

**THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL, WITH  
AN EMPHASIS ON RHINO POACHING**

by

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I declare that **THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL, WITH AN EMPHASIS ON RHINO POACHING** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



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Miss M L Griffiths

21 January 2015

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Date

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# **The illegal trade in endangered animals in KwaZulu-Natal, with an emphasis on rhino poaching**

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Degree: Master of Arts

Subject: Criminology

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## **SUMMARY**

The illegal trade in endangered animals in KwaZulu-Natal, with an emphasis on rhino poaching, is tactically addressed in this dissertation. The aim is to expose the nature and extent of these crimes; the victims, offenders and modus operandi involved; the adjudication of wildlife offences; the causes and consequences concerned; the relevant criminological theories to explain these crimes; and recommendations for prevention. This research intends to examine the contemporary pandemic of rhino poaching in KwaZulu-Natal, South Africa, and offer potential techniques for intervention. Furthermore, one of the main goals of the study is to reveal and enhance the extremely neglected field of conservation criminology. A general disregard by society for the environment, as well as the overall ineffectiveness and corruption of criminal justice and conservation authorities, comes to the fore. The purpose of the research is therefore to suggest possible prevention strategies in order to protect the rights of endangered species.

## **KEY TERMS**

Conservation criminology; organised crime; the illegal trade in endangered animals; biodiversity; rhino; rhino poaching; poaching; poacher; trafficking; smuggling; trophy hunting; Traditional Chinese Medicine.

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# **CHAPTER ONE**

## ***INTRODUCTION AND BACKGROUND***

## **1.1 Introduction**

The illegal trade in endangered animals can be classified as a type of conservation crime, as it involves crimes against the natural environment, of which animals are a part. This form of illegal trade has become a worldwide problem. Wildlife is mostly defenceless against people and is therefore vulnerable to exploitation. This exploitation may take the form of the illegal capture or hunting of endangered animals, with the intent to sell live creatures or products from killed wildlife, such as ivory, rhino horn, and tiger skins and bones.

Traditionally, criminological study has focused on crimes committed against people, such as murder, sexual offences and robbery. However, the process of modernisation has made possible – through communication, technology and trade – a wide range of organised criminal activities. The illegal trade in endangered animals can be described as organised in nature, as it often takes place in a highly coordinated fashion within criminal syndicates and has become a hugely profitable industry.

According to Yury Fedotov, the Executive Director of the United Nations Office on Drugs and Crime (UNODC), "Illicit trade in wildlife is a form of transnational organized crime, just like trafficking in illegal drugs, weapons and human beings that bring negative consequences to security and development. And like most organized crime, it relies on the complicity of corrupt officials throughout the entire supply chain: forests and waters, border controls and local authorities in the markets where illegal wildlife is sold. Wildlife crime involves money-laundering, fraud, counterfeiting and violence, and in some cases it may have links to terrorist activities or insurgencies" (Larson nd:np).

With the dramatic increase in rhino poaching worldwide, and particularly in South Africa, over the past several years, it has become evident that urgent steps need to be taken to prevent this form of conservation crime. If immediate action is not taken, South Africa could be facing the extinction of one of its Big Five, which includes rhino, elephant, buffalo, lion and leopard. The poaching of and illegal trade in South Africa's endangered species is not only a crime committed against the animals concerned, but also against the citizens of South Africa. Apart from the fact that taxpayer money

serves to protect National Parks and the wildlife therein, the killing of South African species also robs citizens of an important part of their heritage. This in turn may affect tourism, as many foreign visitors come to South Africa to view its rich and diverse wildlife assets.

This dissertation therefore aims to provide a criminological investigation into the illegal trade in endangered animals, particularly rhino poaching, in order to bring to light possible strategies to prevent these crimes, as well as to broaden the scope of criminological knowledge with regard to conservation crimes. To achieve this, focus will be directed at considering the nature and extent of the crimes, the characteristics of the victims and perpetrators, the modus operandi, the adjudication of the offences, the causes and consequences of these crimes, theories to explain the illegal trade, and potential recommendations for prevention.

It is important to note that for the purposes of this study, an animal is deemed to be a land mammal, excluding birds, reptiles and aquatic creatures. The focus is specifically on endangered animals that are native to KwaZulu-Natal. The term “endangered animals” will be used interchangeably with the term “wildlife” when referring to these offences, to avoid similitude. The terms “poach”, “slaughter” and “kill” will likewise be used in an interchangeable manner. Furthermore, crimes against both white and black rhinos will be examined, with the precise species mentioned when applicable.

## **1.2 Research problem and rationale**

Bak (2004:20) explains that the research problem refers to the particular phenomenon that is going to be explored and forms the crux of a research project. Furthermore, the rationale or background to the study may be described as an assessment of why the research is worthwhile. In other words, the rationale provides a framework for the research and explains the reasoning behind it (Bak 2004:16-17).

Criminological research has traditionally focused on offences that involve immediately identifiable human victims, and has largely ignored crimes against nature (Herbig 2004:53). However, with the contemporary increase in awareness of environmental issues, the gravity and extent of conservation crime has become apparent to



criminological researchers. Even so, it is not yet a fully recognised field in criminological study. This view is reinforced by Wyatt (2013:13), who states that since Michael Lynch proposed the addition of environmental issues under the criminological umbrella in 1990, this type of criminology has developed and attained greater recognition. It nevertheless remains a marginalised area of study.

There is, furthermore, an ostensible lack of understanding about environmental issues amongst South Africans. This lack of awareness will be highlighted through the analysis of the collected data in later chapters. This research project attempts to address these quandaries by bringing to light the severity of crime and criminality pertaining to natural resources in the quest to promote conservation criminology as a recognised field of study.

This research is deemed necessary to fill a gap, since very little conservation criminology research is conducted in KwaZulu-Natal (KZN). It is significant to note that KZN is a coastal province that shares a border with Mozambique to the north. These geographical issues make for easier trafficking routes from other countries and South African provinces to points of entry and exit in KZN. Furthermore, unlike other provinces' parks that are under the control of the South African National Parks (SANParks), the KZN parks authority - Ezemvelo KwaZulu-Natal Wildlife (EKZNW) - controls all the protected areas in the province (Craigie, Snijman & Fourie 2009:72). It is therefore important to address the conservation needs of KZN separately while taking cognisance of the province's unique issues.

Fitzgerald maintains that the illegal trade in wildlife is financially motivated and is worth billions of US dollars. It is the second most profitable illegal trade worldwide after the trade in drugs, and followed in third place by the trade in weapons (Herbig 2004:86). According to Herbig (2004:86), Swanepoel states that from 1991 to 1995, the South African Police Service (SAPS) recorded seven hundred and seventy-four cases of the illegal trade in endangered species, to the value of R30 million. In this period, four hundred and fifteen rhino horns, one thousand and ninety-two elephant tusks and thirty-four thousand and ninety-five ivory cubes (or three thousand four hundred and ten tusks) were confiscated.

This rate has escalated enormously in recent years. In this regard, Larson (2012:np) states that thirteen rhino were poached in South Africa in 2007, eighty-three in 2008, one hundred and twenty-two in 2009, three hundred and thirty-three in 2010 and four hundred and forty-eight in 2011. According to TRAFFIC (2012b:np), nineteen of the four hundred and forty-eight killed in 2011 were the critically endangered black rhino, of which fewer than five thousand are left in the wild. Six hundred and sixty-eight rhino were slaughtered in 2012, while nine hundred and forty-six rhino were poached and three hundred and thirty poachers were arrested in 2013. Of the nine hundred and forty-six, eighty-four were killed in KZN (South African Press Association 2013b:np).

The offenders who are involved in the illegal trade in endangered animals may be identified as poachers, runners and wholesalers. Poachers are the people who kill the animal, such as the rhino in order to remove its horn, while runners are the individuals who transport the animal or its products, such as rhino horn, from the poachers to the wholesalers. The wholesalers are the people who sell the animal or its products – for example to Eastern markets, where rhino horn is believed to have medicinal properties (Swanepoel 2005:327).

According to Larson (2011:np), Doctor Susie Ellis, the Executive Director of the International Rhino Foundation, maintains that only 5% of rhino poachers in South Africa are convicted. However, according to the South African Press Association (2012b:6), Edna Molewa (the Minister of Environmental Affairs) states that rhino poaching is a huge concern for the government and that a total of two hundred and thirty-two people were arrested in connection with rhino poaching in South Africa in 2011. This number may be compared to the total of one hundred and sixty-five arrests made in 2010 (TRAFFIC 2012b:np). Furthermore, Edna Molewa (2011:np) believes that the increasing arrest rates are due to the improved investigative efforts of rangers, SANParks investigators, the National Wildlife Crime Reaction Unit, the Directorate for Priority Crime Investigation (Hawks), SAPS, State Security, Department of Defence, Department of Justice, the National Prosecuting Authority and the International Criminal Police Organization (INTERPOL).

Recommendations for the improvement of the relatively low conviction rate mentioned above will be presented, both in terms of law enforcement and legal measures. It is

crucial that not only the arrest rates are enhanced, but that the convictions are drastically increased, and the importance of this will be emphasised in the data analysis chapters. By making recommendations, the researcher hypothesises that prevention methods may lead to a reduction in the illegal trade in endangered animals and may contribute to the field of criminological study by expanding the knowledge base relating to conservation crimes.

### **1.3 Literature study**

Hofstee (2010:91) holds that the goal of the literature study is to demonstrate that researchers are aware of what is happening within their subjects, that there is a theoretical foundation for the proposed research, how the project slots in with what has previously been studied, that the topic is important, and that the research will create novel awareness. An effective literature study sets the scene for the work, and is analytical and inclusive. In essence, it provides the reader with the foundation of the research.

It is maintained by Ridley (2012:3) that the literature review is the section of a thesis that cites associated theory and studies in the field, and it serves to link this theory with where the new research will be situated. It is the researcher's chance to prove involvement with and appreciation of the knowledge base of the chosen field. In a similar vein, the purpose of a literature review is to discover what research has previously been done on a particular topic, if the research findings are consistent or conflicting, and what theories can be used to explain a particular issue (Maxfield & Babbie 2011:115).

This research began with a thorough literature review, during which a voluminous number of literary sources were consulted, including books, study guides, journals, newspaper and magazine articles, online articles and blogs, as well as documentaries. Due to the constantly developing nature of the illegal trade in endangered animals, it was necessary to continuously consult the emerging literature, particularly news articles. This was especially the case for rhino poaching, which was already a very serious problem at the start of the research and dramatically escalated throughout the duration of the study.

Although there were numerous sources of applicable information in terms of news articles, particularly with regard to the rhino poaching pandemic, it was not as easy to find academic research into the matter. Thus, the literature review revealed not only a scarcity of conservation criminology research in South Africa, but also generally. For example, Gibbs, Gore, McCarrell and Rivers (2009:124) maintain that little attention has been paid to conservation-related topics in criminology. In addition to this, Montesh (2012:np) states that research into rhino poaching in South Africa is crucial in order to combat the problem. According to the Department of Environmental Affairs (2012:10), research into the conservation of rhinos is imperative to reduce the illicit demand and to prevent poaching.

This dearth of information is interesting considering that Wyatt (2013:166) is of the view that the trade in wildlife occurs throughout the entire world. Hundreds of millions of plants and animals are traded every year, and while a lot of this trade is lawful, there is a persistent unlawful trade that endangers many species. From cacti and wood, to insects, birds, reptiles and mammals, all types of fauna and flora may be illegally trafficked. Due to the covert nature of these crimes, there is a large dark figure around the illegal trade in species. However, it is estimated that wildlife offenders are earning billions of pounds in profit from their crimes. The burgeoning rates of offences against wildlife suggest that these enormous revenues are increasing rapidly, as more and more species are faced with extinction. This illegal trade is thus deemed to be one of the most lucrative illicit markets worldwide (Wyatt 2013:167).

The harmful consequences of wildlife trafficking are thought to be even more detrimental than those relating to other black markets, since these crimes impact biodiversity (Wyatt 2013:167). Damaged ecosystems cannot support human life, which will have an impact on where people live. In addition to this, individuals are in danger from wildlife offenders, such as poachers, who are extremely violent when committing their crimes. The illegal trade in species may have further negative effects on tourism and the economy, and can certainly undermine national security (Wyatt 2013:168).

The illegal trade in endangered animals may thus be considered an extremely serious offence that requires further academic research. Since these crimes are so extensive and destructive, it is crucial to study them in order to suggest potential preventative methods. It is put forward that since KZN and South Africa rely on tourism as a major source of income, the illegal trade in our endangered animals will have a very unfavourable impact on the country. This is particularly the case when iconic Big Five species, such as the rhino, are destroyed.

In this regard, Outraged SA Citizens Against Rhino Poaching (nd:np) assert that while thirteen rhino were killed in South Africa in 2007, eighty-three were slaughtered in 2008. One hundred and twenty-two were poached in 2009, and this dramatically increased to three hundred and thirty-three in 2010. When this research project began in 2011, the country saw a heightened escalation when four hundred and forty-eight rhino were killed. Six hundred and sixty-eight were poached in 2012, while tragically, one thousand and four were slaughtered in 2013. In 2014, one thousand two hundred and fifteen were poached.

In KZN specifically, no rhinos were poached in 2007, while fourteen were killed in 2008. This figure doubled to twenty-eight in 2009, and increased again to thirty-eight in 2010. These rates dropped slightly in 2011, when thirty-four rhino were killed in KZN. However, 2012 saw sixty-six rhino being poached. In 2013, eighty-five rhino were killed, while ninety-nine were slaughtered in 2014 (Outraged SA Citizens Against Rhino Poaching nd:np).

These statistics showing the alarming dramatic increase in the rates of rhino poaching over the past few years demonstrate that this is an extremely serious emerging crime problem. This is the case for KZN in particular - which went from no rhino poaching cases in 2007 to almost one hundred in 2014 - as well as for South Africa in general. It was also found that the relative easy availability of news stories and statistics pertaining to rhino poaching was not matched by adequate information on crimes against other endangered species in KZN, such as elephant, leopard, cheetah and wild dog. Thus it was deemed necessary to incorporate other endangered animals into this research project, to reveal potential evolving crime trends.

The scarcity of relevant academic information suggested that a criminological investigation needed to be conducted into the nature and extent of the crimes, the characteristics of victims and offenders, the modus operandi, adjudication, the causes, consequences, theoretical explanations, and prevention techniques, in order to formulate recommendations for the prevention of these crimes in KZN.

#### **1.4 Research aims and objectives**

Research objectives are the aims to be achieved in a study. These aims need to be declared and clarified from the beginning, and it needs to be clear why they are worthwhile (Hofstee 2010:86). Furthermore, research aims refer to the reasons why a study is being performed. These reasons can be basic, such as for descriptive purposes, or applied, to bring about change (Davies, Francis & Jupp 2011:46).

As held by Bak (2004:15-16), research objectives are the end results that the researcher is aiming for. There are two types of aims – the first of which are academic aims, which are directed at an “academic audience” and relate to the matter that the study strives to attend to. Secondly, there are strategic aims, which are secondary to the academic aims and are intended for a “non-academic audience”. These aims refer to the practical applications that the research intends to bring to bear.

The academic aims and objectives of this research are to promote conservation criminology as a recognised field within criminological study, as well as to expose the gravity of conservation crimes, specifically the illegal trade in endangered wildlife. The research aims to augment the knowledge base within the criminological field in terms of crimes against the environment, which is a topic that has previously been neglected in criminological research. It also aims to look at conservation crimes from a criminological point of view and highlight the serious and organised nature thereof.

Furthermore, this research strives to make strategic recommendations on ways to prevent the illegal trade in endangered animals, particularly rhino poaching, which is currently a pandemic criminal phenomenon in South Africa and is receiving worldwide attention and condemnation. The recommendations are based on an analysis of the literature, including information supplied by the participating organisations where

possible, as well as on the opinions of experts from these organisations, which were obtained by performing interviews. These recommendations may be used to inform the various relevant role players, such as the research participants, governmental departments, the criminal justice system and conservation organisations, on ways to prevent such crimes.

The key questions in this regard are as follows:

1. What is the nature and extent of the illegal trade in endangered animals in KwaZulu-Natal?
2. What are the characteristics of the victims of these crimes?
3. What are the characteristics of the perpetrators of these crimes?
4. What is the modus operandi or methods by which these crimes are committed?
5. How are these crimes being investigated, adjudicated and punished?
6. What are the causes of the illegal trade in endangered animals in KwaZulu-Natal, particularly in terms of rhino poaching?
7. What are the consequences of these crimes?
8. What criminological theories can be used to explain these crimes?
9. What recommendations can be made to prevent the illegal trade in endangered animals, particularly rhino poaching, in KwaZulu-Natal?

### **1.5 Units of analysis**

Units of analysis refer to whom or what will be studied to collect data; or in other words, the subjects of the research (Maxfield & Babbie 2011:115). Terre Blanche, Durrheim and Painter (2006:41) describe units of analysis as objects of examination about which the researcher draws a conclusion. The unit of analysis plays a significant role in the selection of a sample (where relevant), data collection methods, and the deductions that can be made from the research. The units of analysis in this research project are data and statistics on incidents of the illegal trade in endangered animals, as well as experts from the participating organisations.

### **1.6 Research design**

In this study, the research design comprises the research method, sample design and size, the collection of the data, the research participants, the limitations of the study, data analysis and interpretation, the validity and reliability of the data, and the ethical considerations relating to the research project.

### **1.6.1 Research method**

This section, dealing with the research method, refers specifically to a discussion of the type of methodology utilised (whether qualitative or quantitative, or both) and the relevance of a pilot study.

#### **1.6.1.1 Qualitative versus quantitative**

According to Myers (2009:8), the use of qualitative research assists researchers to understand people, and the social and cultural environment within which they act and live. Qualitative research is naturalistic; it aims to study people's everyday life in their natural setting. Furthermore, qualitative research is the kind of research that uses methods such as participant observation or case studies to narrate and describe specific settings or practices (Guest, Namey & Mitchell 2013:2). Merriam (2009:13) posits that qualitative researchers pay attention to the way in which people make sense of their world and their experiences in it.

As held by Dantzker and Hunter (2012:56), Creswell defines qualitative research as "nonnumerical explanations of one's examination and interpretation of observations, the purpose of which is to identify meanings and patterns of relationships". A major advantage of qualitative research is that it leads to perceptive responses drawn from precise questions, whereas a disadvantage is that qualitative research may involve serious time and financial implications for researchers (Dantzker & Hunter 2012:56).

Mouton maintains that qualitative research methods refer to the participants themselves making statements about their own worlds and experiences, rather than using "measurements that are compared with universally accepted norms" (Conradie 2004a:87). On the other hand, quantitative research methodologies are those in which the research participants normally answer set questions in a questionnaire format



(Conradie 2004b:48). Dantzker and Hunter (2012:56) define quantitative research as that which characterises concepts in terms of numerical values. In this regard, quantitative studies serve to quantify and calculate objects linked with the relevant phenomenon.

The decision was made to utilise qualitative research methodologies, in the forms of survey questionnaires and telephonic interviews, which were conducted with expert participants. Using both questionnaires and interviews provided a broad set of information and led to a richer and more comprehensive view of the circumstances surrounding incidents of the illegal trade in endangered animals.

#### **1.6.1.2 The pilot study**

As stipulated by Persaud (in Salkind 2010:1033) and Van Teijlingen and Hundley (in Lewis-Beck, Bryman & Liao 2004:824), a pilot study simply refers to a trial run of the main research project to determine if it will be feasible. In addition to this, it may involve a pre-test of research procedures such as data collection instruments. Since the pilot study needs to resemble the actual study as much as possible, participants should also strongly bear a resemblance to the chosen sample (Persaud in Salkind, 2010:1033). As a result, a good pilot test will increase the possibility of success in the actual research (Van Teijlingen & Hundley in Lewis-Beck et al 2004:824).

The researcher was not able to pilot test the sampling techniques because only a restricted number of statistics and data could be collected due to the sensitivity of the information sought. In addition to this, it was not possible to pilot test the research instruments as only a limited number of experts from the participating organisations were available to take part in the research. Finally, pilot testing of any nature was not possible because it was extremely challenging to gain access to and information from the participants at all, due to the sensitivity of the research topic and their subsequent refusals or reluctance to take part and/or provide certain or any data. This resulted in the decision that the least involvement possible, while maintaining the integrity of the research, was desirable for the benefit of the participants. Furthermore, advice was sought from the participants on how best to approach the research in terms of dealing

with participating individuals and gathering information on a sensitive topic such as rhino poaching.

### **1.6.2 Sample design and size**

Davies et al (2011:72) declare that there are two types of sampling techniques – probability and non-probability methods. Probability sampling is random and aims to be representative of the whole population, while non-probability sampling does not aspire to make generalisations. Rather, it puts the emphasis on particular groups based on pre-established qualities.

The researcher utilised accidental sampling as a non-probability sampling method (in which the subjects in the population do not have an equal chance of being selected for the study). Accidental sampling (also referred to as availability or convenience sampling) involves choosing the most easily accessible subjects to include in the sample (De Vos, Strydom, Fouché & Delport 2011:232). Furthermore, it is maintained that accidental sampling refers to the selection of those participants who are on hand (Davies et al 2011:72).

This sampling method was conducive to accessing the data and selecting employees or officials from the participating law enforcement and conservation organisations for inclusion in the questionnaire and interview processes. The chosen sampling technique was especially appropriate to this study due to the sensitivity of the research topic, particularly with regards to rhino poaching. Furthermore, it was germane owing to the resultant understandable disinclination of certain individuals and organisations to provide opinions or information.

In addition to this, snowball sampling was utilised to optimise access to valuable participants, who may otherwise not have been willing to participate. According to Ellis, Hartley and Walsh (2010:148), snowball sampling entails participants being brought in (included) and then requested to assist in bringing in further participants. An advantage of this method is that the participant base can be increased rapidly. Davies et al (2011:72) hold that snowball sampling is applied when access to individuals in the research population is especially challenging. It involves the

identification of an initial participant, and then subsequent referrals by that participant to other individuals who may also be willing to take part in the study.

In terms of this research study, the original aim was to distribute the questionnaire to approximately six individuals from each participating organisation, and to telephonically interview one expert individual from each organisation. However, it was found that not all of the organisations could manage to complete six questionnaires, so exceptions were made in these cases, as well as in the case of individual participation in a private capacity. In total, eighteen questionnaires were successfully disseminated, reaching one private individual and five conservation and law enforcement organisations. Of these, thirteen questionnaires were received back, totalling 72%. Furthermore, four out of the five desired telephonic interviews were completed, which is a success rate of 80%. Considering the delicate nature of the focus of this research, these participation rates were deemed sufficient for the purposes of this study.

### **1.6.3 Data collection**

Hofstee (2010:57) holds that the collection of data may comprise measuring objects, performing archival research, examining an organisation's records, or interviewing participants. Moreover, as collecting primary data is one of the most difficult parts of completing a dissertation, the focus needs to be on evaluating information and interviewing participants that are the easiest to gain access to (Hofstee 2010:111).

Data regarding the illegal trade in endangered animals was collected from the literature and from information provided by the participants where possible, as well as by means of questionnaires and telephonic interviews. This collected data was then analysed with the end goal of determining recommendations for the prevention of the illegal trade in endangered animals, particularly rhino poaching. The ethics around the collection of the data will be discussed below, under section 1.6.8.

### **1.6.4 Research participants**

The researcher approached numerous individuals, as well as conservation and law enforcement organisations, requesting their participation in the research project. However, many difficulties were encountered with securing participants due to the delicacy of the research topic. This was particularly noticeable in relation to rhino poaching where some of the individuals and organisations were hesitant to become involved, as they were concerned about divulging sensitive information. In addition to this, several participants were initially willing to be involved but subsequently dropped out of the study.

A brief explanation of each participating individual or organisation's role in the research will be provided below. This will be done in order to bring to light the difficulties that were experienced, as well as to accentuate the fruitful participation of many of the role-players.

Diana Beeton of the Delta Environmental Centre agreed to participate in the research by providing valuable statistics and information relating to the illegal trade in endangered animals, as well as by suggesting other potential participants for inclusion in the study.

EKZNW was approached in October 2011 with a request for permission to access their records and to collect data by means of questionnaires and interviews. A proposal was then drafted to EKZNW for the research to be registered with them in order for them to participate and was submitted in December 2011. EKZNW suggested certain amendments be made to the proposal, and then agreed in February 2012 to participate in the research.

SANParks was contacted in October 2011 for permission to access their records and to collect data by means of questionnaires and interviews. A proposal was then submitted to SANParks in December 2011 for the research to be registered with them in order for them to participate. SANParks gave advice on required changes to the proposal and agreed in February 2012 to participate in the research.

Contact was made with the SAPS in December 2011 for permission to access their records and to collect data by means of questionnaires and interviews with experts.

After considering the request, they agreed to participate in the research. Unfortunately, the SAPS had to be excluded from the research in October 2013 due to the fact that no information was provided at all over an almost two year period. This was despite assurances made regarding their participation and various personal attempts to elicit same. This meant that the SAPS were unable to contribute their extensive knowledge about law enforcement procedures to the research. To compensate for this, a decision was made to identify and include other experienced law enforcement experts in the project, ensuring that the data obtained was rich and inclusive.

The iSimangaliso Wetland Park Authority (IWP), a branch of EKZNW, approached the researcher on 17 February 2012, as they were interested in participating in the study. A proposal was formulated and provided to them, acceptance of which was communicated in June 2012. It was agreed that the researcher would have access to their relevant data and would gather information from questionnaires and interviews.

Unfortunately, EKZNW (and IWP, as a branch thereof) had to withdraw from the research in December 2012 because of staff having to sign Declaration of Secrecy documents due to the sensitivity of the rhino poaching situation. This created negative consequences for the research project, since these organisations are knowledgeable about the illegal trade in endangered animals in KZN. In an attempt to make up for this shortcoming, other participants who are also well-informed about the situation in KZN were approached, which served to remedy the situation.

In January 2013, the researcher's supervisor provided assistance by obtaining the cooperation of INTERPOL as another participant. Consent was received from INTERPOL on 16 January 2013.

On the advice of Diana Beeton, a decision was made to approach TRAFFIC – The Wildlife Trade Monitoring Network - to request that they become involved, and they agreed to do so on 5 April 2013.

Joint contact was made with the Lawrence Anthony Earth Organization (LAEO) and Thula Thula Private Game Reserve, with which LAEO is involved, to ascertain whether

they would like to participate in the research. They agreed to participate on 11 April 2013.

The Endangered Wildlife Trust (EWT) was also approached to be a participant in the research, as per a referral by Diana Beeton. They agreed to participate on 24 April 2013.

The manager of Tala Private Game Reserve was approached on 29 June 2013 and agreed that the reserve would take part in the research. However, shortly thereafter, a new manager was appointed and cooperation dwindled, despite the researcher's perseverance. Tala gave notice of their withdrawal from the study on 18 April 2014, after failing to complete their questionnaire despite numerous reassurances that they would do so. This challenge was overcome by approaching one of the other reliable and knowledgeable participants and requesting the completion of an additional questionnaire.

Attempts were also made throughout 2013, in accordance with suggestions from Diana Beeton, to attain the cooperation of Project Rhino. However, due to a desire to protect their information, they were unwilling to participate in the research. This was unfortunate because their organisation is comprised of many expert individuals who could have contributed positively to the research. This impediment was overcome, however, by the inclusion of other expert participants who are well-informed about conservation issues, particularly rhino poaching.

Finally, participation was secured from a private individual who will remain anonymous. The contribution of this individual is considered valuable by virtue of position and experience. This person is a skilled and well-respected role-player in conservation and law enforcement fields, especially with regard to rhino poaching.

#### **1.6.5 Limitations of the research study**

This research project has faced serious problems with regard to obtaining the cooperation of participants, which is due to the sensitivity of information relating to the illegal trade in endangered animals. The rhino poaching situation in particular is a very delicate topic and many organisations have displayed secretive behaviour in attempts

to protect their information. Although this is understandable to a certain extent, it has had a negative effect on the research – the goal of which is to generate recommendations for ways to prevent the illegal trade in endangered animals.

The limitations faced have been mainly related to participant reluctance and withdrawal. A great deal of time was spent approaching numerous individuals and organisations requesting their involvement in the study. Most of the requests went unanswered or were declined. Several individuals expressed a desire to participate in the research project, but they were unable to commit to participating due to the unwillingness of the organisations to which they belong. These individuals were repeatedly approached in an attempt to secure some type of cooperation, but the efforts were in vain.

In addition to this, some participants had to withdraw from the study after previously giving consent and initially participating. Again, this was due to the sensitivity of the topic and agreements that the participants had to enter into within their own organisations. These agreements were made in order to protect their data, owing to the escalating problems surrounding the poaching situation. Some of the participants were also reticent about certain aspects of their involvement in the research and were concerned about potential future legal implications within their organisations due to the delicacy of the subject.

Another constraint was that one of the participants, while highly knowledgeable about the poaching problem in other provinces, was apparently not aware of the situation in KZN, which had an effect on the responses in the questionnaire. It was decided to still include this participant in the research in order to highlight areas where knowledge and expertise need to be improved.

A final limitation of the research was that one of the participating organisations failed to submit some of the promised questionnaires and to take part in the telephonic interview, despite numerous follow-ups over many months. Due to time constraints, the choice was made to omit the outstanding questionnaires and interview, and to proceed with the data analysis.

These limitations around the study seemed counterproductive to the goals of the research – goals which should be shared by all law enforcement and conservation authorities handling crimes against wildlife. For this reason, it is unfortunate that certain individuals and organisations were reluctant to be involved, or were not allowed to take part, in a study that aims to make recommendations to prevent these offences. It is put forward that this furtiveness, while perhaps being well-intended by some, serves to promote a lack of transparency, which unfortunately may stimulate corruption.

To counterbalance all of these limitations, a substantial effort was put in to attain the cooperation of additional participants throughout the dissertation phase of the research. A decision was made to include more participating organisations than initially required to compensate for any potential future drop outs and biases or gaps in the information. In addition to this, frequent and often excessive participant follow-ups were mostly required to maintain cooperation with regard to the completion of the questionnaires. This had an undesirable impact on the timeframe of the project, but it was necessary in order for the data gathered to be comprehensive and valuable.

#### **1.6.6 Data analysis and interpretation**

It is maintained that we analyse and interpret data in order to come to conclusions that reveal the thoughts and concepts that instigated the study in the first place (Maxfield & Babbie 2011:112). Hofstee (2010:117) is of the opinion that, upon attainment of the data, the researcher needs to work with it for it to become evidence. In other words, the researcher needs to analyse the data. In qualitative research, the data obtained needs to be described, as well as mentioning any biases, limitations or weaknesses. A statistical analysis of the data then needs to be performed. In addition to this, an analysis of the literature can also be done.

Henning, Van Rensburg and Smit (2004:128) affirm that to analyse in the literal sense means to smash data into small pieces. At this stage of the research, the quantity of raw data is condensed; separation of significant information from less important information takes place and patterns are identified in order to reveal the real meaning of the information collected (Schurink, Fouché & De Vos in De Vos et al 2011:397).



According to Henning et al (2004:128), explanations, interpretations and predictions are of the essence at this time as the researcher attempts to answer the how, why and what questions.

In this study, the data obtained from the literature, questionnaires and interviews was analysed in order to identify patterns, similarities and differences for organising the findings into related categories. These categories formed the various sections and chapters of the study and were labelled thus, and the data was interpreted by analysing and comparing the findings in order to make recommendations for the prevention of the illegal trade in endangered animals.

The researcher personally transcribed the telephonic interviews and analysed the data therefrom, as well as the information obtained from the questionnaires. A statistician was furthermore consulted for guidance with analysing the data collected from the questionnaires and interviews. This information was used in conjunction with the data gathered from the literature to create a comprehensive picture of the crime problem. Finally, the services of an editor were also employed.

The collected data was organised by means of a thematic analysis, which entailed identifying recurring themes throughout the information and organising it into relevant categories. In this regard, Braun and Clarke (nd:np) believe that thematic analysis refers to identifying meaningful patterns in the data that address the research question. In order to find these patterns, it is necessary to go through a process of becoming familiar with the data, coding it, and developing and reviewing themes. The main advantage of thematic analysis is that it is flexible and will fit into any type of research framework.

#### **1.6.7 Validity and reliability of data**

Before a research study commences, it must be ensured that the measurement procedures and instruments are valid and reliable in order to produce appropriate data (De Vos et al 2011:172). Maxfield and Babbie (2011:136) maintain that reliability is evident when a specific measurement method provides the same results every time when applied to the same thing. In other words, it denotes consistency. On the other

hand, validity refers to whether or not the research is measuring what it claims to be measuring (Maxfield & Babbie 2011:139).

It is further maintained that the validity of a research study is attained when the research instrument measures what it is supposed to be measuring. Smith (in Lewis-Beck et al 2004:958; Leedy & Ormrod 2005:28) posits that a study is valid if the researcher has precisely illustrated the event under scrutiny. Reliability, on the other hand, is achieved when the research instrument consistently produces the same results each time it is used or when it is used by other researchers. Smith (in Lewis-Beck et al 2004:958) denotes that the term “reliability” was originally formulated by quantitative researchers who believed that a study is reliable if it can be replicated by other researchers.

According to De Vos et al (2011:380), Babbie and Mouton suggest that reliability and validity can be tested by authors reading and critiquing their own work, comparing documents and data, and corroborating information by interviewing witnesses, informants or knowledgeable individuals. In this research study, reliability and validity were tested by the researcher reading and assessing her work, the supervisor reviewing and critiquing the work, and by corroborating the collected data by interviewing knowledgeable individuals from the participating organisations.

Furthermore, validity from the qualitative research viewpoint was ensured in this research because the researcher was vigilant in choosing the sample and means of data collection. To comply with the principle of validity, the questionnaires and interview schedules were deemed to measure what they were intended to measure. It is submitted that the results of this research study may be considered reliable because the sample comprised expert individuals who have thorough knowledge of the topic. Consequently, the participants were able to provide the researcher with the required knowledge necessary to achieve reliable findings.

#### **1.6.8 Research ethics**

It is advocated that whenever humans are being studied along with their behaviour, the issue of ethics emerges. Even though the primary aim of ethics is to protect the

well-being of research participants, ethics are often thought of as a list of negative rules and regulations that result in chastisement should the researcher not adhere to them. Words that come to the fore when exploring the subject of ethics are values, principles, morals and sets of laws. Davies et al (2011:283) state that ethics are standards which ought to be applied towards others when conducting research. These standards are guidelines as to how researchers should conduct themselves in their pursuit of concealed issues of interest, especially if these issues involve human beings. It is, therefore, safe to say that research ethics should be a fundamental concern of all social science researchers in planning, designing, implementing, and reporting research with human participants. Consequently, each researcher is compelled to sensitise themselves to what is right or wrong when conducting research. Researchers furthermore have an obligation to treat research participants morally.

The Constitution of the Criminological and Victimological Society of Southern Africa (2004:2) states that criminologists must adhere to high ethical standards (including technical standards) and perform research with integrity. Criminologists should describe the limits of their knowledge as well as any personal or disciplinary limitations that may have an impact on research validity. Criminologists must also provide a comprehensive and complete report on their research methodologies and findings, and must not leave out important data or misrepresent their findings. Criminologists should also give sufficient information and accurate citations, and conserve the research instruments used in their studies.

In addition to this, criminologists must honour their commitments to research participants and sponsors, and must give full details on sponsorship. Criminologists may not accept research tasks, contracts or funding that breaches the Code of Conduct, and should remove themselves from their research if such a breach is discovered and is not possible to rectify. Furthermore, criminologists are obligated to regularly share their information in the interests of science and public policy, and they have the right to share their research findings, unless doing so will cause harm to participants and collaborators or lead to a violation of agreements or confidentiality (Constitution of the Criminological and Victimological Society of Southern Africa 2004:2-3).

Ovens (2006:13) states that ethical standards in criminology relate to conflicts of interests and confidentiality in communication and research, and that upholding ethical standards in criminological research will contribute to the professionalisation of the field of study. Moreover, a discussion of ethics in a dissertation aims to explain to the readers what was done to ensure that the research complies with the relevant institution's ethical requirements. It thus needs to be explained what the ethical issues in the research were and what was done to tackle these matters (Hofstee 2010:118). In addition to this, McLaughlin and Muncie (2013:380) maintain that a researcher needs to ensure that the risk of harm caused to the participants is minimised, which is referred to as non-maleficence. This can be done by excluding vulnerable individuals from the research and making sure that the results are not inaccurate.

Ethical clearance was obtained from the University of South Africa's ethical clearance committee upon completion of the research proposal in 2012. Ethical considerations in this study relate to the confidentiality of sensitive information, such as that obtained from the questionnaires and telephonic interviews. This confidentiality was achieved by the researcher explaining the nature of the project to all of the participating organisations and each of them providing informed consent. In addition to this, confidentiality was maintained by omitting sensitive information, such as names and locations - including the locations of rhino populations - where required. Furthermore, as the information was required strictly for scientific criminological research purposes, the information needed did not expose or implicate any particular individual, which protected their privacy, anonymity and autonomy. There were no conflicts of interests and no harm was done to the participants.

## **1.7 Definitions of key concepts**

### **1.7.1 The illegal trade in endangered animals**

The illegal trade in endangered animals may be defined as the “hunting, capture, possession, import, export or transport...as well as the donation or the receipt” of animals that are on the verge of extinction or are under threat of becoming extinct if critical preventative steps are not taken (Swanepoel 2005:326).

### **1.7.2 Rhino**

Rhino (rhinoceroses) may be defined as large herbivorous mammals native to Africa and Asia that have thick skin and one or two horns on their snouts (Encarta World English Dictionary 2001:np). For the purposes of this research, both white and black rhino will be focused on. Furthermore, the Asian rhino species will also be mentioned in order to draw a comparison between the offences against the different types of rhinos.

### **1.7.3 Conservation crime**

Herbig and Joubert (2006:96) define conservation crime as “any intentional or negligent human activity or manipulation that impacts negatively on the earth’s biotic and/or abiotic natural resources, resulting in immediately noticeable or indiscernible (only noticeable over time) natural resource trauma of any magnitude”. This definition must be viewed in the context of the more simplistic or inaccurate terminologies that may be used to attempt to classify these crimes. For instance, Herbig and Joubert (2006:94) state that green crime is a vague term that may incorrectly be associated with fanatical groups. In addition to this, environmental criminology may relate to situational crime prevention and market reduction methods (White & Heckenberg 2014:19).

Conservation criminology is concerned with “natural resource conservation” in criminological terms, and focuses on conservation, the management of natural resources, and risk analyses (White & Heckenberg 2014:18).

In light of the foregoing, the term “conservation crime” will be utilised in this study to refer to crimes committed against endangered animals.

#### **1.7.4 Organised crime**

According to Joubert (2004:34), the European Union defines organised crime as collaboration between two or more people who are involved in criminal behaviour for a long period of time, in order to pursue power or profit. Furthermore, Joubert (2004:34) maintains that these criminal organisations have businesslike structures that are controlled by enforcing discipline, and all members of the organisations have their own duties to perform. They partake in money laundering and use intimidation or violence in the performance of their crimes, and they also attempt to influence politics, the economy, legal authorities, public management and the media. In the commission of their crimes, these organisations exploit provincial, national and international borders.

#### **1.7.5 Biodiversity**

Elliott (2004:30) defines biodiversity as “diversity of species, genetic diversity within species and the diversity of habitat that supports biological life.”

#### **1.7.6 Traditional Chinese Medicine**

Traditional Chinese Medicine (TCM) may be defined as an ancient and still existing method of healthcare, which is premised on the belief in balance, moderation and prevention (Medical Dictionary 2008:np).

#### **1.7.7 Poaching**

According to Booth, McCullum, Mpinga and Mukute (1994:167), poaching may be defined as the illegal hunting of wildlife. Additionally, Brockington, Duffy and Igoe (2008:77) define poaching as activities ranging from subsistence hunting with traps and snares, such as hunting birds and buck for food, to hunting to obtain profitable wildlife products, such as rhino horn and ivory.

### **1.7.8 Poacher**

A poacher may be defined as an individual who captures a living animal or takes a living plant, or who kills a plant or animal. There are different types of poachers, such as those who commit their crimes for subsistence purposes, and those who supply the illegal market (Wyatt 2013:83).

### **1.7.9 Trafficking**

Trafficking may be defined as the well-organised, illegal movement and sale of goods, such as wildlife and wildlife products (United States Agency for International Development 2011:np).

### **1.7.10 Smuggling**

Swanepoel (2005:326) defines smuggling as “the deceitful and unlawful import, export, trade or reproduction of scarce goods...which is contrary to the law controlling the trade and production thereof”, such as the scarce goods of animal products like rhino horn.

### **1.7.11 Trophy hunting**

Trophy hunting may be defined as a hunter paying for a hunt in order to attain a trophy of or from an animal (Campaign Against Canned Hunting 2008:np).

## **1.8 Motivation for the research**

The researcher has had a lifelong passion for conservation issues, and has additionally had a passion for criminology since the commencement of her study career. This research topic thus combines these two key areas of interest. Furthermore, the goal is to pursue a lasting career in the prevention of conservation crimes, from either an academic or practical side.

It is put forward that the problem of the illegal trade in endangered animals, particularly rhino poaching, should be approached from a criminological perspective in order to make recommendations for the prevention of these conservation crimes. It is hoped that these research efforts will lead to holistic and sustainable interventions to combat the illegal trade in endangered animals, particularly the contemporary rhino poaching epidemic. The rhino poaching situation is a high priority crime in South Africa that is receiving worldwide attention and condemnation, and it is critical that research on this topic be explored to tackle this issue before we are faced with the extinction of such an iconic species.

### **1.9 Layout of the dissertation**

Chapter 1 of the dissertation contains an introduction and background, which involves a discussion of the research problem and rationale, the literature study, the research aims and objectives, the units of analysis, the research design, the participants, the limitations of the study, the definition of key concepts and the motivation for the research.

Chapter 2 concerns the nature and extent of the illegal trade in endangered animals in KZN, with an emphasis on incidents of rhino poaching.

Chapter 3 highlights the characteristics of the victims (such as the endangered animals and the country as a whole in terms of citizens being deprived of natural resources, with resultant social and economic impacts) and the offenders (such as the poachers and smugglers), as well as the modus operandi or the methods by which these crimes are committed.

Chapter 4 addresses the adjudication of these crimes by analysing the processes within the parks or reserves, police and courts to deal with the offenders.

Chapter 5 investigates the causes of the illegal trade in endangered animals.

Chapter 6 is concerned with the consequences of such crimes; for instance, social, biological, economic and tourism consequences.



Chapter 7 provides explanations for these crimes by means of criminological theories.

Chapter 8 exposes prevention techniques and recommendations that may reduce the illegal trade in endangered animals, particularly rhino poaching, and provides the summary and conclusion to the dissertation.

### **1.10 Time schedule**

The dissertation project began in July 2012. The researcher started by requesting statistics from the participants and by submitting the questionnaires for the participants to complete. Thereafter, the telephonic interviews were conducted. Once the relevant data had been obtained from the participants, each chapter took approximately two months to finalise. It took two and a half years to complete the dissertation.

### **1.11 Conclusion**

This research into the illegal trade in endangered animals in KwaZulu-Natal, with an emphasis on rhino poaching, was deemed necessary due to the threat to the survival of endangered animals, particularly rhino, in South Africa. The research was also imperative to address the unique conservation challenges in KZN due to its geographical location and it being the only province that operates independently from SANParks, as well as to address the scarcity of conservation criminology research in KZN and SA.

The research, therefore, is aimed at making recommendations for the prevention of the illegal trade, which will be beneficial to the research participants, conservation organisations, the government, and the criminal justice system. It is unfortunate that quite a few limitations were experienced – most notably the disinclination of certain individuals and organisations to take part in a study that aims to make recommendations to prevent the illegal trade in endangered animals. Considering the current rhino poaching pandemic in particular, this situation is most obstructive. However, the limitations were effectively surmounted by means of securing additional expert participants from various law enforcement and conservation authorities.

In the following chapter, the nature and extent of the illegal trade in endangered animals will be discussed. While an emphasis will be placed on rhino poaching, crimes against other endangered species in KwaZulu-Natal, South Africa, Africa and international countries will also be examined in order to put this illegal trade into perspective. Furthermore, a thorough explanation into the characteristics of these offences will be provided, with the goal of understanding the criminal element in order to make relevant recommendations for prevention.

## **CHAPTER TWO**

### ***THE NATURE AND EXTENT OF THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL***

## **2.1 Introduction**

In this chapter, an analysis of the nature and extent of the illegal trade in endangered animals in KwaZulu-Natal (KZN) will be presented. This will be achieved by discussing the features of these types of crimes, as well as by examining the statistics pertaining to the illegal trade in endangered animals in KZN, with an emphasis on rhino poaching. It is important to discuss these aspects in order to understand what these crimes involve, how they can be classified, and how frequently they are occurring. This must be done in order to ascertain their severity and whether or not they are to be regarded as priority crimes. It is crucial to put the problem into context, as well as to indicate the dramatic increase in the rates of these crimes, particularly with regard to rhino poaching.

A comparison will, furthermore, be made between the poaching situation in KZN and that in South Africa in general, as well as in other African countries, and internationally, particularly in Asian countries. The goal of this comparison is to put into context the current illegal natural resource exploitation problems faced by KZN and to emphasise other potential issues that may arise in the future. The plight of other endangered animals not native to KZN will also be mentioned to highlight the different species that are affected by exploitation for use in, amongst others, Traditional Chinese Medicine. This serves to expose possible links in the illegal trade, which may one day further affect the endangered animals in South Africa in general and in KZN in particular. For example, the tiger bone trade in Asian countries may be linked to the lion bone trade in South Africa, which will be discussed below.

## **2.2 The nature of the illegal trade in endangered animals**

White (2012:7) maintains that the illegal trade in endangered animals falls under “natural resource crime” and that the main subject thereof relates to “conservation”. Carrabine, Iganski, Lee, Plummer and South are of the opinion that “crimes of species decline and against animal rights”, such as the illegal trade in wildlife, are primary types of conservation crime. Primary conservation crimes are those that occur through the acts of people and serve to destroy natural resources, whereas secondary

conservation crimes refer to those which violate the regulations around environmental catastrophes (White 2012:93).

The illegal trade in endangered animals occurs in multiple steps and comprises various activities. The first step is poaching (killing) or collecting (harvesting alive to be utilised in numerous ways) the animal. The next step is transportation of the animal or its products to a place for processing or to a market and final buyer, either in person or online. This transportation may occur across borders and even internationally (Wyatt 2013:3-4,6). For example, a rhino may be poached in a KZN reserve, its horn collected and smuggled through to Mozambique and trafficked to an Asian country. There, the horn may be processed and turned into powder, after which it might be illegally sold online or in a market.

Consonant herewith, according to the Environmental Investigation Agency (2014:4), CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is of the opinion that the nature of wildlife crime is organised and serious, particularly when rhino, elephant and Asian big cats are involved. Factors that illustrate this organised nature include enormous financial benefits, and a controlled arrangement to the poaching, such as taking advantage of local communities, utilising gangs, and providing vehicles and weaponry. Other factors include complex trafficking methods, the utilisation of the Internet in the commission of crimes, high-tech forgery of documents, and the utilisation of “front” companies (Environmental Investigation Agency 2014:4).

CITES furthermore holds that money may be invested in starting up the illegal operations, as well as in technology to assist in this regard. Wildlife offenders may have previous convictions, display aggression towards law enforcement employees, exploit legal procedures, and employ first-rate legal practitioners to assist them. Individuals with pronounced political or social statuses may also be involved in these crimes (Environmental Investigation Agency 2014:4).

At a meeting of governments for the United Nations Convention Against Transnational Organized Crime, held in October 2012, it was argued that environmental crimes such

as illegal wildlife trafficking were recognised as new types of “transnational organized crime”. This convention is the chief international treaty that has been adopted by one hundred and forty-seven countries and serves to combat transnational organised offences, such as human trafficking and drug smuggling. It was also declared at the meeting that environmental crimes require a heightened response and, in this regard, a resolution was made to persuade governments to improve their legislation to prevent and deal with these criminal activities (TRAFFIC 2012a:np).

According to TRAFFIC (2012a:np), Wendy Elliot, a World Wildlife Fund (WWF) Species Programme Manager, commented that this recognition of illegal wildlife trafficking as a new type of transnational organised crime needs to serve as a call to action for governments internationally, since “all forms of transnational organized crime have major impacts on stability, security and development”.

At the aforementioned meeting, the United Nations Office on Drugs and Crime (UNODC) emphasised the advanced methods that wildlife smugglers utilise, and pointed out the connection between environmental crimes and other types of offences that display corruption and severe violence. The UNODC desires that governments help to combat illicit wildlife trafficking by making it a serious offence, which under the Convention carries a minimum prison sentence of four years. In agreement, Pitso Montwedi (South Africa’s Chief Director of Human Rights and Humanitarian Affairs) declared at the meeting that rhino poaching is a serious organised criminal activity (TRAFFIC 2012a:np).

Stephanie Pendry, an Enforcement Programme Leader for TRAFFIC, is of the opinion that wildlife offenders are gaining enormous financial benefits from their criminal acts and are evading apprehension since crimes against animals have not traditionally been viewed as serious offences (TRAFFIC 2012a:np). Furthermore, Pendry believes that these offenders have severe negative influences not only on the animals they target, but on local communities, the economy and the “rule of law”.

Similarly, Heather Sohl, Chief Species Advisor at WWF-UK, states that, “Wildlife crime is a serious crime and it must be stopped. This trafficking devastates species populations, but also takes the lives of rangers, impedes countries’ economic

development and destabilises society by driving corruption.” Sohl further asserts that these crimes must be dealt with globally, rather than merely at regional levels (TRAFFIC 2014c:np). As TRAFFIC (2014d:np) denotes, Mark Simmonds, the United Kingdom Government’s Foreign and Commonwealth Office Minister for Africa, says that wildlife crime “is something that brings untold misery to people across Africa, and feeds regional and international instability. Above all though, it is a terrible act that endangers species and threatens entire ecosystems”.

