various legal acts makes the opinion of the ECO invaluable in the decision making process when deciding on the extent and possibility of various projects in conservation areas. Decision makers are sometimes dealing with many other factors such as budgets, needs of the business etc. and don't always consider the conservation, legal and social impacts or opportunities which the ECO will be able to point out".
5	"Yes, because the knowledge and experience the ECO have assist in dealing with the concessions".
6	"Yes, because I he is a specialist and can assist with the prevention and reduction of negative environmental impacts through our submission of reports monthly and during environmental audits".
7	"Yes, since he is knowledgeable in dealing with the protection of the environment".
8	"Yes, including urban developments".
9	"Yes"
10	"Yes, it makes compliance and monitoring important during EIA follow-up".
11	"Yes, because he / she is a person with more knowledge how people should conserve and preserve the environment".

7. <u>What authority does the ECO have?</u>	
1	"A professional person with people skills and the ability to facilitate and co-ordinate processes related to environmental auditing and environmental control".
2	"Advisory, guide and support but also report noncompliance".
3	"Advisory and supportive. The ECOs monitor for environmental compliance and liaise with all stakeholders e.g. concessions, KNP, suppliers on environmentally friendly products etc".
4	"I would most definitely suggest this in fact I have just registered for a Masters in Environmental management in order to have the ability to comment and take the role of ECO in professional projects in my future career purely for the reason that I see their value".
5	"Report to Management".
6	"Support for the management team".
7	"Advisory"
8	The ECO has to apply NEMA and all its facets of reporting transgressions, if not remedied as pertained in the Act.
9	"I have no idea"
10	"Ensures compliance"
11	"Should not have overall authority and should be impartial and fair at all times".

8. <u>Do you report to the ECO?</u>	
1	"No. I communicate directly with the ECO on matters of environmental management and jointly monitor compliance".
2	"No I communicate directly with the ECO on matters of environmental management and jointly monitor compliance".

3	"No. I liaise communicate directly with the ECO on issues of environmental management and jointly monitor compliance but I look up to him when working with concessions to guide and assist them when working in KNP to make sure that the environment is conserved a and preserved".
4	"Currently the ECO has a large amount of authority in our set up as his/ her findings are presented to the land owner (SANParks) and tenant (Tinga) and as such both parties are covered or informed as to the various impacts and limitations relating to the project".
5	"Yes, sometimes if there are none compliance by concessions or for discussion on issues about concessions about the environment Report to Management".
6	"Not in all aspects of my job, but only on what has been agreed as specified with by both concessions and KNP on environmental issues both positive and negative".
7	"No, but in relation to environmental issues relating to the concession".
8	"No, the ECO submits a written report the Concessionaire".
9	"Yes".
10	"No, but only on overall environmental issues relating to the concession as stipulated in the contract".
11	"NO, but indirectly yes because as a head ranger I do liaise with both the GM and the ECO especially when I deal with guides or ranger".

9. What information do you disclose/ report/ give to the ECO?	
1	"All information related to the concession and the requirements of the ROD, KNP policy and procedures are disclosed and communicated to the ECO. The concessionaire can exercise their own discretion in disclosing any financial or sensitive information to the ECO".
2	"All information that I believe they should be informed about, and I inform the concessionaire the same. Fortunately both Imbali and Ngala are very positive

	towards achieving compliance and I have never struggled, both are a pleasure to work with”.
3	“All information that require his guidance and knowledge as well as experience in partnering with both KNNP and the concessions. Also this information needs to be reported to DEA using the ECO as per agreement with KNP”.
4	“I supply any information that is requested by the ECO. Currently I supply records relating to the legal contract requirements between concessionaire and landowner such as number of people residing on the concession, amount of water used on a monthly basis, incidents such as human wildlife conflict, water leaks etc. I also supply the ECO with a tour of the concession on a bi-annual basis for auditing processes”.
5	“Complaints and environmental risk”.
6	“Monthly figures pertaining to water, environmental and regulatory requirements”.
7	“Whatever info he requested”.
8	“Information is given upon request as per the audit frame work. In my case we have a 15 year relationship so a lot of information is shared”.
9	“A monthly report that includes, occupancies, water and fuel usages, off-roading and game drives”.
10	“Relevant environmental information contributing to best practice”.
11	“Monthly figures as required and documented by his department”.

10. <u>In your opinion, how independent is the ECO?</u>	
1	“In my opinion, the independence of the ECO is largely related to the integrity of the person appointed. Often, ECOs are not completely independent and do not report or disclose non-compliance to the KNP and the DEA. They also often assess proposed projects in favour of the concession and not according to the potential risk to the environment. There are, however, ECOs that do remain independent and assess potential risk associated with concession activities and

	operations with the environment and environmental damage as a prioritized concern and with strict compliance with environmental legislation”.
2	“Totally Independent, fair and of great value to all parties”.
3	“Yes. Completely independent so as to report in a fair and unbiased manner. Presently we work as a team to check for the ECOs independence during an environmental audit; thus he does not work in isolation”.
4	“I am honestly a bit concerned at the independence of the ECO. This is not a comment for the individual, more for the process and practice. Currently the concessionaire employs or pays the ECO and has him/ her come out for the various projects or Audits thus I worry that the ECO is not an employee in some people’s minds”.
5	“Good. Presently he does not have favorites”.
6	“Yes, completely because he makes decisions in a neutral manner without taking any sides so as to give meaningful reporting”.
7	“Yes, completely”.
8	“Completely independent and has to be, as the ECO has to apply and abide by NEMA”.
9	“Yes. Obviously they are there to look after SANParks side, so they in my experience, fair, but will want to ensure that SANParks are looked after and taken care of”.
10	“Cannot answer, because I have only interacted with the ECO at RWS once. Otherwise, the ECO who I was working with at another concession before I was transferred to this was completely independent with being biased on making decisions”.
11	“Very independent so as to make sure that concessions are run as indicated by legislation”.

ANNEXURE D: GROUNDEDNESS OF A CODE (NUMBER OF QUATATIONS CODED)

	• Skills and Training: Coordination, Policy and Procedural knowledge Gr=37		• Value: Advisory role and support Gr=17		• Value: Auditing and Reporting Role Gr=22	
	count	coefficient	count	coefficient	count	coefficient
• Skills and Training : Preserving and Conserving Environment Gr=12	3	0.07	0	0.00	1	0.03
• Value: Advisory role and support Gr=17	1	0.02	0	0.00	2	0.05
• Value: Auditing and Reporting Role Gr=22	4	0.07	2	0.05	0	0.00