Furthermore, it appears that the money obtained from elephant poaching funds the activities of various militant and terrorist groups, including al-Shabaab. In 2011, a report by the Elephant Action League declared elephant ivory “the white gold of jihad”. Clearly then, the conservation of elephants is not only necessary for biodiversity, but also to prevent terrorism (Medina 2013:16).

Du Bois (1997:np) states that the illegal trade in endangered animals in KZN in particular may be influenced by the state of affairs around security in the province. Since the termination of Apartheid, border control in South Africa has weakened. Furthermore, the end of the civil war in Mozambique (which shares a border with KZN) led to an increase in the number of illegal immigrants coming into South Africa. These unstable conditions have a specific impact on the game reserves in northern KZN, which are increasingly vulnerable to criminal syndicates illegally trading in wildlife products. The political and factional disputes that have occurred in KZN have aided in creating a volatile environment in which crime can flourish. Likewise, the unstable socioeconomic conditions in the province may also contribute to criminal behaviour. These socioeconomic circumstances may relate to amplified intolerance, politicisation of issues, increased crime rates, the rising use of firearms, indiscriminate assaults on innocent people, farm attacks, the uncertainty around land claims, disturbances from protests, and frustrations over unfulfilled expectations.

Against this background, unfortunately the creation of many of the protected areas in South Africa has been counterproductive to the financial interests of neighbouring communities. The game reserves in KZN are often small, “with a relatively high ratio between the extent of the reserve and the length of the boundary”. The wildlife can

therefore be easily accessed by local communities, which are expanding rapidly and frequently living in poverty. The community members mostly do not view game reserves as a benefit to themselves, and instead poach animals for bushmeat or for economic exploitation. The collusion of local game rangers in the poaching adds to the problem, and organised criminal networks frequently run these criminal operations. Endangered species, including black and white rhino, are commonly targeted (Du Bois 1997:np).

Based on these views as to the extremely serious and organised nature of these conservation crimes, it is proposed that this research is necessary to craft recommendations for ways to prevent the illegal trade in endangered animals, particularly crimes against rhinos. Not only do these offences cause severe suffering to the animals, but they also create national and international instability by contributing to corruption, terrorism, economic insecurity and the undermining of borders.

### **2.3 The extent of the illegal trade in endangered animals**

The illegal trade in wildlife makes about US\$19 million per year, and is the fourth most profitable offence worldwide, after the drug trade, counterfeiting and trafficking in persons (International Fund for Animal Welfare 2014:4). In the current global poaching pandemic, the Internet has transformed criminal activity to an astonishing extent (International Fund for Animal Welfare 2014:5). The International Fund for Animal Welfare (2014:6) declares that “The Internet has become the world’s biggest marketplace, one that is open for business [twenty-four] hours a day, seven days a week. It is without boundaries, largely unregulated, free and mostly anonymous, and provides easy opportunities for criminal activity”.

According to Wyatt (2013:9), Fison estimates the illegal trade in wildlife to be worth up to US\$20 billion, excluding the trade in timber and fisheries. Wildlife trafficking is the third most lucrative crime worldwide, after the trade in drugs and weapons. Since the legal trade in animals is in itself so immense and difficult to determine, Wyatt (2013:8-9) is of the belief that there is a very large dark figure when trying to ascertain the extent of the illegal trade. A dark figure refers to the amount of criminal activity that is



unknown. Since animals and their products might be documented by unit or by kilogram, or through other types of measurement, it is therefore even more problematic to try to estimate the extent of the trade.

It is suggested that these extremely high illegal profits and the large dark figure render it critical to investigate these offences in order to gain a clearer picture of the problem. Furthermore, it is crucial to make recommendations for possible prevention methods.

### **2.3.1 The situation in KwaZulu-Natal**

The Zululand Anti-Poaching Wing (nda:np), also known as ZAP-Wing, states that KZN has lost more than two hundred and fifty rhino in the last thirteen years and “is under sustained and increasing attack from poaching syndicates linked to well-funded international criminal organisations”. Most of KZN’s rhinos are found on government, community-owned and private reserves in the northern regions of the province, a location which unfortunately exposes the rhinos to poachers from Mozambique.

Historically, forty southern white rhinos were discovered in KZN in 1894, after having previously believed to be extinct. Through conservation efforts, this number had risen to six hundred by 1960, signalling the start of Operation Rhino, whereby hundreds of rhino were moved to various parts of Africa, including the Kruger National Park. Because of these conservation triumphs by KZN, there were twenty-two thousand southern white rhinos worldwide by 2010 (93% of these in SA), although this number has now dropped to fewer than eighteen thousand. Currently, KZN has the greatest density of rhinos in SA, with 21% of the national white rhino and 24% of the rarer black rhino population (ZAP-Wing ndb:np).

The Wilderness Foundation (2012:np) reports that fourteen rhino were killed in KZN in 2008, while eighty-three were poached in South Africa. Whereas one hundred and twenty-two were slaughtered in South Africa in 2009, twenty-eight of these were in KZN. Furthermore, the Department of Environmental Affairs (2014b:np) holds that thirty-eight rhino were poached in KZN in 2010, while three hundred and thirty-three were killed throughout South Africa. Thirty-four were slaughtered in KZN and four

hundred and forty-eight in South Africa in 2011. In addition to this, sixty-six were killed in KZN in 2012, and six hundred and sixty-eight in South Africa as a whole. While one thousand and four rhino were slaughtered in South Africa in 2013, eighty-five of these were from KZN. As of 10 July 2014, forty-eight rhino were killed in KZN, while five hundred and fifty-eight had been poached throughout the whole of South Africa (The Department of Environmental Affairs 2014a:np).

According to Outraged SA Citizens Against Rhino Poaching (nd:np), one thousand two hundred and fifteen rhinos were slaughtered in South Africa in 2014, ninety-nine of which were in KZN. Pieterse (2015:3) moreover mentions that as of 16 January 2015, fifteen rhinos were killed throughout South Africa, while six of these were poached in KZN. Out of these six, four (three male white rhinos and a calf) were killed in Mkhuze Game Reserve in northern KZN. The males were all dehorned, but the calf was simply shot as its horn had not yet developed enough to be cut off. The other two rhinos were slaughtered and dehorned in Weenen Game Reserve in the KZN Midlands.

While the rhino poaching pandemic is currently the most prominent conservation crisis affecting South Africa in general and KZN in particular, it is also crucial to look at the killing of other endangered species. It is advised that poaching of other endangered animals may become a problem in the future, as the apparent success that rhino poachers are having at the moment may pave the way for further criminal networks to be established and similar crimes to flourish. To showcase this potential threat, incidents of elephant, leopard, cheetah and wild dog poaching in KZN will also be discussed.

In May 2013, an elephant was killed for its tusks in Tembe Elephant Park, which is located in northern KZN on the border with Mozambique. It was the first elephant to be poached in South Africa in at least two decades, and it is believed that the poachers crossed the border from Mozambique (Tempelhoff 2013:np).

Regarding the abovementioned elephant poaching incident, Carnie (2013b:np) holds that a month before the killing, the Wildlife and Environment Society of South Africa

(Wessa) had cautioned that elephants in South Africa may be in danger as the price of ivory had doubled in the preceding three years. This threat may well originate from Mozambican poachers in particular, suggesting that KZN elephants might be at significant risk in the future. Wessa further stated that the “southward migration” of elephant poaching may echo the danger that rhinos faced from other countries in Africa, and that “the scramble for Africa’s natural resources is expanding exponentially, not only in terms of area, but also in terms of products, including wildlife”.

As held by JayWay (nd:np), Cunningham and Zondi state that leopards are poached for their skins, as these are used in traditional medicine and in the creation of ceremonial clothing and charms. As an example, News24 (2014:np) maintains that the Shembe religion, which was established in KZN and is based on traditional Zulu and Christian beliefs, subscribes to the usage of leopard skins in their customary attire, as a symbol of “pride and royalty”. Since a legally hunted leopard skin can cost in the region of R4,500, this high price may encourage poaching.

Guy Balme of the conservation organisation Panthera states that the Shembe traditional religious gatherings mentioned above are “the biggest display of illegal wildlife contraband on earth”. In this regard, the Shembe Church is campaigning amongst their followers to promote the usage of faux leopard skins in order to reduce both the financial costs for their members and the negative impact on the leopard population. It is estimated that 10% of their skins are now fake (News24 2014:np). This is relevant to the current study as it highlights how educating traditional cultures about conservation issues can bring about consumer behavioural changes to the benefit of indigenous wildlife resources.

It is maintained that two cheetahs were killed in wire snares at the Mkhuze Game Reserve in northern KZN in 2013. The cheetahs had been part of a breeding project in the reserve and the signal from their collars was followed to a nearby homestead. The cheetah skins were subsequently recovered from the homestead and the suspects were arrested. Since only nine hundred wild cheetahs subsist in South Africa (Oellermann 2014:8), this incident highlights the significant impact that a relatively

small loss can have on an already dwindling population – particularly since these cheetahs had been participating in a breeding project.

Only four game reserves in KZN have wild dog populations, namely Thanda Private Game Reserve, Hlambanyathi Game Reserve, Mkhuze Game Reserve and the Hluhluwe-iMfolozi Park. KZN Wild Dog Reintroduction Projects started in the 1980s in an attempt to re-establish the wild dog population in KZN, which had been non-existent for about fifty years due to disease and poaching. Hluhluwe-iMfolozi started with the release of twenty-three wild dogs, and has since managed a project to reintroduce wild dogs to the park. The numbers in the park grew, but by 1993, the population had again declined and this resulted in more dogs being released in 1997. However, the total African population of wild dogs is declining and there are approximately four thousand five hundred remaining throughout the continent (The Experience nd:np).

There were eighty-four wild dogs in Hluhluwe-iMfolozi Park and approximately four hundred in South Africa, as of 2010. According to Miller (2010:np), Zama Zwame, a wild dog tracker in the park, said that boys from neighbouring communities poach animals (including wild dogs) as a rite of passage into manhood. Furthermore, these dogs often escape through openings in the fences created by poachers, and are viewed as pests by the local communities, who are unaware of their endangered status. Bearing in mind the success of the Shembe educational intervention with regard to the use of faux leopard skins, it is submitted that through culturally-sensitive education, consumer behavioural changes can occur and poaching incidents such as these (which are the result of cultural practices) can be prevented. These and other preventative initiatives are comprehensively discussed in a subsequent chapter of the dissertation.

### **2.3.2 Comparison to the rest of South Africa**

A total of three hundred and thirty-three rhino were poached in South Africa in 2010, while three hundred and forty-one were killed as of November in 2011 (TRAFFIC 2011b:np). As a potentially related consequence, in one of the biggest seizures of

rhino horn in the present poaching crisis, thirty-three rhino horns, seven hundred and fifty-eight ivory chopsticks and one hundred and twenty-seven ivory bracelets were seized in Hong Kong in a shipment from South Africa on 15 November 2011 (TRAFFIC 2011a:np). The size of this seizure shows the devastating impact that poaching has on Africa's wildlife and biodiversity, and highlights the demand that exists for wildlife products in Asian countries.

It is stated by SANParks that fifty-two rhino were poached in South Africa in 2012, as of mid-February (South African Press Association 2012a:2). The dramatic increase in the killings in only a two-year period is illustrated by the fact that one hundred and twenty-eight rhino were poached by 22 February 2014 (Rhino death toll 2014:np).

Carnie (2013a:5) reported that in the first six months of 2013, four hundred and forty-six rhino had been killed and it was estimated that approximately nine hundred to one thousand would be poached by the end of the year. This estimated number is equal to around 10% of the total of the rhino population in South Africa, and surpasses all past statistics since more than a century ago, when the white rhino was on the verge of extinction. From fewer than fifty southern white rhino in 1903, which lived in the iMfolozi Game Reserve in KZN, the combined total population of white and black rhino had reached almost twenty thousand by 2010. As held by Carnie (2013a:5), South Africa has 93% of the white rhino population in Africa (a total of twenty thousand one hundred and sixty-five rhino) and 83% of Africa's total populations of white and black rhino (approximately twenty-five thousand and forty-five animals).

Furthermore, on average, fewer than twenty rhino were killed each year from 2000 to 2007. However, this peaked in 2008, with eighty rhino poached. Since then, this figure has increased dramatically, with one hundred and twenty-two poached in 2009, three hundred and thirty-three in 2010, four hundred and forty-eight in 2011 and six hundred and sixty-eight in 2012 (Carnie 2013a:5). Doctor Richard Emslie, a rhino expert who is part of the African Rhino Specialist Group of the International Union for the Conservation of Nature (IUCN), has admitted that this increased level of killings is not sustainable for the future (Carnie 2013a:5).

According to SAPA (2014:np), the Department of Environmental Affairs indicated that one thousand and four rhino were killed in South Africa in 2013. Albi Modise, spokesman for the Department, said that six hundred and six of these were poached in the Kruger National Park, while one hundred and fourteen were killed in Limpopo, ninety-two in Mpumalanga, and eighty-seven in the North West Province. Moreover, eighty-five were slaughtered in KZN. From 2008 to mid-January 2014, two thousand, seven hundred and seventy-eight rhino were killed in South Africa. These statistics are illustrated in Figure 2.1 below. Furthermore, as of 10 July 2014, five hundred and fifty-eight rhinos were poached in South Africa (The Department of Environmental Affairs 2014a:np). In November 2013, it was held that, for the first time, the number of deaths of rhinos from poaching may soon exceed the rate of births (SAPA 2013b:9).

Altogether, one thousand two hundred and fifteen rhinos were killed in 2014 throughout South Africa (Outraged SA Citizens Against Rhino Poaching nd:np). As of 16 January 2015, fifteen rhinos had been poached nationally. In this regard, conservationist Andrew Muir acknowledges that South Africa is losing approximately three rhino per day, and that the death rate is now exceeding the birth rate. He also states that while rhinos have predominately been killed in the Kruger National Park, there is an alarming escalation in the poaching incidents in KZN. Since KZN has the most genetically critical population of rhino, every death is deemed a major loss (Pieterse 2015:3).



### **Figure 2.1: The extent of rhino poaching in South Africa (TRAFFIC 2014a:np)**

In terms of elephant poaching, Chris Galliers of Wessa maintains that elephant ivory gangs are equally as sophisticated as rhino horn syndicates, and that as elephants are being massacred in central, east and west African countries, there will be a southward movement of the poaching incidents (Carnie 2013e:np). Galliers further asserts that criminal gangs targeting wildlife will often appear with the emergence of other developments, such as infrastructural improvements to roads, and economic developments in terms of mining. Gangs exploit these advancements for their criminal activities (Carnie 2013e:np).

These predictions were proved correct in that two elephants were poached in the Kruger National Park, in May and July 2014. Both were killed in the northern region of the park, and both had their tusks removed. Now-suspended Doctor Hector Magome, who had previously held the position of SANParks managing executive of conservation services, had also said in December 2013 that the widespread poaching throughout other African countries was likely to filter down to South Africa in 2014 (de Klerk 2014:np).

Galliers furthermore holds that over the last few years, there have been several ivory confiscations in South Africa, but it was not known where these products originated from. Furthermore, the elephants that are under the most severe threat are large, older bulls that occasionally cross over South African borders into neighbouring conservancy zones in Zimbabwe and Mozambique (Carnie 2013e:np).

Finally, according to Carnie (2013e:np), Galliers stated that, “The looming threat to elephants should ensure that there is continued and even increased support for rhino anti-poaching efforts, as our investment now will no doubt increase the chances of reducing the threat to South Africa’s elephants in the future”. This shows that whatever gains that are made to combat rhino poaching will also help to prevent the illegal trade in other animals, including elephants, in the future.

With regard to the conservation of lions, the legal export of lion products from SA points to possible future problem areas for these threatened animals. Due to the endangered status of wild tigers, it is believed that products from lions (such as their bones) are being used as tiger substitutes in Traditional Chinese Medicine, in which tiger bones are thought to be a “health tonic” (Cota-Larson 2012:np).

This potential threat to lions is demonstrated by the fact that Marnus Steyl, a South African safari operator who was arrested in 2011 for illegally trading in rhino horn, was also providing lion bones to a Laotian company called Xaysavang Export Import. Steyl was linked to Punpitak Chunchom, who was expelled from SA after pleading guilty to the unlawful possession of lion bones. In addition to this, lion breeder Clayton Fletcher of Sandhurst Safaris was arrested in 2006 for his role in a rhino horn gang, which was nicknamed the “Boere Mafia”, but the court case was struck from the roll four years later. Fletcher was running one of SA’s biggest lion breeding facilities when he was apprehended (Cota-Larson 2012:np).

According to the South African Press Association (2013a:np), conservationist Christina Bush reported that one thousand five hundred lions are killed every year in SA in the trophy hunting industry. Furthermore, wildlife experts maintain that Africa’s lion population has decreased by 75% in the last twenty years.

The owner of the Protrack Anti-Poaching Unit, Vincent Barkas, said that there had been at least five leopard poaching incidents in Hoedspruit from 2011 to 2013. In the foregoing twenty years, there had only been one recorded incident in the same region. Barkas believes that this increase is due to the demand for leopard skins (Kruger 2 Canyon News 2013:np).

While the rhino poaching issue currently remains the most significant crime against wildlife in South Africa, the researcher maintains that it is crucial to monitor the extent of crimes against other animals, such as elephants and big cats. This is due to the fact that the established criminal networks may eventually branch out and escalate their targeting of other species. This may occur as the demand grows in Asian countries with the simultaneous development of the middle classes and the increasing popularity of wildlife products for use as status symbols.



### **2.3.3 Comparison to the African situation**

Having discussed the poaching conditions in KZN in particular and South Africa in general, it is now important to shift attention to the African situation. It is essential to make this comparison in order to put the rates of poaching in South Africa and KZN into context and to make predictions about potential future problems that the country and the province might experience.

According to Cota-Larson (2011:np), black rhino have been classified by the IUCN as critically endangered since 1996. Between 1970 and 1993, poaching took the black rhino population from about sixty-five thousand to less than two thousand five hundred. Furthermore, the assumed extinction in 2006 of the western black rhino was confirmed by the IUCN in 2011. As of 2011, there were around four thousand eight hundred and sixty black rhino, which includes three subspecies – the south-western, eastern and south-central black rhino.

To add to this, white rhinos currently number over twenty thousand and are classified by the IUCN as Near Threatened (WWF nde:np). According to WWF (nde:np), it is upheld that 98,8% of white rhinos occur in South Africa, Zimbabwe, Kenya and Namibia. There are two subspecies of white rhino – the northern and southern white rhinos. There are only four northern white rhinos remaining in the Garamba National Park in the Democratic Republic of the Congo (DRC), while they used to be found in northern DRC, the Central African Republic, north-western Uganda, southern Chad and south-western Sudan. However, there are around twenty thousand one hundred and forty southern white rhino remaining. This is due to conservation successes after a small population of southern white rhino – once believed to be extinct – was found in the Hluhluwe-iMfolozi Park in KZN in the 1890s (WWF nde:np).

Tempelhoff (2013:np) contends that the massacre of African elephants started in 1970, and the African elephant population decreased from one million two hundred thousand to six hundred thousand between 1970 and 1980 as a result. This led to a ban on the sale of ivory in 1989.

The population of elephants increased greatly since this ban was instituted, and southern Africa now holds more than 50% of the elephants in Africa, compared to 21% twenty years ago. Galliers of Wessa states that central, east and west Africa previously held about 70% of Africa's elephants, but they are being wiped out by poaching. For example, nearly three thousand elephants were killed from about 2010 to 2013 in Zakouma National Park in Chad (Carnie 2013e:np).

TRAFFIC (2013a:np) states that approximately seventeen thousand elephants were poached in Africa in 2011, and this figure did not improve in 2012. Since 2007, the illegal trade in ivory has more than doubled, and since 1998, it has more than tripled.

While there were approximately one hundred thousand lions in Africa in the 1960s, there are currently between fifteen thousand and thirty-two thousand individuals. A study by Lion Aid in 2012 estimated that there are about fifteen thousand two hundred and forty-four lions living in the wild in Africa with six hundred and forty-five to seven hundred and ninety-five in Western and Central Africa, and fourteen thousand four hundred and fifty in Eastern and Southern Africa. Lion Aid stated that lions are extinct in the wild in approximately twenty-five African countries. Despite this drastic decrease in the African lion population, trophy hunting still continues. It is recommended by Annamiticus that this should desist and that lions should be classified as endangered under the United States of America's Endangered Species Act of 1969 (Cota-Larson 2013b:np).

The WWF (ndb:np) maintains that there are two main species of gorilla – the western gorilla and the eastern gorilla – that live in equatorial Africa. All of the subspecies are either endangered or critically endangered due to hunting for bushmeat and poaching. The western gorilla has two subspecies, the western lowland gorilla (which has a total population of about one hundred thousand) and the Cross River gorilla (which totals two hundred and fifty to three hundred individuals). The eastern gorilla also has two subspecies – the eastern lowland gorilla (the total population of which is unknown, but was once estimated at seventeen thousand) and the mountain gorilla (which totals around eight hundred and eighty individuals that are split into two groups).

It is submitted that as wildlife populations in other African countries are decimated by the poaching scourge, poachers will increasingly move south in order to find more suitable animals to target. This leaves South Africa in a particularly vulnerable position, and KZN is believed to be a relatively easy target due to its coastal location and its border with Mozambique, which is well known as a transit country.

#### **2.3.4 International comparison**

In order to properly understand our own poaching crises in Africa and South Africa, it is crucial to look internationally and examine the poaching conditions in overseas nations, particularly those of consumer countries and nearby territories. Moreover, it is important to ascertain through this international examination why Asian consumers are increasingly targeting African animals rather than animals that can be sourced closer to them.

In terms of rhinos from other continents, over 70% of the world's population of more than three thousand greater one-horned rhino live in India. In the Indian state of Assam, twenty-one greater one-horned rhino were poached in 2012. This may be compared to the twenty-six killed in Assam within the first five months of 2013 alone (Cota-Larson 2013a:np).

The WWF (nnd:np) states that there are two remaining subspecies of the Sumatran rhino – the western Sumatran and the eastern or Borneo Sumatran. The population of Sumatran rhinos was halved between 1985 and 1995, and today fewer than two hundred exist, while it is estimated that a maximum of seventy-five individuals occur in the largest population. These minute population sizes make the rhinos extremely vulnerable to poaching, political conflict, natural disasters and diseases.

In addition to this, the Indonesian Javan rhino is most likely the “rarest large mammal on the planet”, numbering no more than fifty in the wild and zero in captivity. The fact that the entire remaining population lives in one area, the Ujung Kulon peninsula, makes the risk to this species enormous. The population, although stabilised, is not

increasing, and a low degree of genetic diversity makes surviving disaster or disease unlikely. Furthermore, the Javan rhino in Vietnam was declared extinct in October 2011, after the last poached rhino was found there in April 2010 (WWF ndc:np).

It is asserted by the WWF (nda:np) that there are between twenty-five thousand six hundred and thirty-two thousand seven hundred and fifty Asian elephants in existence. Consequently, they are listed as endangered by the IUCN, as their numbers have decreased by at least 50% over the past sixty to seventy-five years. Almost 30% of the remaining elephants live in captivity. The male Asian elephant is the only one that bears tusks, and therefore the victims of poaching are only male. Between 1995 and 1996, Asian elephant poaching increased dramatically due to demand for meat, hides and ivory, with the border between Thailand and Myanmar proving to be particularly problematic. Following the ban on the international trade in ivory in 1989, the trade continued illegally, although most of the illegal ivory comes from African elephants.

In terms of the dwindling international rhino and elephant populations, it is clear that since these species have been driven to extinction or decimated due to poaching, it is necessary for the crimes to be displaced. Criminal networks therefore have to shift their focus to other countries, where animals are relatively plentiful and socioeconomic conditions are exploitable, such as in Africa.

From 1994 to 2003, the Wildlife Protection Society of India (WPSI) recorded the “poaching and seizure” of two thousand three hundred and thirty-five leopards and six hundred and eighty-four tigers in India. The Executive Director of WPSI, Belinda Wright, stated that, “Between 12 June and 10 July 2004, ten tiger skins, four sacks of fresh tiger bones, and the claws of thirty-one tigers and leopards were seized in eleven cases throughout India and Nepal.” The extent of the poaching of tigers is massive when taking into account the small number of tigers that remain (Ellis 2005:3). According to Ellis (2005:4), this is highlighted by the fact that the WPSI has held that, “To reach an estimate of the magnitude of the poaching of tigers in India, it may be interesting to note that the Customs authorities multiply known offences by ten to estimate the size of an illegal trade”.

Foley, Stengel and Shepherd (2011:1) state that in terms of the bear bile trade, three species of bear that occur in Southeast Asia are the main victims – the Asiatic black bear, the sun bear and the brown bear. Asiatic black bears, which exist throughout eighteen Asian countries, are classified by the IUCN as vulnerable and may number as few as twenty-five thousand in the wild. However, according to Foley et al (2011:2), MacGregor maintains that this number may be just below one hundred thousand. The sun bear lives in eleven Asian countries and is also recognised as vulnerable, as the population has declined by 30% over the last thirty years due to the illegal trade and habitat destruction (Foley et al 2011:3). Finally, the brown bear is classified as of Least Concern, but this is due to the healthy populations in Europe and North America. The brown bear populations in Asia are small and are under threat from poaching (Foley et al 2011:4).

In the past, bear bile was harvested by removing the gall bladders of poached bears, but now bile is also taken from living bears in commercial bear farms (Foley et al 2011:6). Maas states that this can be done by means of inserting a permanent catheter into the bear's gall bladder to drain the bile, or by doing an ultrasound to locate the gall bladder and then stabbing the bear to remove the bile (Foley et al 2011:6).

As detailed by Foley et al (2011:5), Busch and Vu are of the opinion that bear bile is used to treat liver problems, muscular difficulties, bruises and sore throats, amongst other ailments. Bear bile is sold in many ways, including inside the complete gall bladder, as raw bile, as an ointment, as flakes, in powder form, and in pill form (Foley et al 2011:5). The World Society for the Protection of Animals (WSPA) believes that as of 2010, at least twelve thousand bears were being kept in legal and illegal bear farms in Asia (Foley et al 2011:6).

Crystallising from the above discussion is the undeniable fact that it is necessary to draw attention to species that are not native to Africa, since the destruction of any species affects biodiversity in general and has an effect on the well-being of future generations of humans. Furthermore, once a species is driven toward the brink of extinction, alternatives will need to be found to continue to satisfy the demand. This

can be seen, for example, following the destruction of the population of tigers that are poached for their skins and bones. In order to keep up with the demand, lions in Africa are being poached and their bones, passed off as tiger bone substitutes, are being used, possibly unwittingly, by Asian consumers.

## **2.4 Conclusion**

The illegal trade in endangered wildlife, particularly with regards to rhino poaching, has escalated into an enormous problem not only for South African provinces, but also for the international arena. The statistics show a massive increase in the rhino poaching rates in recent years, which coincides with the rising demand for rhino horn. These rising levels of poaching endanger not only our rhino, but also put other species of animals at possible risk for poaching in the future, as our borders are increasingly placed in jeopardy.

Furthermore, citizens of our country are placed at risk, as border control problems are an issue of national security and create the potential for many other types of crimes to occur, such as drug and weapons smuggling, as well as illegal immigration and human trafficking. This makes the illegal trade in endangered animals an undeniably serious form of transnational organised crime.

While this chapter has examined the nature and extent of the illegal trade in endangered animals, the following chapter will begin the data analysis of the information gathered from the questionnaires. The analysis in Chapter 3 will focus on the victims, offenders and modus operandi involved in these crimes.

# **CHAPTER THREE**

## ***VICTIMS, OFFENDERS AND MODUS OPERANDI***

### **3.1 Introduction**

In the preceding chapter, the nature and extent of the illegal trade in endangered animals was discussed, culminating in the establishment of a comparison between the extent of the situation in KwaZulu-Natal (KZN), South Africa in general, Africa, and the international arena. Rhino and elephant poaching were determined to be particularly significant crimes overall, with rhino poaching being the most prolific crime against endangered animals in KZN. Furthermore, it was found that the socioeconomic circumstances in KZN have contributed to the illegal trade in endangered animals within the province. This trade in general may be described as organised in nature, with the consequence of destabilising the economy as well as undermining national security.

In order to comprehensively flesh out and examine the data obtained from the questionnaires, the specifics will be presented in this chapter and over the next three chapters. This will facilitate separation of the most significant themes addressing the key questions of this study into logical sections. This chapter will focus on providing an analysis of the information garnered from the questionnaires. It will scrutinise the victims and offenders of the illegal trade in endangered animals, as well as the modus operandi of these crimes.

In order to achieve this, the discussion will focus on the endangered wildlife as victims in KZN, as well as on the victimisation of South African citizens in general and the ill individuals (such as those with cancer) who may utilise the products of endangered animals for their purported health benefits. The people who use animal products as status symbols will not be included in the examination of victimisation as they are not suffering or being medically misled as a result of using such products. The characteristics of the perpetrators will also be discussed, which can serve as a basic profile of these offenders. Finally, the modus operandi or methods by which these criminal acts are committed will be examined in terms of the infiltration of reserves, the poaching of the animals and the trafficking of their parts.



### **3.2 Questionnaire structure**

The survey questionnaire served to address the key questions of the research study, which relate to the victims, offenders and modus operandi involved in these crimes, the adjudication of the offences, and the causes and consequences of the illegal trade in endangered animals. It was comprised of eight main sections, some of which were subdivided. In total, there were thirty questions – all of which were open-ended. Questionnaire attached as Appendix 2.

The key questions comprising the questionnaire will be dealt with in the various chapters as follows:

- The first to third questions dealing with the victims, offenders and modus operandi will be discussed in this chapter (Chapter 3).
- Chapter 4 will cover the adjudication of these offences, which relates to questions five to seven.
- The fourth question addressing the causes of illegal trade in endangered animals will be tackled in Chapter 5.
- In Chapter 6, the consequences of these offences will be discussed, and this reflects in question eight.

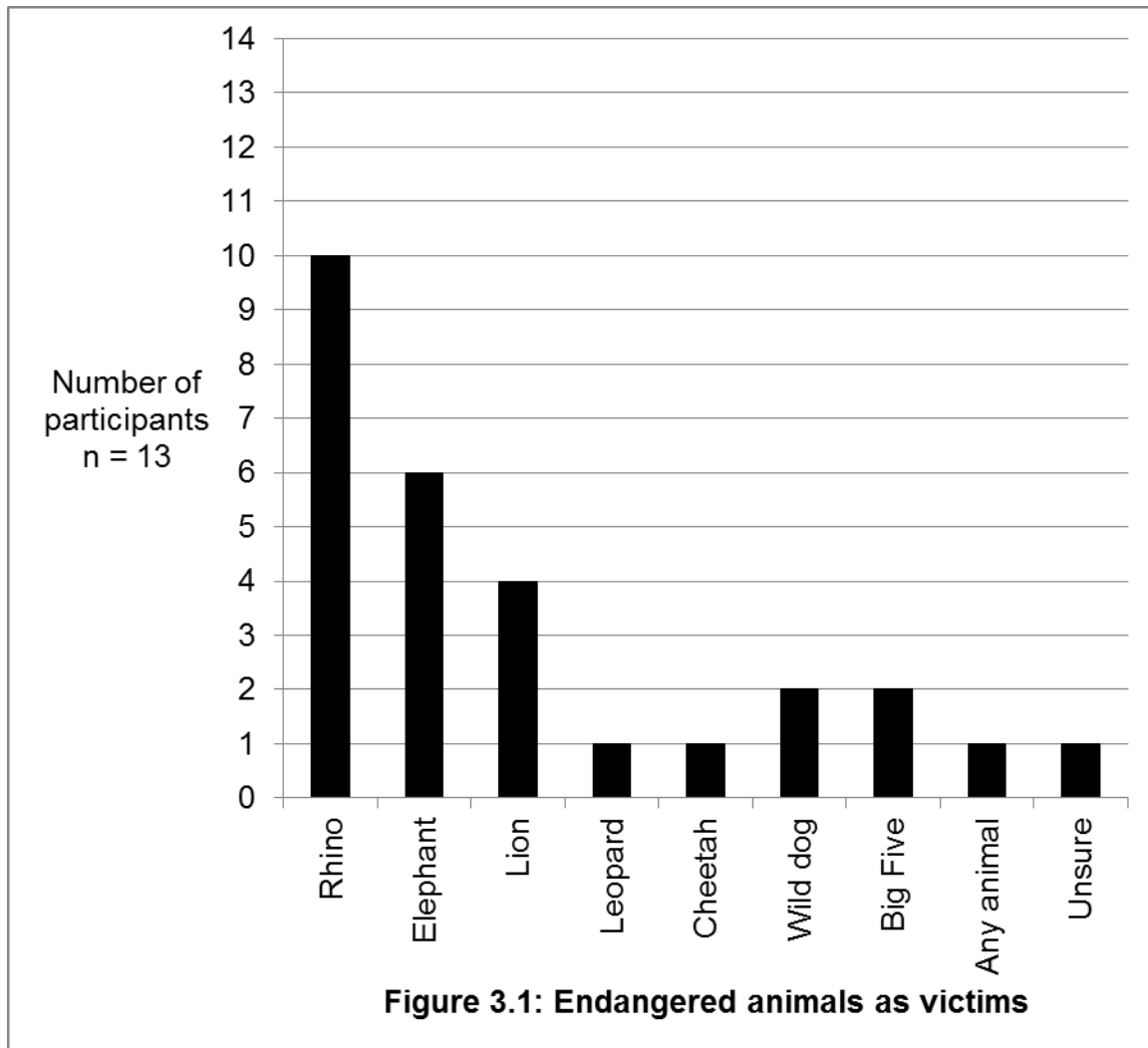
Eighteen survey questionnaires were disseminated via email to the participating conservation and law enforcement organisations. After a very lengthy and time-consuming follow-up process, thirteen questionnaires were returned by email or post, or were personally collected by the researcher.

### **3.3 Victims**

The questions in this section dealt with victim characteristics, and referred specifically to which animals are mostly victimised, whether South African citizens are also victimised in terms of our wildlife being killed, and whether ill people in traditional Asian cultures are victimised due to being given incorrect medical advice.

### 3.3.1 Endangered animals as victims in KwaZulu-Natal

The most obvious targets of wildlife crimes are the wildlife themselves, which are the direct victims. This victimisation may be in the form of injury, harm, suffering and/or death. Furthermore, the illegal trade in endangered animals may encompass “kidnapping, smuggling, death or life in pain and/or confinement” (Wyatt 2013:70).



The participants were asked in the questionnaire which animals are mostly victimised. They could select more than one answer, hence the responses totalling more than thirteen. Ten (77%) of the participants directly mentioned rhino, as depicted in Figure 3.1 above. Rhinos are targeted regardless of their sex or age, the size of their horn, or whether or not they have been dehorned. It is put forward by the researcher that

dehorned rhinos may still be victimised because of the small remaining stump of horn that is left after the dehorning procedure, as even this slight stump is very valuable.

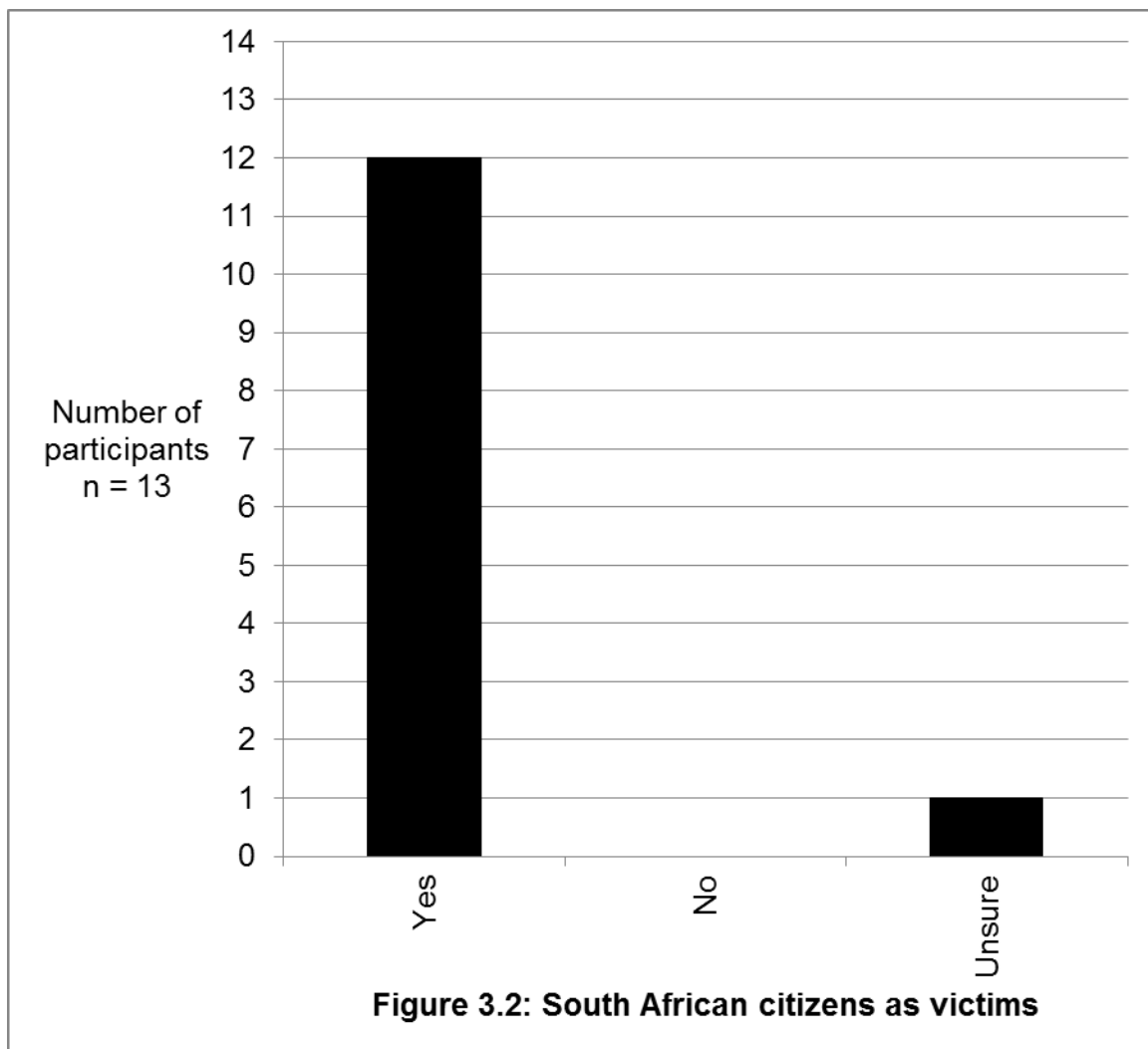
It was explicitly held by six (46%) of the participants that elephants are often targeted, while four (31%) of the participants were of the opinion that lions specifically are also victimised. One (8%) of the participants openly mentioned leopard, while another one (8%) held that cheetah are also under attack. Wild dogs are victimised according to two (15%) of the participants. Two (15%) of the participants referred precisely to the animals belonging to the Big Five (rhino, elephant, lion, leopard and buffalo) as the main victims of the illegal trade in endangered animals. One participant (8%) stated that any animal might be poached, whether it is large or small, as long as it provides protein. However, this participant stated that smaller, easier to catch animals, are most commonly victimised.

These findings are in line with the serious levels of rhino poaching in KZN and South Africa in general. Furthermore, the findings tie in with the incidents of elephant poaching that are emerging as a new problem for KZN and South Africa, as well as the lesser known instances of leopard, lion, cheetah and wild dog poaching.

One participant (8%) stated that this question - as well as all of the other questions in the questionnaire - cannot be answered due to a lack of personal experience in KZN. This inability to answer the questions was surprising considering the qualified status and expert position of this specific participant. It is therefore advocated that this exposes a knowledge gap amongst certain authorities regarding the situation surrounding the illegal trade in endangered animals in KZN. Considering the priority status of rhino poaching in particular in South Africa, this knowledge gap is quite alarming and supports the research finding regarding the importance of education and skills training for officials in the conservation field. It is unlikely that the participant did not address the questions because of a lack of desire to commit to any answers, as they were helpful in other aspects of the research with which they were well-informed.

### **3.3.2 Citizens of South Africa**

Wyatt (2013:64) maintains that people can also be the indirect victims of the illegal trade in endangered animals. This is due to the fact that individuals who live in areas where they are dependent on wildlife for their means of support would be threatened economically by an illegal trade. It is presented that this is clearly the case in South Africa, as citizens are dependent on wildlife tourism for their livelihoods. Similarly, a country as a whole may be considered an indirect victim, as an illegal trade by its very nature circumvents taxes and therefore contributes to a loss of income (Wyatt 2013:65).



In answer to the question regarding whether or not South African citizens are victimised in terms of the killing of our wildlife, twelve (92%) of the participants agreed

that this was the case, as per Figure 3.2 above. However, different reasons were given for this, which will be elaborated on below.

One (8%) of these participants mentioned that while killing animals for bushmeat is not regarded as causing victimisation to any person, citizens may be victimised if natural resources are compromised when animals are overhunted. According to the participant, this is due to the fact that killing for bushmeat provides sustenance for those who may not be able to afford to buy food, whereas overhunting may be a criminal offence. This discovery was very thought-provoking as it showed that offenders may be regarded as less guilty when they are poaching out of necessity for food. These crimes are consequently viewed as being less serious in nature. The need for sustenance is therefore seen in a more favourable light and is easier to justify than the apparent financial motivations for other wildlife crimes, such as rhino poaching, which are viewed much more seriously.

It was mentioned by four (31%) of the participants that poor South African citizens are victimised in that they are recruited for poaching, possibly by foreigners who offer them a lot of money to commit the crimes. Due to the poachers' impoverished living situations, they are not able to refuse this money. Another one (8%) of the participants said that the family members of poachers may also be considered victims as they are left abandoned when their sole breadwinner is apprehended. It is interesting to note in this regard that some of the participants view the poachers themselves or their families as victims of their impoverished circumstances.

Community members are under peril from offenders in the illegal trade in endangered animals, according to three (23%) of the participants. In this regard, citizens may be threatened to keep quiet if they know too much, and poachers may be intimidated if they wish to withdraw from the criminal activities. Furthermore, some members of the community may be involved in the illegal activities and benefit indirectly or directly therefrom. It was found that the greater the benefits of the crime, the greater the threat is to members of the community to keep quiet. The threat levels may also be influenced by the offenders' status and the tribal authority ranking. This shows that intimidation is a significant factor in the communities from which the offenders in the

illegal trade in endangered animals originate. Unfortunately, this does not bode well for the necessary gathering of intelligence from the communities neighbouring protected areas in order to prevent these offences.

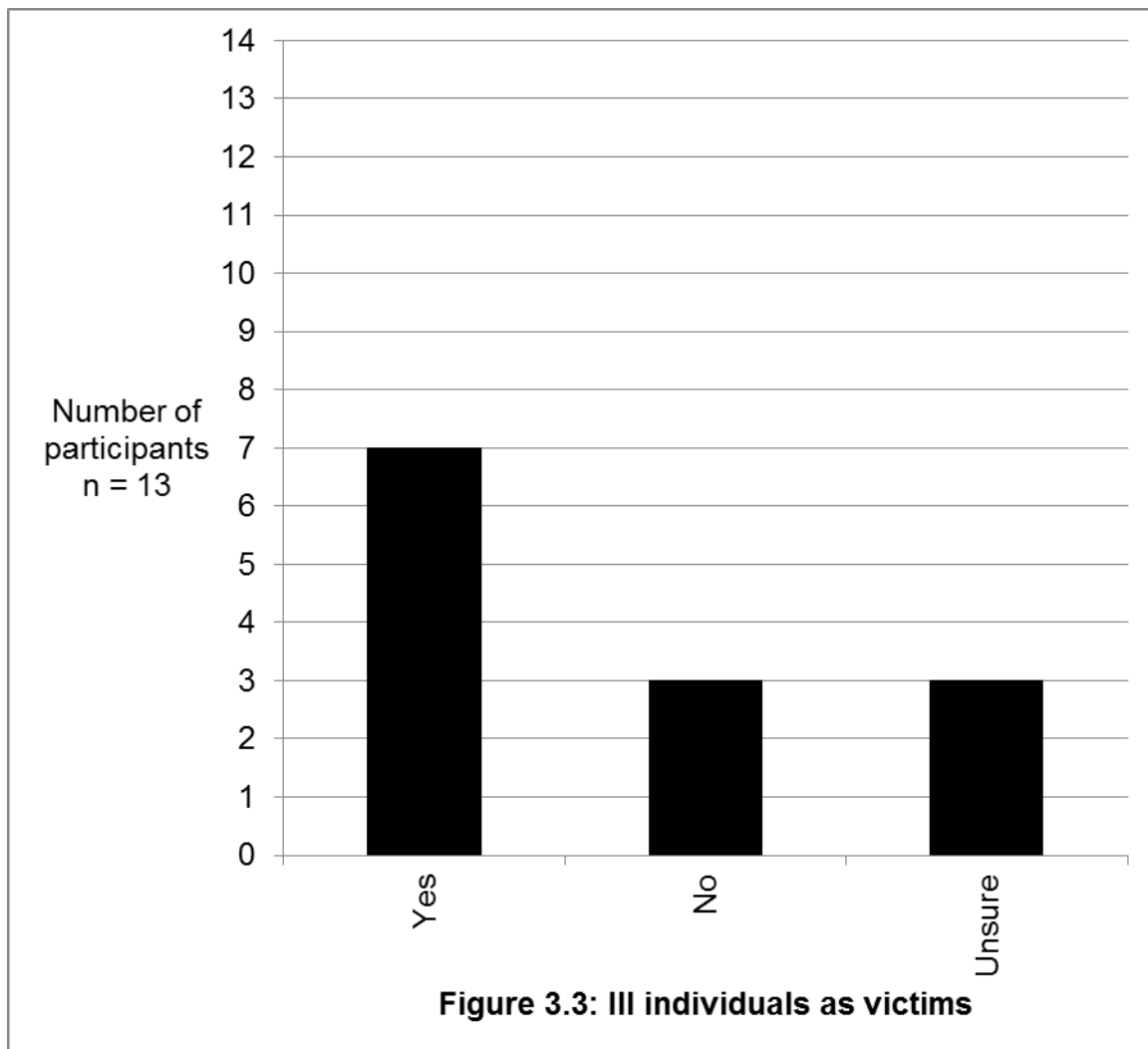
It was stated by two (15%) of the participants that citizens who look after wildlife or work in the conservation arena are victimised. This may be owing to the fact that they understand nature and are at risk for protecting animals, and may thus be under threat from armed poachers. This is unfortunate as it is the very people who appreciate and safeguard wildlife who seem to be under threat for undertaking this enormous responsibility.

Two (15%) of the participants mentioned that citizens are victimised by these crimes in terms of economic losses. This may take the form of a decrease in tourism and employment in South Africa, as well as the fact that the legal hunting industry loses income when rhino are illegally killed. It was also held that citizens suffer financial and heritage losses due to rhino poaching in terms of their investment in public reserves, while private rhino owners may also be viewed as victims when their rhino are slaughtered. These results show that all citizens may be regarded as victims when our natural resources that should be protected are destroyed. Taxpaying citizens in particular are also victimised when their investments in public parks are damaged by criminal activities, such as the poaching of our wildlife.

Finally, this question was not addressed by one (8%) of the participants as it was deemed not relevant to their experience. It was decided to still include this individual in the research due to their expertise on conservation matters, which may serve to expose a lack of awareness of certain professionals regarding conservation crimes in KZN.

### 3.3.3 The utilisation of Traditional Chinese Medicine by ill individuals

When answering the question as to whether or not ill people in traditional Asian cultures are victimised due to being given incorrect medical advice with regard to the use of animal products in Traditional Chinese Medicine (TCM), it was found that seven (54%) of the participants believed this to be true. This is shown in Figure 3.3 below. However, the reasons given for this varied and will be discussed below.



It was held by four (31%) of these participants that the use of animal products in TCM is based on mythical cultural beliefs. The use of these products, such as rhino horn, in TCM is based on the traditional belief system of the Asian culture, but these traditional medicines have not been proven effective. It was reported that there is

currently a scam occurring whereby rhino horn traders trap ill individuals outside clinics and persuade them to purchase illicit rhino horn, under the pretence of it curing their cancer.

These findings support the view that ill people who use animal products in TCM, on the basis of being given incorrect medical advice, may be viewed as victims themselves. Rather than receiving proper medical care, they are being targeted by traders who exploit their sicknesses and vulnerabilities. This belief is reinforced by Ash (2012:5), who maintains that due to the misconception that rhino horn can cure cancer and other serious illnesses, peddlers are alleged to be entering hospital wards and exploiting distressed patients.

Three (23%) of the participants felt that these ill people are not being victimised per se. Ill people who use TCM in an attempt to cure their sicknesses may simply be uneducated. For instance, rhino horn may be touted as a medicine for some illnesses, and certain individuals may believe that it is the only option for them and that other treatments will not be effective. The problem may therefore be psychosomatic rather than a victimisation issue. These outcomes are interesting in that they highlight the need for education for those who use animal products in TCM, in order to bring about behavioural changes.

Three (23%) of the participants stated that they did not know the answer to this question. This shows a lack of knowledge about the underlying contributing factors to crimes against wildlife, particularly rhino poaching. Besides, this suggests that further study is needed into the use of animal products, particularly rhino horn, in TCM in order to properly understand this phenomenon. If the causes are not understood, these crimes cannot be prevented. Specifically, the reasons for and consequences of using these products need to be examined in order to create programmes that engender awareness in consumers.



### **3.4 Offenders**

This set of questions tested the participants' perceptions as to the characteristics of the perpetrators in the illegal trade in endangered animals in KZN, particularly rhino poaching. In other words, the questions aimed to expose an offender profile in terms of the race, gender, age, economic status, education level and other possible characteristics of these offenders.

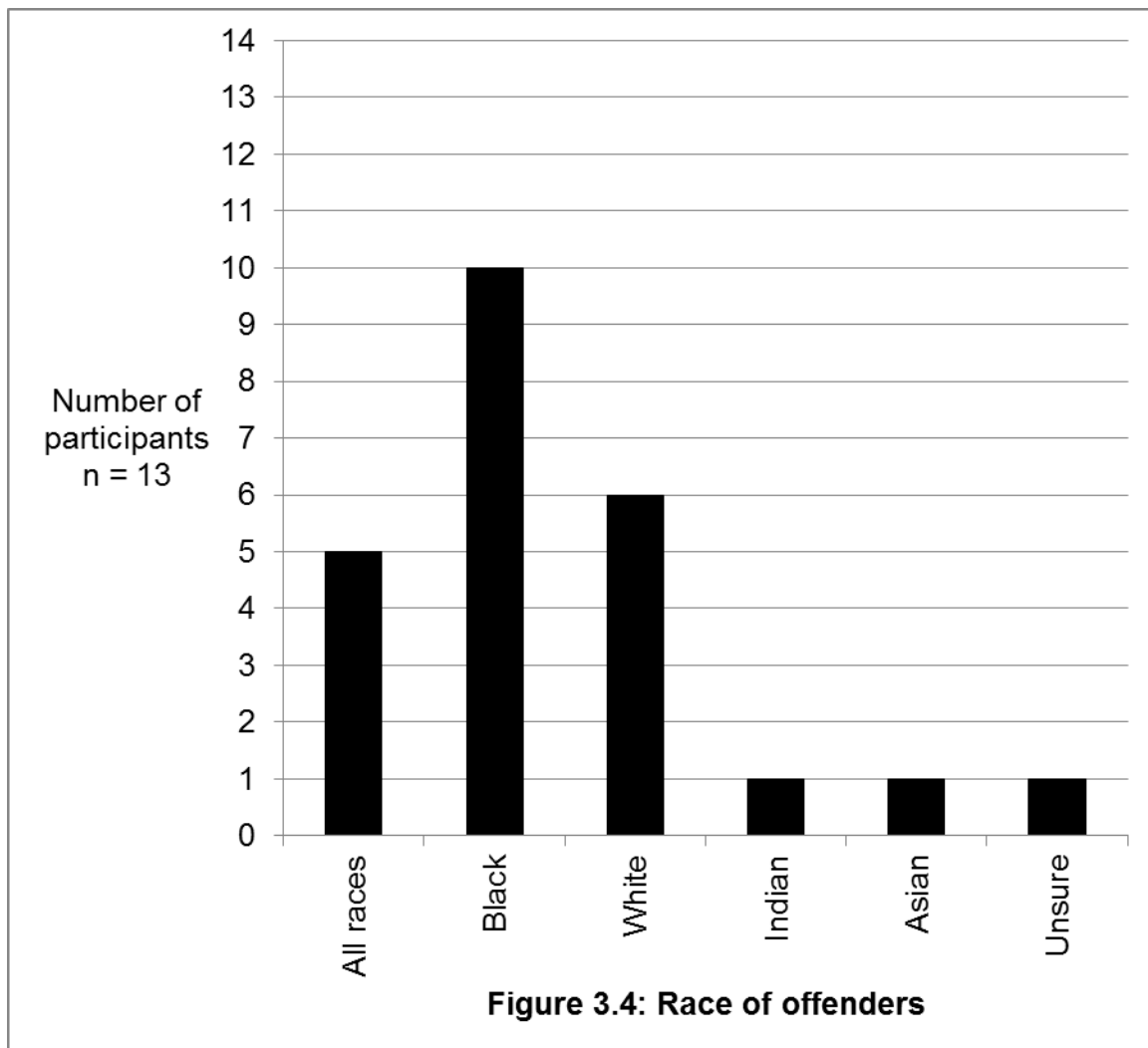
Wyatt (2013:83-85) is of the opinion that there are several types of poachers – those who kill for survival (such as for food and income), those who are opportunistic (or are motivated by their closeness to “natural resources” rather than financial necessity), and those who are experts (such as those who commit these offences out of rational choice rather than economic need).

Furthermore, other offenders in the illegal trade in endangered animals may be the smugglers who traffic the animals or their products and operate based on financial incentives. Smugglers may also have links to organised “criminal networks” (Wyatt 2013:85,87). According to Wyatt (2013:93) additional offenders in the chain are the processors, who form the animals into goods that can be traded, and the sellers, who peddle the products. The final offenders in the chain are the buyers, who acquire the wildlife products and then use or consume them (Wyatt 2013:94).

#### **3.4.1 Race of offenders**

The participants were able to provide more than one answer to this question, which is why the responses totalled more than thirteen. According to five (38%) of the participants, all racial groups may be involved in the illegal trade in endangered animals, as per Figure 3.4 below. However, it was found that their level of involvement varies. Ten (77%) of the participants specifically mentioned black Africans as being the main race of offenders implicated in the illegal trade in endangered animals. The greater involvement of black offenders may be owing to the fact that they are the majority population group in South Africa, but other racial groups are also implicated. Black people tend to be the poachers operating on the ground as they may come from

Mozambique or from the local communities that surround game reserves. They may also be working inside parks and participating in corrupt activities.



On the other hand, offenders from other races are more likely to operate higher up the trade chain, such as in running the syndicates and placing the orders for rhino horn. In this regard, white people are also involved in these crimes, according to six (46%) of the participants. One (8%) of the participants explicitly referred to Indian people, while another one (8%) implicated Asians in the illegal trade in endangered animals.

One (8%) of the participants was unable to answer this question due to a lack of personal experience on the matter. This individual was still included in the study due

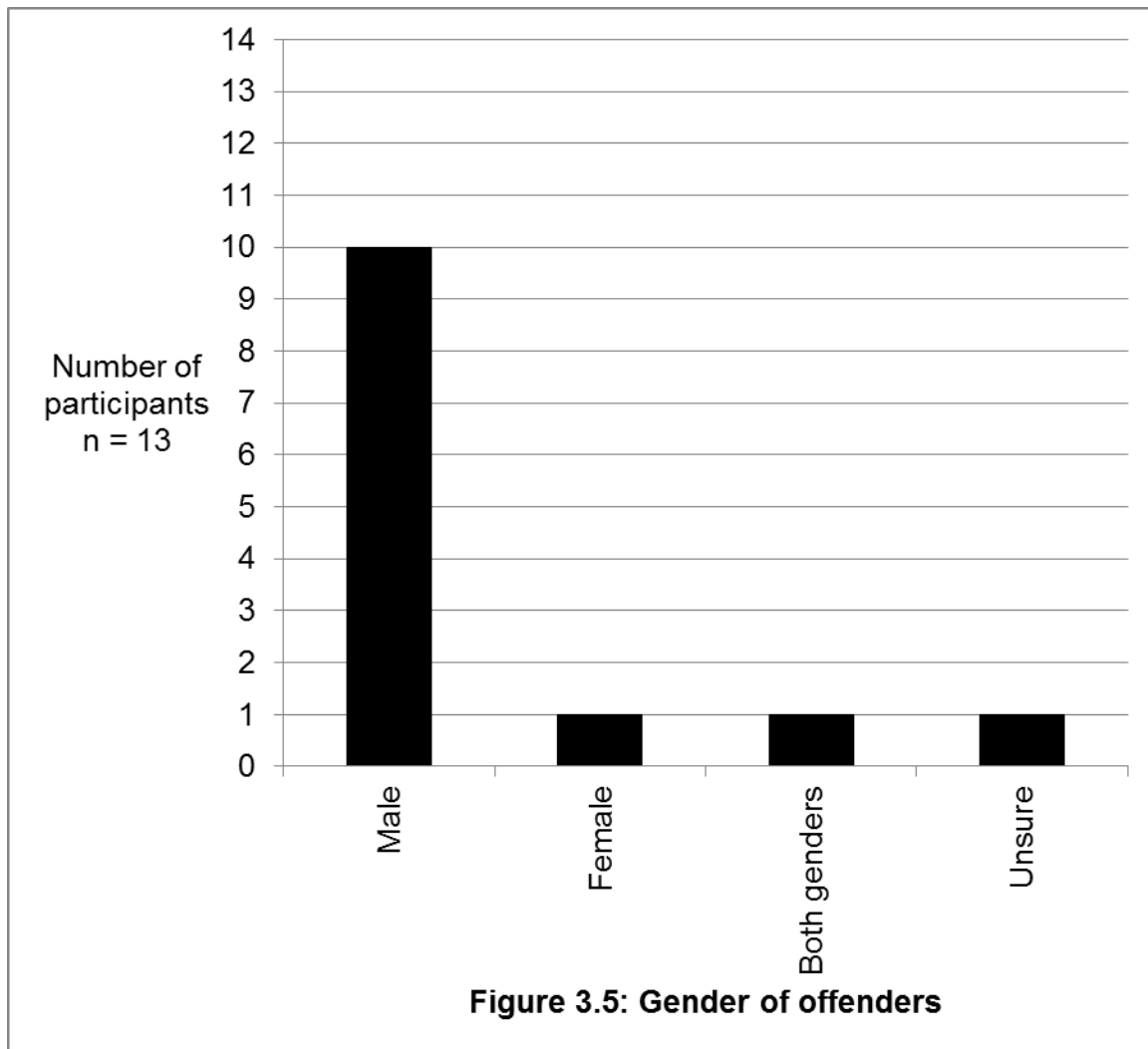
to their professional status, and to highlight a potential gap in the knowledge of some experts about the poaching crisis in KZN.

These findings regarding race are interesting, since most of the participants implicated black people as being the primary offenders in the illegal trade in endangered animals. Due to the previously disadvantaged position of black individuals in South Africa, these findings can be linked to some of the causes of crime, such as lower levels of education and susceptibility to financial motivations, which will be reviewed in Chapter 5.

### **3.4.2 Gender of offenders**

Men are mostly the offenders in these crimes, according to ten (77%) of the participants, which is depicted in Figure 3.5 below. One (8%) of the participants stated that both genders are implicated, while another one (8%) referred specifically to females. This finding reflects normal crime trends in that men are the predominant gender when it comes to offending. The fact that men commit more crimes than women is highlighted by Heidensohn and Silvestri (2012:336), who note that men also tend to be implicated in more violent and serious offences. Furthermore, men are more predisposed than women to being recidivists.

One (8%) of the participants was unable to provide an answer to this question due to a lack of knowledge on the situation in KZN. This individual was nevertheless included in the research due to their expert status in their field, which in itself highlights the fact that certain specialists may actually be less knowledgeable about the particular circumstances in KZN.

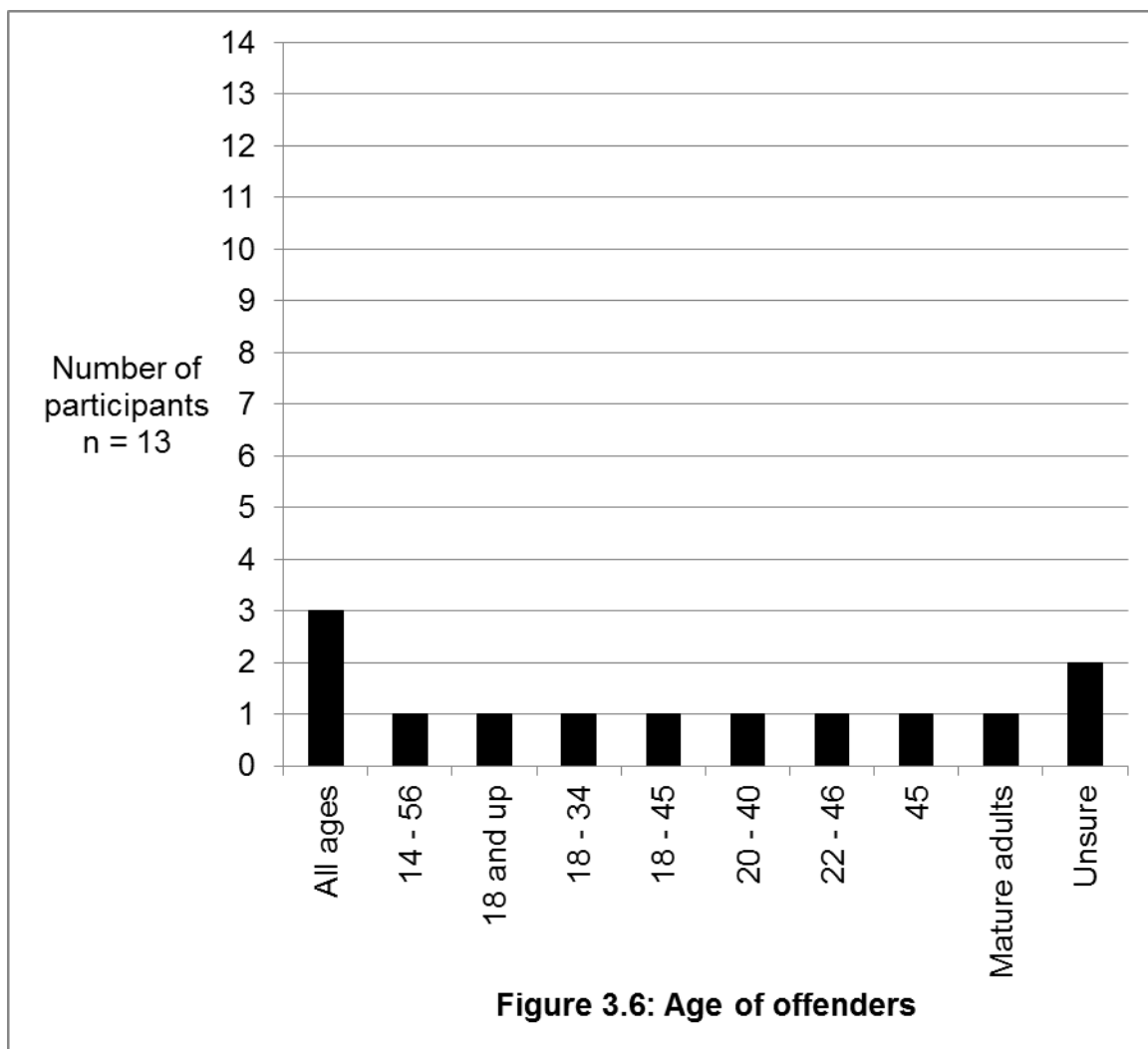


### 3.4.3 Age of offenders

In response to the question about the age of the offenders involved in the illegal trade in endangered animals, three (23%) of the participants were of the opinion that people of all ages engage in these crimes. This is depicted in Figure 3.6 below. For example, these offenders may range from youthful boys hunting illegally with their dogs to older individuals, up to the age of sixty, poaching rhino.

One (8%) of the participants said that the offenders are from fourteen to fifty-six years old, while another one (8%) said that the relevant ages are eighteen and older. A further one (8%) of the participants held that offenders range from eighteen to thirty-four, and another one (8%) specified eighteen to forty-five. According to one (8%) of

the participants, twenty to forty years of age is the usual age group, while an additional one participant (8%) emphasised the twenty-two to forty-six bracket. Finally, forty-five was deemed to be the pertinent age by one (8%) of the participants. One (8%) of the participants additionally conveyed the opinion that most of these criminals are mature adults.



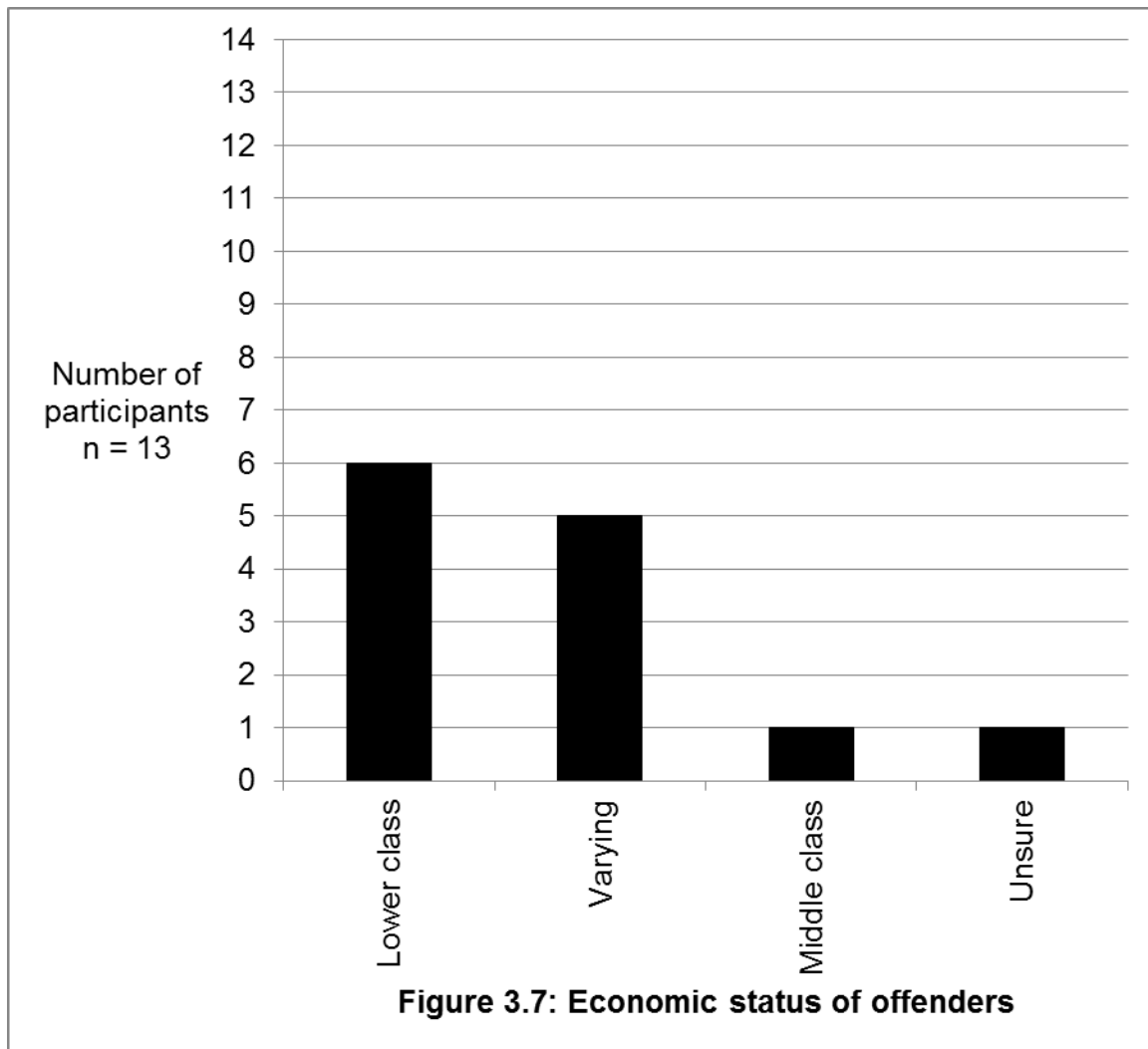
This question was not addressed by two (15%) of the participants due to their lack of knowledge on the issue. They were included in the research owing to their professional positions, and in order to highlight the fact that some experts may need to be made more aware of the characteristics of offenders in the illegal trade in endangered animals in KZN.

These outcomes relating to the age of offenders are thought-provoking, as they more or less coincide with general trends of criminal behaviour in that most offenders tend to be young adults. According to Ulmer and Steffensmeier (2014:377), sociologist Adolphe Quetelet discovered that criminality was likely to peak in adolescence and then diminish with age. This may at least partially be explained by the decline of physical abilities that coincides with getting older, as committing crimes may require physical strength and speed (Ulmer & Steffensmeier 2014:379). It is suggested that this is particularly the case for poaching, which may necessitate arduous tasks, such as tracking and killing large animals in difficult terrain.

#### **3.4.4 Economic status of offenders**

As per Figure 3.7 below, six of the participants (46%) directly indicated that offenders in the illegal trade in endangered animals have a low economic status. It was emphasised that they are poor and financially unstable. A further five (38%) of the participants referred to the varying economic statuses of different offenders, which is dependent on their positions within the criminal syndicates. This may be attributed to the fact that in terms of endangered species, the greater the financial rewards, the more the economic status of the offenders varies. For example, it was mentioned that local black poachers on the ground are often impoverished and have no alternative source of income.

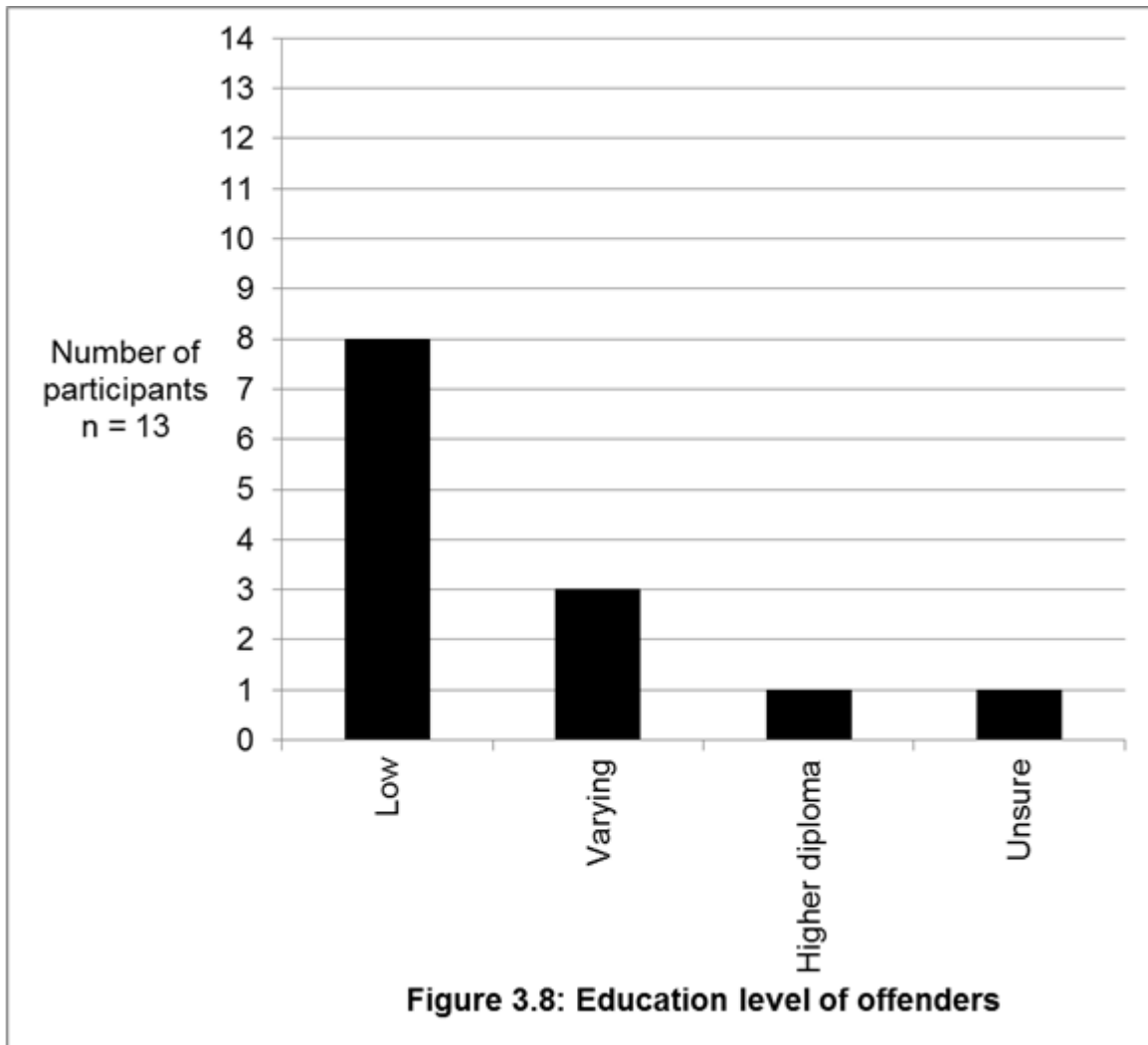
On the other hand, the offenders higher up the chain (such as the middlemen) may be more financially stable and may live in cities. These criminals who are higher up in the chain may take on a more professional role in the trade network, and may be veterinarians, farmers, game rangers or recreational hunters. The wealthiest offenders tend to be those living overseas who give the instructions, and so the level of wealth thus decreases down to the level of the poachers. It was submitted, however, that poachers today are better off than poachers were in the 1970s and 1980s. Finally, the impact of overseas offenders on the poaching situation in KZN was emphasised in terms of their organised criminal activities. Only one participant (8%) exclusively mentioned that offenders come from the middle class.



This question was deemed inapplicable by one (8%) of the participants due to their admitted lack of knowledge about the circumstances in KZN. It was decided, however, that this individual should still be included in the study owing to their specialisation in the field of conservation, which serves to emphasise a potential dearth of awareness amongst certain experts regarding the illegal trade in endangered animals in KZN.

These findings are in line with the beliefs reinforced by the literature, which are supplied throughout this dissertation and show that the financial benefits of the illegal trade in endangered animals are a strong enticing factor for these crimes. Many of the offenders come from impoverished communities that neighbour game reserves or parks, or cross the border from rural villages in Mozambique in order to commit their crimes.

### 3.4.5 Education level of offenders



Eight of the participants (62%) stated that offenders have a poor or low level of education, as shown in Figure 3.8 above. In fact, offenders in the illegal trade in endangered animals may often have little to no education. It was maintained that while most people in the rural areas have matriculated from school, poachers mainly have low levels of education (a Matric education or lower). Furthermore, offenders may not understand how crucial it is to protect nature and the effect that its destruction will have on their lives.

The varying nature of the education levels of offenders was referred to by three (23%) of the participants, who suggested that the level of education is dependent on the



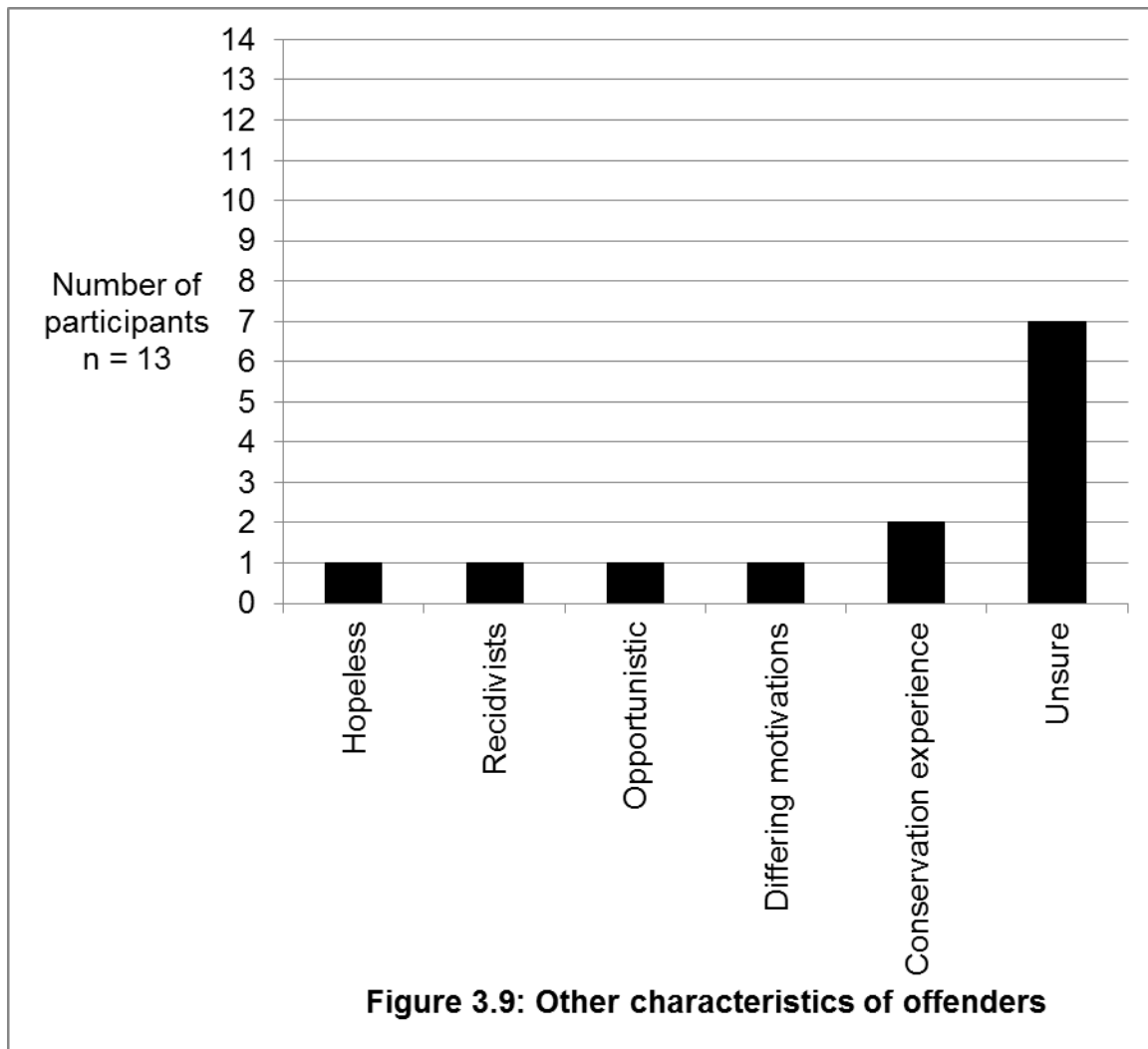
individual's position in the criminal network. It was stressed that the greed for money is limitless and exists regardless of educational achievements or a lack thereof. Thus, the education level of offenders may range from their being unschooled, all the way up to having attained university degrees. In general, poachers are poorly educated, while those higher up in the criminal organisations are better educated and more highly skilled, and have more connections. The importance of know-how or expert practical skills, rather than a formal education, was emphasised when it comes to the illegal trade in endangered animals and the field of organised criminal activities. One (8%) of the participants further stated that offenders may have higher diplomas.

This question was left unanswered by one (8%) of the participants due to their lack of knowledge about the situation in KZN, which points to the necessity of further training for certain conservation professionals. This individual was still included in the research, as it was deemed important to underline their lack of awareness, despite their expert status.

These results are in line with the emphasis on the importance of education in order to prevent these offences, which will be comprehensively dealt with in Chapter 8. Furthermore, since most offenders come from impoverished communities, it can be expected that their levels of education would subsequently be poorer. Poverty and education levels are therefore related elements that may contribute to wildlife crimes.

#### **3.4.6 Other characteristics of offenders**

The participants were asked in the questionnaire to identify other relevant characteristics of offenders in the illegal trade in endangered animals. This was queried in order to uncover alternative important qualities that they may possess, which would serve to add to the basic offender profile that aims to be established. As depicted in Figure 3.9 below, a combined total of six (46%) of the participants believed there to be other germane factors, which will be elaborated on below.



Being hopeless was mentioned as characterising offenders in the illegal trade in endangered animals by one (8%) of these participants. Another one (8%) of the participants stated that while they may not have been apprehended previously, rhino poachers are unlikely to be first-time offenders, and that they would have probably committed other types of poaching or petty offences in the past. This is an interesting finding as it indicates that rhino poachers may be repeat offenders or recidivists.

The opportunistic nature of these offenders was emphasised by one (8%) of the participants, who mentioned that by virtue of their geographic location (such as in an isolated community bordering a game reserve), poachers simply happen to reside in an opportune place when the middlemen come to collect rhino horn. These middlemen are aware of where the rhinos are, and they conduct poaching that is led

by intelligence when they find someone who is willing to kill the animals. The participant emphasised that this type of operation is different to killing for the pot – in other words, poaching that is done for the purpose of eating for survival. These views are in line with the other findings, which emphasise the importance of job creation and education in the communities on the borders of parks and reserves.

It was held by one (8%) of the participants that while some of these criminals are subsistence poachers who snare animals, other poachers are driven by financial motives and utilise sophisticated weapons such as automatic rifles. This corresponds to the view that offenders may commit these crimes due to the financial incentives that they attain, particularly from poaching which is a highly financially profitable offence, as will be demonstrated in subsequent chapters.

Worryingly, two (15%) of the participants stated that these offenders may have experience in the conservation field. It was held that they may also have bush war skills. It is therefore put forward that this is in line with the belief that there is a high degree of corruption involved in these offences, with some of the people who are supposed to protect endangered animals being the ones who are involved in the illegal trade. This issue of corruption will be highlighted in the following chapters.

Seven (54%) of the participants did not describe other characteristics that offenders might possess. One (8%) of these participants was not able to address this question specifically due to a lack of personal experience regarding offenders in KZN. This individual was still included in the study due to their expert qualifications. Their lack of awareness on this issue exposes a potential gap in the knowledge base regarding the poaching situation in KZN.

### **3.5 Modus operandi**

The questions in this section were aimed at eliciting the opinions of the participants in terms of the modus operandi or methods by which these crimes are committed, particularly in terms of rhino poaching. Here the emphasis was placed on how parks

and reserves are infiltrated, how the endangered animals are captured or poached inside the reserves or parks, and how the animals or their parts are trafficked.

### **3.5.1 Infiltrating the parks and reserves**

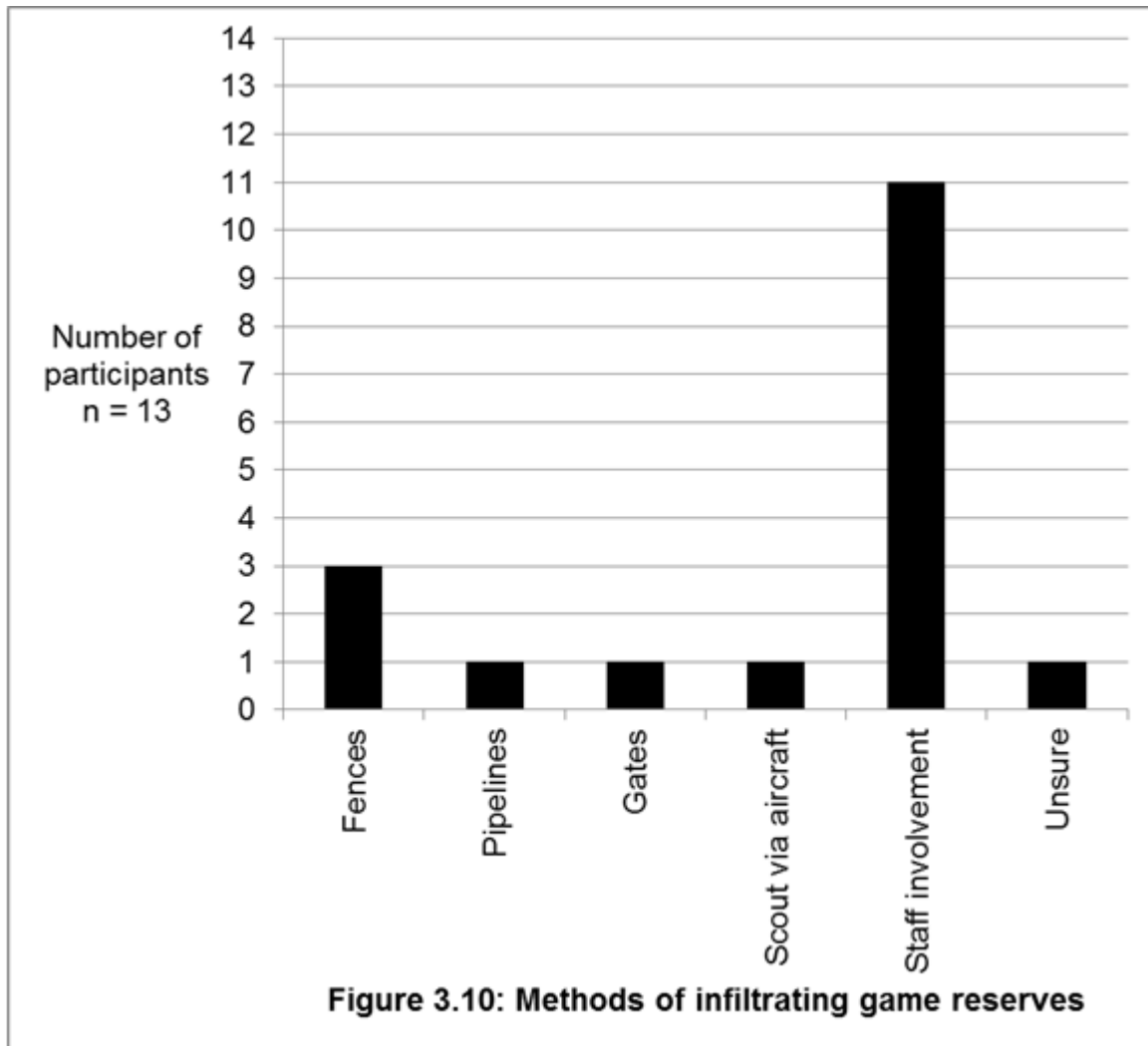
Stop Rhino Poaching (2014:5) states that poachers generally operate in groups of between two and six people. They exploit a tactical lead and may conceal themselves in the local communities. They furthermore make use of corrupt staff members or expert guides to gather information for their crimes. Poachers will infiltrate local communities to attain intelligence on the location of rhino, and will observe parks and waterholes. While doing this, they will also determine a minimum of two escape routes.

Additionally, the poachers are not afraid of animals. In fact, they may be experienced trackers or have military expertise, and so are able to survive off the land without requiring much to get by. While dart guns are sometimes utilised, poachers regularly use silenced guns, as well as semi-automatic weaponry and hunting rifles. Rhino poachers are often involved in other offences as well, such as vehicle smuggling, and tend to live a gangster type of existence involving females, alcohol and fast cars. Poaching, for them, is a crime comprising great benefits and low levels of risk (Stop Rhino Poaching 2014:5).

It was further reported by Stop Rhino Poaching (2014:4) that in the past, poachers preferred to operate at night, under a full moon. While this is still the most active time for these offences, poachers now commit their crimes during all phases of the moon, and even during the day. They will change their modus operandi according to the risk of apprehension.

For this question, the participants were able to give more than one answer, which is why the responses total above thirteen. According to three (23%) of the participants, poachers infiltrate parks or reserves through the fences, as indicated in Figure 3.10 below. This is due to the fact that poor fencing at many reserves makes it easier to gain access to the protected areas. An additional vulnerable entry point may be

through the pipelines in a reserve, as maintained by one (8%) of the participants. The poachers may then enter on foot and observe what is happening inside the park. What's more, one (8%) of the participants also mentioned that poachers may enter the reserve gates by posing as tourists in order to kill the rhino, and will then leave via the gate. One (8%) of the participants added that poachers may even scout the reserve via aircraft.



Interestingly, it was held by eleven (85%) of the participants that staff involvement was key in the targeting and infiltration processes. Various explanations were given for this fact, which mostly pointed to corrupt activities, particularly around staff members leaking information to the poachers. Low-ranking staff members all the way up to management are implicated, and friends and family members of game reserve staff

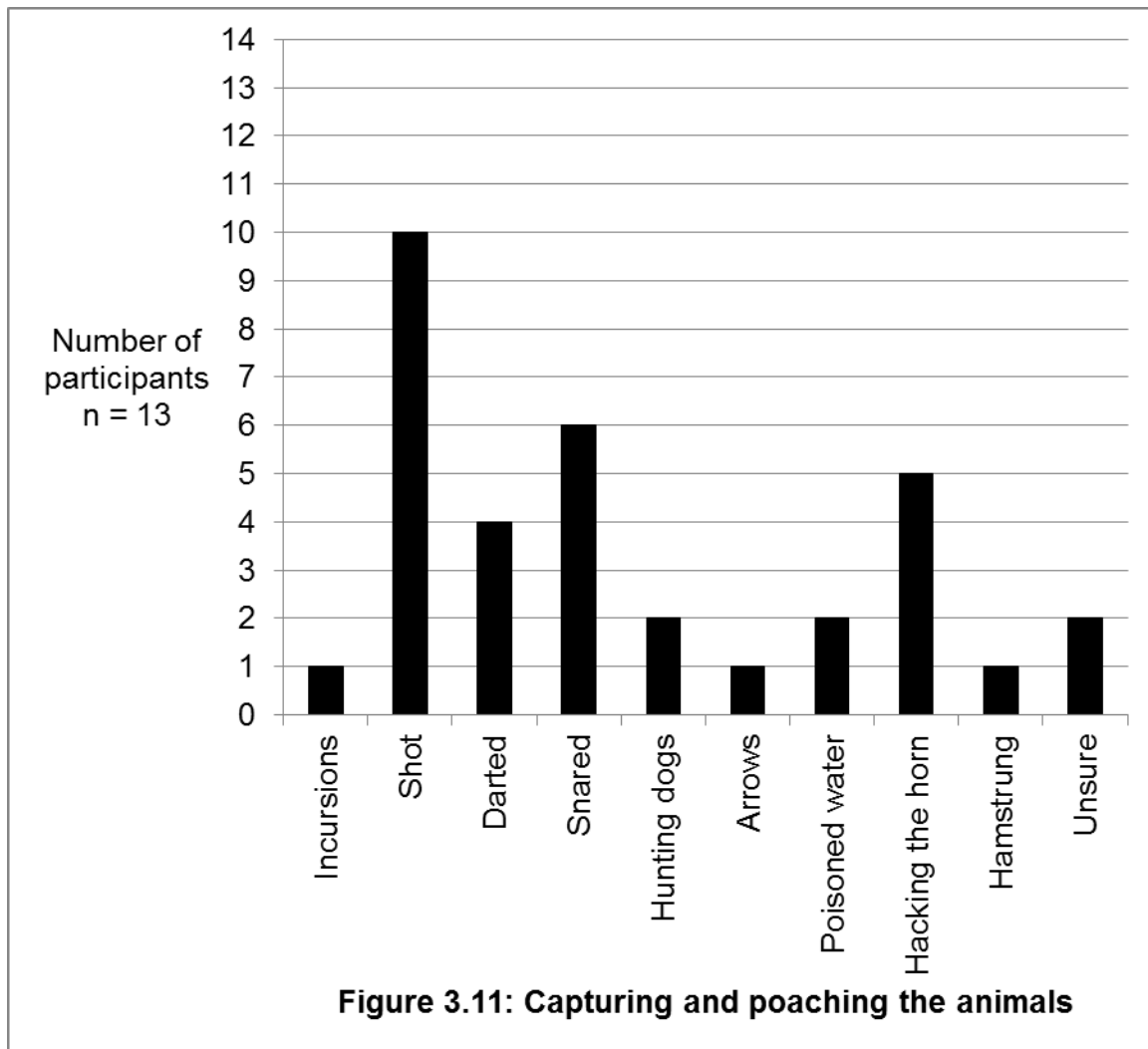
may also be involved in the information exchange process. Financial incentives were typically cited as being a motivating factor for staff involvement, by which money is exchanged for intelligence. For instance, disloyal staff members may be bribed to divulge inside information, such as details regarding how the reserves are run and where the wildlife is located. They may succumb to this pressure due to the relatively low salaries that they receive. This exchange allows for easier access to the game reserves for the poachers. Moreover, traditional bushmeat poachers may be approached to kill rhinos due to their familiarity with the reserves. The parks are watched and examined by poachers, and the number of rhinos within a park is crucial to the infiltration process. The poachers' calculation of the risks versus the rewards of killing a rhino was furthermore emphasised.

This question was not completed by one participant (8%) as it was deemed not relevant based on a lack of experience. It was decided that this individual should be included in the research owing to their expertise pertaining to conservation issues, which points to a possible gap in the knowledge regarding the poaching crisis in KZN.

These research findings are thought to be decisive in that most of the participants believe that staff corruption is a key factor in the infiltration of parks and reserves in order for the poaching incidents to take place. This advocates that it is very important to properly select, train and monitor staff in order to prevent these offences. It also suggests that staff in these fields are not adequately financially compensated for their work, and thus resort to taking bribes and participating in other criminal activities in order to boost their income.

### **3.5.2 Capturing and poaching the animals**

Poachers use diverse methods to commit their crimes. Pangas and axes are the most common tools utilised, while chain saws, hand saws and blades may also be used. An experienced poacher is able to take off a rhino horn skilfully along the skull, while an inexperienced individual may remove half of the top jaw (Stop Rhino Poaching 2014:8).



The responses to this question add up to more than thirteen because the participants were able to supply more than one answer. As stated by one (8%) of the participants, the animals are captured and poached by means of an incursion, which involves the offenders cutting the fence, entering the reserve on foot, and escaping via a getaway vehicle. This is depicted in Figure 3.11 above.

The animals are shot with firearms, according to ten (77%) of the participants. In terms of rhino poaching, the primary method seems to be shooting the animal. There appeared to be an increased use of hunting rifles in KZN in 2012, whereas previously assault rifles had been favoured. It was believed that while most animals are shot, this sometimes happens with silenced weaponry.

Darting the endangered animals with drugs was mentioned by four (31%) of the participants. This can cause an overdose, potentially resulting in the death of the animal. In addition to this, six (46%) of the participants referred to the use of wire snares for capturing the animals. This may, in particular, lead to antelope being caught. Two (15%) of the participants said that dogs may be used to hunt animals in a game reserve, and one (8%) stated that arrows may be utilised. In addition to this, two (15%) of the participants declared that water sources in the parks, such as waterholes, may be poisoned in order to kill the animals.

Five (38%) of the participants specifically discussed the poachers hacking off the rhino horn, which may be done after a rhino has been shot or darted. It may even take place when a rhino is still alive. It was furthermore held by one (8%) of the participants that injured animals may be hamstrung by having their tendons cut while they are still living.

These findings show that shooting the animals is the most common method when capturing or poaching them inside the reserves or parks, while snaring and darting are also commonly utilised techniques. This emphasises the importance of regular patrols along the borders of and inside reserves and parks, as well as the proper maintenance of the fences.

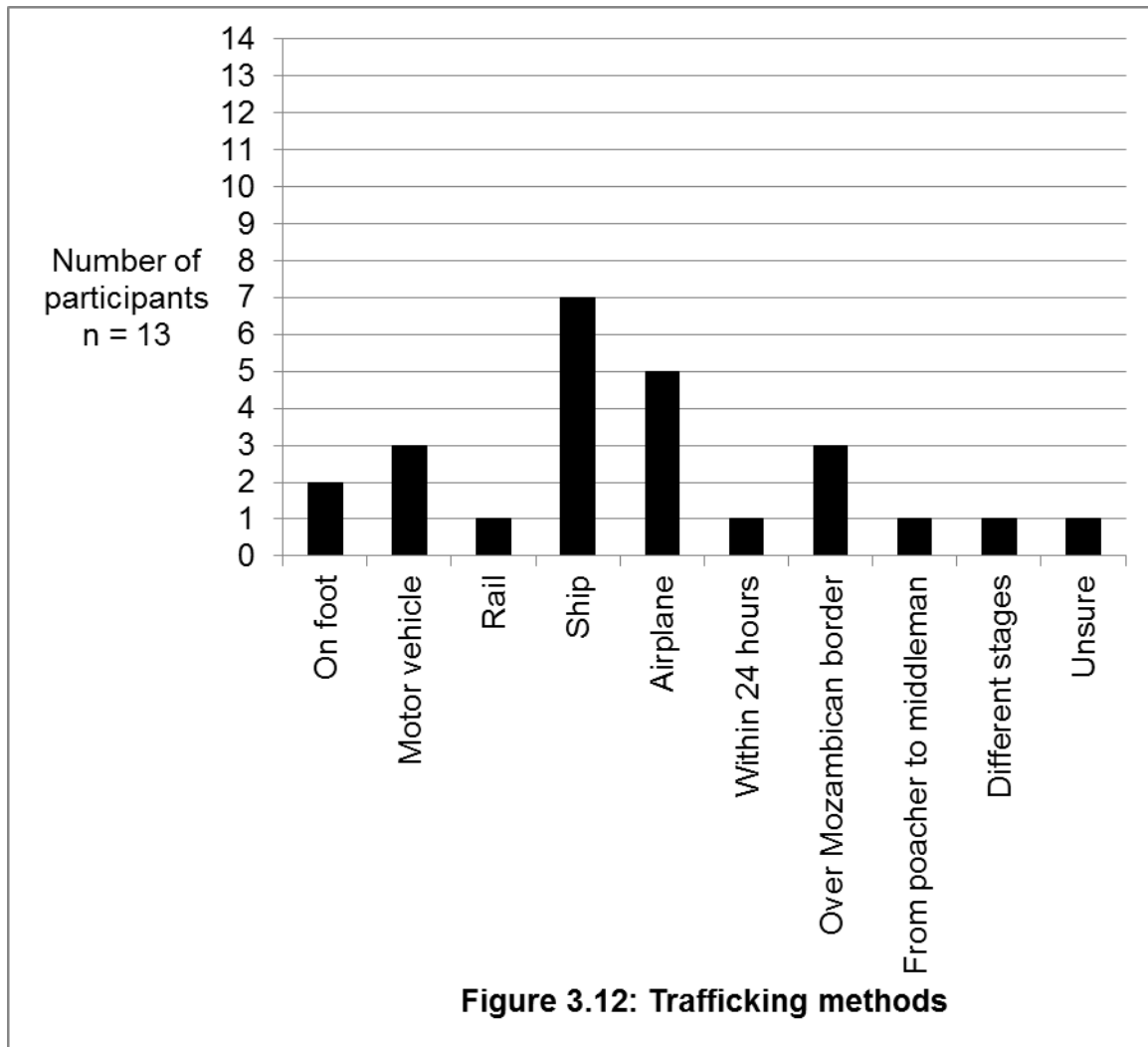
Two (15%) of the participants did not answer this question due to their lack of KZN specific experience on this matter. They were still included in the study due to their professional statuses, which highlights gaps in the knowledge of certain experts. This suggests that further education and training need to be done to aid in the prevention of these offences, especially since the poaching problems faced by the different provinces are related and should be addressed collectively.

### **3.5.3 Trafficking of animals and their parts**

Wyatt (2013:4) maintains that animals or their parts may be trafficked by being transported inside a country, between neighbouring countries, or internationally. This is done surreptitiously in order to avoid the appropriate border and customs checks. In this regard, the techniques employed to smuggle the wildlife may be concealment



“in secret compartments on planes, trains, boats and vehicles”. Alternatively, the contraband may be hidden alongside other goods, or concealed in baggage or on an individual’s body (Wyatt 2013:5). Furthermore, fake certification may be utilised to make the smuggling appear legal, such as by indicating that the items are from another species. After being transported across borders, the animals or their parts are either sent to a facility for processing or directly to the black market to be sold (Wyatt 2013:4).



This question totals more than thirteen responses because the participants were able to offer several answers each. When asked the question about how animals or their parts are trafficked, two (15%) of the participants maintained that the perpetrators operate on foot, as indicated in Figure 3.12 above. It was suggested that they might conceal the animal parts in backpacks. The use of motor vehicles in the commission

of these offences was mentioned by three (23%) of the participants. These vehicles may belong to the offenders, or taxis may be utilised. The animals or their parts will then be smuggled out of the park and transported to the city for distribution to neighbouring countries. In addition to this, one (8%) of the participants asserted that animals or their products can also be smuggled via rail.

Seven (54%) of the participants specifically referred to animals and their parts being trafficked on boats or ships over the sea. Chinese ships may in particular be involved. It was further held by five (38%) of the participants that animals or their parts might be smuggled via airplanes. In this way, the wildlife contraband crosses international borders and reaches the buyers. The animal parts are subsequently sold whole, chopped up or made into powder. It was maintained by another one (8%) of the participants that animals or their parts are sent to buyers within twenty-four hours due to the degree of ease involved in these profitable offences, and in order to reduce the likelihood of being caught. Interestingly, it was suggested that these international smuggling routes by air and sea are the same as those used for drug smuggling. Three (23%) of the participants explicitly cited the South African border with Mozambique as a route for smuggling wildlife contraband, due to its lack of suitable control. In terms of rhino poaching, the horn may be concealed in a cloth and trafficked across the border.

It was raised by one (8%) of the participants that the animals or their parts are transported from the poachers to the middlemen. The middleman is the one who provides the weapons and ammunition, as well as the information concerning where the rhinos are located and the relevant safety procedures of the reserve or park. The animals or their parts may then be smuggled to communities for sustenance, to sangomas or to muti (traditional medicine) markets.

One (8%) of the participants stated that the most difficult step for the middlemen in the criminal operation is transporting the poached animal or object away from the area without being caught. It is believed that this is achieved by dividing the transportation into different stages that are carried out by diverse role players, who are independent in time and space. Furthermore, the possibility of apprehension is greatly diminished

once the animal or its parts arrive in a secure country, and the crime then becomes less covert in nature. Therefore, it is suggested that offenders become more confident as the criminal activities progress, as they seem to perceive that their risk of detection is reduced.

This question was not addressed by one participant (8%) due to a lack of knowledge on the subject. This individual was included in the study due to their expertise on conservation issues, and so their lack of awareness on the topic at hand demonstrates that certain professionals may be uninformed about the situation in KZN.

The results of this question clearly indicate the high degree of structured movement involved in this type of criminal activity, which corroborates the views espoused in Chapter 2 that conservation crimes are highly organised in nature and occur across borders. The fact that many different role players take part in these offences demonstrates their serious nature and the potential dire consequences for biodiversity and security. The role that Mozambique plays as a transit country is highlighted – once again implicating this country in the poaching problem. The findings also emphasise the fact that since these priority crimes occur across borders, they must be addressed by various stakeholders, at local, national and international levels, in full cooperation with one another.

### **3.6 Conclusion**

While rhinos were the predominant animal classed as victims in the illegal trade, it was also determined that other animals, such as elephant, lion, leopard, cheetah and wild dog are also victimised. Also, citizens of South Africa are victimised through losses to our natural resources and by threats made to those responsible for protecting animals. Interestingly, it was also established that poachers are sometimes viewed as victims themselves, especially relating to their impoverished conditions.

In terms of the profile of a criminal, the findings demonstrate that a typical offender in the illegal trade in endangered animals in KZN is a young black male, with a poor economic status and a low level of education. Since this corresponds with the profile of many other offenders in South Africa, it shows that different types of crimes may

have similar contributory factors that are rooted in the socioeconomic conditions in the country.

Furthermore, with regard to *modus operandi*, it was found that parks and reserves are mostly targeted and infiltrated by exploiting corrupt staff members who provide poachers with inside information, particularly regarding security measures and the location of animals. The animals are then captured or poached mainly by shooting or darting them and removing their parts, such as the horn of a rhino. The animals or their parts are then smuggled out of the reserve, and transported out of KZN and South Africa (most notably through Mozambique, and then via ship or airplane) to the destination country, where they are illegally sold.

While this chapter focused on the victims, offenders and *modus operandi*, the following chapter will focus on the adjudication of these wildlife crimes. Special emphasis will be placed on investigations inside parks or reserves, investigations by the police, and adjudication and punishment within the court system.

# **CHAPTER FOUR**

## ***ADJUDICATION ISSUES***

## **4.1 Introduction**

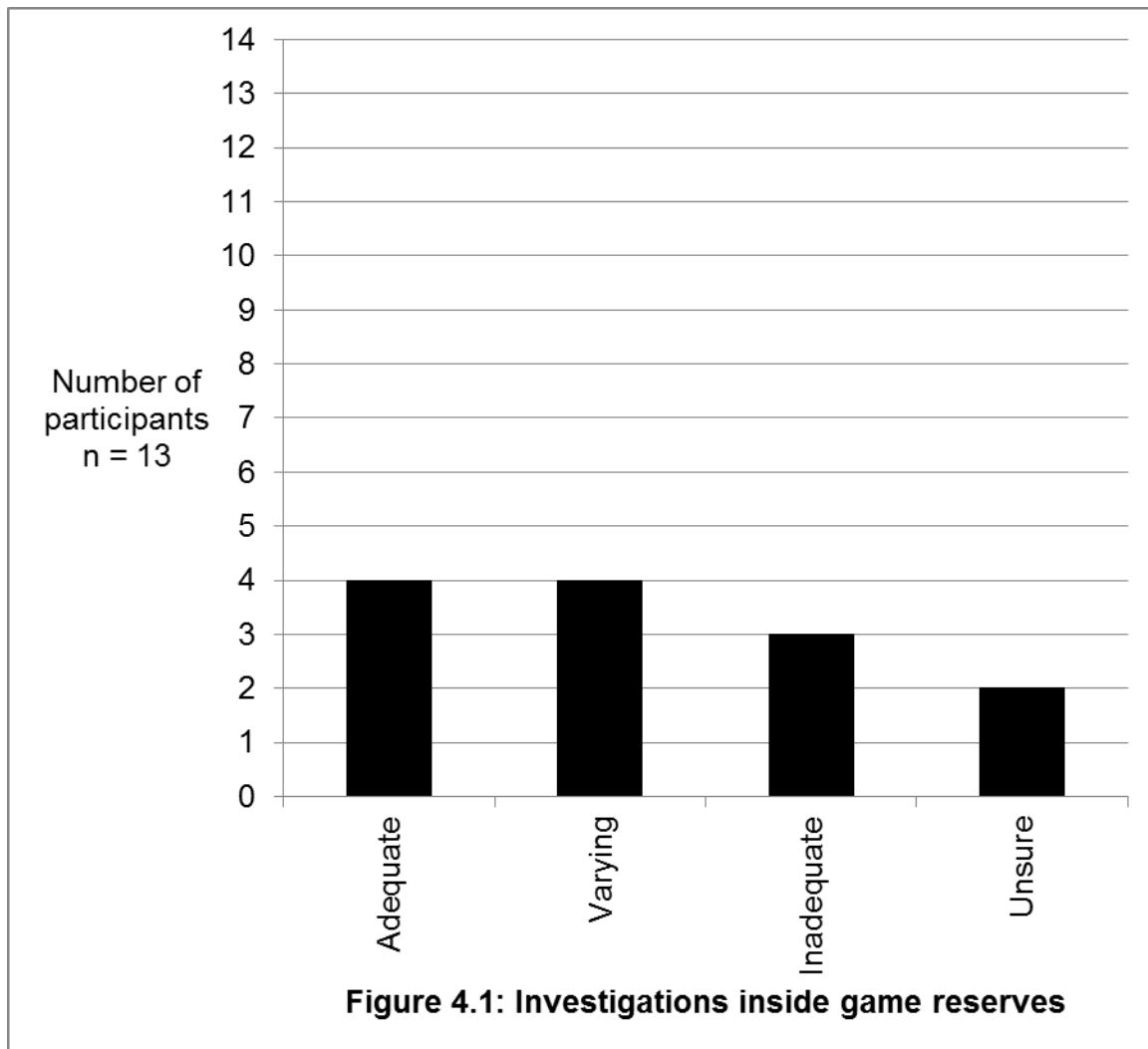
In Chapter 3, an analysis was provided of the victims, offenders and modus operandi relating to the illegal trade in endangered animals. This was done in order to explain which animals and people are victimised by this illegal trade, to uncover a basic profile of a wildlife offender in KwaZulu-Natal (KZN), and to expose the organised methods by which these conservation crimes are committed.

Information on the adjudication of these offences will be provided in this chapter, based on an analysis of the data attained from the questionnaires. Particular attention will be paid to investigations within parks or reserves, investigations by the police, and adjudication and punishment by the courts. It is very important to discuss the adjudication of these crimes to expose the existing limitations, with the aim of making suggestions for improvements.

## **4.2 Investigations inside parks and reserves**

Upon being asked in the questionnaire how conservation crimes are investigated inside game reserves and parks, four (31%) of the participants indicated that the investigations are adequate. This is depicted in Figure 4.1 below. It was maintained that the primary responders on the crime scene are frequently the rangers who find the carcasses. The rangers then notify the reserve management, who subsequently inform the SAPS. Furthermore, if poachers are apprehended, they are passed on to the SAPS so that they can be prosecuted for their crimes.

It was also mentioned that the inquiries are conducted by efficient anti-poaching investigators, who utilise polygraph examinations and rewards for information. An emphasis was placed on the importance of park guards approaching the community members for information. This is made possible when parks are closely involved with the local communities. It was held that wildlife crimes are investigated stringently these days, with strict protocols being observed by park officials. In addition to this, poaching investigators are summoned to the park quickly after a crime has happened.



Four (31%) of the participants suggested that the standards of investigations within game reserves and parks tend to vary. Some reserves have efficient teams, while others do not. The investigations are performed by police and private security companies, but their efforts are not supported by relevant legislation. While many park officials are very knowledgeable and skilled, some of the police who are deployed to reserves to investigate are not as adequately trained. It was emphasised that a great degree of professionalism exists in particular cases where sufficient training and funding had been made accessible. However, in other cases, investigations may be conducted ineffectively, owing to capacity and budgetary restrictions. It was further claimed that there is only a small number of experienced and greatly skilled investigators within Ezemvelo KZN Wildlife, the SAPS and the Hawks, while park management is relatively capable. However, many other staff members, lacking skills

and qualifications, tend to undermine the good work of these officials by messing up the investigations and succumbing to bribery.

Three (23%) of the participants indicated that investigations inside parks and reserves are inadequate. Staff members may be involved in the offences by providing inside information to poachers in exchange for money. When these staff members deny their involvement in the crimes, their version of events is either accepted or they are subjected to a polygraph examination. Consequently, it was opined that more effective anti-poaching teams are needed inside parks, rather than employing just any individual to do the job.

It was also asserted that wildlife crimes are not really investigated appropriately. While each park has its own methods of investigation, the police may also be called in, depending on the location of the park in relation to the nearest police station. It was nevertheless claimed that the offenders succeed in evading justice almost all of the time. This is due to delayed reactions to the requests for help from the police, and because the crime scenes are sometimes discovered only days after the incidents occur because of the vast range of the parks. It was further held that since investigations rarely result in offenders being arrested, expert teams should be created to investigate these crimes, although this may also not be of immediate help. However, these specialist groups could uncover evidence that may result in the offenders ultimately being apprehended.

It was also reported that not many of the reserve officials conduct the investigations inside their own parks. Rather, this duty is performed by investigators who take responsibility for all the cases in KZN. It was said that the three major reserves in KZN have in recent times been appointed investigators, which is a positive move. Up until the completion of the questionnaire, there were only two individuals in charge of investigations in KZN, one of whom was allegedly inexperienced. Furthermore, jobs are awarded to people who are not qualified in investigating conservation crimes.

The views of the participants concerning the importance of training and employing more people to investigate crimes against wildlife are reinforced by Duffy, Emslie and



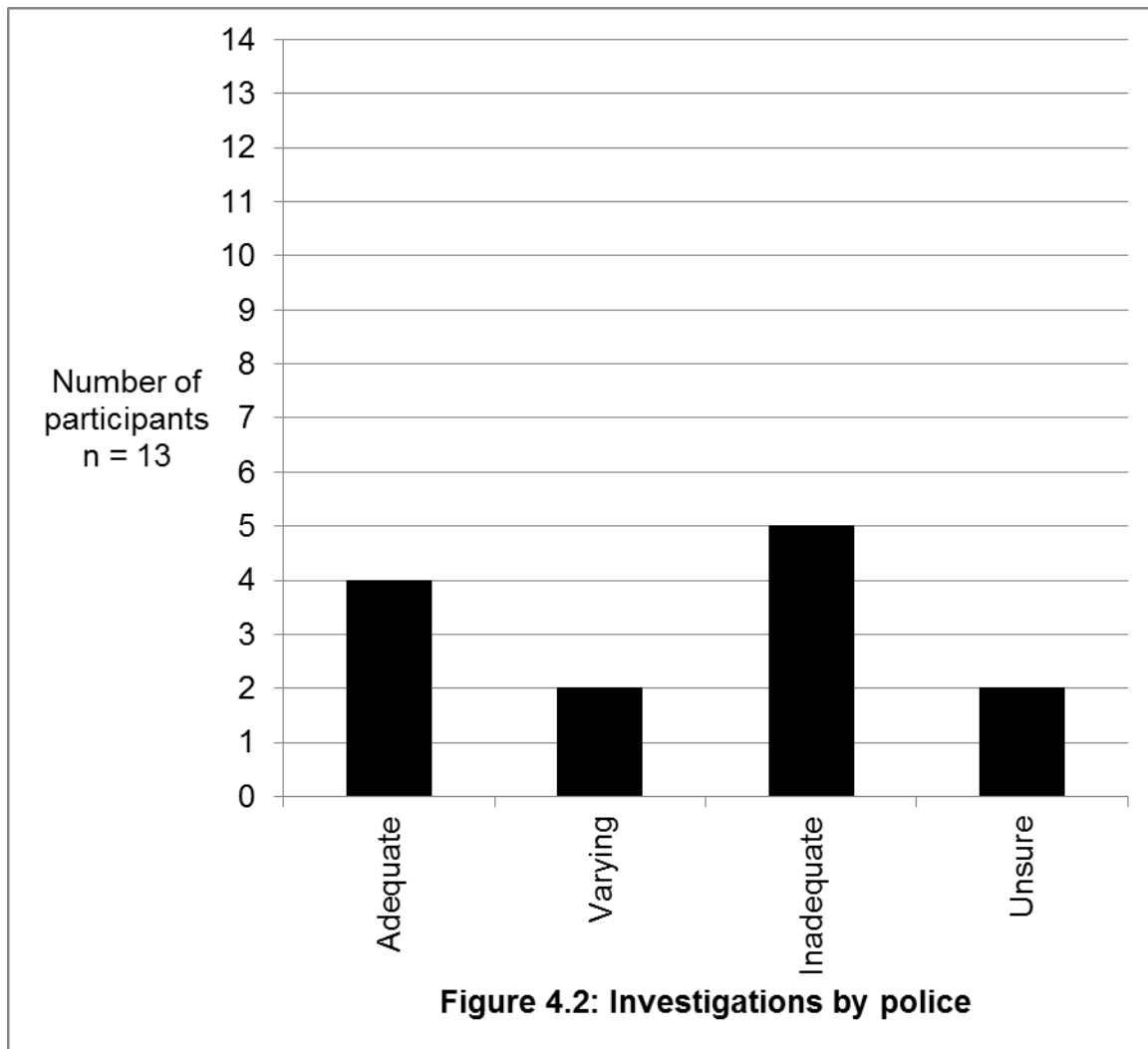
Knight (2013:8). These authors also highlight the significance of enhancing crime scene training and forensic capabilities in South Africa, in order to improve the rate of apprehensions and findings of guilt.

Finally, two (15%) of the participants were unsure of how to answer and so did not address this question. One (8%) of these participants stated that they have no comment, while the other one (8%) was unable to answer this question due to a lack of personal knowledge on the matter. These participants were still included in the study as their lack of understanding of this issue is interesting and serves to expose a gap in the awareness of how these crimes are dealt with inside game reserves.

These research findings highlight the significance of adequate training for reserve staff, as well as police or other investigators who may be involved in the investigations inside parks. Similarly, they emphasise the importance of creating dedicated units that specialise in the investigation of crimes involving wildlife. Once again, staff corruption and incompetence were underlined as contributing factors in conservation crimes, as well as in inefficient investigations.

### **4.3 Investigations by the police**

When answering the question about how the illegal trade in endangered animals in KZN is investigated by the police, four (31%) of the participants believed the investigations to be adequate. This is illustrated in Figure 4.2 below. It was held that investigations are conducted with comparative diligence owing to the fact that there is a great deal of attention currently being focused on these crimes. The police have created dedicated anti-poaching units to combat these offences. In addition to this, the Hawks specialised crime unit is utilised in investigations, as well as dog units for tracing offenders. These investigations are performed by examining the crime scenes, questioning reserve staff and using criminal informants. Upon gathering sufficient evidence, the police then arrest the perpetrators, who may be granted bail while they await their day in court.



The importance of informer networks is reinforced by Du Toit, Mungwashu and Emslie (2006:61), who insist that informants be properly compensated and assured anonymity. Additionally, these authors hold that staff members who gather intelligence must be properly educated on how to penetrate gangs of poachers, and how to enlist and manage informants.

On the other hand, two (15%) of the participants espoused that the standards of investigations by the police tend to vary. This may result in some offenders being arrested, while others escape justice. It was emphasised that some police officials may take bribes when dealing with these crimes. Furthermore, while rhino poaching is being handled with great eagerness and competence, crimes against other species are not viewed as seriously by the SAPS. These other offences are thus not

prioritised, as some members of the police may believe that people have a cultural entitlement to hunt wildlife.

Investigations by the police were deemed inadequate by five (38%) of the participants. It was asserted that the police need to handle conservation crimes with much more urgency than is currently the case. Unfortunately, investigations seem to be performed out of duty instead of willingness. This is a worrying finding as it demonstrates the lack of cooperation on the part of the police in investigating these serious priority offences. It was additionally held that investigations may be tainted by conflicting interests, turf wars, and insufficient assistance from neighbouring countries. Furthermore, the international aspect of these offences may not be dealt with effectively or paid enough attention to due to a lack of capability. This therefore creates an inescapable dilemma in that wildlife crimes that occur across borders are highly organised in nature and prevention requires a strong international response.

It was further maintained that the SAPS are mostly unskilled in investigating crimes against wildlife. This may be because they are given more general training, rather than training specific to conservation issues. However, since it was believed that rhino poaching has been deemed a priority crime, it should be dealt with by more experienced members of the police. It was nevertheless held that there are not enough police officials who are sufficiently qualified to investigate conservation crimes.

These views were reinforced by the claim that at the time of the completion of the questionnaire, there was only one police officer in KZN who was highly involved in investigating rhino crimes. There were apparently two more officers who would have liked to be involved, but they were allegedly either thwarted by the person in charge or were not authorised to perform investigations into rhino poaching. Furthermore, it was held that there are not many committed officers who are eager to deal with rhino cases, and that two of the offices concerned apparently employ staff members who are either unenthusiastic or unreliable. It is therefore believed that regardless of what is indicated to the public, the police display a lack of dedication in handling these offences as priority crimes.

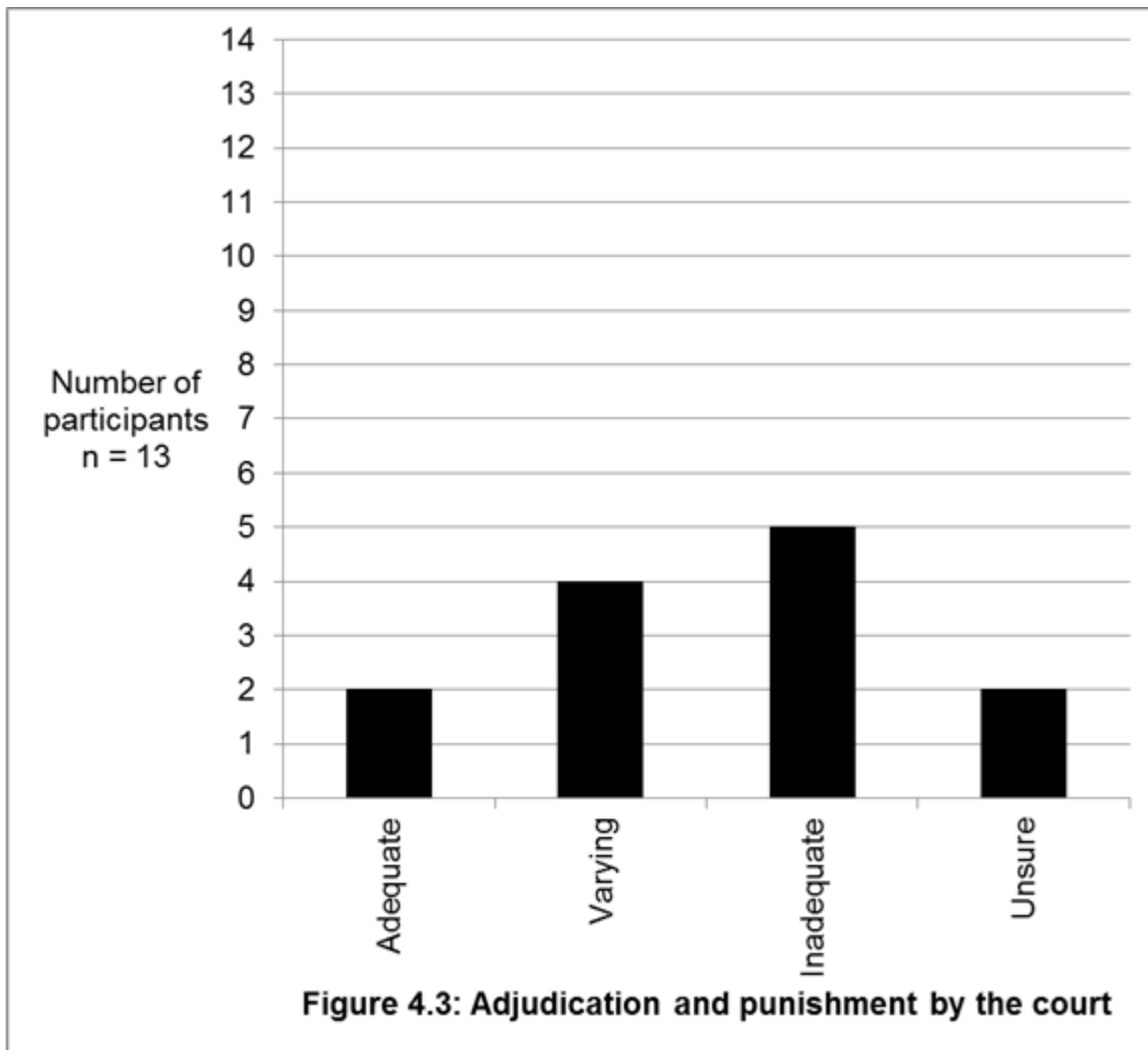
Two (15%) of the participants were unsure and maintained that they lacked personal experience on this issue. One (8%) of these participants specified that they cannot measure the competence of these investigations. This clearly reveals a lack of knowledge amongst certain expert individuals into how these investigations are conducted by the police. These participants were still included in the research as their lack of awareness highlights the need for improved training and education.

These results generally emphasise the lack of expertise and qualifications held by the police, and their inability to adequately investigate conservation crimes. However, it has been indicated that there are a small number of experts who are willing and able to deal with these offences. It is therefore postulated that more jobs should be created for people with the necessary skills and qualifications to investigate crimes against wildlife, and that training needs to be provided to improve the awareness of the existing police officials. The serious nature of these offences, as well as their priority status, needs to be emphasised to all role players in order to increase efficiency.

The findings are worrying considering the importance placed by Du Toit et al (2006:64) on information sharing and cooperation between different law enforcement agencies. This is owing to the organised and cross-border nature of these crimes. Based on the research conclusions, it is called into question how effective this cooperation and information sharing can be, especially if there are so few people working in this field in KZN, and even fewer who are sufficiently skilled or interested in the matter.

#### **4.4 Adjudication and punishment by the court system**

In answer to the question about how the court adjudicates and punishes these crimes against wildlife, it was maintained by two (15%) of the participants that adjudication and punishment are adequate. This is shown in Figure 4.3 below. It was found that these offences are adjudicated and punished increasingly well in South Africa. However, the penalties in other countries involved in the illegal trade in endangered animals are deemed not as effective.



Four (31%) of the participants believed that the adjudication and punishment of crimes against wildlife tend to vary. It was thought to be a bit problematic to make the court aware of the grave nature of conservation crimes. For instance, magistrates may believe that rhino poaching is a petty offence that is not worth the court's time. It is even more difficult to ensure that a good investigator gathers all the required evidence of a crime, in order for the prosecutor to be able to perform their duties effectively. It was believed, however, that prosecutors' abilities to handle these offences have largely improved. While certain cases are widely broadcasted due to the effectual punishment received, it was maintained that most wildlife offenders do not answer for their actions. Furthermore, the penalties mostly do not fit the crimes and only in very serious poaching cases will individuals or groups be given harsh punishments.

Rhino poachers in particular are increasingly being found guilty and given strict punishments. For other species though, the cases may not even get to court. This is owing to the fact that prosecutors are either not prioritising these incidents or the dockets contain big gaps in the information that is necessary for a conviction. Conservation authorities frequently issue admission of guilt fines due to their disinterest in law enforcement or the inadequate resources provided to properly investigate these offences. If cases do end up in court, magistrates may frequently succumb to the mitigating evidence relating to social issues and poverty. The offenders will hence be released with a small fine or on a suspended sentence. Since these types of prosecutions and punishments do not act as deterrents, these crimes are not really prevented and are thus likely to happen again.

It was opined by five (38%) of the participants that crimes against wildlife are dealt with inadequately. Court procedures are deemed to be poor, slow and lenient, with little regard for regulating punishment. Adjudication and punishment are deficient, as legislation is very ineffective and the penalties for wildlife offences are not appropriate. It was found that legislation should be stricter and less bureaucratic. A distinction was further drawn between the different species poached. For instance, while poaching for the pot is not strictly punished, rhino and elephant poachers receive more severe penalties. It was nevertheless considered that these penalties are still not adequate. Moreover, poachers of elephant and rhino are given insignificant fines or short sentences, and are subsequently released from prison early due to overcrowding or on the grounds of good behaviour.

Two (15%) of the participants were unsure and thus did not answer the question. It was stated by one (8%) of these participants that their lack of response was due to their unfamiliarity with the matter in KZN. It was decided that this participant should still be included in the research due to their expert position in the conservation field, which may serve to expose a potential gap in the knowledge of certain professionals regarding the situation in KZN.

It is clearly demonstrated by the research findings that the primary view of the participants is that the adjudication and punishment of conservation crimes are

inadequate. Punishment therefore has little deterrent value, rendering these offences high reward and low risk in nature. In order to prevent crimes against wildlife, particularly rhino poaching, it is crucial to improve the adjudication and punishment that results. If court procedures are swifter and more efficient, and punishments are harsher, these crimes can be reduced.

In this regard, Du Toit et al (2006:63) maintain that wildlife crime investigators who are employed by environmental organisations are capable of helping prosecutors to deal with rhino poaching cases. The investigators may assist in the preparation stages and by attending court with the prosecutors to provide further guidance. Prosecutors who specialise in conservation crimes may also be utilised in order to assist in guaranteeing convictions.

Furthermore, expert witnesses should be employed so that the full punishment can be applied to offenders who are convicted of crimes against rhinos. These experts may suggest a suitable and effective punishment, based on the importance of conservation, the grave nature of these offences, and the scarcity of and predicament experienced by rhinos. For instance, it will not serve as a deterrent if a poacher is given only a fine that may equate to less than the value of the rhino horn (Du Toit et al 2006:63).

#### **4.5 Conclusion**

This chapter emphasised the adjudication of offences against wildlife, in terms of the investigations within reserves, the investigations by the police, and the adjudication and punishment within the court system. This was presented in order to highlight possible problems within these legal processes, and to expose potential areas for improvement.

In terms of the investigations within reserves and by the police, it was found that more education and training is needed for the staff and officials who deal with these offences. Furthermore, more jobs need to be created in the field of wildlife investigations as the groups handling these issues appear to be understaffed. In the same vein, more funding is required to properly investigate these serious conservation

crimes. The severe and organised nature of these offences must be demonstrated to all criminal justice system and conservation role players involved if any strides are to be made towards prevention.

Also, it was widely held by the participants that the adjudication and punishment of conservation crimes by the courts is insufficient. It was found that these offences are not often viewed as matters of priority, and that penalties may not be harsh enough to deter criminals. Rhino poaching in particular is therefore a crime that yields great benefits with low levels of risk. For these crimes to be prevented, harsher punishments need to be meted out more effectively and with greater speed.

The following chapter will deal with the causes of these offences, particularly with regard to economic factors, cultural aspects, medicinal usage, poor education, the vulnerability of parks, poor border control methods, insufficient law enforcement techniques, inadequate legislation and punishment, and corruption problems. This will be done in order to expose the contributing factors surrounding these crimes, as well as to uncover pertinent methods for prevention, which will be linked in and discussed in the final chapter.



# **CHAPTER FIVE**

## ***THE ILLEGAL TRADE IN ENDANGERED ANIMALS - CAUSATION IN PERSPECTIVE***

## **5.1 Introduction**

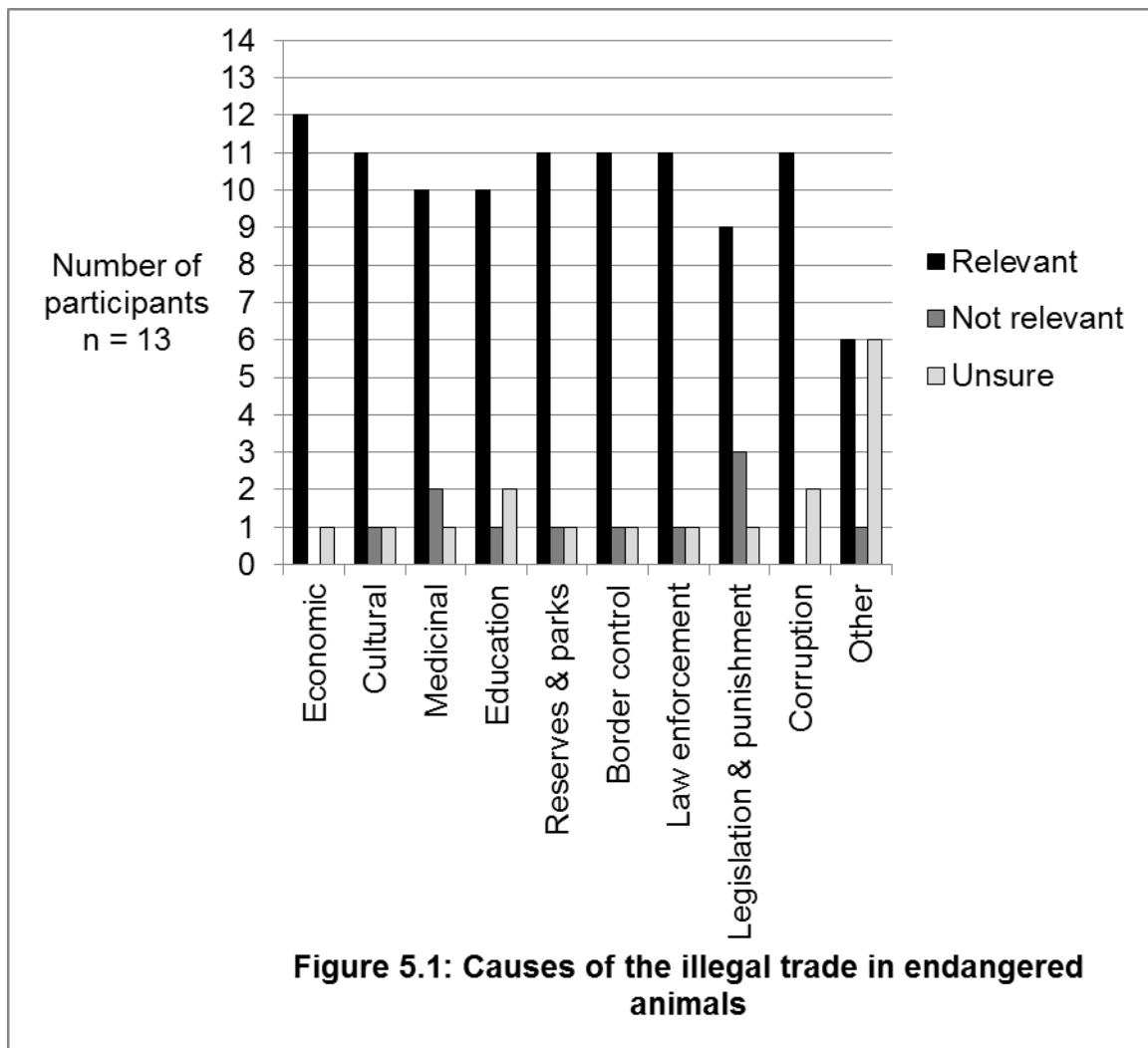
Having dealt with the adjudication of crimes in the previous chapter, the focus now shifts to the causes of the illegal trade in endangered animals, with an emphasis on rhino poaching. The findings in Chapter 4 served to accentuate the downfalls within the criminal justice system, exposing potential areas for improvement. For instance, it was found that it would be very beneficial to create more positions within the field of wildlife investigations, and that these jobs should be filled by qualified and interested individuals. Existing officials and authorities dealing with conservation crimes need to be educated and trained on these matters, in order to advocate the importance of protecting the environment. Likewise, penalties for wildlife offences need to be greatly increased to counterbalance the enormous financial profits gained from these crimes. This will impose an unfavourable risk and should thus deter criminals, particularly rhino poachers.

In this chapter, the causes of these crimes against wildlife will be assessed, based on a data analysis of the information gathered from the questionnaires. The focus in terms of these drivers will be on economic aspects, cultural factors, medicinal uses, educational elements, the vulnerability of parks and reserves, poor border control measures, inadequate law enforcement, poor legislation and punishment, and corruption problems. It is crucial to examine the triggers of the illegal trade in endangered animals, particularly rhino poaching, in order to expose possible prevention methods. Preventing these crimes is vital to the survival of species, such as the rhino, and thus to the functioning of the ecosystem as a whole. Furthermore, prevention is critical to the safety of South African citizens, since crimes against wildlife are organised in nature and occur across borders, thus destabilising national security and the economy.

## **5.2 Causes of the illegal trade in endangered animals**

Figure 5.1 below demonstrates all the causes of the illegal trade in endangered animals, particularly rhino poaching, which are discussed in this research project. These are the views of the participants, each of whom could choose more than one

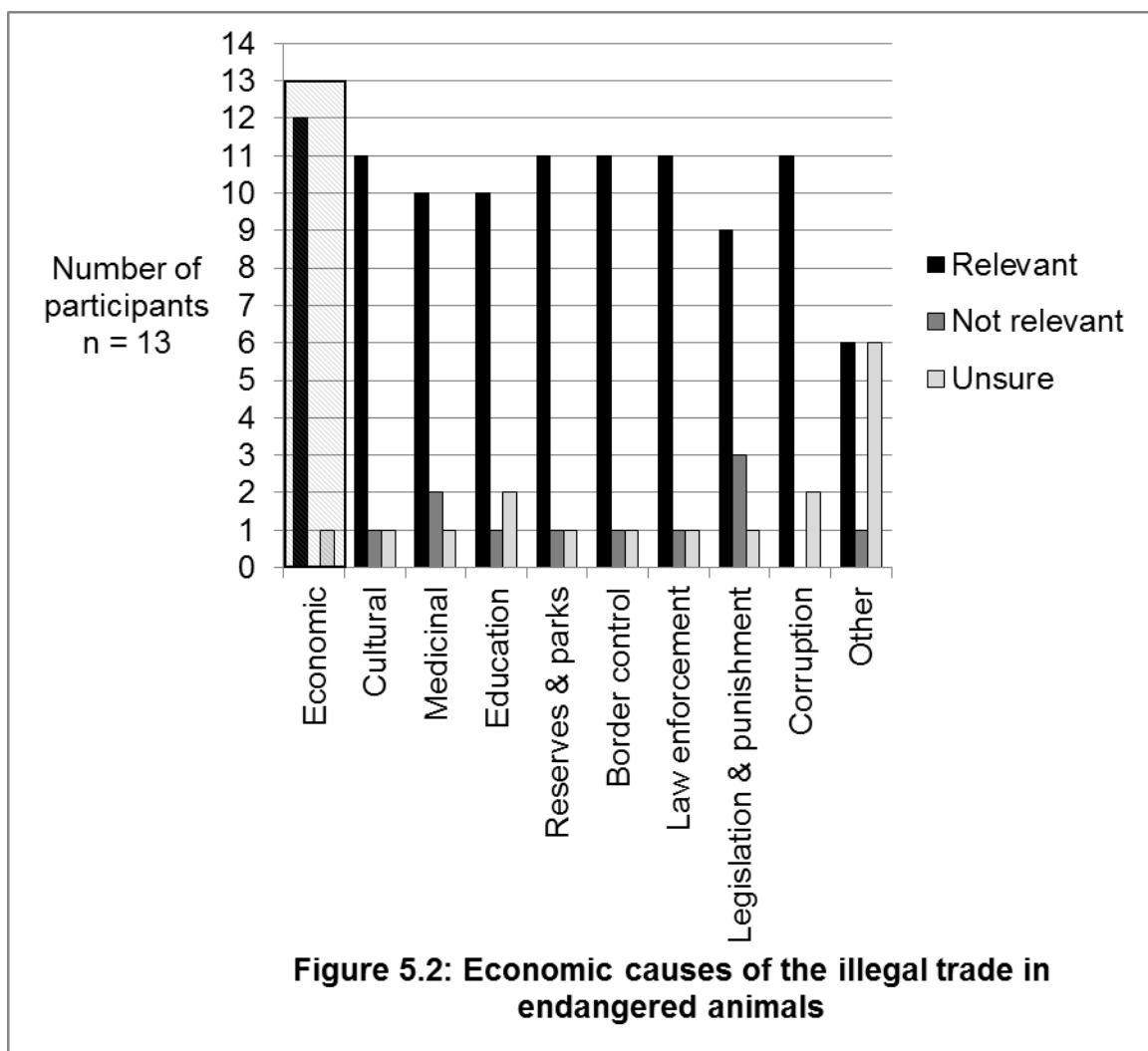
option – hence the thirteen responses in the different categories. The various causes will each be elaborated on and highlighted in individual sections below.



### 5.2.1 Economic causes, and supply and demand

According to TRAFFIC (2014b:np), the classic economy theory states that an upsurge in prices could be the outcome of a reduced supply while demand remains high. This can, therefore, lead to an increase in elephant poaching and more ivory being trafficked. It is put forward that this may also occur for other endangered animals, such as rhinos, and may become progressively detrimental as rhino populations dwindle due to increased levels of poaching.

Furthermore, it was held that the demand for illegal wildlife products is varied in nature, with different markets having diverse motivating forces. For example, there may be a demand for food, traditional medicine, processed products, or collectors' items – all of which have distinct drivers, markets and end-users (Wyatt 2013:22-23). In addition to this, the individuals who supply the demand also have unique motivations for their actions. Certain people may commit crimes against wildlife due to poverty and desolation, while others may be inspired by the perception of wealth, and the desire for luxury products and traditional medicine (Wyatt 2013:36).



In answer to the question regarding the causes of the illegal trade in endangered animals in KwaZulu-Natal (KZN), particularly in terms of rhino poaching, twelve (92%)

of the participants agreed that economic triggers are relevant, especially relating to supply and demand. This is depicted in Figure 5.2 above.

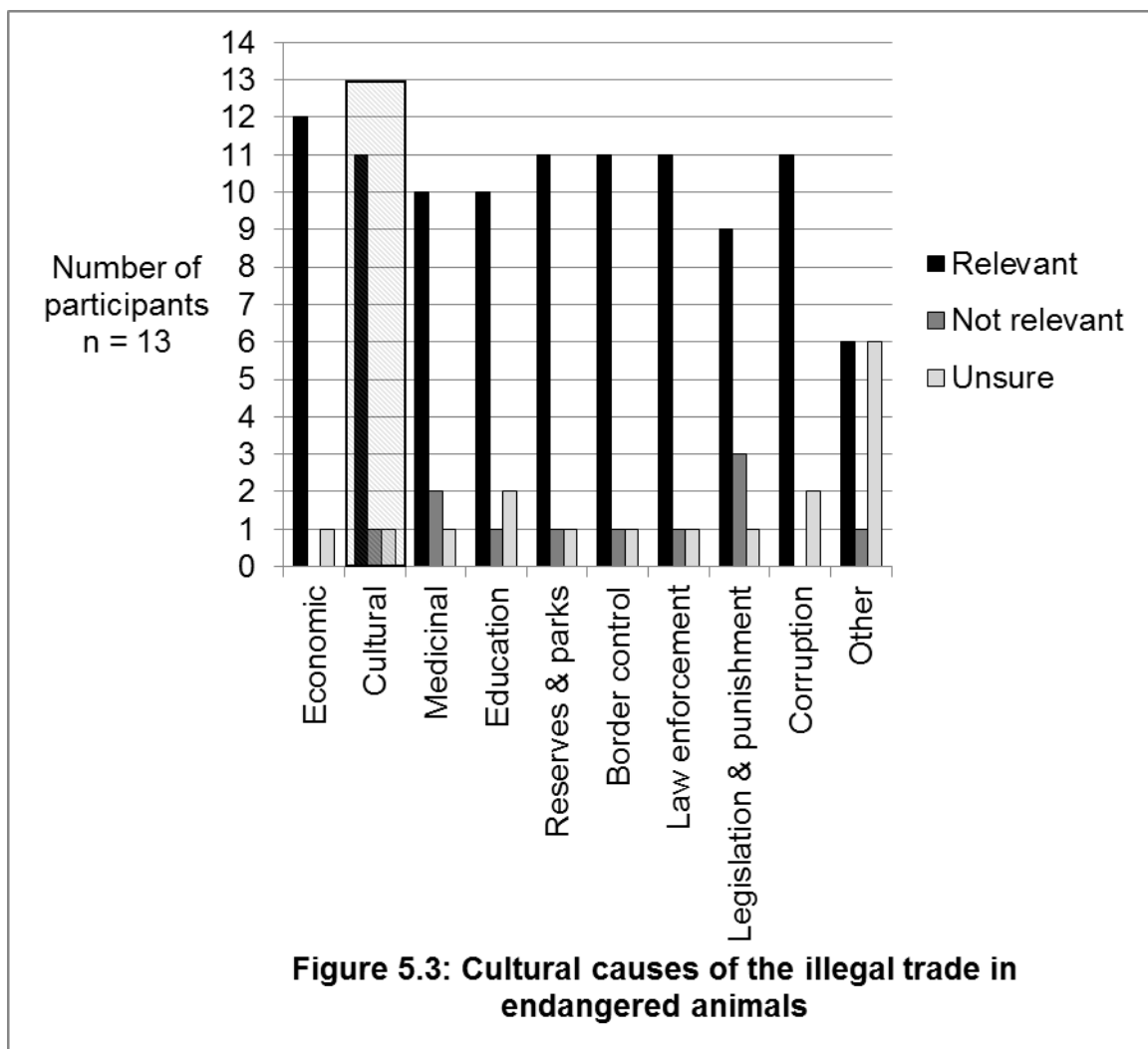
It was held by these participants that there is a lot of money involved in the illegal trade in endangered animals, and financial incentives may consequently be seen as the main cause of these crimes. The demand for animals or their products is driven by wealthy people in Asian countries. On the other hand, impoverished individuals are the ones who kill the animals and supply the illegal products, primarily out of financial necessity. The money given to the suppliers of animal products, such as rhino horn, serves to promote these crimes, since the incentives overshadow the dangers. Therefore, the poachers and middlemen are driven by enormous financial benefits. A powerful illicit component thus exists around the supply and demand.

One (8%) of these participants was of the opinion that the demand for illegal wildlife products has proceeded south down through Africa over the past twenty years. However, according to this participant, it is not confirmed as to what or who controls the demand. Moreover, it was held that social problems such as unemployment and hunger, as well as easy access to weapons and ammunition that are mostly supplied by the middlemen, drive the economic causes of these offences. Financial greed was additionally listed as a contributing factor, as the illegal trade in rhino horn and lion bones is an easy way to make a great deal of money. Furthermore, a lack of rapport amongst game reserve staff may contribute to these offences, as feelings of hostility destroy a sense of allegiance. This problem is worsened by inefficiency and corruption, both of which are not adequately prevented due to important positions not being filled.

This question, as well as all the other questions, was not addressed by one (8%) of the participants, as they were uncertain of how to answer due to a lack of personal knowledge on the circumstances in KZN. As previously stated, this participant was included in the study due to their expert position, which reveals a gap in the knowledge of certain specialists regarding the situation in KZN.

These results demonstrate on the whole that economic issues entice individuals to commit conservation crimes. When the demand for illegal wildlife products is high, offenders will be encouraged to contribute to the supply due to the enormous financial benefits involved. This particularly relates to rhino horn, as it is very expensive on the black market.

### 5.2.2 Cultural causes



As depicted in Figure 5.3 above, eleven (85%) of the participants agreed that cultural factors play a role in contributing to these offences.

It was held that Vietnamese people are currently the main consumers of animal products such as rhino horn, due to their traditions and false views about medicinal and social gains. On the other hand, the Chinese belief system was formerly the main cultural factor related to the illegal trade in endangered animals. However, since local poachers in South Africa are not usually aware of the perceived gains for consumers, their offences appear to be driven by the demand for illegal products. It was also asserted that in African and Asian cultures, animals may be viewed as merchandise to be used whenever there is a need. It was further stated that in the past, South Africans were able to hunt and deal in wild animals. For example, an activity that used to be acceptable but that is now outlawed by legislation is hunting by using dogs.

Six (46%) of the participants referred to the use of animal products, such as rhino horn, by consumers who believe that using such items will bring them social benefits, such as wealth or good luck. These consumers tend to be Vietnamese people who have newly acquired wealth and utilise the horn recreationally or as a status symbol to demonstrate their affluence. In addition to this, there are still some people who believe in the healing properties of Traditional Chinese Medicine (TCM), including rhino horn. They might have the misguided views that rhino horn may be used as a treatment for cancer, or to increase alcohol tolerance and treat hangovers.

Ash (2012:5) fortifies this opinion by maintaining that the most significant use of rhino horn is not medicinal, but rather cultural. A growing number of users trust that the horn may be consumed as a health tonic or a cure for hangovers. According to Ash (2012:5), websites in Vietnam are touting a wine and rhino horn mixture as “the alcoholic drink of millionaires”. It may even be consumed as a luxury product at “rhino-wine associations”. Furthermore, rhino horns are given away as presents by people wishing to gain the approval of others with higher political or socioeconomic statuses.

Furthermore, it was indicated that the individuals who generate the demand for illegal animal products use their cultural beliefs to justify their crimes. It was also said that a culture of unemployment, nepotism and the promotion of cadres rather than capable workers, and false racial biases around conservation being the responsibility of white people, all contribute to these offences.

It was upheld by one (8%) of the participants that cultural dynamics are a contributing factor to the illegal trade in endangered animals in general, but not in relation to rhino poaching in particular. In addition to this, while it is possible that cultural factors contribute to these offences, it is implausible that the upsurge in demand is powered by cultural issues. This is due to the fact that there is a very gradual increase of awareness, driven by the work of non-governmental organisations in consumer states, around the harmful effects of rhino poaching.

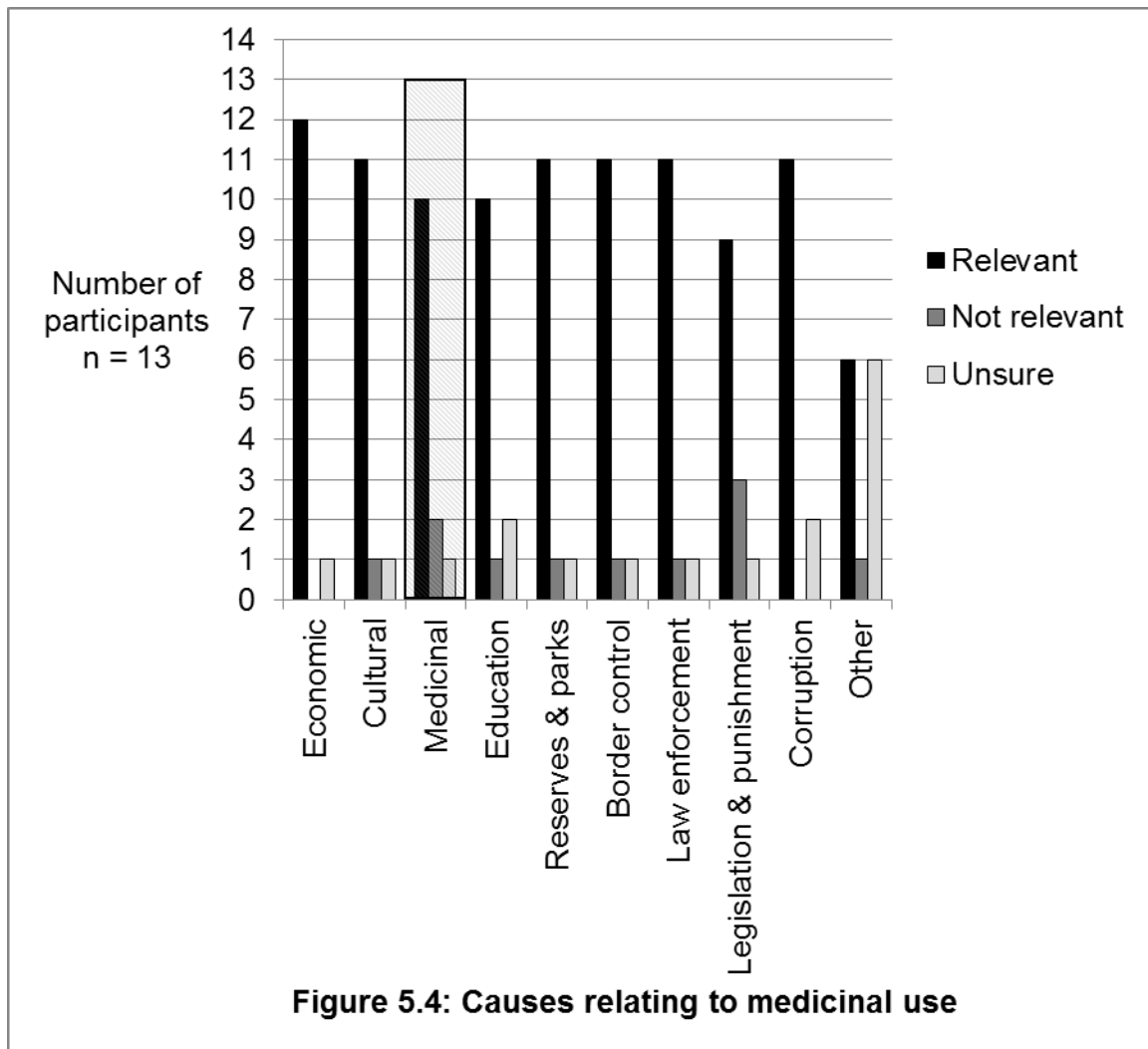
Only one (8%) of the participants said that cultural triggers are not relevant to the illegal trade in endangered animals.

One (8%) of the participants was unsure due to a lack of knowledge about the matter in KZN specifically. It was decided that this participant still be included in the research due to their expert status, which in itself highlights a potential gap in the awareness of certain professionals regarding the situation in KZN.

The findings plainly reveal that cultural aspects – both in South Africa and in Asian countries – play a role in the commission of these conservation crimes. The underlying belief that wildlife is viewed as a commodity is highlighted by the participants' answers. Moreover, an emphasis is placed on the superstitions held by Asian consumers that drive the demand. These superstitions underline the importance that these users place on social status and good health, which clearly demonstrates the need for education and awareness of conservation issues in consumer and range countries.



### 5.2.3 Medicinal uses



As shown in Figure 5.4 above, ten (77%) of the participants were of the view that medicinal usage may be a contributing element in the illegal trade in endangered animals in KZN, particularly in terms of rhino poaching.

It was stated by one (8%) of the participants that rhino horn, as well as lion and tiger bones, are used in TCM. However, while numerous animal products are used in traditional African medicine, lion bones and rhino horn are not. Instead, lion and rhino intestines and hearts are utilised, as well as rhino skeletons, which are believed to reinforce a baby's bones. According to this participant, South Africans believe that removing a rhino horn brings misfortune because it takes away the poacher's

manhood. Furthermore, pangolins are exploited for a wide variety of medicinal usages in both African and Asian countries.

It was held that consumers who utilise animal products, particularly rhino horn, do so because of a lack of education. Moreover, medicinal use of animal products is due to mistaken beliefs. In this regard, the fact that high-profile individuals may claim that rhino horn can cure terminal illnesses was emphasised. It was added, however, that rhino horn is consumed in such tiny quantities in these cases that this consistent demand cannot account for the dramatic increase in the levels of poaching.

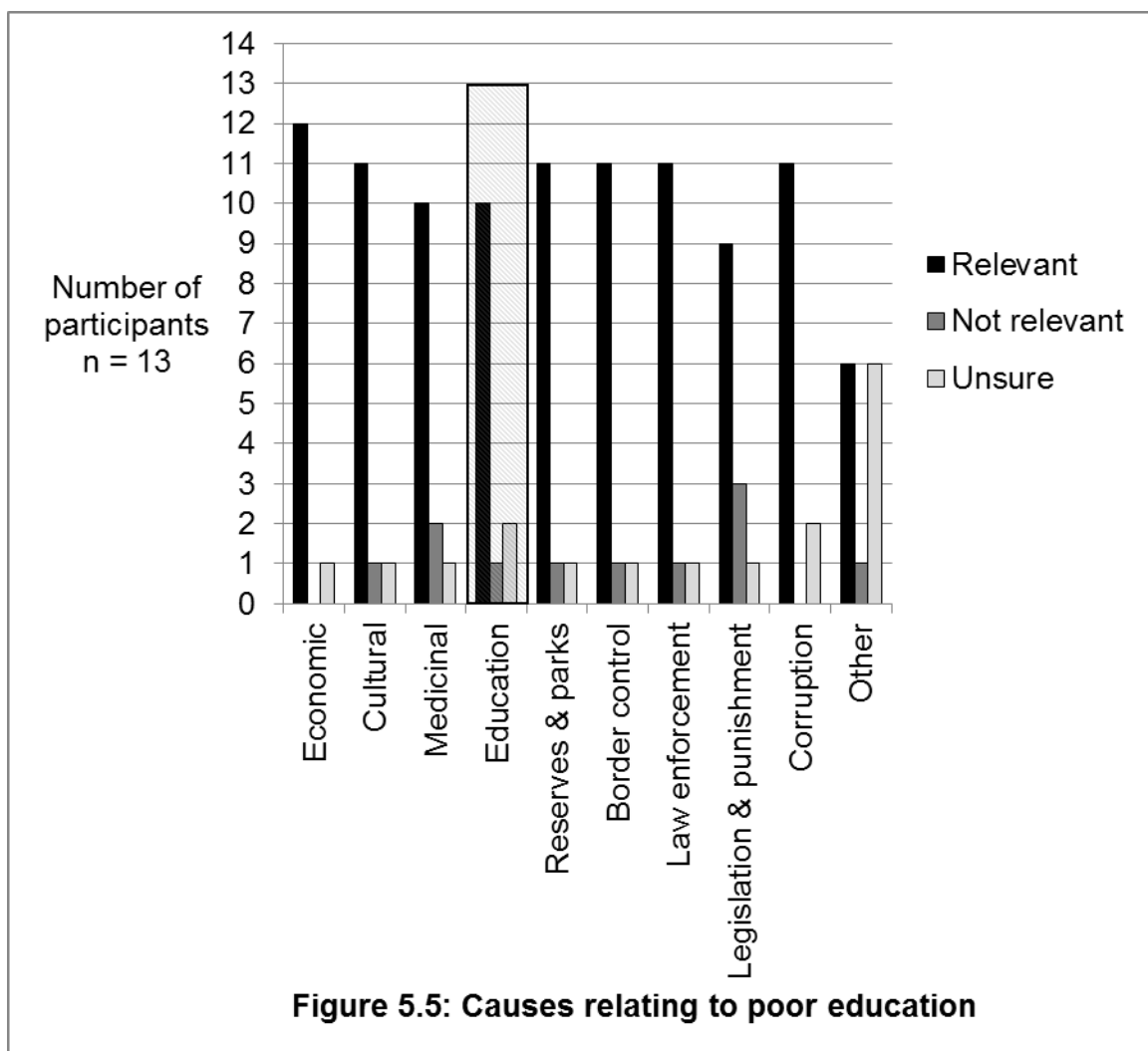
The common perception amongst consumers is that certain animal products can be used for, amongst others, medicinal or quasi-medicinal purposes, according to four (31%) of the participants. These consumers incorrectly trust that all sorts of ailments can be cured by using animal products, such as rhino horn. For example, it is falsely believed that animal products will treat cancer, strokes, impotence, fevers and bleeding. These views were reinforced by the literature, as it was maintained that rhino horn has been utilised as traditional medicine for thousands of years in Asian countries. It is typically used to eradicate contaminants and remedy fever, as well as to treat terrible sicknesses such as cancer (Ash 2012:5).

However, two (15%) of the participants maintained that medicinal uses are not relevant contributory factors to these crimes. It was held that there are no known medicinal uses for rhino horn in South Africa. Also, most international and particularly Asian consumers who are currently creating the demand for these products are not motivated mainly by a medical foundation.

This question was left incomplete by one (8%) of the participants, as they were unsure due to their lack of experience in these matters in KZN. The participant was still included in the study owing to their expert status within the conservation field, which may serve to expose a gap in the knowledge of certain professionals about issues in KZN particularly.

These results indicate that traditional medicine practises do in fact contribute to the illegal trade in endangered animals, particularly rhino poaching. This is due to inaccurate customary beliefs around animal products being able to treat various ailments, particularly cancer. It is thus deemed necessary to educate these consumers about the false myths that form the basis of their use of animal products, so that the demand for these products may be reduced. This will serve to prevent these crimes against wildlife, especially rhino poaching.

#### 5.2.4 Poor education



Poor education was deemed a relevant feature in these offences by ten (77%) of the participants. This is illustrated in Figure 5.5 above.

It was maintained that the education levels of wildlife offenders are extremely low. The lack of education exists both in range and consumer countries, in that there is an impoverished and uneducated poacher in South Africa and an uninformed user who is not aware of the consequences of consuming animal products. In addition to this, local South Africans often lack awareness regarding wild animals and their significance.

In this regard, the importance of educating people about the meaning of conservation was emphasised. All individuals should be taught about the significance of conservation issues, including relating to rhinos. People furthermore need to be made aware that conserving nature will create long-term job opportunities. It is also crucial to teach medicinal consumers that animal products serve no true medical purpose, and enlighten them about where the rhino horn actually comes from. In addition, it is critical to support traditional doctors in providing alternative treatments. These efforts may help to reduce the illegal trade in endangered animals.

Although a poor level of education may likely play a role in these offences, having a decent education does not ensure success or prosperity. The only requirement is finding someone who is willing to poach, as trafficking techniques are learnt just like any other skill and do not involve obtaining a certificate. For example, bird traffickers may be out-skilled by the very people whom they taught to commit similar offences.

Cronje and Zietsman (2009:17) upheld that having a higher than average level of education is a characteristic of 60% of poachers. Therefore, it is suggested that while poor education is significant, it may not be the most important factor in the causation of these offences. In determining the major causal factors, one should also consider economic conditions, such as poverty. This is due to the fact that conservation crimes such as poaching are motivated by the huge financial benefits that are acquired.

On the other hand, only one (8%) of the participants maintained that poor education is not a contributory factor in these conservation crimes.

Two (15%) of the participants were unsure and therefore unable to answer the question. One (8%) of these participants stated that they did not have KZN specific

experience. It was decided that these participants should still be included in the study, as the fact that they are experts in their fields might highlight a potential gap in the knowledge about the situation in KZN.

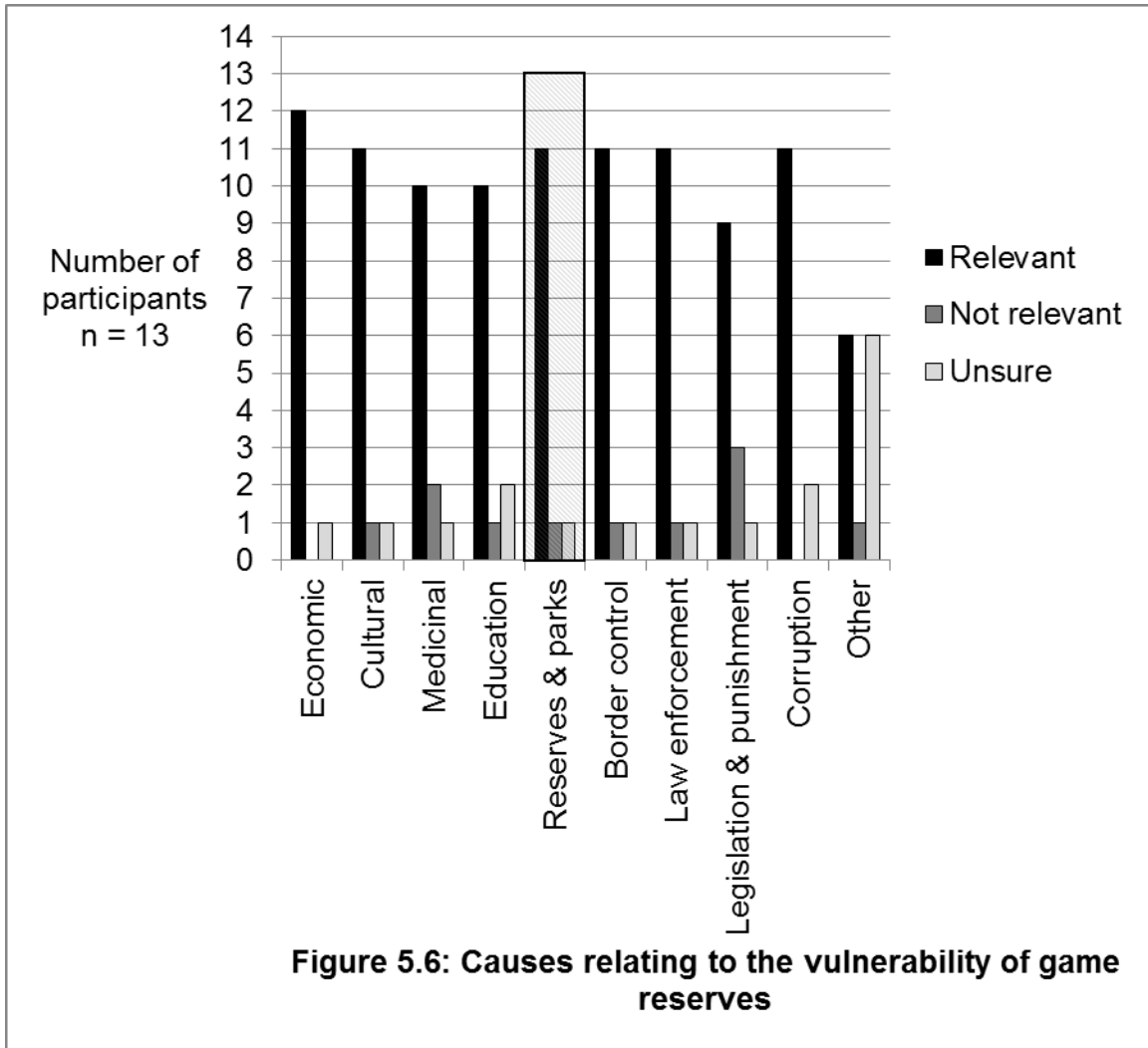
While a poor level of education is viewed by the majority of participants as a contributing cause of the illegal trade in endangered animals, it was also found that being skilled in the commission of these offences is an important factor. These criminal methods cannot be gained through a regular education, but may be learnt in similar ways to acquiring normal skills.

### **5.2.5 Vulnerability of parks and reserves**

It was held by eleven (85%) of the participants that vulnerability of parks and reserves is a contributing element to the illegal trade in endangered animals in KZN, particularly in relation to rhino poaching. This is depicted in Figure 5.6 below.

Four (31%) of these participants mentioned that security is very problematic. Although security may reduce the vulnerability of a reserve, it will not completely stop the poaching, no matter how much security is put in place. However, the war will nearly be won if the poachers can be prevented from reaching the wildlife.

Issues with game reserve staff was cited by five (38%) of the participants as a contributing factor to the illegal trade in endangered animals. In this regard, insufficient numbers of staff may add to the vulnerability of a reserve. This situation may in part be due to how expensive it is to pay for security. Low staff wages increase the vulnerability of reserves, as this state of affairs may lead to disloyalty amongst staff. The roles of inept managers and untrustworthy staff members also play a part in the problem. Furthermore, as a result of the interference by trade unions, the operational hours of the small number of staff members who are actually functioning on the ground are drastically restricted. These conditions lead to a lack of the necessary control required in game reserves.



The size of reserves was mentioned by four (31%) of the participants as a contributing factor to their vulnerability, as it makes them difficult to regulate. In addition to this, it was declared that the tactics used by the criminal organisations and their exploitation of the element of surprise increase the vulnerability of the parks.

This vulnerability of reserves and parks is emphasised by Carnie (2013d:2), who indicated that the dramatic escalation in rhino poaching in KZN in 2013 was due to the improved security measures put in place by the Kruger National Park. It is proposed that the offences are thus being displaced to KZN, as the criminals move around the country in search of easier targets.

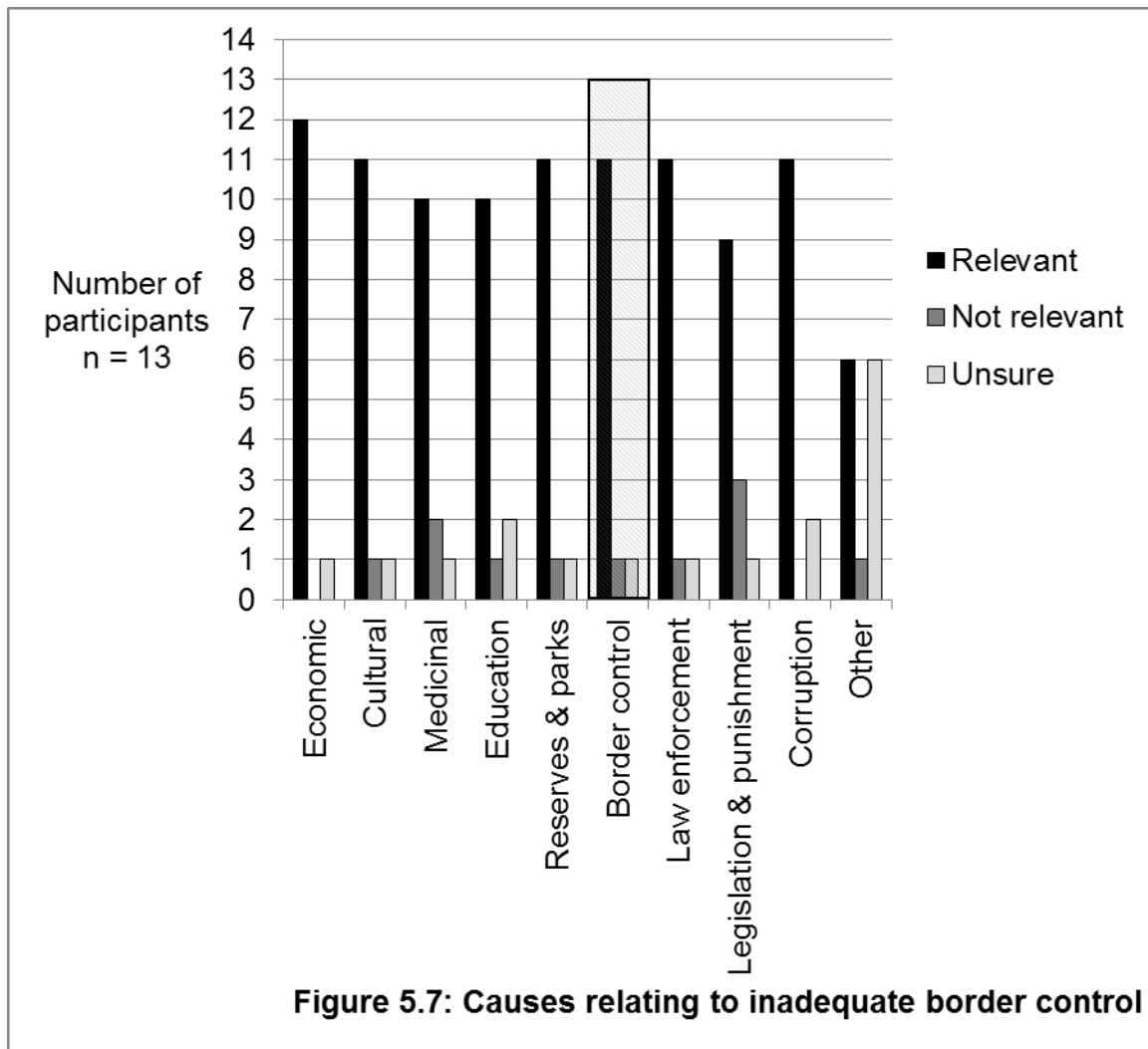
Furthermore, Ndaliso (2014:3) testified that in June 2014, four alleged rhino poachers were arrested in Hluhluwe in KZN after entering a private game reserve. They had cut through the reserve fence in order to access the rhino. In addition to this, it was stated that three white rhino were attacked and dehorned at Tala Game Reserve near Durban in May 2014. Two of the rhino died, while one survived after being treated by a veterinarian. The crime scene was about one or two kilometres from the main gate in the reserve, out in an open field (Oellermann 2014b:1). Incidents like these show that inadequate security measures can leave animals vulnerable to crime.

Vulnerability of reserves or parks was not deemed a relevant causal factor by only one (8%) of the participants.

Furthermore, one (8%) of the participants was unsure and was unable to answer this question due to it being inapplicable to their knowledge. The decision was made to still include this participant in the study, as their professional position suggests that some experts may not be aware of the circumstances in KZN, particularly around rhino poaching.

These outcomes demonstrate the importance of security within a game reserve or park, as without such procedures in place, wildlife is increasingly vulnerable to poachers. The sheer size of these reserves poses a problem for preventing incursions, as it is not possible to patrol all areas at once. Another problem relates to the great financial costs involved in establishing and maintaining decent security. Moreover, in order to assist in reducing the vulnerability of a game reserve, it may be crucial to employ a greater number of qualified and competent staff, as well as to provide adequate salaries. Measures such as these should enhance staff loyalty and help to ensure that staff members are proficient at their jobs.

## 5.2.6 Inadequate border control



Eleven (85%) of the participants were of the belief that inadequate border control is a causal factor in the illegal trade in endangered animals, as depicted in Figure 5.7 above.

It was stated that the borders are as porous as a sieve. The South African borders were deemed to be extremely permeable, irrespective of the items smuggled. Furthermore, it was indicated that Mozambique presents a problem due to its virtually non-existent border control, which serves to enable trafficking. It was maintained that corruption at the borders leads to inadequate control, as the authorities accept bribes. Consequently, there is a complete lack of control at certain borders. Contributing to



these problems are the enormous capacity issues at ports of exit and entry, the rapid turn-around time of fifteen minutes allowed for checking a cargo truck, and the lack of awareness of border officials regarding the trafficking of animals. In this regard, the Endangered Wildlife Trust (EWT) has conducted training programmes for staff working at O.R. Tambo International Airport, but they were still struggling to get authorisation to perform the training at land borders at the time of the completion of the questionnaire.

Therefore, it was opined that border control cannot completely prevent the smuggling of any illegal items, rhino horn included. This is due to the fact that there are too many opportunities for contraband to be trafficked. Moreover, the sole authority with any consistent power in this regard is customs, which tend to pay more attention to goods coming into the country rather than products exiting it. On top of the massive quantities of mail, baggage and cargo that cross the border each day, the border officials are often totally unconcerned about inspecting the goods that are exiting the country.

These views were reinforced by the Endangered Wildlife Trust (2013:7), which states that the illegal trade in animals comprises organised, cross-border offences. In this regard, the EWT's Rhino Project aims to intervene by, amongst other things, improving the detection rates of animal contraband through education and capacity building for airport staff, and by using detector dogs at airports.

It was upheld by just one (8%) of the participants that inadequate border control is not an issue that contributes to these offences. This was owing to the fact that offenders are able to use many methods to illegally cross the border.

This question was not answered by one (8%) of the participants as they were unsure due to a lack of awareness on the topic. The decision was made to still include this participant in the study due to their professional status, which may accentuate a possible gap in the knowledge of some conservation experts regarding the conditions in KZN.

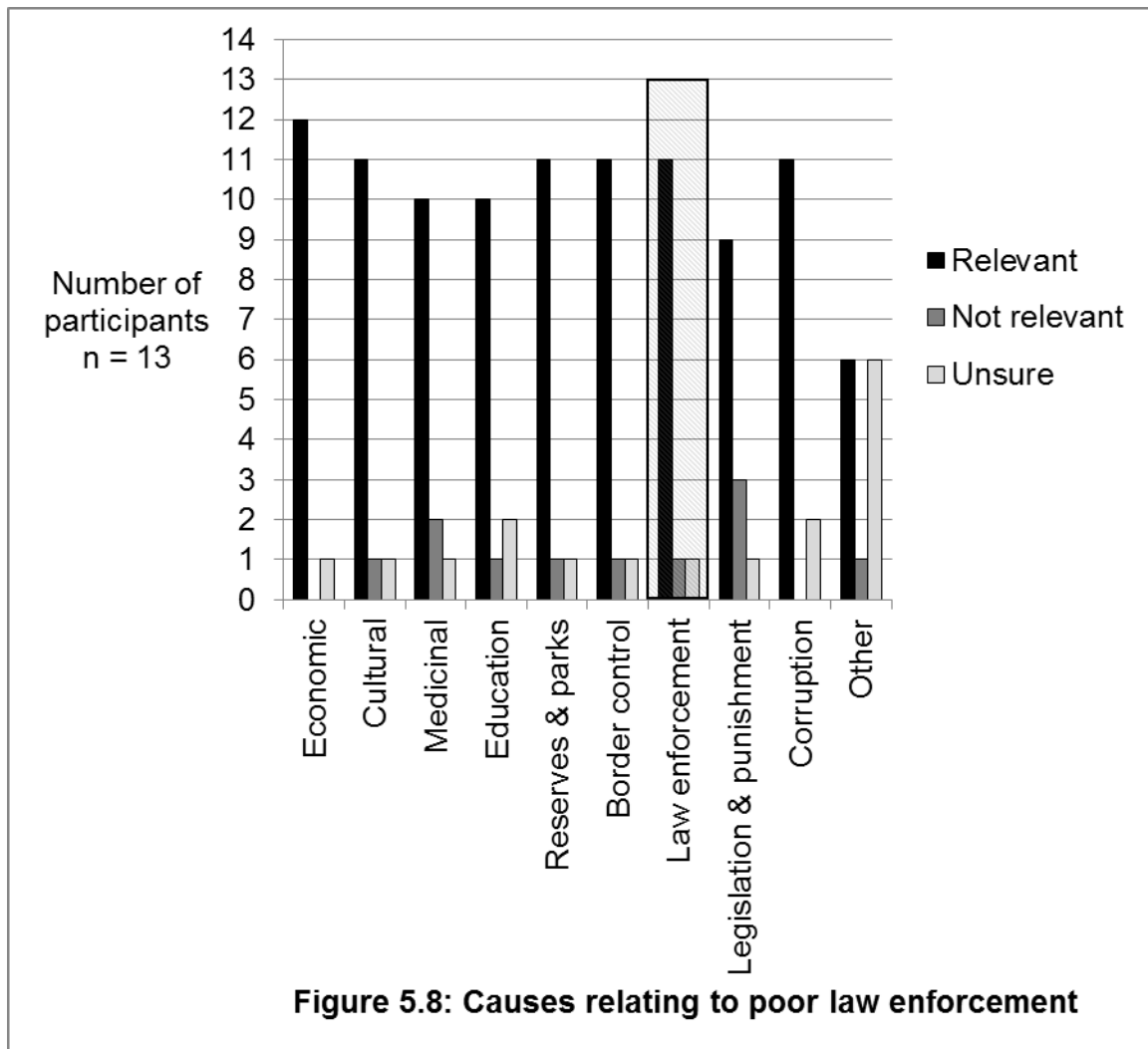
The findings in relation to border control show that inadequate measures at ports of entry and exit do contribute to the illegal trade in endangered animals in KZN, particularly rhino poaching. This may be due to the fact that poor border control does not deter wildlife offenders, and may instead serve to encourage them to commit crimes. Since by their nature these organised offences occur across borders and involve trafficking, it is crucial to put processes in place to prevent this from happening. What's more, while South African border measures are deemed to be insufficient, the Mozambican border was found to be completely permeable, which allows for easy smuggling of endangered animals and their products. This is particularly significant for KZN, which shares a border with Mozambique. Corruption amongst border officials was discovered to be a serious problem, as were practical issues such as under-educated staff and capacity concerns. These border authorities need to be trained with regard to identifying wildlife contraband, as well as in placing at least as much importance on inspecting items leaving the country as those entering it.

#### **5.2.7 Poor law enforcement**

As stated by eleven (85%) of the participants, poor law enforcement is an issue that plays a role in the commission of these conservation crimes. This is shown in Figure 5.8 below.

It was held that the enforcement of the law is lacking and not up to its previous standards. It was furthermore maintained that the efficiency of law enforcement methods does have an impact on the areas where animals are poached. However, it was also added that law enforcement is just one of many contributing factors in the illegal trade in endangered animals.

These views were highlighted by five (38%) of the participants, who listed collusion, bribery and corruption as major issues around law enforcement. The corruption that occurs higher up than law enforcement is deemed to be the biggest problem, as it leads to a trickle-down effect and promotes complicit misconduct.



Additionally, it was asserted that there is a lack of understanding and know-how amongst law enforcement officials. It was also mentioned that sentencing is too lenient. Although poor law enforcement occurs in certain instances, there are some decent officials. However, their work is impeded by the enormous size of the country's protected areas, understaffing, the tempting financial rewards for poachers, and the well-structured syndicates that operate based on useful insider information and by catching the targets unawares.

It was further stated that the greatest problem in dealing with these challenging offences is the tiny number of expert officials investigating them. Another shortcoming is that these very few professional endeavours are fragmented across South Africa and thus are not triumphing over the highly efficient criminal organisations. Likewise,

since the various provinces have not been cognisant of the poaching situation in the last several years, these crimes have not been prioritised and the relevant authorities have not been awarded the necessary logistical capabilities. It was held that the investigators in KZN who have been employed of late are inexperienced, and the staff who are knowledgeable are not appointed to postings in which they can take action, in case they then expose the others' lack of experience.

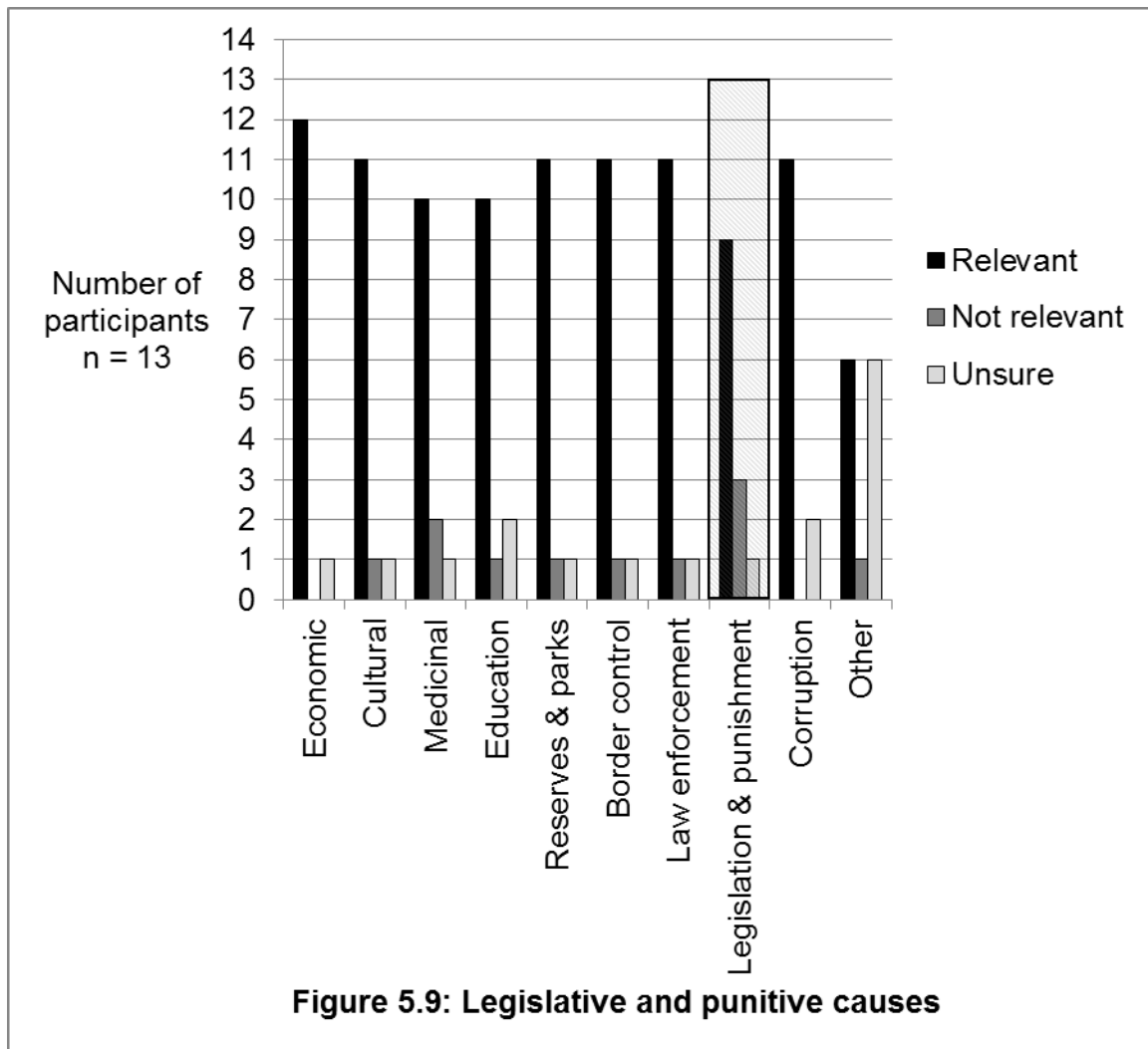
These opinions about difficulties facing law enforcement were supported by Milliken (2014:21), who specified that while efforts by South African law enforcement are commendable, more needs to be done. Although nearly one rhino poaching related arrest is taking place in the country every day, these arrests may not be very valuable. This is the case because it is mainly the lowest ranking offenders (the poachers) in the trade chain who are apprehended. Furthermore, the high rates of arrests are not stopping the poaching, since there are many willing individuals who then take over the commission of these offences. It is put forward that the low number of prosecutions that result from these arrests is a further contributing facet, which was referred to in Chapter 4.

However, poor law enforcement is not considered a causal factor in these crimes, according to one (8%) of the participants.

One (8%) of the participants did not complete this question because they were unsure about the situation in KZN. Owing to their expert status, they were still included in the research. Since it may reasonably be expected that they would be knowledgeable about matters in KZN by virtue of their position, their lack of awareness may point to similar unfamiliarity amongst other specialists about the problems in the province.

These results suggest that there are many problems facing law enforcement which hinder their attempts to deal with conservation crimes, particularly rhino poaching. If bribery and corruption are rife and law enforcement officials are unskilled, as well as there being staff shortages and faction issues, these offences will never be properly investigated as priorities.

### 5.2.8 Inadequate legislation and punishment



Nine (69%) of the participants held that inadequate legislation and punishment are causes of the illegal trade in endangered animals in KZN. This is illustrated in Figure 5.9 above.

It was opined that while ineffective legislation and punishment may be causal factors in certain cases, legislation is generally robust. However, it was added that there is little chance of being apprehended for these conservation crimes. In this regard, fewer than half of all arrested poachers are properly prosecuted. In fact, the actual number prosecuted may be as low as 19%. The remaining criminals are released by an

inefficient and unskilled justice system, and tend to re-offend and frequently get caught again.

It was indicated by five (38%) of these participants that punishments are not severe enough. The sentences meted out are insufficient in that the terms of imprisonment are very short and the fines are excessively lenient, and the cases take too long to process. In addition to this, the punishments for poaching other endangered animals, such as wild dogs, are unusual and extremely light. For example, these poachers may receive a fine of R500 in a best case scenario. Officials accepting bribes also appears to be a big problem.

The viewpoints of these participants were reinforced by the Environmental Investigation Agency (2014:17), which held that wildlife offenders are exploiting inadequate legislation, non-existent deterrents, a lack of legal knowledge and corruption amongst officials. To remedy this situation, wildlife crime investigators need to direct their efforts towards obtaining sufficient evidence for prosecuting offenders “under anti-money laundering, proceeds-of-crime and anti-corruption laws”.

According to three (23%) of the participants, inadequate legislation and punishment do not contribute to the illegal trade in endangered animals. These participants stated that while legislation is sufficient and skilled prosecutors will guarantee that suitable punishments are meted out by the courts, the problem lies in poor law enforcement. For example, it was declared that there was only one investigator in KZN who dealt with rhino poaching at the time of the completion of the questionnaire. It was also declared that while courts are starting to find offenders guilty of rhino-related offences and give out heavy sentences, other conservation crimes are not treated with the same priority. For instance, unlawful hunters who use dogs to commit their offences (such as poaching oribi) may frequently be given community service. No one will then follow up to ensure that the offenders do their service, as these crimes are not viewed with the same gravity as other offences against people, such as rape or murder.

This question was not addressed by one (8%) of the participants because they were unsure owing to a lack of personal experience in KZN. The decision was taken to still

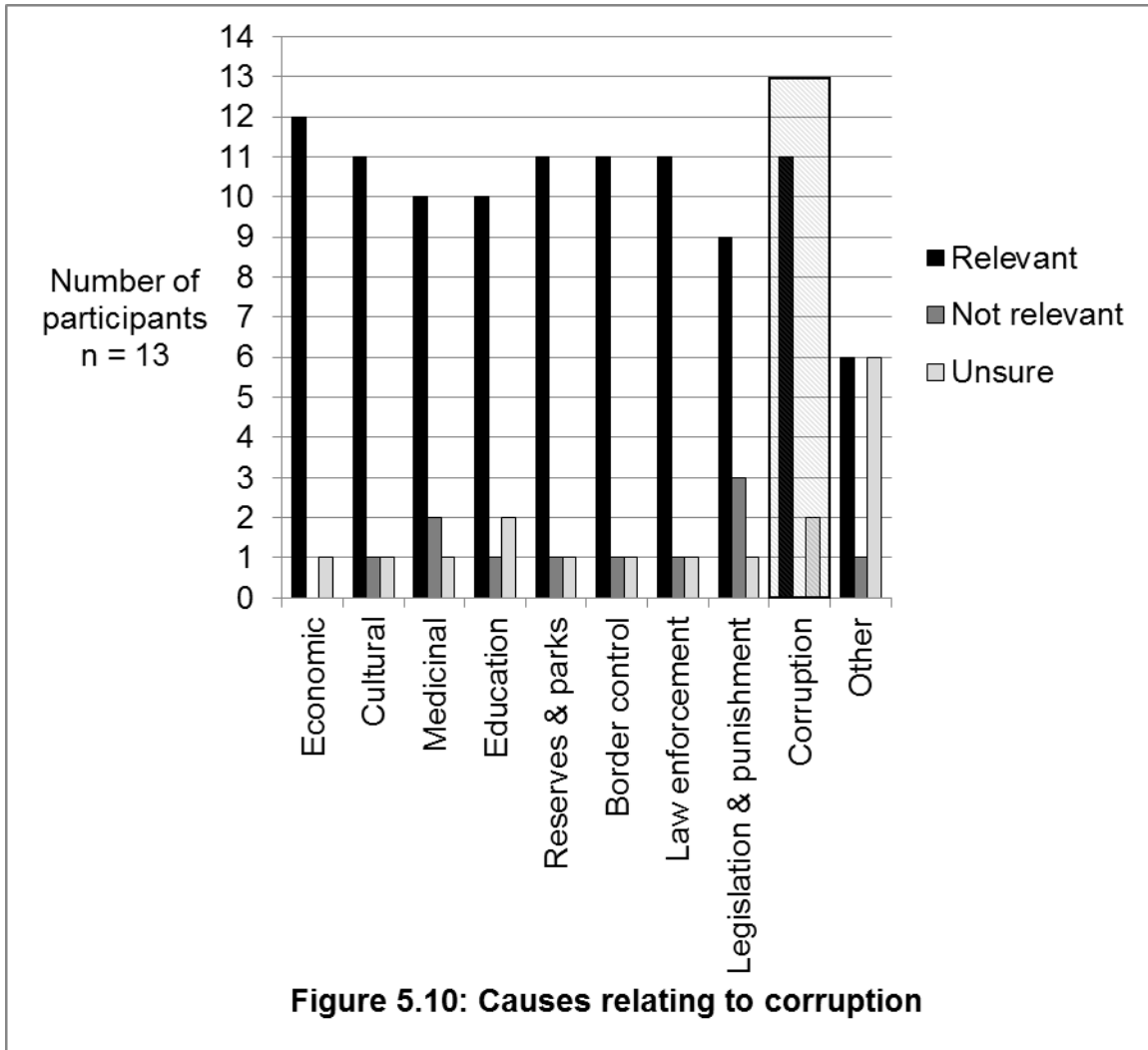
include this participant in the study due to their professional position in a key conservation organisation. Their lack of awareness is important as it may serve to expose other experts' unfamiliarity with the topic.

The findings regarding legislation and punishment indicate that inefficiency in these areas may contribute to the illegal trade in endangered animals. The most salient issues here are the inadequate sentences dished out to offenders, as the prison terms given are too short and the fines too small. It is put forward that these sentences will not have a deterrent impact on criminals or potential offenders, as the risks of punishment are minimal, while the financial benefits for these crimes are enormous. It was also suggested by the participants that while South African legislation may in itself be adequate, the enforcement thereof is not. It is not beneficial to have strong legislation if it is not applied properly in order to deter offenders and prevent crime – particularly conservation crimes, which have not always been treated as priorities.

### **5.2.9 Corruption**

As per Figure 5.10 below, it was maintained by eleven (85%) of the participants that corruption is a causal factor in the illegal trade in endangered animals, particularly rhino poaching.

Corruption was found to be an enormous problem contributing to these crimes, and may involve bribery and people being paid for their silence. This sometimes happens because people are financially needy. It was further stated that corruption takes place because people are employed in unsuitable positions and are not motivated to perform the finest work that they can. In this regard, senior managers make choices that are founded on misinformation owing to their lack of expertise, and inefficient companies are given contracts.



Furthermore, four (31%) of the participants emphasised where corruption takes place. Corruption was considered endemic in South Africa and Vietnam, and was thought to occur from the top structures of government down to grassroots levels. It may be committed by anyone, including game farmers, law enforcers, legal officials, border authorities and consumers. Corruption is therefore very well concealed and hard to uncover.

It was asserted by one (8%) of the participants that research into organised crime shows that these types of criminal activities can only work when the government itself is corrupt. According to this participant, corruption exists in South Africa, and is evident in the case against Dawie Groenewald, which involves two veterinarians and eight other people who were implicated in rhino poaching. What's more, the case against



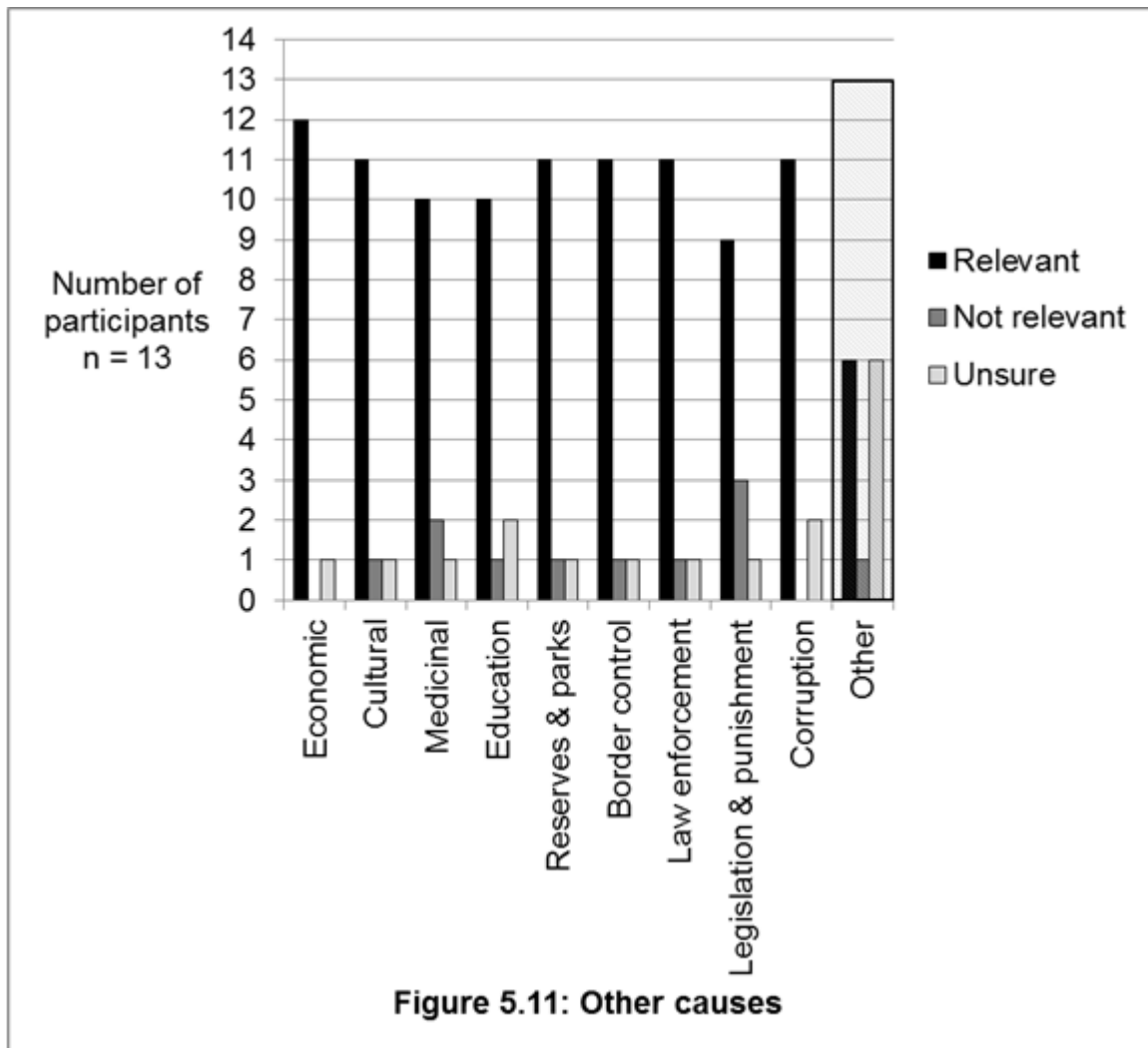
Chumlong Lemtongthai implicated provincial authorities in assisting him and Marnus Steyl to doctor hunting permits. At the time of the completion of the questionnaire, it was alleged that none of these authorities had been investigated or apprehended for their involvement. This implies that there is a lack of importance placed on dealing with offenders who are higher up in the criminal networks, especially if they are operating within government structures.

These beliefs about corruption were highlighted by the London Conference on the Illegal Wildlife Trade (2014:7). This declaration stated that a method that governments can take to ensure efficient legislative measures and to deter people from committing crimes against wildlife is to implement a “zero tolerance policy” when it comes to corruption. This is due to the fact that corruption is a significant facilitating element in the commission of these offences.

Two (15%) of the participants were unsure and did not answer this question. It was indicated by one (8%) of these participants that the question could not be addressed due to their lack of experience in the matter in KZN. It was decided to still include this participant in the research owing to their expert status, which may point to a gap in the awareness of certain professionals about the situation in KZN.

These results suggest that corruption is a major contributing factor in the causation of the illegal trade in endangered animals in KZN. Officials working in or with the criminal justice system may accept bribes from offenders to sabotage investigations or prosecutions. Furthermore, corruption may also exist amongst other individuals who are employed in positions meant to protect wildlife, such as provincial officials, game farm owners and veterinarians. However, it was found that corruption occurring at these levels would not be as rampant if it was not for the fact that the South African government itself is corrupt.

### 5.2.10 Other causes



Six (46%) of the participants maintained that there are other causes that are relevant to the illegal trade in endangered animals, as shown in Figure 5.11 above.

It was held by two (15%) of these participants that financial greed is a pertinent contributing issue in these offences. This belief was sustained by Rademeyer (2012:ix), who stated that rhino horn is more valuable than platinum, gold, heroin and cocaine per kilogram. In addition to this, he said that, “In Vietnam, it has become a party drug for the wealthy and a panacea for the very sick. And yet, it offers no real scientific benefits. Its value is artificial, founded on myth and propagated by greed”.

Another one (8%) of the participants was of the view that the lack of significant community involvement may be an important causal factor. It is submitted that if local communities participate in conservation efforts in their neighbouring protected areas, they may feel more of a sense of ownership over and responsibility for such spaces. They might also be more aware of the importance of biodiversity, and will therefore be less inclined to commit conservation crimes.

Unemployment, hunger and capacity problems within conservation authorities are mentioned by one (8%) of these participants as being some of the other roots of the illegal trade in endangered animals. Moreover, another issue is the unwillingness of the government to provide adequate budgets for the departments responsible for preventing offences against nature.

In addition to this, peer pressure in Vietnam and China are contributing factors in these crimes, according to one (8%) of the participants. In this regard, one's position in the social structure is defined by one's income, which is accomplished through following the rules and being highly disciplined. It was furthermore said by another one (8%) of the participants that the syndicates driving the offences have strong associations in Asian countries. Also, it is highly likely that these syndicates are amassing rhino horn so that they can command the market in the future.

It was held by only one (8%) of the participants that there are no other relevant causes of the illegal trade in endangered animals.

Six (46%) of the participants were unsure and did not address this question. It was stated by one (8%) of these participants that this was based on a lack of understanding about the situation in KZN. It was decided to still include this participant in the research due to their professional position, which may suggest that certain experts need to be made aware of the poaching problem in KZN.

Based on these results, it is proposed that action needs to be taken both in South Africa and Asia to bring about change and prevent these offences. The mindset and behaviour of the consumers must be altered, and the priorities of the government need

to be addressed in South Africa in order to deal with these crimes with greater importance and heightened urgency.

### **5.3 Conclusion**

This chapter addressed the causes of the illegal trade in endangered animals, with a special emphasis on rhino poaching. In particular, triggers relating to economics, culture, Traditional Chinese Medicine, education, the vulnerability of parks and reserves, border control procedures, law enforcement methods, legislative and punitive measures, and corruption were addressed. It was found that crimes against wildlife are financially motivated, and consumers of animal products are driven to use these items based on false myths. For example, they may believe that using animal products, such as rhino horn, will bring them better health and an improved social ranking. To counteract these incorrect beliefs, it is critical to bring about consumer behavioural change through education and awareness programmes.

While employing these demand reduction strategies, it is necessary to simultaneously address the causes of the illegal trade in endangered animals in range countries, such as South Africa. This can be done by enhancing the security in game reserves, such as by employing anti-poaching professionals. In addition to this, it is crucial to improve border control procedures and law enforcement techniques, which can be done by utilising sniffer dogs and training officials on the importance of conservation. Legislative and punitive measures also need to be elevated, by creating stricter punishments for wildlife offenders in order to deter these individuals from committing their crimes. Corruption also needs to be tackled in order to prevent the illegal trade in endangered animals, as many people who are supposed to protect our wildlife are actually involved in these offences. In addition to this, other factors that were found to be significant are greed, the role of criminal syndicates, and the lack of political will to tackle conservation crimes.

The following chapter, Chapter 6, will examine the consequences of the illegal trade in endangered animals, particularly for rhino poaching. Here the focus will be on social and cultural significances, biological and conservation consequences, economic

costs, and concerns for tourism. It is necessary to study the consequences of these offences in order to understand the impact that the illegal trade in endangered animals has on the province – and the country – in cultural, biodiversity, economic and tourism terms.

# **CHAPTER SIX**

## ***THE CONSEQUENCES OF THE ILLEGAL TRADE IN ENDANGERED ANIMALS***

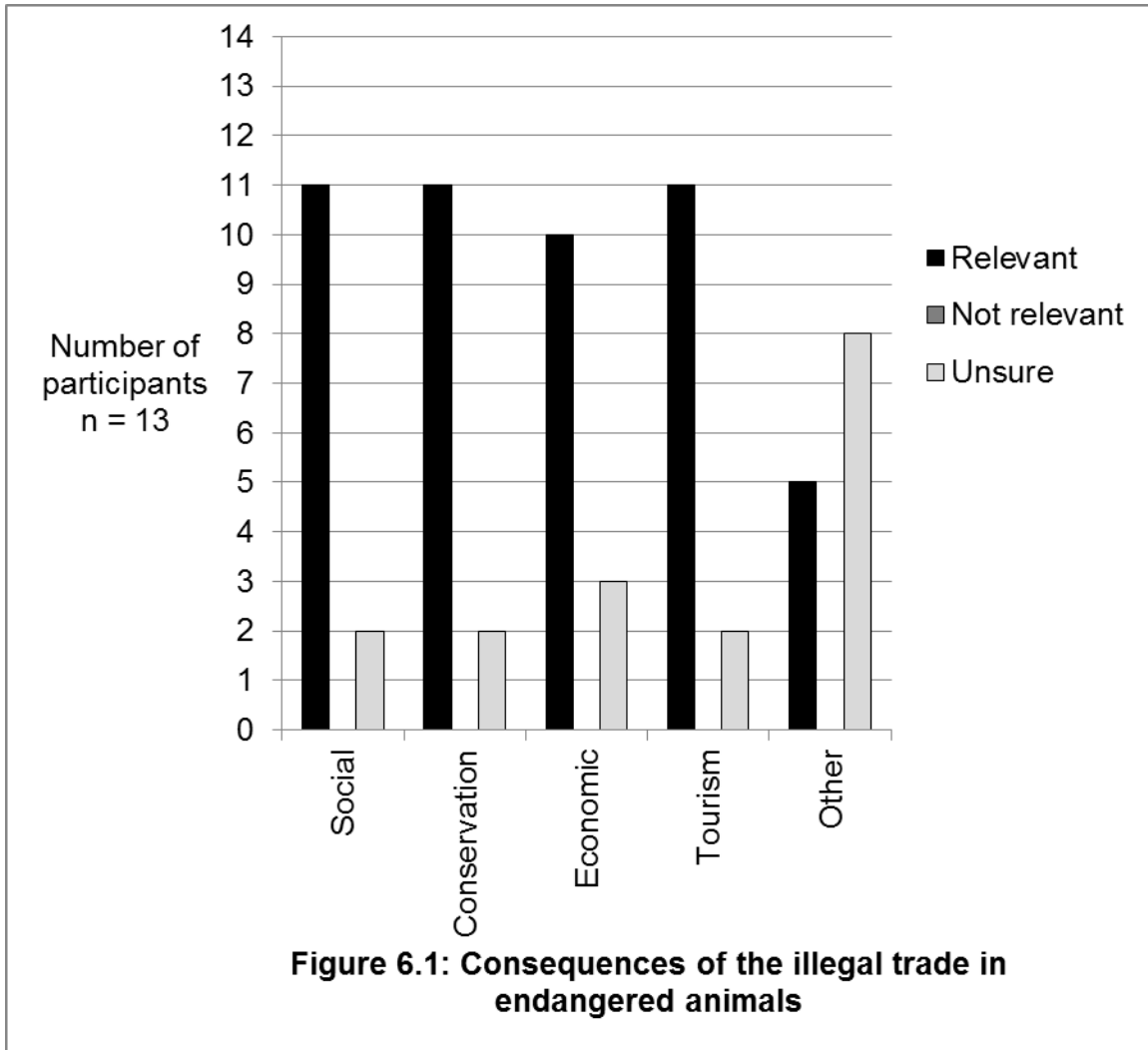
## **6.1 Introduction**

In Chapter 5, the causes of the illegal trade in endangered animals in KwaZulu-Natal (KZN), with a specific emphasis on rhino poaching, were examined. Particular importance was placed on economic, cultural, medicinal and educational factors, as well as the vulnerability of parks, poor border control measures, inadequate law enforcement, ineffective legislation and punishment, and problems surrounding corruption as triggers advancing misdeeds in this arena.

Pursuant to causal issues, the consequences of the illegal trade in endangered animals will now be investigated through an analysis of the data gathered from the questionnaires. In this regard, social, conservation, economic and tourism consequences will be highlighted. It is necessary to discuss the consequences in order to properly understand the wider impact of these crimes. Special attention will be paid to the effects on the animals themselves and on biodiversity, as well as the costs to the country and KZN in particular.

## **6.2 Consequences of the illegal trade in endangered animals**

Figure 6.1 below reveals all of the perceived and actual consequences of the illegal trade in endangered animals, which are highlighted in this study. While prominence was placed on rhino poaching in particular, the plight of other endangered species, such as elephant, wild dog, cheetah and leopard, is also germane. By presenting all of the consequences together in one graph, a comparison of the various impacts of these crimes is provided. The consequences will be featured and expounded upon in separate sections below. In particular, the perceived and actual consequences for society, conservation, the economy and tourism will be discussed. It is significant to examine these consequences because the illegal trade in endangered animals has such a detrimental impact not only for the wildlife itself, but also for people and the economic conditions of the country.



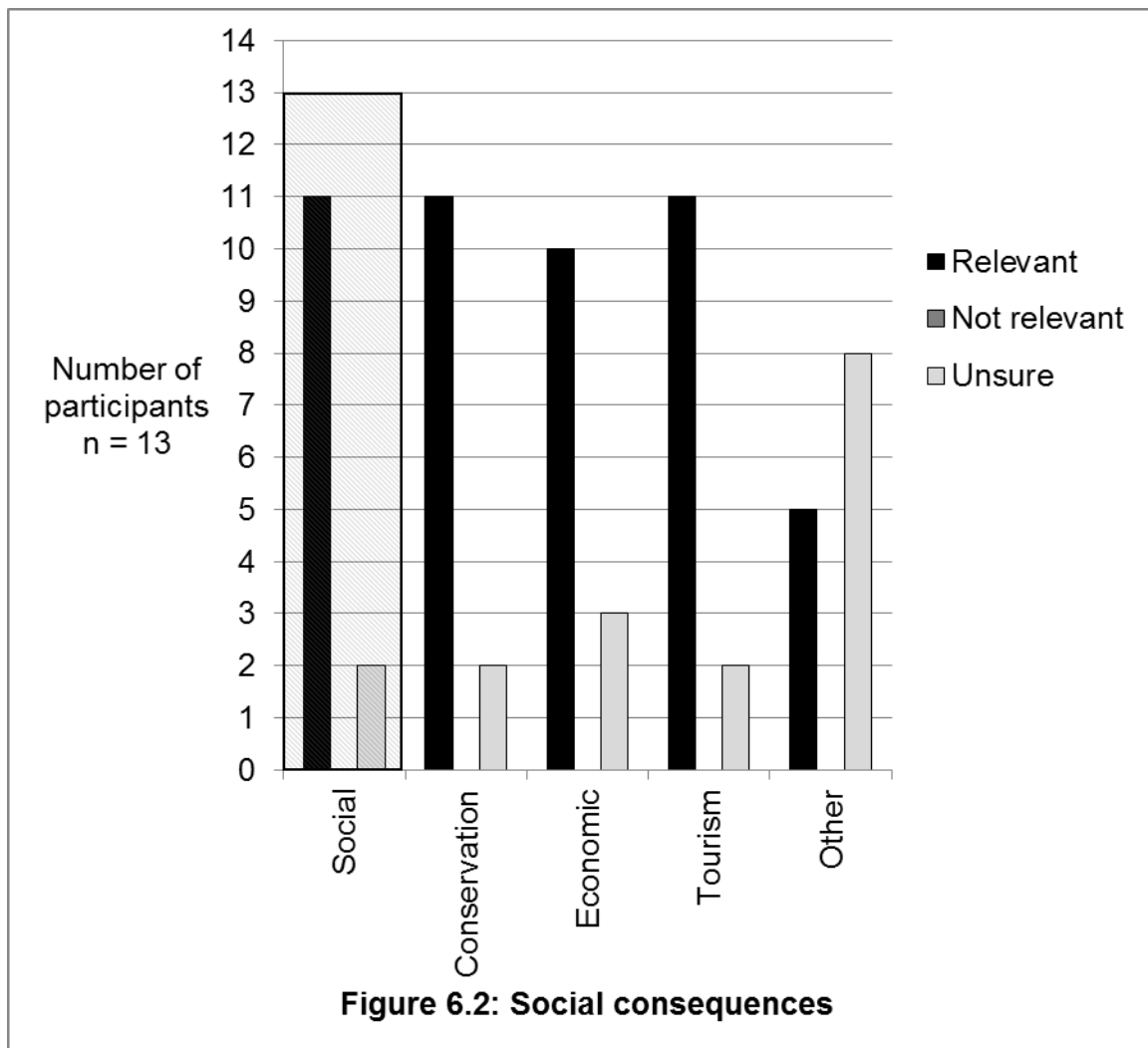
### 6.2.1 Social and cultural consequences

In answer to the question regarding what they believe are the perceived and actual consequences of the illegal trade in endangered animals in KZN, particularly rhino poaching, eleven (85%) of the participants were of the view that social or cultural consequences are relevant. This is shown in Figure 6.2 below.

One (8%) of these participants stated that specific cultural groups may face discrimination due to the behaviour of some of their members. On the other hand, it was held by one (8%) of the participants that several cultures will be affected by these conservation crimes. It was asserted by another one (8%) of these participants that



individuals with wealth become more powerful and influential, which allows them to establish their positions, values and criminal activities.



It was opined by six (46%) of the participants that people will lose their culture and traditional inheritance due to the illegal trade in endangered animals. Our heritage and national pride as South Africans will be negatively affected, particularly by the annihilation of high profile species such as the rhino. As a result of this, society's organisation and cohesiveness will be eroded. In a broken down society, people may resort to offending.

These assessments by the participants were reinforced by Wyatt (2013:65), who advocates that victimisation can occur through "the loss of cultural and environmental

heritage from public lands or lands set aside for conservation and preservation, such as national or nature parks". It is therefore believed that the loss of rhinos and other animals from South African game reserves may be viewed as cultural victimisation and will bring negative consequences for our heritage.

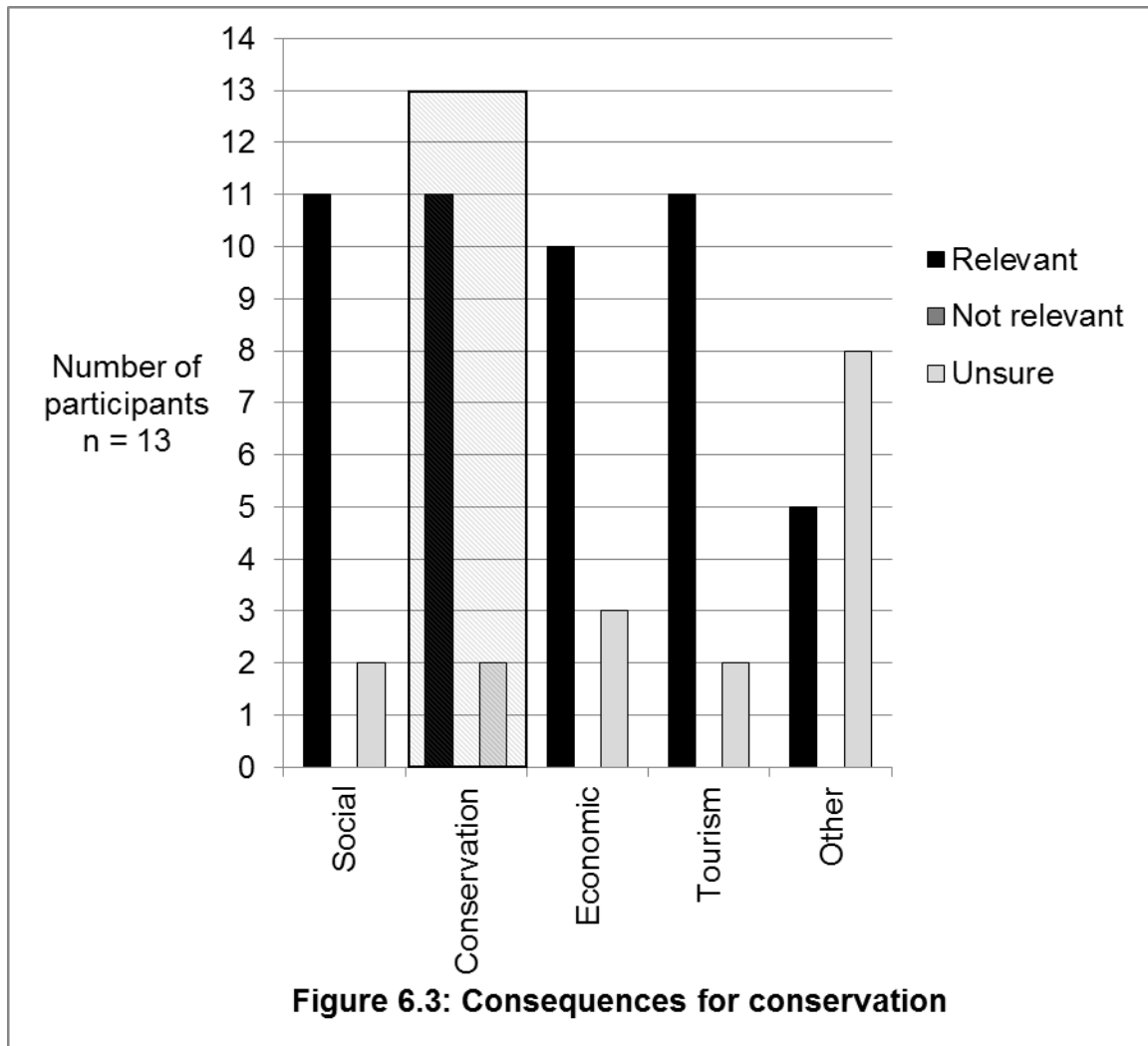
Furthermore, three (23%) of the participants suggested that people have little awareness of the consequences of these offences. In this regard, society does not appreciate the importance of biodiversity, and instead believes that it is acceptable to commit offences against wildlife as these crimes are not viewed as priorities. This is despite the fact that citizens have rights – including those set out in the Constitution – to have our natural resources safeguarded. Asian people in particular may lack awareness of the social and cultural consequences of these crimes, and may pay little attention to conservation issues. Additionally, in KZN and throughout South Africa, people are mostly of the view that rhinos are merely animals, existing for humans to exploit, and that concerns around extinction are not significant.

This question was not addressed by two (15%) of the participants. One (8%) of these participants stated that the answer is not known, while the other one (8%) admitted that their lack of response was due to being unaware of the consequences in KZN. As previously stated, this participant was included in the research due to their skilled position, possibly exposing a gap in the knowledge of certain specialists regarding the circumstances in KZN. This may have important ramifications in that while much expert attention and numerous preventative efforts are being directed towards the biggest problem area - Kruger National Park - less consideration is possibly being given to the dilemmas facing the other provinces. This situation might make the game reserves in other provinces, such as KZN, even more vulnerable to poaching.

These findings show that the illegal trade in endangered animals leads to great social and cultural consequences - most significantly, that citizens' rightful cultural heritage will be lost. As South Africans, our natural resources are extremely important to our culture and social lives, and our existence cannot be separated from the presence of our animals. Wildlife - the Big Five in particular - is a significant aspect of our lives and identities. Certainly, more needs to be done to improve awareness in South Africa

as well as in Asian countries regarding the importance of biodiversity and conservation, to incorporate these issues into the cultural framework of all individuals.

### 6.2.2 Biological and conservation consequences



In response to a question relating to the biological or conservation consequences of the illegal trade in endangered animals, eleven (85%) of the participants agreed that such consequences are relevant. Thus, these participants believe that crimes against wildlife do indeed have consequences for conservation. This is depicted in Figure 6.3 above.

Five (38%) of these participants referred to the depletion of natural resources as being a consequence of the illegal trade in endangered animals. Wildlife and habitats may

be lost, which will have an undeniable impact on biodiversity. This could result in a broad range of harm, with all species being at risk. In the worst case scenario, species such as the rhino may become extinct.

Rhinos were directly mentioned by six (46%) of the participants. Since rhinos belong to the ecosystem and other species are thus dependent on them, their being poached and wiped out will have an impact on the whole ecosystem, including other animals. Private farmers may be discouraged from keeping rhino due to the risk of poaching, which will ultimately decrease rhino range territory, especially since government-owned land is at capacity in terms of stocking wildlife. It was also held that although people have a responsibility according to the Constitution to defend biodiversity, as well as an ethical duty to do so on behalf of all South African citizens, too few people are aware of these obligations.

It was additionally stated that there is a huge diminution of biodiversity for the current and upcoming generations. For example, if rhino poaching continues at the existing rate, rhinos will display a negative population growth by 2015. Furthermore, crimes committed against wild dogs (*Lycaon pictus*) are not subject to prosecution or punishment, although they are the most threatened predators in Southern Africa and are regularly killed through illegal snares and unlawful slaughter by landowners. Oribi (*Ourebia ourebi*) are also highly endangered and are mostly threatened by illicit hunting with dogs, which leads to a situation where their populations are diminishing abnormally.

Bega (2014:15) supports the aforementioned opinions by affirming that it is important to prevent rhino poaching because rhinos are prehistoric creatures that have survived for more than forty million years. They are dangerously threatened and their current downfall is due to human interference. In addition to this, they are a “keystone species” (a species that plays a critical role in how the ecosystem operates) that is specially protected. If rhinos are watched over, many other animals might well be safer as a result.

Two (15%) of the participants did not complete this question. One (8%) of these participants stated that this was due to their lack of experience with the issue in KZN.

It was decided to still include this participant in the study because their professional status may serve to highlight certain experts' lack of familiarity with the situation in KZN.

The results in this regard appear to demonstrate that all species, including rhino, are important for maintaining biodiversity in South Africa. If one species is affected, such as through poaching, this will impact not only the victimised animals, but many other species in the ecosystem. It is, therefore, crucial to prevent the illegal trade in endangered animals in order to avoid these severe biological and conservation consequences – the most critical of which is extinction of a species.

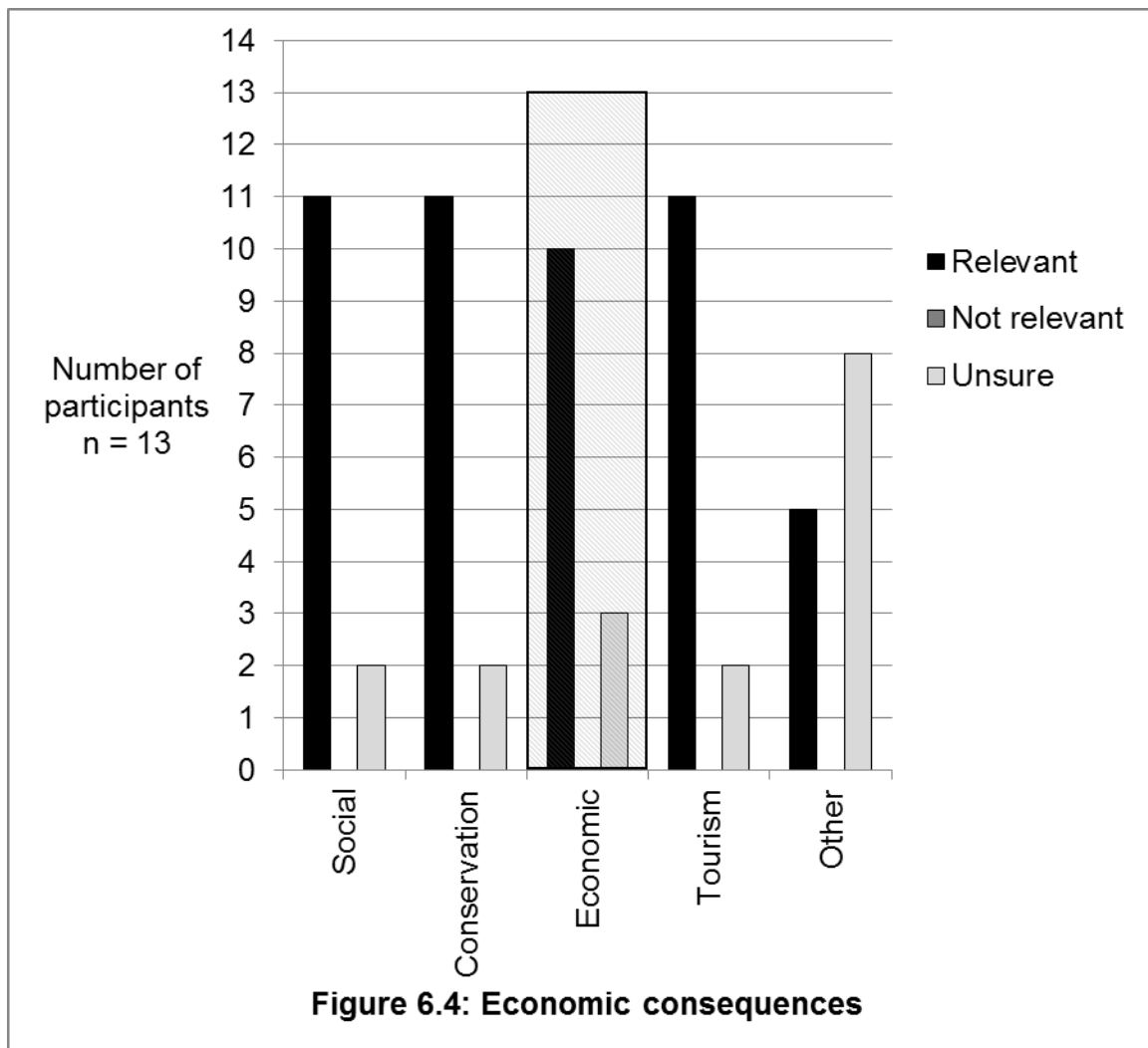
### **6.2.3 Economic consequences**

Rejoinder to the question dealing with the economic consequences of the illegal trade in endangered animals, ten (77%) of the participants believed that such impacts are relevant. This is illustrated in Figure 6.4 below.

One (8%) of these participants simply stated that the economic consequences of these offences are disastrous. Another one (8%) of the participants specifically said that game reserves will lose income as a result of crimes against wildlife, while five (38%) of the participants referred directly to a loss of job opportunities. Although South Africa already struggles with one of the highest rates of unemployment, further job reductions will occur in both the state and private sectors due to these offences. This decrease in job opportunities will inevitably lead to amplified levels of poverty. In addition to this, certain landowners will no longer want to stock rhino owing to the hazards of poaching. If rhinos become extinct, other species, such as elephants and lions, will increasingly be targeted. However, it has not yet been determined exactly how biodiversity degradation impacts on economic security.

Since poachers are often killed, communities are losing their young people who are the prospective wage earners, according to one (8%) of the participants. It was upheld by another one (8%) of the participants that an economic consequence of the illegal

trade in endangered animals is that there exists a restricted flood of money in the country that has its roots in criminal activities.



A further one (8%) of the participants maintained that while the financial value of rhinos grew with the demand in Asia for lawfully hunted rhino, this state of affairs has now come to an end. Moreover, the value of rhinos in the eyes of private owners has intensified due to the notion that one day it may be possible to legally trade in horn. There have also been a few cases in which the financial implications of securing rhino have had a negative impact on their value.

These views were reinforced by the South African Press Association (2013:4), which maintained that, according to the Professional Hunting Association of South Africa

(Phasa), during the period from 2008 to 2013, rhino poaching cost the South African economy R1,1 billion. The chief executive of Phasa, Adri Kitshoff, stated that four hundred thousand hectares of game land had been lost to conservation due to the fact that stocking rhino is so risky and the security needed to safeguard them is so costly. According to Kitshoff, "Poaching is proving to be a disincentive to own rhino." Wyatt (2013:66) fortified this opinion by asserting that since living wildlife has an economic worth to the government and to citizens alike, people are financially victimised when these animals are endangered or illegally taken.

This question was not answered by three (23%) of the participants. One (8%) of these participants maintained that this was because of a lack of personal knowledge on the matter in KZN. The decision was made to still include this participant in the research study owing to their expert position within conservation, which may point to a gap in the awareness of some professionals regarding the circumstances in KZN.

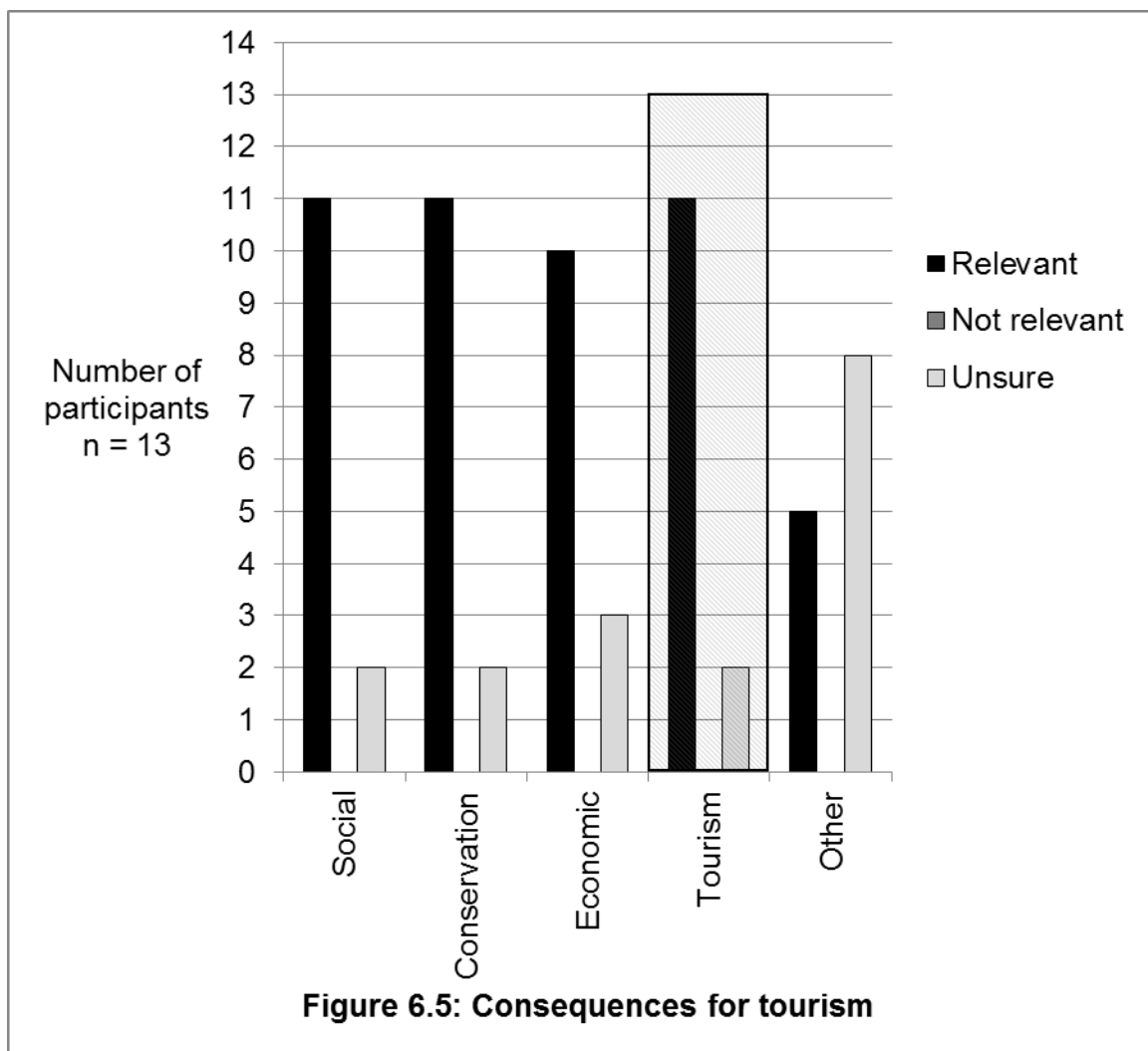
The outcomes with regard to this question were interesting in that most of the participants declared that the illegal trade in endangered animals leads to great economic losses for the country. Job opportunities are reduced and criminal activities may flourish. Therefore, the loss of income resulting from the illegal trade in endangered animals may cause other types of crimes to blossom. It is thus extremely important to prevent these offences against wildlife, as they have the potential to both economically and socially destabilise the country.

#### **6.2.4 Tourism consequences**

As per Figure 6.5 below, eleven (85%) of the participants believed that there are indeed consequences for tourism due to the illegal trade in endangered animals in KZN. This may particularly be the case when it comes to rhino poaching.

Nine (69%) of these participants proposed that the consequences for tourism will be very bad. A decrease in tourism will lead to a reduction in revenue for South Africa. Tourism will be impacted because no tourist would want to witness the savagery of these offences. Since one of the Big Five (rhinos) may become extinct, the country

will lose some of its tourists, who would then be able to see rhinos only on television. Since one of the main reasons why people come to South Africa is to see the animals, it is extremely lucky that no native or overseas tourists have been attacked by armed poachers. However, it is inevitable that this will ultimately happen, and thus if tourists become too scared to visit South African game reserves, they will lose money and start to close down. This will consequently lead to reduced income and eventual unemployment – a vicious circle.



These beliefs are endorsed by Bega (2014:15), who opines that since rhinos attract tourism into the country, people cannot allow the Big Five to turn into the Big Four. The author believes that this is particularly important because tourism contributes to 10% of South Africa’s gross domestic product. In addition to this, Wyatt (2013:66) was



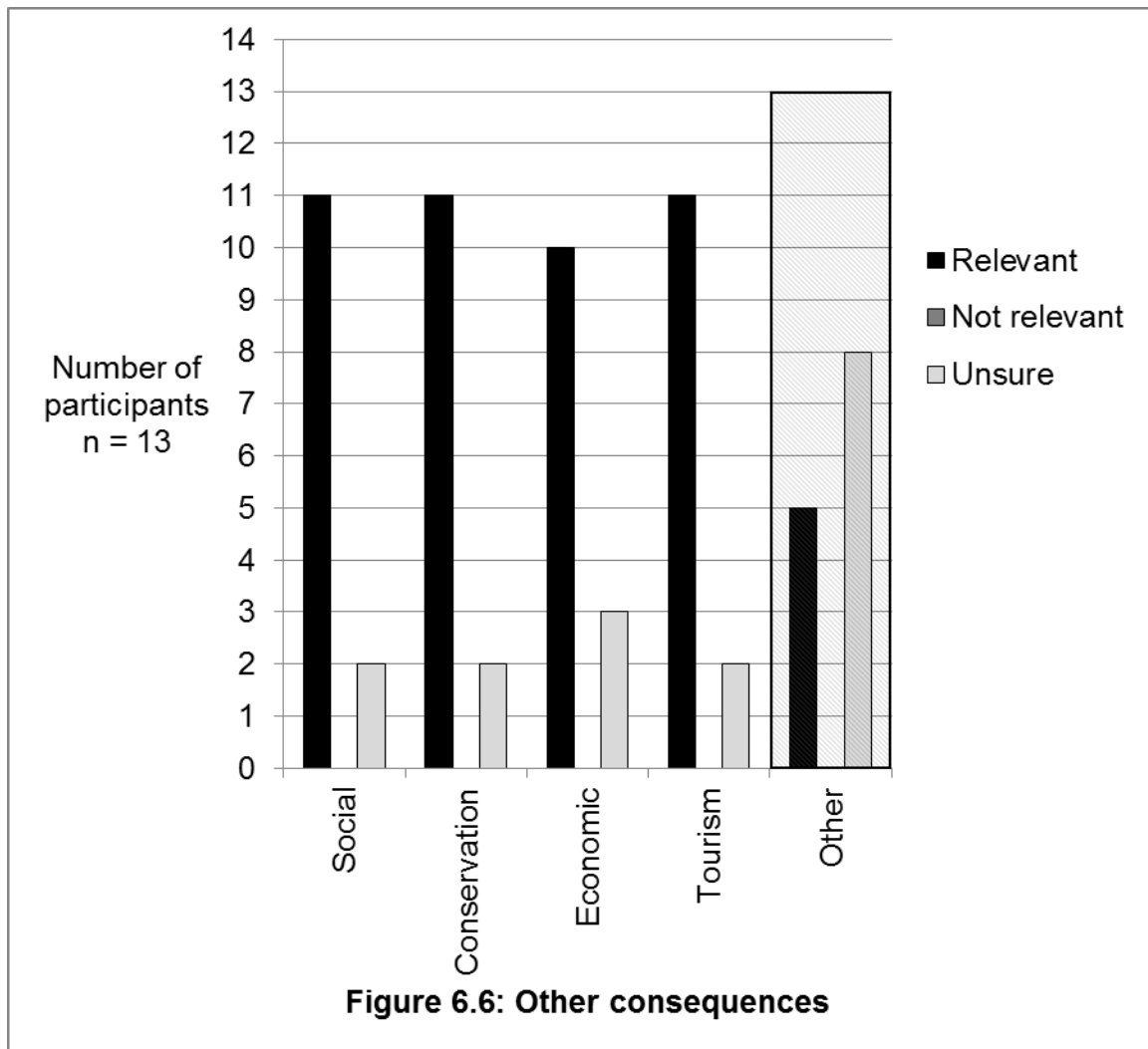
of the view that if animals become threatened due to poaching, tourism will decrease and incomes will be reduced. With regard to rhino and elephant poaching in particular, tourists may become afraid to visit game reserves due to the violence used in the slaughter, as well as in the war between poachers and game rangers.

One (8%) of these participants said that the impact on tourism is slight, while another one (8%) of the participants stated that the consequences for tourism will only be discernible when the poaching problem leads to the extinction of the rhino. This participant also added that government reserves have mostly chosen not to dehorn their rhinos, and that the population decline in the majority of cases has not yet resulted in tourists being unable to view the rhinos.

This question was not addressed by two (15%) of the participants, while one (8%) of these participants upheld that this was owing to a lack of personal know-how regarding the issues in KZN. It was decided that this participant should still be included in the study, because their professional position may serve to expose a potential gap in the knowledge of certain conservation experts regarding what is happening in KZN, particularly around rhino poaching.

These results demonstrate that there may be potentially dire consequences for tourism in the future, if the current rhino poaching rate continues to escalate. One of the main reasons for tourists visiting South Africa is to behold our wildlife. For the rhino, as one of the Big Five animals, to be facing extinction will have a negative impact on the tourism industry. Tourists may furthermore feel fearful to visit South Africa lest they be confronted by a poaching incident while visiting a game park. If tourism decreases, we are likely to see a massive economic decline in our country, coupled with intensifying unemployment.

### 6.2.5 Other consequences



Responding to a question dealing with the other consequences of the illegal trade in endangered animals in KZN, five (38%) of the participants said that there are indeed additional relevant consequences. This is represented in Figure 6.6 above.

Two (15%) of these participants mentioned that biodiversity will be negatively affected, which will impact on the ecosystem and potentially lead to the extinction of species. It was moreover maintained by one (8%) of the participants that communities will experience a reduction in income when habitats and wildlife are destroyed further. Another one (8%) of the participants stated that the connection between communities and the protection of biodiversity will be damaged. This participant also held that the

illegal trade involves increasing associations with organised crime and that occurrences of corruption are growing.

Finally, one (8%) of these participants was of the view that the importance placed on investigating crimes against rhino has led to the neglect of other types of wildlife offences. The government is thus not viewing crimes against other animals seriously enough. However, they are also not providing sufficient resources to properly deal with the rhino poaching problem – not to mention any other potential disaster that may transpire in the future.

This question was not completed by eight (62%) of the participants. One (8%) of these participants stated that this was due to it being not relevant based on a lack of expertise regarding the circumstances in KZN. It was opted to still include this participant in the research owing to their proficiency in conservation, which may indicate that some professionals are not aware of the problems being faced by KZN.

The findings pertaining to this question highlight the importance of preventing the extinction of a species, particularly the rhino. In order to do this, the government must set aside adequate resources to tackle the rhino poaching crisis, as well as view other conservation crimes with the necessary gravity. It needs to be clearly understood by the government that these offences are rooted in corruption and have links to organised crime – both of which destabilise a country's economic and social existence.

### **6.3 Conclusion**

This chapter highlighted the consequences of the illegal trade in endangered animals in KZN, with an emphasis on rhino poaching. In particular, the social, biological, economic and tourism consequences were discussed, and were found to be inextricably linked. It was established that one of the most significant consequences of these offences is losses to South African residents' rightful culture and heritage in KZN. As South Africans, our identities are inseparable from the existence of our wildlife, particularly the Big Five (rhinos included). For one of our most important symbols to be targeted in such a brutal manner is a disgrace to our nation. This

atrocious situation requires that all citizens take action to help prevent such dire consequences from happening. If nothing is done about the poaching problem, we may be facing the destruction of the ecosystem and the potential extinction of species. This is particularly the case for rhino, but other endangered animals such as elephant, cheetah and wild dog may soon also be facing imminent peril in KZN.

Furthermore, these crimes may lead to other detrimental consequences, such as job losses and unemployment. This may particularly be the case for the tourism industry, which is a crucial source of income for KwaZulu-Natal and South Africa as a whole. Since tourists bring in enormous revenue to this country when they come to view the wildlife, it is counterproductive for the economy if our animals are being decimated. The extreme violence of the poaching incidents is also frightening and off-putting for tourists and even local visitors to game reserves, who certainly do not wish to encounter such disturbing scenes or come across armed offenders in the bush.

In the following chapter, the criminological theories that may be utilised to explain the occurrence of these serious and violent offences will be described. Here, particular significance will be placed on the rational choice theory, anomie theory, the neutralisation theory, self-control theory and the routine activities theory. The purpose of discussing these theories is to explain why these conservation crimes are happening in criminological terms. This will then lead on to the final chapter, in which the recommendations for prevention are presented.

# **CHAPTER SEVEN**

## ***CRIMINOLOGICAL THEORIES***

## **7.1 Introduction**

Having evaluated the causes and consequences of the illegal trade in endangered animals in KwaZulu-Natal (KZN) in the previous two chapters, it becomes important to review applicable criminological theories in order to offer an explanation as to why these crimes occur. This chapter, in essence, provides the theoretical basis through which reasons can be advanced regarding the causation of this type of crime.

It is affirmed by White and Haines (2008:2) that theories guide all activities that criminologists undertake, even though criminologists differ as to how they manage the study of criminal behaviour. Criminological theories may be offered in an abstract way in that they constitute various diverse perspectives. Every perspective tries to address a specific phenomenon by probing precise questions, applying particular concepts and establishing an individual framework for explanation. It is unusual for criminologists to rely on only one approach; instead they tend to incorporate a broad spectrum of concepts when examining certain issues. Nonetheless, it is helpful to present the ultimate kinds of theories in order to elucidate the key concepts and make critical comparisons between the assorted frameworks (White & Haines 2008:9,10).

The differing levels of analysis are emphasised by White and Haines (2008:10-11), who draw distinctions between individual, situational and social structural analysis. On an individual level, attention is paid to the personal qualities of the victim or the perpetrator in order to offer explanations for criminal behaviour. Situational analysis refers to the immediate conditions surrounding the criminal event, and may relate to the viewpoints of the role-players and the opportunities for the offender to commit their deeds. On the other hand, social structural analysis accentuates the main societal institutions and the extensive community relations around the crime. This may link in particular to the interactions between different gender, racial and class groups, and the processes of educational, familial and legal establishments. Consequently, the level of analysis that a criminologist selects will have an impact on the way that offending and the characteristics of the perpetrator are perceived, as well as on the administration of the criminal justice system.

Specifically, it is maintained by White (2012:14-15) that there is no precise theory to explain conservation criminology. Instead, there is a “green perspective”. This perspective comprises environmental justice, which relates to environmental rights and is concerned with fairness for present and future generations. It also relates to ecological justice, which includes environmental citizenship, global interconnectedness and species’ rights. In this vein, species justice refers to the rights of animals, and the prevention of discrimination and abuse against animals.

White and Heckenberg (2014:16) further explain that while some researchers have looked at environmental crime in particular, this has usually been done by applying traditional criminological approaches. In other words, illicit activities impacting on nature have been examined by utilising conventional theoretical frameworks in criminology. However, Wyatt (2013:13) asserts that conservation criminology goes beyond these mainstream investigations into criminal behaviour.

Since there is no specific theory which addresses conservation crimes specifically, general criminological theories may be utilised to explain the occurrence of these offences, particularly when it comes to the illegal trade in endangered animals in KZN, most notably rhino poaching. This may be done because the illegal trade in endangered animals, particularly the rhino horn trade, is a contemporary type of criminal behaviour that falls under the conservation crime and organised crime fields. The illegal trade in endangered animals is destroying our wildlife resources, particularly the rhino populations of South Africa (SA), and these crimes need to be explained in order for them to be understood and prevented.

The theories that will be applied in this research to explain the situation in KZN (which relates to the situation in SA as a whole, as well as to that in Asian consumer countries) are the rational choice, strain (anomie), social learning (neutralisation), self-control and routine activities theories. These theories have been selected as they are believed to be the most relevant in explaining the complex nature of conservation crimes. This is because these theories have broad application in that they may be applied to explain a diverse range of criminal activities, including the emerging research area relating to crimes against wildlife. While the theories may be applied individually, applying them

together builds a more comprehensive explanation of the crime situation. Since crime is a multifaceted phenomenon that involves numerous causative factors, no theory should be used in isolation to explain it. It is thus good praxis to combine theories in order to offer a more comprehensive explanation for criminal behaviour, from various levels of analysis.

## **7.2 Rational choice theory**

According to Reid (2012:61), Ronald Clarke and Derek Cornish were proponents of the rational choice theory and believed that it could explain all kinds of criminal activities. This theory suggests that all criminal behaviour displays “a measure of rationality, albeit constrained by limits of time and ability and the availability of relevant information”. In this regard, offenders make choices based on what will bring them the most pleasure and the least amount of pain (Siegel 2011:85). It is submitted that the rational choice theory can therefore be applied to conservation crimes, including the illegal trade in endangered animals. This is owing to the fact that offenders make ostensibly rational decisions to commit these crimes in order to gain financial and/or status benefits.

Similar to numerous other theories, Cornish and Clarke (2014:6) declare that the rational choice theory aims to provide a framework for explaining all types of criminal behaviour. However, unlike many other criminological theories, the rational choice theory directly stresses the importance of “situational variables” around criminal activities. This theory also underscores the significance of incentives (rewards) and disincentives (punishments), which points to the essential role of learning in criminality. The rational element also signifies the absence of pathology in the offender, which suggests that a lot of criminal behaviour may be considered normal.

Furthermore, it is believed that people behave in a manner which will amplify their own gains, and that they are receptive to “incentives and disincentives” (White & Haines 2008:139). This view is supported by Vito and Maahs (2012:63), who state that the key assumptions of the rational choice theory are that offenders will assess the pros and cons of participating in crime, and will opt to commit an offence when the benefits



are greater than the risks. In this regard, both the concrete benefits (for instance, financial gain) and the intangible incentives (such as improved status) are deliberated. Also, the offender will take into account the formal risks (such as the possibility of detection and arrest) and the informal costs (for example, feelings of embarrassment or being fired from a job).

Akers (2013:23) adds to this by asserting that the rational choice theory is founded on the “expected utility” belief, which stems from economic theory. In other words, this means that individuals will make rational choices based on their expectation of increasing their benefits and curtailing their losses. This key assumption about human nature also forms the basis of classical criminology.

Additionally, it is indicated by Siegel (2012:105) that criminal behaviour happens after an individual has considered their personal circumstances (such as a financial need or the desire for thrills) and situational aspects (such as target protection and law enforcement competence). People are less likely to commit crime if there is a high risk of being apprehended and punished. Siegel (2012:106) goes on to state that if the benefits and excitement are considerable, and the risk relatively low, people are more likely to commit crime. Committing crimes can make some people feel in control, capable and alive. It is concluded that particular individuals decide to commit crime under certain circumstances, and this is a simple choice for some of them.

As stated by Reid (2012:61), Clarke and Cornish hold that the following can be construed as the six fundamental principles of the rational choice theory. The first principle advocates that criminal behaviour is considered and purposeful, and is committed in order to benefit the criminal. The second implies that while criminals attempt to benefit themselves, they do not always make the best choices because of the disadvantages and doubts involved. Third, the different types of crimes will determine the different kinds of choices that are made. The fourth principle of the rational choice theory is that involvement decisions (which are choices about becoming involved in crime) are distinguished from event decisions (which are choices around an individual criminal deed). This is related to the fifth principle, which states that these involvement decisions occur in three stages – initiation (initial involvement),

habituation (sustained involvement) and desistance (terminating the involvement) – and the different stages must therefore be examined separately. The sixth and final fundamental principle maintains that event decisions involve choices throughout the criminal deed, such as “preparation, target selection, commission of the act, escape, and aftermath”.

The rational choice theory is therefore applicable to this study since the offenders appear to make a rational decision to participate in this hugely financially lucrative crime. These crimes can benefit them and lead to excitement, with relatively little risk of being apprehended. According to TRAFFIC (2012c:np), Sabri Zain, TRAFFIC’s Director of Advocacy, stated that, “As long as demand exists for rhino horn, and criminals consider the rewards outweigh the risk of being caught, gangs will go to any lengths to supply horn to the marketplace”.

The financial benefit is evidenced by the fact that rhino horn is worth R590,000 per kilogram on the black market (Mouton 2013:np). With nine hundred and forty-six rhino having been poached in South Africa as of 19 December 2013 and only three hundred and thirty arrests made, it is evident that the relatively low risks involved in this type of crime are considerably outweighed by the benefits. This low risk of apprehension is apparent in the fact that five hundred and seventy three of these poached rhino and one hundred and twenty-seven of these arrests were in the Kruger National Park (South African Press Association 2013b:np). It is submitted that these lack of disincentives are prompting the dramatically increasing levels of rhino poaching.

According to News24 (2013:np), the Game Rangers’ Association of Africa (GRAA) says that, “Professionally trained and armed militia from Mozambique enter South Africa to plunder the country’s natural resources on a daily basis”. As stated by GRAA, it is imperative that the responsibility for the poaching problem is escalated beyond the Department of Environmental Affairs, since the circumstances have heightened from a conservation matter to one of national security due to the attack on South Africa’s borders. This evidence that many poachers are crossing the border from Mozambique into South Africa to commit their crimes and are professional criminals seems to indicate that the chances of detection are even further diminished.

Finally, the use of rhino horn in Asian countries can also be explained by applying the rational choice theory. As held by Mouton (2013:np), rhino horn is prized in Asian countries for its “social significance”. Additionally, ingrained cultural myths about the healing properties of rhino horn have ensured that individuals will pay a huge amount of money for an item that has no medicinal value (Cota-Larson 2010:np). Therefore, Asian consumers of rhino horn make the rational decision (based on incorrect information) to initiate and continue using rhino horn as a healing tool in accordance with their cultural beliefs.

It is therefore submitted that, upon receiving the correct information by way of education, these consumers may make the rational decision to desist from using rhino horn, as well as other products manufactured or derived from endangered animals. The research findings support this view, as most of the participants placed a great deal of importance on a lack of education as the cause of these offences. It is proposed that, according to the rational choice theory, the education of Asian consumers is therefore a more feasible solution to preventing poaching than is the reduction of poverty in South Africa and neighbouring countries such as Mozambique. The fact that impoverished individuals are resorting to poaching in order to acquire financial benefit makes this a much more difficult problem to tackle. Poverty reduction initiatives should thus be ongoing and performed in tandem with environmental awareness campaigns. What’s more, short-term interventions will necessitate more directed actions if the rhino is to have any chance of being saved.

For example, Joubert (2014:6) maintains that Justice Ngovene, a rhino poaching kingpin in the small Mozambican village of Massingir, admits that “all the money in Massingir is rhino money...There is no work for people in Mozambique. People go to South Africa and shoot the rhinos because they want money because there are no jobs. Rhinos are a way of doing a job”.

Reid (2012:61) asserts that while some people view the rational choice theory as simply an expansion of deterrence theory, Ronald Akers and Christine Sellers are of the opinion that rational choice theorists believe that it is much more than just an

extension. The rational choice theory is put forward as a comprehensive, general theory of crime, which explains the decisions to begin, continue with and end criminal activity.

However, empirical research on this theory reveals that not all behaviour is rational, and that people do not consider all the advantages and disadvantages of their actions (Reid 2012:61). It is submitted that this might be due to the fact that people may at times make choices based on limited knowledge or a lack of experience, and that circumstances surrounding the crime can be unpredictable. Individual offender personality traits could additionally be a factor in seemingly irrational behaviour. It is nevertheless proposed that these factors should not mitigate the offenders' actions, as conservation crimes, particularly rhino poaching, are extremely serious offences. For instance, when killing a female rhino, a poacher may also slaughter its hornless calf for no apparent logical reason. Although it may appear irrational, this type of behaviour is deemed barbaric and will have very serious effects, such as negative consequences for biodiversity, as discussed in Chapter 6.

### **7.3 Strain: Merton's theory of anomie**

White and Haines (2008:54) are of the opinion that the fundamental principle of strain theory is that it is "a social phenomenon". Strain theory does not consider personal pathology (such as in a biological or psychological form), but rather highlights social forces that drive behaviour. Crime is thus seen as being a consequence of social problems that cause strain within a particular community. The key emphasis is on "structural opportunities" and "cultural processes", whereby there is a lack of legitimate opportunities to achieve goals through culturally accepted means (White & Haines 2008:55).

According to White and Haines (2008:56), Emile Durkheim was one of the main proponents of the strain theory. He believed that people's desires are limitless and that society must regulate these desires. If desires are not limited and directed in this manner, a state of anomie or normlessness occurs. What's more, in an anomic society, crime can flourish (White & Haines 2008:58).

Bernard, Snipes and Gerould (2010:154) state that Robert Merton expanded on Durkheim's strain theory, by deeming anomie to be "a breakdown in the ability of society to regulate the natural appetites of individuals". Merton maintained that this appetite is culturally bred rather than natural, but that society puts restrictions on the appeasement of this appetite. Society creates certain anticipations in terms of achieving aims. However, because not all individuals can be expected to achieve the same aims, society highlights accepted methods of achievement and the value of abiding by these methods. A state of anomie is created when the accepted methods are put under severe strain, and the desired goals cannot be achieved legitimately. For example, people who achieve wealth through illegitimate means may still enjoy social status, whereas those who work hard and are honest may not enjoy wealth or status (Bernard et al 2010:155).

It is moreover upheld that Merton views an anomic state as being one in which desires (although possibly constrained) exceed what can be gained through socially legitimate methods. Merton is of the belief that society will not be in a state of anomie if people utilise only legitimate methods to achieve their goals, regardless of whether or not their desires are restricted. The important element is the relationship between the desires and the methods of achieving these desires (Williams 2012:344).

Williams (2012:345-346) states that Merton explained the following five kinds of individual social responses to anomie. The first type of reaction is one of conformity, in which people accept the aims of society and the methods of achieving these aims, even if they cannot achieve them personally. Merton believes that society is relatively stable because most people conform and are not criminal. The other four types of reactions are deviant. The first of the four is innovation, which denotes acceptance of goals but rejection of the legitimate methods of achieving them. The second deviant reaction is known as ritualism, whereby the established methods are rigorously obeyed but the goals are discarded. Merton includes retreatism as the third, in which people reject both the aims and the methods of achieving them, while not pursuing new aims or methods. These people often exist on the outskirts of society and do not really belong, such as drug addicts. The fourth and final deviant reaction is rebellion,

whereby people reject the goals of society and the established means of achieving them, but fight to replace these goals with new ones. An example of rebellion is the case of freedom fighters who wish to change the status quo in society.

Most conservation criminals, it is submitted, would fall into the innovation category. This is due to the fact that these offenders accept the goals of society (for example, having wealth and status) but reject the means (such as advancing through education and hard work) and rather resort to illegal methods to achieve their aims.

It is postulated that the strain theory, specifically related to anomie, may be applied to explain conservation crimes, including the illegal trade in endangered animals. This is particularly the case in KZN, where poverty, unemployment and poor education are extremely problematic, which was highlighted in the data analysis in the preceding chapters. This leads to a situation where people are unable to achieve their goals legitimately, and instead resort to crime as a means of supporting themselves financially, increasing their wealth and improving their social status and prestige. This view is supported by the findings of this research, whereby the low economic level of offenders was identified as a common factor in the occurrence of these crimes.

Due to the fact that rhino horn is such a financially attractive commodity, poor individuals (in South Africa and from neighbouring countries such as Mozambique) are drawn to committing the crime of poaching in South African parks and reserves to gain monetary advantages. For example, many Mozambican villages along the border of South Africa are impoverished, and a poacher can earn the equivalent of ten years' wages in one night of poaching. For bringing in so much money, these poachers are often deemed heroes in their villages (Helping Rhinos 2013:np).

Conklin (2013:136) asserts that the theory of anomie incorrectly assumes that everyone strives for the same aims in all communities, and that it does not explain why crime occurs in societies where people strive for different goals. However, according to Bernard et al (2010:159), Merton claims that the intention of his theory is not to explain all types of crimes, but to emphasise the strain caused by the incongruity between goals and means.

#### **7.4 Neutralisation theory**

Siegel (2012:241) explains that the neutralisation theory originated with David Matza and Gresham Sykes, who viewed becoming an offender as a learning experience in which offenders learn methods to neutralise norms and drift between law abiding and criminal behaviour. This is made possible by the existence of subterranean values, which are publicly condemned but privately practiced, such as the excessive drinking of alcohol. The drift back and forth between law abiding and criminal behaviour occurs because even serious and frequent offenders do not commit criminal behaviour all the time, as they also participate in normal activities, such as within the family, school and religious environments. In other words, behaviour may sometimes be conventional and restrained, while at other times, it can be deviant. Neutralisation techniques allow people to rationalise errant conduct and temporarily move away from normal behaviour to become involved in crime.

According to Siegel (2012:241-242), Matza and Sykes base their neutralisation theory on the following four factors. The first one is the fact that offenders sometimes express guilt over their criminal behaviour, which suggests that a drift occurs since offenders would not show remorse if their criminal values were stable. The second factor is that criminals often look up to law abiding people, such as parents, teachers and priests, for their honesty. Third, offenders tend to distinguish between people whom they can and cannot victimise, such as members of a particular religious affiliation, which suggests that offenders know that their criminal behaviour is wrong. Lastly, offenders are not immune to the demands of conventionality, such as within the family or church environments.

Justifications for criminal behaviour can additionally enable individuals to maintain their feelings of self-worth and evade blame. In this way, people tell themselves and others that their behaviour had reasons behind it and that they did not have criminal intent. Matza and Sykes maintain that these justifications are known as techniques of neutralisation, and they serve to weaken the social control that prevents criminal behaviour (Conklin 2013:154).

The existence of five neutralisation techniques is proposed by Conklin (2013:154). The first of these is denial of responsibility, by which individuals do not hold themselves responsible for their criminal behaviour. People who use this technique often feel that they are not in control of their own behaviour, and that social circumstances (such as poverty or addiction) force them to commit certain acts.

It is put forward that the technique of denial of responsibility can be applied to the illegal trade in endangered animals, because many offenders commit this type of crime due to their personal experience of poverty. For example, Joubert (2014:6) holds that Justice Ngovene, a rhino poacher from Mozambique who orders the killing of rhino in South Africa, has said that many of the men who returned with horns have bought cars and built houses with their money, but that some use their new wealth to party and drink alcohol. Furthermore, Ngovene states that, "The children today will not see the rhino because we will finish the rhino. They'll only see the picture of the rhino...this is very wrong". It would, therefore, not be misguided to postulate that Ngovene and other poachers, while knowing what they are doing is wrong, justify their actions in terms of financial need and thus deny responsibility for their crimes. This view is supported by the research findings, which emphasise the financial motivations and greed behind these offences against wildlife.

The second method is the denial of injury, whereby criminals claim that no one has been harmed by their deeds and treat victims as a means to an end. On the other hand, law abiding people tend to realise that potential victims could be harmed by their behaviour, and show distress about this. In this way, offenders are desensitised to the injury suffered by their victims (Conklin 2013:155). It is submitted that this can be applied to the illegal trade in endangered animals, as some offenders may believe that crimes against wildlife are less injurious than crimes committed directly against people. For example, a rhino poacher may believe that since he is not harming a person, what he is doing is not that serious.

The third neutralisation technique is denial of the victim, which according to Conklin (2013:156), means that the offender justifies the crime as being what the victim



deserves. Therefore, the offender sees the victim as the transgressor, and often will appeal to generalisations about which types of people are viewed as good or bad, such as prostitutes.

The fourth method is condemning the condemners, by which the offender denounces the intentions of the individuals who are judging the offender (Conklin 2013:157). For example, a poacher may condemn conservation organisations if some of their members are involved in the poaching problem, as the poacher may feel that they are hypocritical in that they are committing the very offences that they purport to prevent. This involvement is evidenced by the fact that a certain provincial organisation declined to participate in this research, in large part because individuals within the organisation had been implicated in the rhino poaching problem.

The final technique of neutralisation, as stated by Conklin (2013:157), is appealing to higher loyalties. This means that criminal behaviour is justified because it was what the group, such as a gang, wanted. Law abiding people, conversely, are able to place more importance on adherence to the law than obedience to the wishes of a certain group.

The neutralisation theory of Matza and Sykes has contributed significantly to the criminological literature and can account for the “aging-out process” of crime, whereby the older an adult becomes, the less likely it is that they will participate in crime. According to the neutralisation theory, this is due to the fact that the offenders did not reject the norms of society in the first place, and so can drift back into conventional, law abiding behaviour (Siegel 2012:243). It is submitted that this may be relevant to conservation crimes in that the offenders may know that their behaviour is illegal and wrong. However, they might justify what they do, and view their offences as less significant because they are harming animals rather than people. They could also defend their actions on the basis of needing the money.

## **7.5 Gottfredson and Hirschi’s self-control theory**

It is maintained by Bernard et al (2010:213) that Michael Gottfredson and Travis Hirschi presented their self-control theory, also known as the general theory of crime, in 1990. This theory explains all kinds of delinquency and crime, in terms of the low self-control of offenders. Furthermore, Gottfredson and Hirschi define crime as “acts of force or fraud undertaken in pursuit of self-interest” (Conklin 2013:3).

Gottfredson and Hirschi believe that criminologists need to examine not why certain individuals commit crime, but why most individuals do not commit crime. They are of the opinion that most people do not commit crime because it is likely that they learnt self-control, which is a psychological characteristic, in early childhood or adolescence. Poor self-control is comprised of impulsivity, risk-taking, self-centredness, low levels of perseverance, little tolerance of frustration, and preference for physical activities rather than mental stimulation (White & Haines 2008:43).

It is therefore proposed that the quality of risk-taking can be applied to poachers, who take the chance of killing large and potentially dangerous animals, as well as to smugglers, who gamble by trafficking the animals or their products across borders. In these situations, it is not possible to be in full control, because the offenders are at the mercy of the behaviour of the animals and the potential interference from the authorities involved. The self-centredness of these criminals involved in the illegal trade in endangered animals can be displayed through their complete disregard for the lives of animals and for the preservation of South African natural resources, and the pursuit of their own self-interests. Furthermore, poaching and smuggling both require physical activity in terms of killing large animals and transporting their products. For example, according to Joubert (2014:6), poaching kingpin Justice Ngovene relays that poachers prefer to enter the parks at night during full moon, and usually stay in the reserve for three to seven days in order to locate and poach the rhino and return with the horn.

Additionally, it is held that inadequate child-rearing methods, for instance a lack of supervision and attachment, contribute to the development of poor self-control and criminal behaviour. The self-control theory maintains that opportunities for committing crime are significant when linked with poor social control. To this end, people who

have gone through proper socialisation (or adequate child-rearing practices) will not submit to opportunities to commit crime. Therefore, the self-control theory postulates that, although all individuals are motivated by hedonistic tendencies, they may be distinguished from one another in terms of the extent to which they are prohibited from offending (White & Haines 2008:43).

In support of this view, Reid (2012:167) believes that when parents are affectionate towards and supportive of their children, the children will be more able to postpone fulfilment of their needs, more sensitive to the needs of others, more accepting of constraints on their own behaviour, and less likely to use violent methods to get what they want. Therefore, poor self-control is caused by poor parenting skills. Furthermore, low self-control is likely to be maintained throughout the course of life, although it may be influenced by improvements in parenting methods or the effects of other social circumstances (Reid 2012:167).

Gottfredson and Hirschi are of the view that crimes have certain common characteristics. These are that crimes entail easy and immediate fulfilment of desires, are exhilarating, need little preparation or skill, and cause pain and suffering for the victim, while the criminal derives few advantages (Bernard et al 2010:213). This can be applied to the offenders that participate in the illegal trade in endangered animals, as they may derive excitement from committing crimes that entail an element of risk to their safety and freedom. Furthermore, the crimes fulfil their financial needs by getting them quick and easy money, which can also contribute to their perceived status within their communities. However, these are temporary advantages fraught with risks when compared to attaining enjoyment, wealth and status through legitimate means. The crimes also cause great harm to the victims, such as elephants, which are killed for their tusks, and rhino, which are mutilated or killed for their horns.

Bernard et al (2010:214) state that levels of self-control are relatively fixed by the age of eight, but that there may be great variations in the rates of offending for an individual. This is because if there are few or no opportunities for crime, individuals with poor self-control will engage in other deviant behaviours. Therefore, policies that are more likely to have an effect on the development of self-control (and the rates of offending) must

be implemented by the age of eight (Bernard et al 2010:219). It is proposed that early educational interventions for children in range and consumer countries regarding the importance of animals and conservation might help to alleviate the illegal trade in endangered animals.

The self-control theory is widely acknowledged in criminology and subject to comprehensive research. However, it is a controversial theory amongst researchers, some of whom claim that psychopathy must be considered in conjunction with low self-control, since both tend to display similar traits relating to antisocial behaviour and self-centredness. Furthermore, the emphasis on parental socialisation is questioned, and it is believed that other factors, such as genetics, should also be considered (Reid 2012:168).

In terms of this research, it is put forward that the self-control theory provides a very relevant fractional explanation in that it accounts for the risk-taking and impulsive behaviour that appears to be displayed by poachers. Furthermore, crimes such as poaching seemingly demonstrate a hedonistic quality in that self-interests are pursued regardless of the consequences for and the suffering of wildlife and South Africa as a whole. This view is reinforced by the findings of this study in that financial greed is mentioned as a major contributing factor.

## **7.6 Routine activities theory**

As stated by Williams (2012:314), the routine activities theory originated out of the need to explain why rates of offending continued to increase as social conditions became more prosperous. It was also developed to explain why certain areas with suitable targets had higher rates of victimisation than others with the same targets, and why the highest rates of victimisation occur in deprived regions where there are relatively few attractive targets. Lawrence Cohen and Marcus Felson thus developed the routine activities theory in 1979, which proposed that crime occurs in a particular space and at a particular time, with the presence of three elements. These three elements are the availability of suitable targets, the absence of capable guardians, and the presence of motivated offenders.

Most criminological theories hold that variations in the crime rate reveal variations in the number of offenders or the power of their motivations, but the routine activities theory asserts that variations in the crime rate are due to changes in the availability of suitable targets and the absence of capable guardians (Bernard et al 2010:27).

Felson is of the opinion that in order for a target to be suitable, it must have the qualities of value, inertia, visibility and accessibility. In other words, it must be psychologically or financially significant, it must be movable, it must be observable and identifiable, and it must be reachable (with the opportunity for escape) in order for the offender to view it as a suitable target (Herbig 2011:7). In addition to this, Conklin (2013:213) believes that the offender will choose a particular target based on the skills that he or she holds, and that it is the manner in which the offender perceives the target that is relevant.

Furthermore, guardianship is determined by the degree to which individuals guard themselves and their property against offending (Conklin 2013:210). Herbig (2011:7) holds that while a capable guardian may be a formal agent of control (such as a police official), it can also refer to a security system or any person who may serve as a reminder that the offender is being observed.

Due to modern developments, Bernard et al (2010:27) believe there are more suitable targets for motivated offenders to prey on, as well as fewer capable guardians to watch over the targets, which has provided offenders with a plethora of opportunities to commit crime. For instance, many modern goods are portable and are therefore easy targets, such as cellular phones and laptops. Also, modern life dictates that people are often away from their homes, with both men and women working, which leaves a gap in terms of guardianship of the home. In addition to this, there are more households in modern times within which only one person resides, and people are prone to taking lengthier and more regular holidays, leaving their homes vacant and at risk (Conklin 2013:210).

These changes in the availability of targets and the absence of capable guardians are as a result of variations to people's "routine activities", or the daily behaviour which makes up how people live their lives. Examples of routine activities may relate to home and work life, as well as child rearing practices, educational aspirations and leisure pursuits, and these activities might lead to increased vulnerability and exposure to offenders. As such, direct contact between the offender and the target results from most property and violent crimes (Bernard et al 2010:27).

The presence of motivated offenders may refer, for example, to large groups of unemployed youths, as stated by Siegel (2012:83). The crime rate will go up if the numbers of motivated criminals increase and if they are located near to suitable targets. If these criminals gather in a particular region, it is referred to as a "hot spot" for crime, and victimisation becomes more likely in these areas. In these hot spots, an unguarded object turns into a very attractive target (Siegel 2012:84).

With regard to the findings of this research, it is held that the routine activities theory is easily relatable to the illegal trade in endangered animals, particularly rhino poaching. Potential offenders in South Africa are motivated by their impoverished conditions, and this situation is fuelled by the financial advantages of participating in these types of crimes. Criminal consumers in Asian countries are motivated by the psychological aspects of peer recognition and achieving social status.

Furthermore, it was found that the targets (endangered animals) are relatively easily available in game parks and private reserves throughout South Africa, including in KZN, which is ironic since the very places that are meant to protect the animals serve as locations for poachers to target. This situation is made easier and the targets made even more accessible by the involvement of conservation and law enforcement officials in the illegal trade. The targets may simply be killed in order for their products (such as rhino horn or elephant tusks) to be removed, carried away and smuggled internationally.

These views are supported by Herbig (2011:9), who holds that the routine activities theory is appropriate for explaining crimes of poaching, because game reserves in South Africa tend to be situated next to communities that regularly display high levels of unemployment and crime. This contributes to the co-existence of many motivated offenders and suitable wildlife targets with relatively predictable behaviour patterns. Additionally, the capable guardians may refer to the conservation officials and to the manufactured or natural barriers within game reserves.

It is understood that the routine activities theory has wider application than the opportunity theory, from which it extends (Williams 2012:314). As held by Williams (2012:314), Tseloni states that the advantage of the routine activities theory is that there are established associations with poor surveillance and high rates of crime. However, some critics assert that the routine activities theory does not actually explain crime. Furthermore, according to Williams (2012:314), Tittle believes that it does not examine which specific activities are linked to which crimes.

## **7.7 Conclusion**

The rational choice, strain (anomie), social learning (neutralisation), self-control and routine activities theories in criminology were used singularly to explain the illegal trade in endangered animals in KZN, with an emphasis on rhino poaching.

In terms of this research, it is believed that the rational choice theory is very applicable in explaining the illegal trade in endangered animals. It accounts for the apparently

logical decisions that offenders make when deciding that the lucrative financial benefits, particularly of poaching rhino for their horns, outweigh the risks involved in the commission of these crimes. This view is reinforced by the research findings with regards to the financial motivations for these offences.

The anomie theory is also relevant to explaining conservation crimes because of the general state of normlessness in an anomic society. The findings support the use of this theory insofar as corruption in society was listed as a major contributing factor in the illegal trade in endangered animals, particularly rhino poaching.

Furthermore, the neutralisation theory is pertinent in that it provides a socio-psychological explanation as to why offenders are able to acquire the appropriate mindset to commit destructive and violent crimes such as poaching. This belief is highlighted by the emphasis in the research findings on education about wildlife and conservation matters, as well as the importance of individual species to biodiversity.

The self-control theory is also fitting in explaining conservation crimes because it emphasises the hedonistic traits of these offenders, as well as their risk-taking behaviours. The research findings support this view in that it was found that financial greed is a contributing factor to these offences against wildlife. It is put forward that greed is due to a lack of self-control.

Finally, the routine activities theory offers a very suitable explanation in terms of the interaction between the elements of the target, the lack of capable guardianship and the motivated offenders, which the research findings suggest are all present in these types of conservation crimes, particularly in South Africa.

While other theories may also be relevant, it is opined that, for the purposes of this research, the neutralisation and routine activities theories can best explain these crimes due to their wide application and specific relevance to conservation crimes. The routine activities theory may preferably be applied to this research study, as it comprehensively explains the simultaneous presence of motivated offenders in KZN,



the availability of suitable targets (the endangered animals) and the absence of capable guardians (which may relate to the inefficiency of most authorities).

Having examined the criminological theories that offer explanations for why these types of crimes occur, the following chapter will serve to discuss the recommendations for the prevention of the illegal trade in endangered animals. It is crucial to understand why crimes happen before they can be effectively prevented. The proposed recommendations will be directly related to the causes of these crimes, and are crucial in that they will advocate techniques that can be applied by government, law enforcement and conservation authorities. A summary and conclusion will furthermore be provided in order to highlight key findings and to close the dissertation. Finally, suggestions for future research projects will also be supplied with the aim of guiding potential studies in this noteworthy field of conservation criminology.

# **CHAPTER EIGHT**

## ***RECOMMENDATIONS, SUMMARY AND CONCLUSION***

## **8.1 Introduction**

In the previous chapter, certain criminological theories to explain the illegal trade in endangered animals were discussed. After examining several relevant theories, it was decided that two specific theories may be viewed as the most applicable to conservation crimes, particularly rhino poaching. These were the neutralisation theory (which offers a socio-psychological reason for these offences) and the routine activities theory (which explains crime in terms of the link between a suitable target, a lack of capable guardians, and the presence of a motivated offender).

This final chapter aims to examine the recommendations for prevention and to provide the summary and conclusion to the dissertation, as well as to offer suggestions for future research topics. Recommendations are crucial to discuss in this study, as making suggestions to prevent the illegal trade in endangered animals is one of the main goals of the research, as laid out in Chapter 1.

Hofstee (2010:159) is of the view that including recommendations in the final chapter of a dissertation is useful, particularly if one's research has potential practical applications. For this reason, the recommendations may also be referred to as the proposals for the application of the study. The recommendations should be valuable and achievable. Furthermore, the best method to use is to give a designation to every recommendation, describe how and where it can be applied, and indicate what the advantages of doing so would be.

The recommendations that will be looked at in this study are based on a data analysis of the information obtained from telephonic interviews conducted with the participants, as well as a review of the literature. Specifically, the recommendations are related to economic factors, cultural issues, medicinal uses, education, parks and reserves, border control, law enforcement, legislation and punishment, corruption and technology. These areas coincide with the causes of the illegal trade, which were highlighted in Chapter 5.

As was stated in Chapter 1, the aim was to telephonically interview one participant from each of the participating organisations. In this regard, individuals from four of the five participating organisations took part in the interviews. These four participants were deemed as sufficient for the purposes of this research, as well as somewhat representative of the total population. In this regard, generalising findings in qualitative research may be done in a limited way, as the main goal of this type of study is to provide specific explanations rather than to generalise (Creswell 2014:203).

In addition to this, De Vos et al (2011:155) are of the view that while the representativeness of a sample is critical when it comes to generalisability, it is usually challenging to obtain truly representative samples of an identified population. Although a goal of sampling is to understand the population from which a sample was taken, this does not mean that the sample is necessarily representative of that population. Instead, the sample may be considered representative. Findings may therefore only be generalised if it can be expected that the observations made about the sample group could also be made about any other groups drawn from the total population (De Vos et al 2011:223-234).

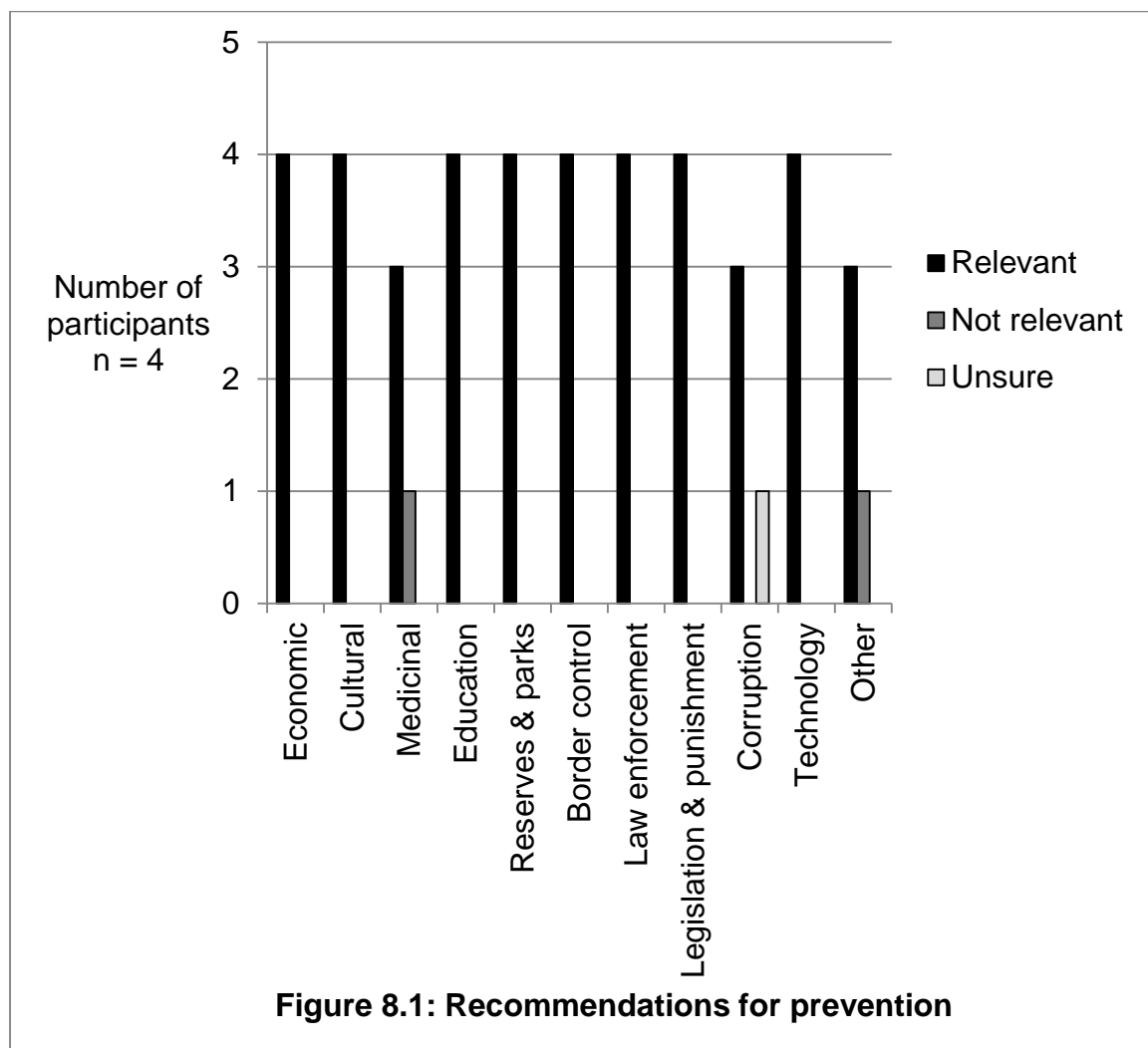
Thus, the four participants who were successfully interviewed may be seen as being representative of a wide range of conservation authorities in KwaZulu-Natal (KZN). This is due to the fact that they are all experts in their diverse fields within the conservation arena. It is also important to take into account the secrecy that surrounds the illegal trade in endangered animals, particularly rhino poaching, and the resultant reluctance of individuals and organisations to become involved in this research. With these issues in mind, the responses of the participants may thus be regarded as being generalisable with regard to prevention methods.

Despite previously giving consent, the remaining one participant was unreachable for many months and thus had to be excluded from the interview process. Interestingly, this organisation was also the only one of all the existing participants who did not successfully complete all of the questionnaires. This indicates their unwillingness to assist with such an important research study that is trying to mitigate the current rhino

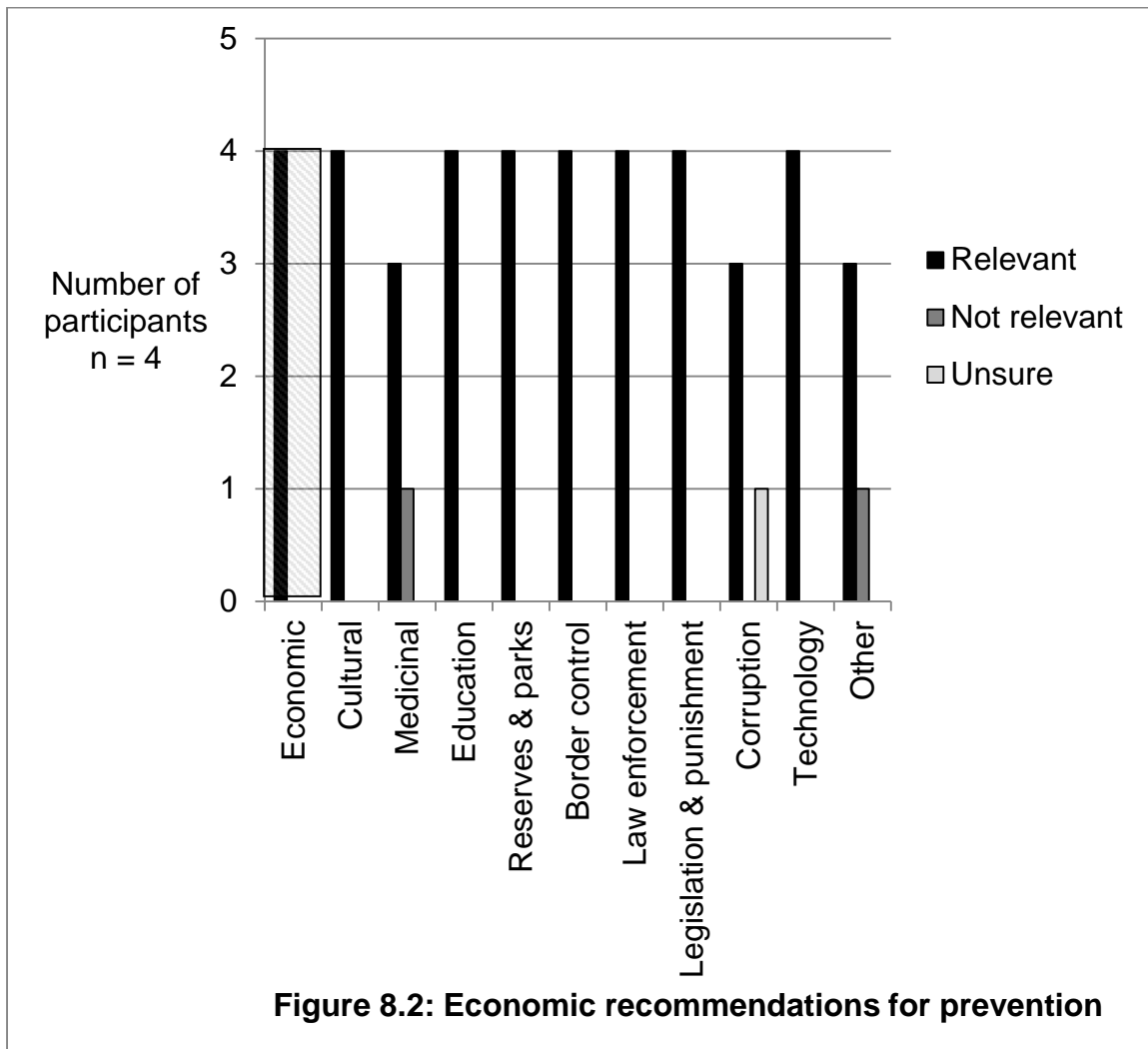
poaching crisis. The recommendations for prevention according to the participants will be discussed below.

## 8.2 Recommendations for prevention

Figure 8.1 below depicts all of the recommendations in this study for the prevention of the illegal trade in endangered animals, with an emphasis on rhino poaching. These recommendations for prevention will now be discussed in separate sections below, where the results for each will be highlighted.



### 8.2.1 Economic factors



When asked about the prevention methods that can be employed to overcome the economic causes of the illegal trade in endangered animals, especially relating to supply and demand, all four (100%) of the participants agreed that these factors are relevant, as indicated above in Figure 8.2. The participants provided answers that fell into three themes. These themes specifically correlated with financial costs, supply and demand, and behavioural changes, and will be discussed below.

#### 8.2.1.1 Financial costs

It was held by one (25%) of the participants that the financial costs of the illegal trade are important to consider, and these relate specifically to the impact on tourism and

on private reserves, especially in respect of security issues. Private game farmers have devoted a great deal of money to rhinos, and they are beginning to reduce these investments out of worry over security issues. Of particular significance here are the huge financial costs of securing rhinos, as a lot of money needs to be spent on improving the security on the land (such as on better fencing), as well as on anti-poaching efforts.

Oellermann (2013:6) is of the opinion that the current financial situation in South Africa is not adequate to conserve rhinos, in spite of valiant efforts from anti-poaching organisations and conservationists. It has been estimated that rhinos may be almost extinct in South Africa by 2026 if something is not done to stop the slaughter. The demand for rhino horn is chiefly motivated by greed, and black market prices are increasing dramatically. The rarity of rhinos has caused the trade to become subversive, and the enormous prices have encouraged the involvement of organised criminal networks and the use of high-tech poaching techniques.

In terms of the costs to tourism, it was held that there are studies currently underway regarding the meaning of rhinos for the tourism industry, and what will occur in this arena if rhinos become extinct. The extinction of the rhino, and the resulting decrease in tourists visiting South Africa, will have a negative effect on the economy and will reduce job opportunities. This is due to the fact that tourism contributes substantially to the country's income.

#### **8.2.1.2 Supply and demand**

Out of the four participants, three (75%) specifically referred to supply and demand, and in particular discussed the importance of demand reduction when it comes to the end-user market. This is in relation to all wildlife products, but particularly rhino horn. The participants suggested that intervening to change supply and demand can be very challenging, as this is the base of the trade in wildlife. Therefore, if the rewards continue to outweigh the risks, these offences will flourish. According to one (25%) of the participants, attempts should be made to weaken market prices by employing market interventions.

One (25%) of these participants stated that the fundamental model of economics refers to what the cost of a product will be depending on the supply and demand curves. However, these curves are very perplexing to interpret, since the supply curve relates to what buyers are willing to purchase based on the price, and the demand curve is what manufacturers are prepared to produce for a set cost. This participant therefore believes that simply trying to institute a demand reduction can lead to various random results. If the goal is to alter the cost of rhino horn, two pertinent questions need to be asked:

- Where do you want to modify the price of rhino horn?
- Do you want to adjust the price that a poacher is given for the horn, or that a consumer pays for the horn?

It was also maintained by this participant that if the aim is to revise the price of rhino horn for the poachers, anti-poaching and law enforcement efforts need to be strengthened. In this way, the disincentives are changed and it becomes more risky for the poacher to commit these offences. If this occurs, then the financial incentives need to increase and outweigh the disincentives for the poacher to be willing to take such a great risk. However, if these disincentives have been implemented and the financial incentives are still of more worth, then economic methods to amend the price of the horn need to be considered. It is put forward that one of the options in this regard may be to consider flooding the market with legal horn, such as that from naturally deceased rhino.

According to this participant, if the plan is to change what consumers are paying for rhino horn, it may be necessary to embark on campaigns to reduce demand. Alternatively, another option is to legally provide the horn, which will be discussed below. Demand reduction campaigns can fall into two categories – either carrying a positive or a negative message. A negative message may declare that using rhino horn for medical purposes is a bad thing to do. On the other hand, a positive message may be culturally sensitive and take cognisance of the underlying reasons for the demand, such as a desire for improved status in the Vietnamese culture. For example, a positive demand reduction message may state that someone will have a far higher status if he or she does not utilise rhino horn.



The second option of making the horn available to consumers ties in with the ideas of certain individuals in the trade debate, including some South African game farmers. In this respect, there are many methods to provide horn, including legally trading in them or even donating them. Other ways to supply the demand may be to lease rhinos to Asian countries, in order for them to remove the horns. However, another one (25%) of the participants does not believe that horn should be supplied.

Carnie (2012:6) provided a debate of the views for and against the legal trade in rhino horn. In terms of those who are for legal trade, conservationist Ian Player suggested that since rhino poaching is increasing and conservation organisations are in desperate need of finances, it makes sense to legally trade in the horns of rhinos that have died of natural causes. Furthermore, conservation economist Michael 't Sas-Rolfes held that South Africa could provide approximately six hundred rhino horns annually from natural deaths and stockpiles, and private rhino owners should be able to supply about one thousand per year through dehorning rhinos. The benefits of a legal trade are that it would be transparent and thus should cause the illegal trade prices to decrease, and that providing a sustainable source of horn may decrease the incentives for offenders. Also, it would offer an income to legal traders, which could be devoted to anti-poaching measures. However, it is important to note that these assumptions regarding sustainability were based on the 2012 rhino poaching rates, which have since dramatically increased, as discussed in Chapters 1 and 2.

According to Carnie (2012:6), for those who are against a legal trade in rhino horn, the pertinent issues are around merging conservation and economic profits, which leads to the fear that rhinos will become a farming commodity, similar to a chicken or pig. While farming rhinos will inevitably increase their population, it may lead to their genetic diversity being hampered. Critics are apprehensive about a legal trade bringing an end to the poaching, and instead maintain that supplying the market will in fact fuel the demand. Moreover, a legal trade may undermine rhino conservation efforts in Asia and Africa. A legal trade also requires that there is no corruption in the governmental and non-governmental sectors, which is impossible. Conservationist Chris Mercer does not believe that illegal trade prices will decrease if horn is legally supplied. He states that, "The 'economic' approach tries to justify animal exploitation

by numbers, both animals and dollars. But numbers alone are hopelessly inadequate to understand environmental degradation, or to fight it. This narrow economic approach could be used by drug and human traffickers as well as car hijackers to justify their abominable activities” (Carnie 2012:6).

These recommendations for prevention relating to the supply curve can be applied in KZN in particular and South Africa in general. The prevention techniques must take into account the unique socioeconomic conditions in South Africa and the enormous financial rewards that occur for these crimes. The disincentives therefore need to be drastically increased, and this can be achieved through stricter law enforcement. The demand reduction strategies may be applied in end-user states, such as China and Vietnam, in order to change hearts and minds through education.

#### **8.2.1.3 Behavioural change**

All four (100%) of the participants discussed changing the behaviour of wildlife offenders, particularly through educating them and making them aware of the necessity of conservation. One of the most important issues that emerged was teaching consumers that their use of wildlife products, such as rhino horn, is illegal and directly results in the harm or death of the animals involved. According to the participants, many consumers are not aware of the link between their use of wildlife products and the killing of the animals on the ground by poachers. Consumers need to be informed that a rhino horn does not simply drop off and get harvested, but that the animals are poached and the horn forcibly removed.

According to Philp (2014:3), Durban conservationist Andrew Muir was the tour guide for two Vietnamese celebrities, Thu Minh and Thanh Bui, at the Shamwari game reserve in the Eastern Cape. These celebrities were visiting South Africa to film an educational campaign aimed at explaining the poaching pandemic to Vietnamese rhino horn consumers. They were videoed amongst rhinos and promised to promote the importance of conservation back in Vietnam. Muir stated that using role models such as celebrities in awareness campaigns is crucial to bring about behavioural

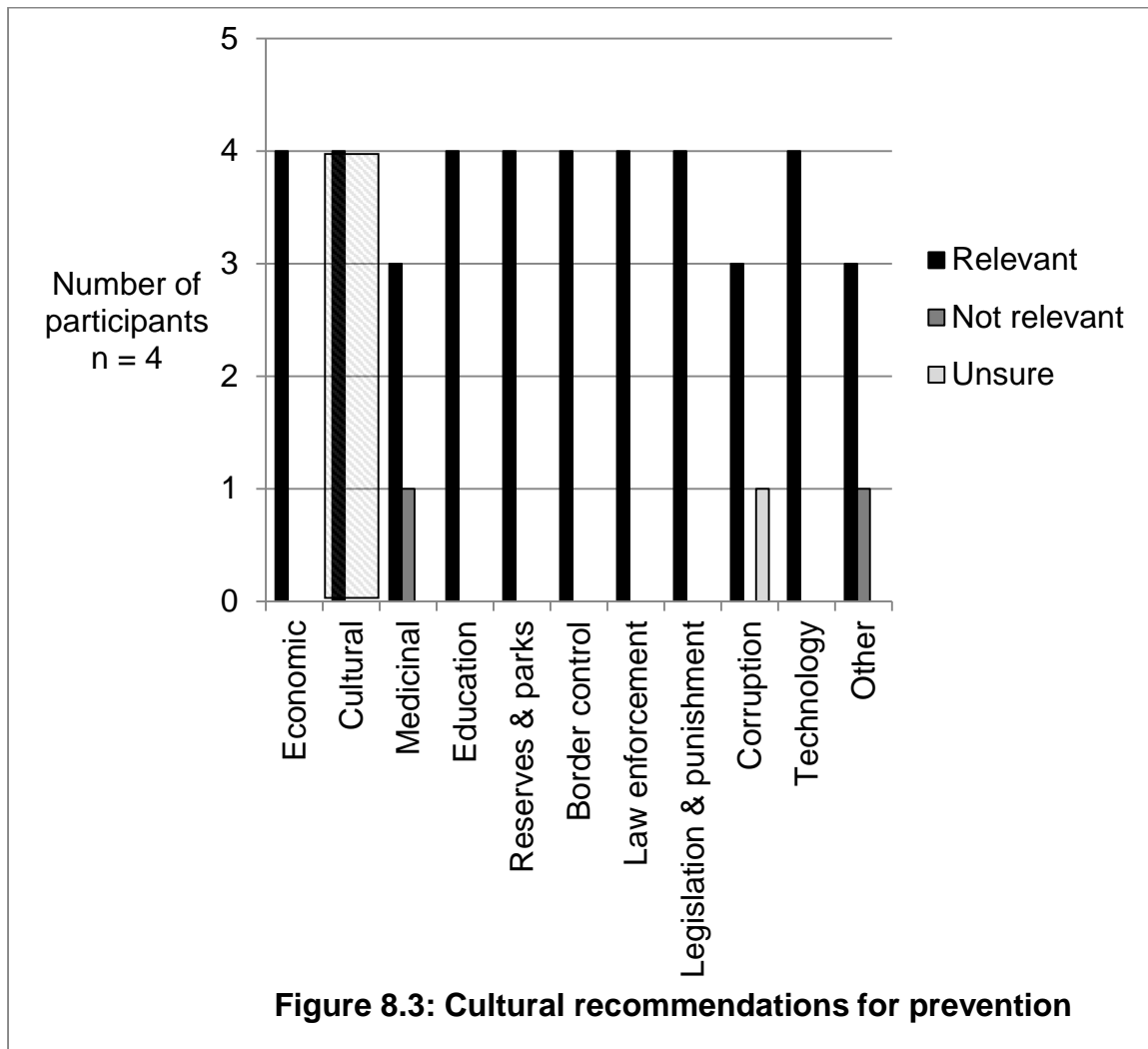
change, as many individuals do not realise that their consumption directly results in such environmental disasters.

An example that was given by one (25%) of the participants of a successful awareness campaign was the Southern African Sustainable Seafood Initiative. Corporations took part in this campaign and committed to changing their buying behaviour, which led to a reduction in demand. However, this participant emphasised that reducing an illegal trade is very challenging, as there are some people implicated who simply do not care about conservation, while others are impoverished and commit their crimes out of financial desperation. It was therefore held that changing behaviours will require ongoing efforts over the long-term, and is very much dependent on the species involved. Germane features influencing the market in this regard are the reproductive rate of the species, how much of a demand a species can withstand, the effectiveness of law enforcement, the awareness of consumers, and the existing opinions about conservation issues.

The increasing impact of poaching in private reserves was emphasised by one (25%) of the participants. According to this participant, poachers are now moving on to private reserves due to the amplified anti-poaching efforts taking place in state parks, such as Hluhluwe-iMfolozi and the Kruger Park. In this regard, the participant directly implicates Asian countries in the poaching pandemic and highlights the need for education of consumers. Furthermore, it was held by another one (25%) of the participants that the penalties given for wildlife offenders can be increased so that the risks involved in committing these crimes become unacceptable.

The above-mentioned recommendations for prevention in terms of behavioural change can be introduced for consumers in end-user countries, such as Vietnam and China, as well as for wildlife offenders, such as poachers, in KZN and South Africa. Education for citizens in all of these areas is key, as ignorance about conservation is a major contributing factor to these offences along all points in the trade chain.

## 8.2.2 Cultural factors



When asked about the prevention of the illegal trade in endangered animals in terms of cultural issues, four (100%) of the participants agreed that these concerns are applicable, as per Figure 8.3 above. The responses all encompassed one single theme, which deals with behavioural change and will be described below.

### 8.2.2.1 Behavioural change

The findings in terms of cultural factors all point to changing the behaviour of wildlife offenders, by educating people in both consumer and range countries. It was said by one (25%) of the participants that it is crucial to involve the communities who live near wildlife in the processes that take place within game reserves. The local community

members should be encouraged to feel a sense of belonging to the reserves, so that they can see for themselves what goes into conserving wildlife. They should also be reminded of the fact that their ancestors once protected the land.

Three (75%) of the participants drew an important distinction between the old traditional cultural beliefs, versus the new and emerging cultural views. In this respect, it was found that it was the Chinese culture that had promoted the use of animal products in line with their traditional medical beliefs for thousands of years. Although some people are motivated to commit wildlife crimes for financial reasons, these cultural usages are often based on ignorance, and consumers do not understand that they are committing an offence. However, many of these Chinese consumers were made aware of the consequences of their cultural practices, and this demand has thus been reduced.

On the other hand, the use of animal products that has recently come about in the Vietnamese culture is still being studied. From the research conducted on this topic, the consumption of animal products in Vietnam seems to have more to do with improving one's standing in the social or business communities, rather than being related to medicinal use. For instance, a wealthy Vietnamese businessman may use rhino horn to demonstrate that he has a high status in society, and to signify to his colleagues and competitors that he is so rich that he can afford to purchase rhino horn. It is people such as these who need to be reached out to and educated about the implications of using animal products, particularly rhino horn.

The World Wildlife Fund (2013:np) stated that educational adverts, such as the one below in Figure 8.4, are being promoted in Vietnam in order to bring about behavioural changes in terms of consumption of rhino horn. While rhino horn has been incorrectly touted as a traditional medicine for many years, the huge upsurge in poaching is believed to have non-traditional foundations that lie in the Vietnamese culture. These include the rhino horn being used to cleanse toxins from the body, as a sexual stimulant, and to treat hangovers. However, rhino horn has no medicinal properties and using it will not treat any ailment. Since rhino horn is made of keratin, consuming

it is akin to eating human fingernails – hence the depiction of human hands in the place of a horn in Figure 8.4.



**Figure 8.4: Educational advert for the Vietnamese end-user (World Wildlife Fund 2013:np)**

According to one (25%) of the participants, an example that is relevant to behavioural change is the successes with educating the members of the traditional Shembe culture in KZN. These individuals dress in leopard skins in their cultural ceremonies. Since being taught about leopard poaching, many of them have opted to instead use fake leopard fur for their outfits. This case shows that if people are made aware of conservation issues – especially if they are not themselves directly involved in the killing of the animals – they are often willing to be educated and to amend their behaviour.

Interestingly, it was maintained by one (25%) of the participants that instructing someone to abandon their well-established cultural practices is a discriminatory Western procedure. This participant stated that traditional Chinese and South African cultural practices cannot feasibly be brought to a halt, and that medicinal uses in

particular should be sustainably regulated. However, it was held that it is completely acceptable to try to change the behaviours of consumers who use animal products based on the new cultural practices, such as to improve their status or to cure cancer and hangovers. In this regard, the participant believes in utilising culturally sensitive methods to reduce the demand, such as a Vietnamese marketing business creating a demand reduction campaign for the new Vietnamese users. It will not be useful for a European company to design such a campaign, as they will not understand the Vietnamese cultural facets and incentives.

These suggestions regarding behavioural change can be enforced in KZN and in South Africa. In addition to this, behavioural change can most usefully be applied in end-user countries in order to reduce demand. This is particularly the case for Vietnam, which was identified as the greatest contributor to these offences in terms of cultural demand.

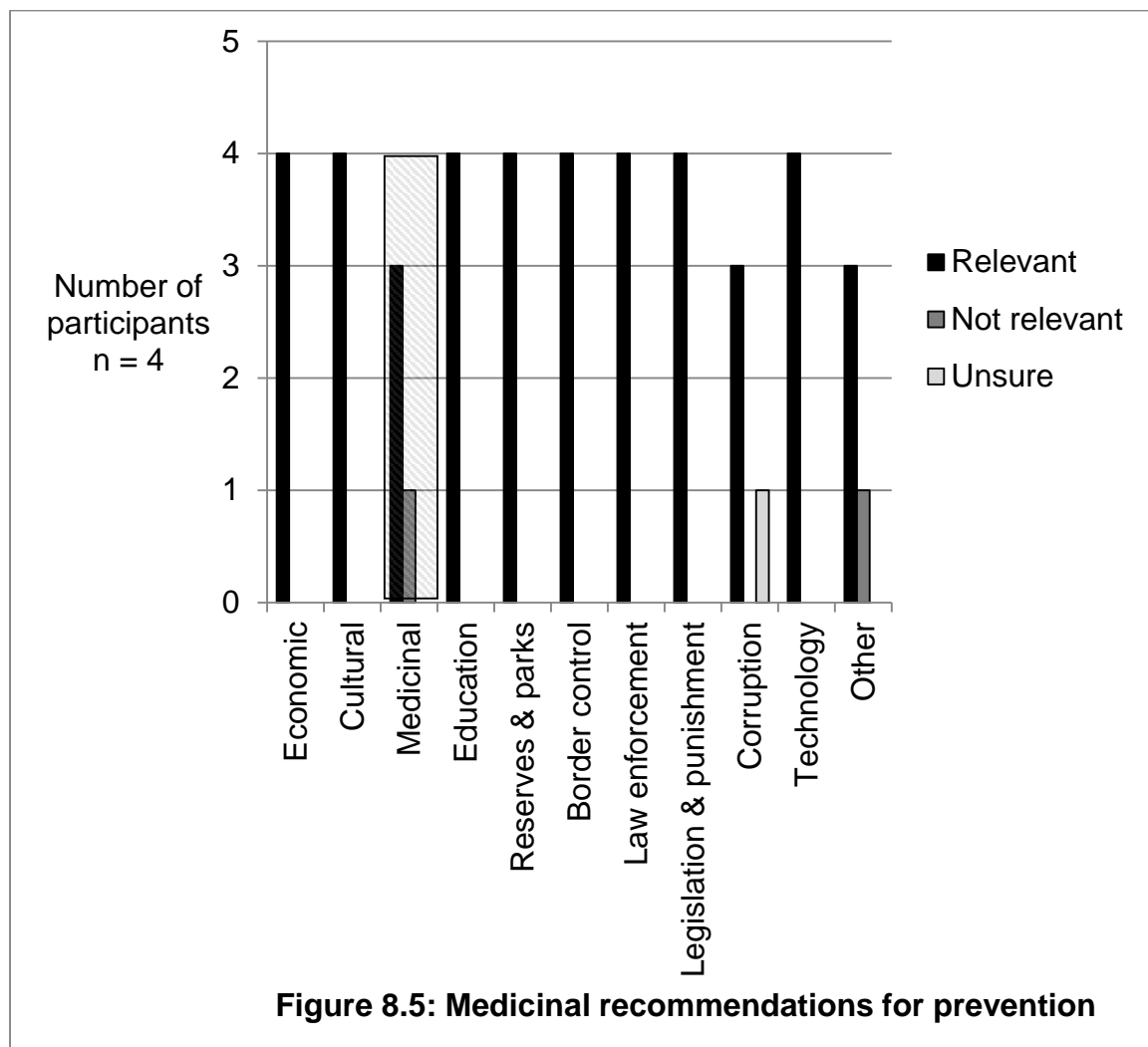
### **8.2.3 Medicinal uses**

The participants were questioned as to what can be done to prevent the use of animal derivatives in traditional medicine, particularly rhino horn. As shown in Figure 8.5 below, three (75%) of them agreed that prevention methods based on medicinal uses are relevant, although to differing degrees. However, one (25%) of the participants believed that preventing people from practising their culture is unfair. The results fell into two main themes, which relate to behavioural change and discrimination. These themes will be debated below.

#### **8.2.3.1 Behavioural change**

Behavioural change was seen as a significant preventative measure by three (75%) of the participants. In this regard, two (50%) of the participants again made the distinction between the old traditional medicinal and the new cultural uses of animal products in Asian cultures. It was found that it is these new social uses of animal products in Vietnam that are causing the current problems around the illegal trade in endangered animals, particularly rhino poaching. While the Chinese have been using

traditional medicine for thousands of years, there is currently not a great use of animal products such as rhino horn. Instead, Traditional Chinese Medicine (TCM) practitioners are now often opting to use plant-based products. The small medicinal trade that does still exist is not based on scientific fact, and instead is founded on myths that animal products can lessen ailments, such as fevers.



According to Sinkins (2012:9), TCM is worth hundreds of millions of dollars annually, but is not based on scientifically-proven fact. In addition to this, TCM products (including the plant-based ones) may actually be dangerous for users. This is due to the fact that DNA testing of confiscated TCM materials has actually uncovered possible allergens and toxins in these purported medical treatments.



In order to reduce demand for animal products in traditional medicine, it was upheld that it is important to change the behaviour of consumers. In this regard, suggestions to flood the market with animal products to attempt to deal with the enormous demand in Asia are not sound. For example, the illegal trade in abalone (perlemoen) demonstrates that even if a legal trade does exist, there can still be a huge illicit element. Instead, it might be preferable to utilise demand reduction or education campaigns. These campaigns have been effective in China, and have employed Chinese celebrities such as the actor Jackie Chan and the athlete Yao Ming to promote the message that conservation is important. Organisations such as WildAid and the Humane Society of America have also done work with the Chinese people to make them aware of the consequences of consumption, and that rhinos are being killed for their horns. However, the situation in Vietnam is still dire and research is currently being conducted, including by TRAFFIC, into end-user demand.

One (25%) of the participants specifically referred to devaluing the animal products that are used in traditional medicine. An example of this is rhino horn, which is used for false medical reasons. Furthermore, both rhino horn and elephant ivory are formed into items that signify great wealth, such as prayer beads and dagger handles. Devaluing these animal products will be a time-consuming process, but may serve to change the mindsets of consumers and stop them from viewing these products as health tonics or status symbols.

However, one (25%) of the participants was of the view that it may not always be essential to prevent the use of animal products in traditional medicine. It was maintained that the need for prevention would depend on the extent of the trade, the rate of consumption, and the individual species' reproductive rates and chances of survival. For instance, some animal products may be consumed slowly over a long period of time and this may not necessarily be harmful to their population. If prevention methods have to be instituted in this regard, they may focus on finding other options, such as growing the species or reducing the demand.

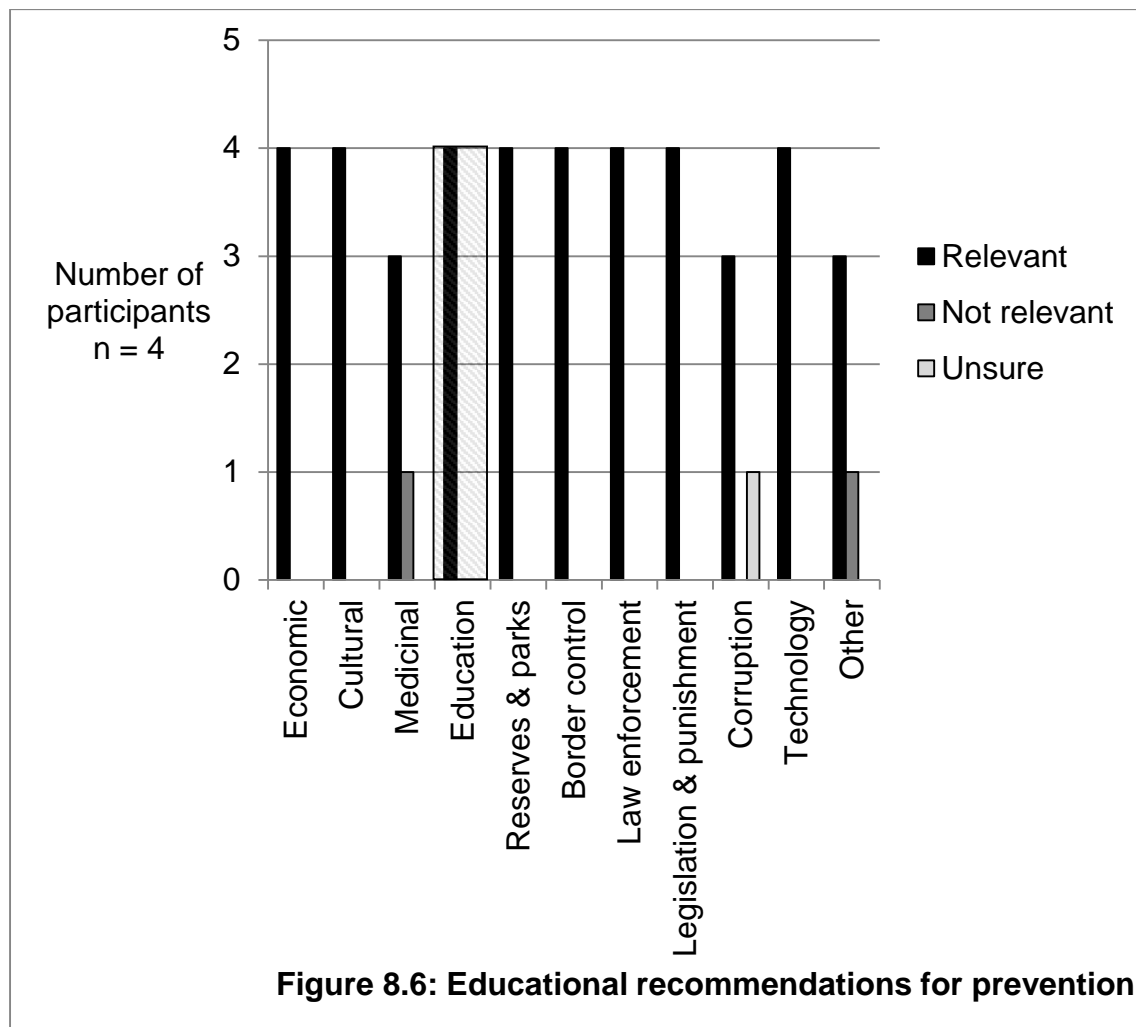
In terms of medicinal uses of animal products, it is most critical to bring about behaviour changes in end-user Asian countries. In this regard, China was found to be

the main culprit, due to their ancient traditional beliefs. Chinese consumers need to be made aware of the consequences of their actions on wildlife, and that they are directly leading to the death of the animals involved.

### 8.2.3.2 Discrimination against a culture

Similarly to the above finding relating to cultural prevention, one (25%) of the participants again maintained the view that trying to stop people from using their traditional medicines is a prejudiced practice. According to this participant, one cannot discriminate against people according to their cultural beliefs, and doing so would amount to imposing Western principles on to other cultural groups.

### 8.2.4 Education



Upon being queried as to what steps can be taken in terms of education in order to prevent these crimes, it was established that all four (100%) of the participants agreed that these factors are valid, as depicted in Figure 8.6 above. Their answers covered two principal themes, which will be elaborated on below. The themes specifically refer to creating awareness and supporting the community.

#### **8.2.4.1 Creating awareness**

While all four (100%) of the participants emphasised creating awareness amongst people regarding the importance of conservation, one (25%) of them in particular drew a distinction between over-consumption that is not a crime and over-consumption that is illegal. If consumption is not legal or has a negative impact on a species, it must be reduced by educating the end-users.

In Vietnam and China, it is necessary to teach consumers about conservation issues, especially around endangered species such as rhino. This is due to the fact that consumers are not linking their use of animal products, such as rhino horn, to the slaughter of the animals. In other words, they do not understand that they are responsible for the death of the animals. In this regard, awareness campaigns should be culturally sensitive, and should contain positive messages rather than negatives messages in order to reduce demand.

These awareness campaigns can be performed by, for example, non-governmental organisations. A relevant programme that was mentioned was teaching Vietnamese schoolchildren about rhinos by using storybooks and colouring books. The goal here is not only to educate the children about the significance of rhinos, but to hopefully get the children to spread the message to their parents about not using rhino horn. Furthermore, people can be taught about self-worth and how to care for themselves, as the next step thereafter would be educating them about caring for another life – be it animal or human.

Another useful campaign might be to expose African and Asian role-players to rhinos, such as by showing them rhinos in game reserves or parks and getting them involved

in the reserves. Some of these people may have never seen a rhino before, and thus may not be able to appreciate why they are such an important species to save. Alternatively, rhinos that have been rehabilitated and cannot be released back into the wild can be used as ambassadors for their species, and people can visit them at rehabilitation centres and be taught about their significance. Awareness campaigns such as these must not only teach people about the importance of conserving animals, but should also explain why crimes against wildlife impact on tourism and the economy, and thus lead to fewer job opportunities and greater poverty.

Supporting this view, Sinkins (2012:9) stated that conservationist Lawrence Anthony believed that it is important to educate the communities who live near game reserves about the economic benefits that animals bring in for tourism, as well as the significance of biodiversity to our survival as humans.

These recommendations for prevention of the illegal trade in endangered animals may be applied in KZN, South Africa and Asian countries. In fact, it is crucial to educate people worldwide about the importance of biodiversity and conservation, in order to prevent the illegal trade in endangered animals in general.

#### **8.2.4.2 Supporting the community**

Putting initiatives in place to support the local South African communities, alongside awareness campaigns, was highlighted by two (50%) of the participants. These communities that neighbour game parks and reserves need to be involved in the parks and a mutual understanding between the communities and the parks needs to be established. The communities should be consulted and asked their thoughts on living next to reserves and the animals therein. Education programmes can then be designed based on these thoughts and feelings, rather than being imposed on the communities.

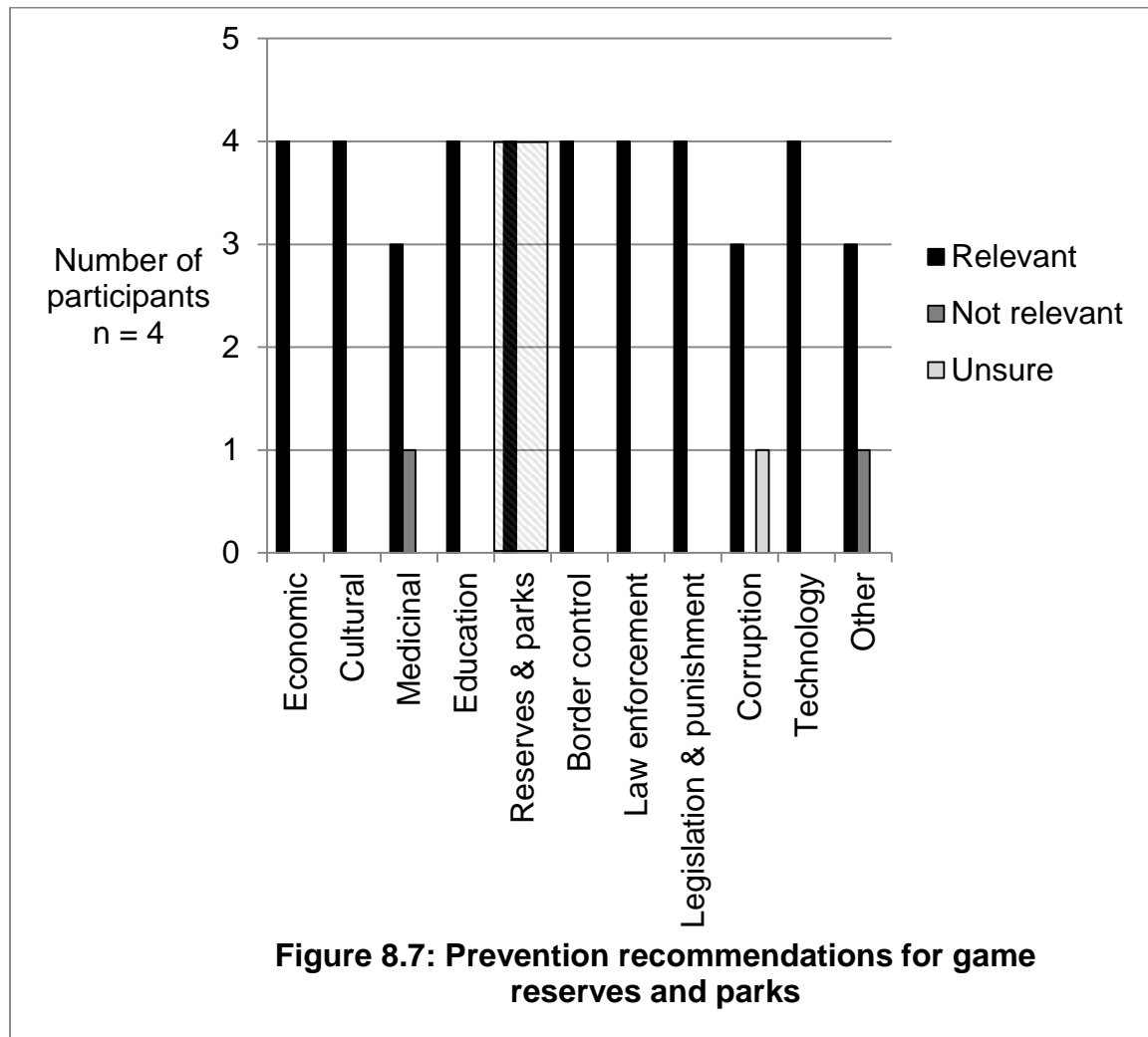
Similarly, if the communities do not feel that they are benefitting from the reserves, they will not experience feelings of loyalty to them. On the other hand, if the communities are communicated with by the reserves and provided with basic

necessities such as water, food and electricity, they may begin to feel a sense of belonging and may hopefully be determined not to let anything impact on their beneficial arrangement with the reserves. They may consequently be more inclined to give information to the authorities in order to prevent poaching incidents. Finally, it is essential that the community members living next to game reserves be provided with alternative economic options, as poaching animals is often one of the only choices that they currently have. No education or support programmes will be effective if the communities are not provided with viable economic choices.

Mkhize (2013:12) likewise maintains that supporting the communities around game reserves is crucial in the fight against rhino poaching. In this regard, EKZN Wildlife has assisted in appointing 400 rhino ambassadors who come from the communities surrounding parks, such as Hluhluwe-iMfolozi Park, Tembe, Ndumo and Weenen. The ambassadors represent the hundreds of thousands of people who live in these neighbouring communities, which suffer from unemployment and poverty, and are affected by greed and ignorance about conservation issues. It is these communities that actually need to be the eyes and ears in the war against poaching, by being made aware of what is going on around them. While communities must be taught about the conservation of rhinos for the benefit of the environment and the economy, they should also be empowered. This empowerment can be achieved through improved education, health care, job creation, and the development of infrastructure and agriculture within these communities.

The technique of supporting communities, especially those around game reserves, can be put into practice in KZN in particular and in South Africa in general. It is crucial that the basic needs of communities are provided for, and that they are given alternative employment options so that they do not have to resort to crime to look after themselves. Furthermore, the communities should be involved in the happenings in the game reserves so that they feel a sense of responsibility towards and ownership over the reserves.

### 8.2.5 Game reserves and parks



The participants were asked about how game reserves and parks can be made less vulnerable to these offences, and four (100%) of them were of the opinion that prevention based on these matters is pertinent, which is highlighted in Figure 8.7 above. Their responses will be explained below. Two core themes emerged, which are preventing incursions in reserves and cooperating with the communities.

#### 8.2.5.1 Preventing incursions

Many methods relating to preventing incursions were mentioned by all four (100%) of the participants. It was held that some game reserves are experiencing problems relating to fencing and border control, especially those sharing international borders

with Mozambique. The costs to secure these borders are enormous and it is not possible to eternally patrol all the borders. Numerous poachers from Mozambique are crossing the borders and illegally entering South African game parks. However, many offenders also come from South Africa, and even private landowners and rhino owners may be involved in the illegal trade in endangered animals. Therefore, while preventing people from entering reserves to commit crimes against wildlife, it is also necessary to identify, remove and prosecute corrupt staff members who are involved in the poaching.

A further problem may relate to the fact that while a lot of funding is going into SANParks, destined for anti-poaching measures in the Kruger National Park, relatively little money is going to the provincial parks, even though they are also being hit hard by the poaching epidemic. More funding must be directed to these provincial parks, as well as to private reserves, in order to prevent incursions and to protect their rhino.

A crucial prevention method to thwart incursions is to put more feet on the ground in terms of rangers patrolling the game reserves. However, this may be more effective for the smaller parks, as the larger reserves will be more difficult to manage in this regard. According to one (25%) of the participants, this is due to the fact that the international standard is one ranger per ten square kilometres, and this would create logistical problems relating to salaries, housing for rangers and their families, and providing enough vehicles. For instance, having the required 2,000 rangers in Kruger might not be feasible. To compensate for these deficiencies, large reserves may instead rely on intelligence-based security measures. While operational intelligence refers to more practical and reactive measures, such as plotting a potential poacher's route within a reserve, tactical intelligence encompasses proactive methods, such as gathering information on possible incursions and allocating resources to prevent them.

To aid such intelligence gathering techniques, it is imperative that game reserves employ technology in order to prevent incursions. An example of such a technological strategy may be using drones to detect heat, so that poachers can be spotted. Tracking devices to keep an eye on rhinos may additionally be utilised, which may involve alarms to identify human movement, or heart rate monitors to detect the

animals' distress. This information can then be sent to relevant people, such as rangers, to follow up on what is happening with the animals.

Furthermore, closed-circuit television may be operated to examine activity within a game reserve, particularly around the fences and the main gates. This is owing to the fact that poachers may loiter around the gates in order to hear what is being said through the rangers' radio systems. It is also helpful to make use of camera traps around a reserve, which can send photographs via message or email to staff. The photographs may assist in observing the animals, or in discovering human incursions on to the property. Other relevant equipment may be night vision goggles and capable weaponry for the rangers to protect themselves and the animals.

Guards may additionally be permanently deployed inside a reserve, in order to protect the animals and even follow them around perpetually. Tracker dogs have been used successfully, and may be trained to either detect the animals and their products, or to track and catch poachers. Another way to prevent incursions may be to move endangered animals to safer areas, or to poison rhino horns, which may simply act as a deterrent to potential poachers. In addition to this, helicopter patrols can be performed at random times around the parks, so that staff members are not aware of when this is going to happen. Moreover, lie detector (polygraph) tests can be applied at arbitrary intervals or if a poaching incident occurs, thereby serving as a deterrent to staff members to minimise corruption.

Another useful method may be to offer reward money for information from staff and local community members, since they will be the first ones to know about any potential incursions. Financial incentives work particularly well in more disadvantaged communities, such as those surrounding reserves. The community members may therefore be more likely to come forward with information if they are offered a reasonable amount of money. For instance, the South African Press Association (2009:np) stated that a reward of R20,000 was offered for intelligence resulting in the apprehension and conviction of the killers of a black rhino in the Tewater Wilderness area in KZN. Relatively large amounts of money such as this reward will motivate witnesses to come forward with information on rhino poachers.



Finally, it is imperative to prevent these incursions by disrupting the organised criminal networks that task poachers to commit their crimes. This will require strategic intelligence and enhanced law enforcement methods, in a united effort to apprehend key role-players, gather sufficient evidence, and institute civil or criminal proceedings against them.

These preventative measures can be applied within game reserves and parks in KZN, and in South African parks on the whole. Furthermore, it is necessary to disrupt the trade chain in its entirety, which may require tactics to be put in place across many nations.

#### **8.2.5.2 Community cooperation**

One (25%) of the participants emphasised the necessity of cooperating with local communities in order to prevent the illegal trade in endangered animals. In this respect, it is important to have an effective management plan in place and for reserve authorities to work flexibly with the neighbouring communities. For instance, an effective plan might be to have negotiated access, although this would depend on the individual species concerned and its rarity. An example of negotiated access may be to allow community members to obtain permits to harvest grass inside a reserve, but when it comes to endangered wildlife species such as rhino, prevention through education is key. The reserves will need to cooperate with the communities in order to raise awareness about the significance of conserving endangered animals. However, it is very challenging to do this when the communities do not have economic alternatives.

For instance, as mentioned above, EKZN Wildlife has established a network of rhino ambassadors who come from the communities surrounding game reserves. The fact that it is key to cooperate with these communities became evident at a Rhino Poaching Summit that was held for them. Many of the ambassadors admitted that they were aware of rhino poaching incidents that were taking place, but that they did not view these activities as being serious because so many of their community members were

already involved with poaching for bushmeat. In addition to this, the ambassadors acknowledged that they did not know who to report these poaching activities to, and that they were afraid of being victimised by the offenders if they did come forward.

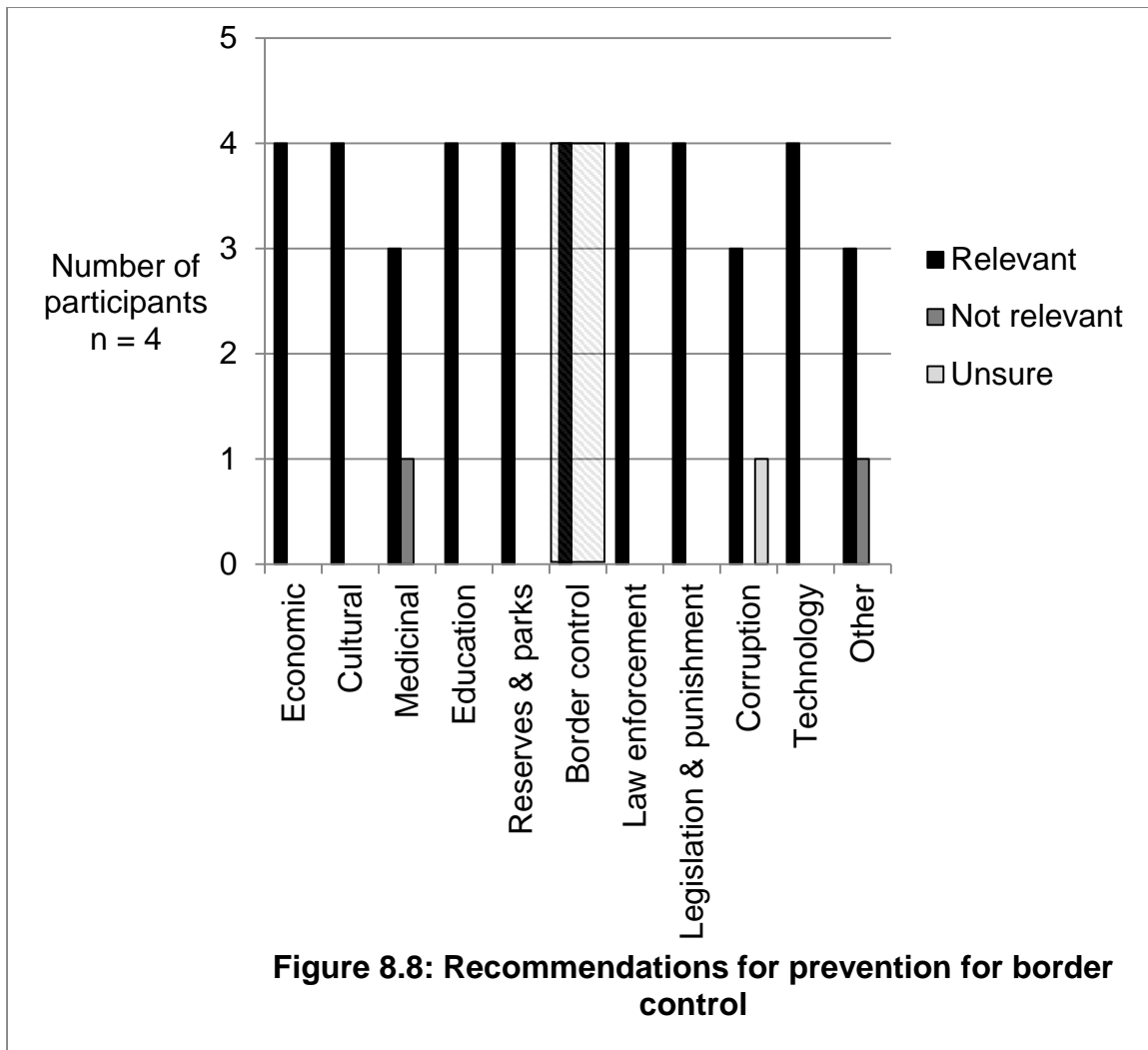
Therefore, local communities in KZN and South Africa will benefit from the authorities and game reserves cooperating with them. Compromises can be reached through negotiations, as sometimes a softer approach may be more effective. In turn, the communities can be taught about the importance of protecting nature, especially rhino, and can be provided with ways to report these offences anonymously and safely. For instance, campaigns should be developed to improve awareness of the toll-free rhino poaching hotline.

#### **8.2.6 Border control**

The findings regarding what can be done to improve border control measures in order to prevent the illegal trade in endangered animals will now be described. As indicated in Figure 8.8 below, all four (100%) of the participants believed that prevention based on border control improvements is an appropriate aspect of the research. The two core themes that developed here are overcoming porous borders and improving detection capabilities.

##### **8.2.6.1 Overcoming porous borders**

Three (75%) of the participants highlighted multi-faceted ways to overcome porous borders, which will act as measures to potentially prevent the illegal trade in endangered animals. It was explained that South African borders, particularly those shared with Mozambique, are extremely permeable, and allow contraband to move through our points of entry and exit. Goods are being smuggled across land borders and out of airports, such as O.R. Tambo International Airport. Many arrests have been made at this airport of people attempting to smuggle rhino horn out of the country. Furthermore, illegal wildlife products are leaving South Africa via Mozambique, and are being trafficked aboard container vessels and fishing boats off the coast.



It was reported by the Endangered Wildlife Trust (2012:74) that O.R. Tambo International Airport may be one of the most prolific wildlife trafficking ports in South Africa, with thousands of mammals, birds, reptiles and invertebrates being smuggled in and out annually. This high rate of smuggling out of the airport, as well as through other points of exit and entry in South Africa, is believed to be due to the low importance that is placed on crimes against wildlife by law enforcement authorities. It is suggested that Customs and Excise officials also display this lack of interest in preventing wildlife trafficking.

It is therefore imperative that steps are taken to counteract these issues surrounding South Africa's porous borders. These preventative measures will be put in place depending on the chance of success versus the financial costs involved. An important element in this regard is to improve border control procedures to block the illegal trade, so that one can prevent the animal products, such as rhino horn, from getting to the

end-users. This will serve to frustrate the Asian kingpins in the trade, as they will be paying a great deal of money for a product that is not reaching them. Simultaneously, it is crucial to reach out to the end-users and change their behaviour by means of education.

Engaging with neighbouring countries is another significant factor in regulating border control issues. The governments of neighbouring countries need to be motivated to be involved and to participate with their own communities in addressing the border control problems. Before the poaching pandemic can be addressed, the South African government needs to first persuade the Mozambican authorities that there is indeed a problem. The Mozambican government will need to be encouraged to become stricter with their border control measures and to modify the behaviour of their citizens who live near the borders.

In addition to this, the authorities in Mozambique will need to cooperate in bringing their own corrupt officials to task. It is therefore critical to examine the chain of complicity and to appreciate the economic motivations behind these crimes. Only then can the organised criminal networks be disrupted and the behaviours changed. These behavioural changes may take a long time to implement and may only occur across generations. Another vital preventative measure is to increase punishments given to wildlife offenders, particularly in Mozambique, where conservation crimes are not always viewed as serious matters.

Another idea that was mentioned is putting double strand fencing up to protect our borders, although it was admitted that offenders could easily cut through the fence and gain access.

The above recommendations for prevention can be implemented at all points of entry and exit, such as airports and harbours. Additionally, they can be applied at our land borders, particularly KZN's border with Mozambique. This is due to the fact that many poachers are crossing the Mozambican border and illegally entering South Africa to poach rhinos.

### **8.2.6.2 Improving detection capabilities**

Improving detection capabilities as a way to prevent border control problems was proposed by three (75%) of the participants. These advancements will not stop the crimes from happening, as by the time one has identified the wildlife contraband, the crime has already taken place. These methods will therefore instead serve as a deterrent, since if there is a great chance of being apprehended at the points of entry and exit, this will act as a disincentive to wildlife offenders.

It was emphasised that South African authorities such as SAPS, the South African Revenue Service (SARS) and Customs need to increase their training of officials in how to identify smuggling techniques when performing searches. Furthermore, they need to train officials as dog handlers, and they need to train biodiversity sniffer dogs to detect wildlife contraband, such as live animals, rhino horn, elephant ivory and cycads. This is due to the fact that sniffer dogs are far more effective than people are at detecting illegal products, and can find items such as rhino horn in places where a person would never consider searching. An additional measure that can be adopted is using technology to assist in border control, such as through the application of x-rays in searches.

According to the Endangered Wildlife Trust (2012:74), airport staff are not nearly as aware of the illegal trade in wildlife as compared to other offences, such as the weapons and drug trades. To attempt to combat this problem, several individuals from government departments and private organisations (such as airport companies) participated in a Wildlife Trade training event which was hosted by the Endangered Wildlife Trust in cooperation with SAPS in 2011. The training covered environmental laws, CITES regulations, permits, species identification, search and seizure, and court proceedings. Positive feedback was received regarding the effectiveness of the training. In addition to this, shortly after the training, two of the participants who worked at an airport managed to detect a suitcase containing elephant ivory and rhino horn, which led to the arrest of the suspects involved.

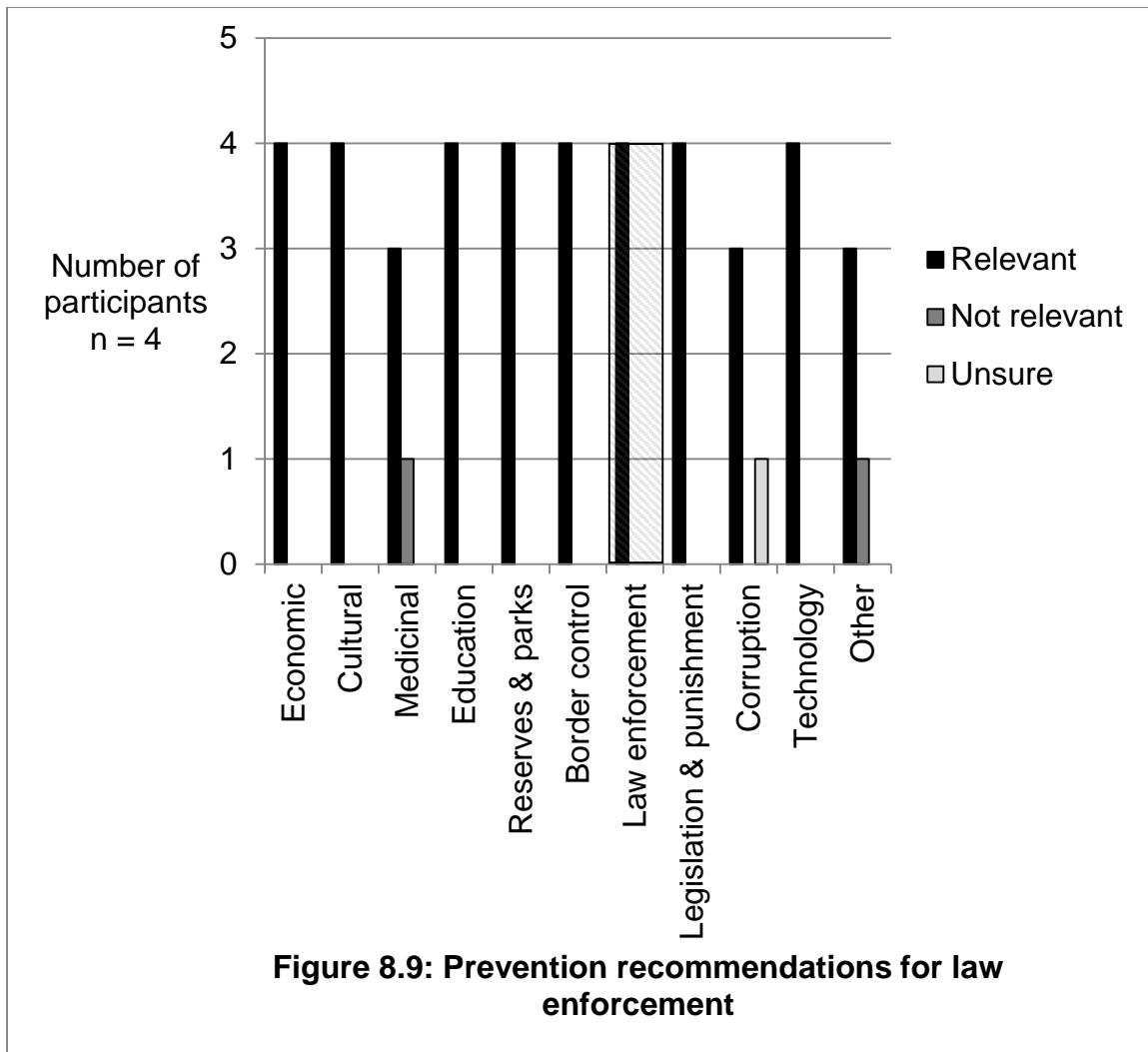
It is crucial that these recommendations for prevention are instituted in KZN and South Africa, as they would greatly improve our ability to detect wildlife contraband. Using technology and sniffer dogs are especially important, as both can lead to the identification of items that people could otherwise not pick up by themselves. These methods should then serve as deterrents to potential wildlife offenders, especially rhino horn traffickers who may fear being apprehended, and may thus disrupt the trade chain.

### **8.2.7 Law enforcement**

When asked about how law enforcement methods can be improved to prevent these offences, four (100%) of the participants agreed that these methods are germane, which is revealed in Figure 8.9 below. The participants' responses involved two major themes. These are enforcement options and solving departmental problems, which are expounded upon below.

#### **8.2.7.1 Enforcement options**

White and Heckenberg (2014:222) are of the view that environmental law enforcement occurs at various levels of government and policing organisations. Thus, the people who perform this type of law enforcement may not always be the actual police, and may also include municipal workers, government officials, INTERPOL, and non-governmental organisations. Since conservation crimes are complex in nature and may involve local, provincial, national and international elements, the enforcement of these crimes is very challenging. Conservation crimes may be hard to detect and may require intense international negotiations to tackle organised criminal networks.



Three (75%) of the participants discussed the different enforcement options that are available to improve law enforcement. It was held that while South African legislation is quite strong, including our Constitution and environmental legislation, the problem lies within the enforcement of our law. Law enforcement needs to be about creating a credible threat so that criminals will be deterred from committing their offences. The threat level needs to be rather high before crime will be prevented.

South African law enforcement is currently focused on apprehending poachers, to the detriment of catching other wildlife offenders in the illegal trade. While there are many poachers, as well as a lot of consumers, there are relatively fewer middlemen and key players moving the product around. This area of movement is where the supply chain is the most vulnerable, and it needs to be targeted more by law enforcement in order to create a long-term effect and reduce the illegal trade.

Law enforcement can thus approach these key players from three fronts. The first is to institute a criminal case against the offender, which is the route that is currently being followed in South Africa. This occurs when, for instance, a poacher has been caught with horn in a game reserve. The onus of proof is then on the prosecutor to prove beyond a reasonable doubt that the poacher is guilty. The second method is to bring about a civil case, which is currently not a common procedure in our country and yet may in some instances be more effective than a criminal case. In such a situation, that plaintiff has to simply prove that his or her case is more probable and that harm has been caused to him or her. Therefore, the onus would be on the offender to prove that the plaintiff is wrong. Finally, the third method is to perform a covert action, such as what the Americans use to find and destroy terrorists. However, this is unlikely to be sanctioned for wildlife offenders.

These enforcement recommendations may be exercised by the SAPS and other agencies enforcing the law in KZN and in South Africa generally. It is a useful suggestion to attempt to disrupt the criminal networks by targeting the middleman who is trafficking the wildlife contraband, as this is seen as the weakest point in the trade chain. At present, most of the apprehensions are of actual rhino poachers, but there is always another willing individual to take over their criminal activities if they are removed from the picture. To make more of an enduring impact, it is necessary to also pursue people higher up the chain.

#### **8.2.7.2 Solving departmental problems**

Solving departmental problems was highlighted by three (75%) of the participants as a way to enhance law enforcement capabilities in order to prevent the illegal trade in endangered animals. One of the main problems within law enforcement that needs to be solved is the issue of budget cuts. In some cases, the budget cuts are so extreme that officials are spending one week in the field and two weeks in the office because there is not enough money for petrol so that investigations can take place. It seems contradictory that officials are being hampered in such a manner when the Minister of



Environmental Affairs has declared that the government is working to develop the awareness into crimes against wildlife.

Compton (2014:7) reinforces these views by describing how the crucial work done by the soldiers in the Zululand Anti-Poaching Wing unit of Project Rhino is being hindered by financial constraints. The unit relies on funding from EKZN Wildlife and public donations, and does not have enough money to perform their tasks optimally. Sometimes they do not have money to pay for fuel for their helicopter patrols, and are forced to remain grounded.

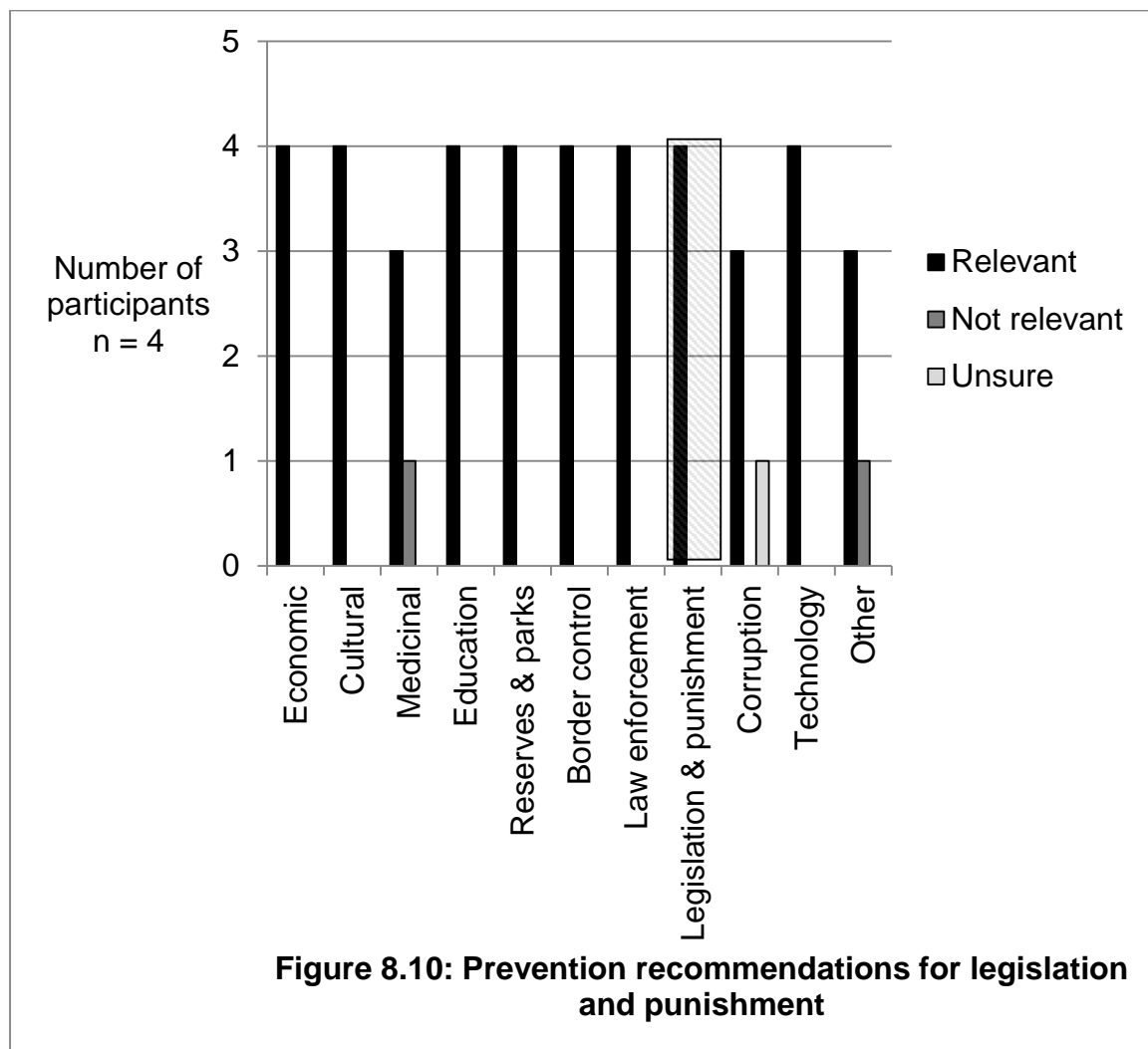
A related issue is the enormous problem regarding vacancies, which means that there are not enough people filling positions in the various departments. For instance, some of the provinces are dealing with 70 to 80% vacancy rates, according to one (25%) of the participants. Posts are simply closing and there is not enough money to pay the officials who are working. These issues need to be solved in order for law enforcement to prove to be a credible threat against wildlife offenders. Departmental budgets need to be increased and posts need to be filled with qualified individuals.

Furthermore, law enforcement officials need to be properly trained in conservation matters and environmental legislation. It is highly undesirable that the police are assigned to enforce this legislation but often are completely unaware of it. Issues around conservation should thus be established as a core subject in the curriculum at police colleges, rather than the police being taught on the job. It is also critical to tackle the problem of police corruption and bribery, since this corruption is occurring throughout the law enforcement arena, from local police to border officials. To counteract corruption, lie detector (polygraph) tests should regularly be administered to law enforcement officials.

The above-mentioned recommendations for resolving departmental problems should be implemented within the SAPS as the principal law enforcers, but also need to be applied to all the relevant authorities who are involved in investigating wildlife offences, such as the Department of Environmental Affairs, EKZN Wildlife and SANParks. It is crucial to fill positions with properly qualified and motivated officials, who wish to make

a difference in conservation, and to provide them with sufficient training to handle wildlife cases. Moreover, it is imperative to allow adequate funding for these officials to do their jobs correctly.

### 8.2.8 Legislative and punitive measures



As per Figure 8.10 above, all four (100%) of the participants agreed that legislative and punitive factors are relevant in the prevention of the illegal trade in endangered animals. The results regarding how legislative and punitive measures can be improved in order to prevent these crimes will now be examined. Two chief themes emerged in this respect, which are legal alternatives and improved measures.

#### 8.2.8.1 Legal alternatives

Legal alternatives were discussed by four (100%) of the participants. Once again, a distinction was drawn between the usefulness of legislation versus the comparative ineffectiveness of law enforcement. Legislation was found to be relatively efficient, and it was pointed out that any laws which are unproductive can be remedied. Moreover, the judiciary should be involved in the application of the law, and prosecutors and law enforcers must understand how to perform their tasks successfully, so as to avoid cases being thrown out of court. All legal alternatives should furthermore be explored, such as instituting civil claims. Wildlife offenders can also be prosecuted under SARS regulations or different acts, such as the National Protected Areas Act and the Money Laundering Act. The shoot to kill policy should also be allowed, as is the case in a few other African countries, so that rangers can adequately protect themselves and the wildlife.

Furthermore, penalties for crimes against wildlife should be improved so that offenders are adequately punished and deterred from future criminal activities. Conservation criminals should receive stricter punishments, such as harsher fines and longer prison terms. A prison sentence is the preferred option, due to the organised and serious nature of conservation crimes. These offenders should also be subjected to seizure of their assets that were acquired through the proceeds of their crimes. Mozambique has, for instance, recently meted out heavier prison terms for rhino poachers, according to one (25%) of the participants. Additionally, the procedure of letting accused offenders, including veterinarians and landowners, out on bail should be stopped. These individuals should instead remain in prison and wait for their court appearances. It is extremely troubling when offenders are arrested and then get let off. They should instead be taught a lesson about the consequences of their actions, and should experience losses to both their freedom and their assets.

In this regard, Carnie (2013c:2) upholds that there should be specialist courts to deal with rhino crimes and that offenders should receive harsher punishments. For instance, the penalties are currently up to five years in prison and fines of no more than three times the value of the rhino. It is suggested that this should be changed to a ten-year sentence and a R10 million fine.

These recommendations in terms of legal alternatives can be implemented in KZN and throughout South Africa. While our legislation was found to be relatively effective, other legal options need to be explored so that wildlife offenders can be brought to justice. Furthermore, it is crucial to apply stricter punishments to wildlife offenders. Considering the organised and highly profitable nature of these offences, a simple fine is inadequate; large fines should be imposed, accompanied by asset seizures and long prison sentences. This should create the necessary deterrent effect in order to prevent the illegal trade in endangered animals.

#### **8.2.8.2 Improved measures**

Two (50%) of the participants suggested that improved measures should be employed within the legal system in order to prevent these crimes. One of the examples that was given was enhancing the legal system's engagement with local communities, since a gentler tactic is often more helpful than an authoritarian one. What's more, expert prosecutors and magistrates need to be trained to properly handle offences against wildlife, including rhino crimes, so that cases can be more fruitful. These specialists need to be knowledgeable about conservation and the consequences of wildlife crime (as discussed in Chapter 6). However, any improved measures will require adequate funding.

According to White and Heckenberg (2014:256-257), conservation crimes need to be perceived as important in order for adequate resources to be directed towards tackling them. In this regard, improvements need to be made to the legal system to address the following problems:

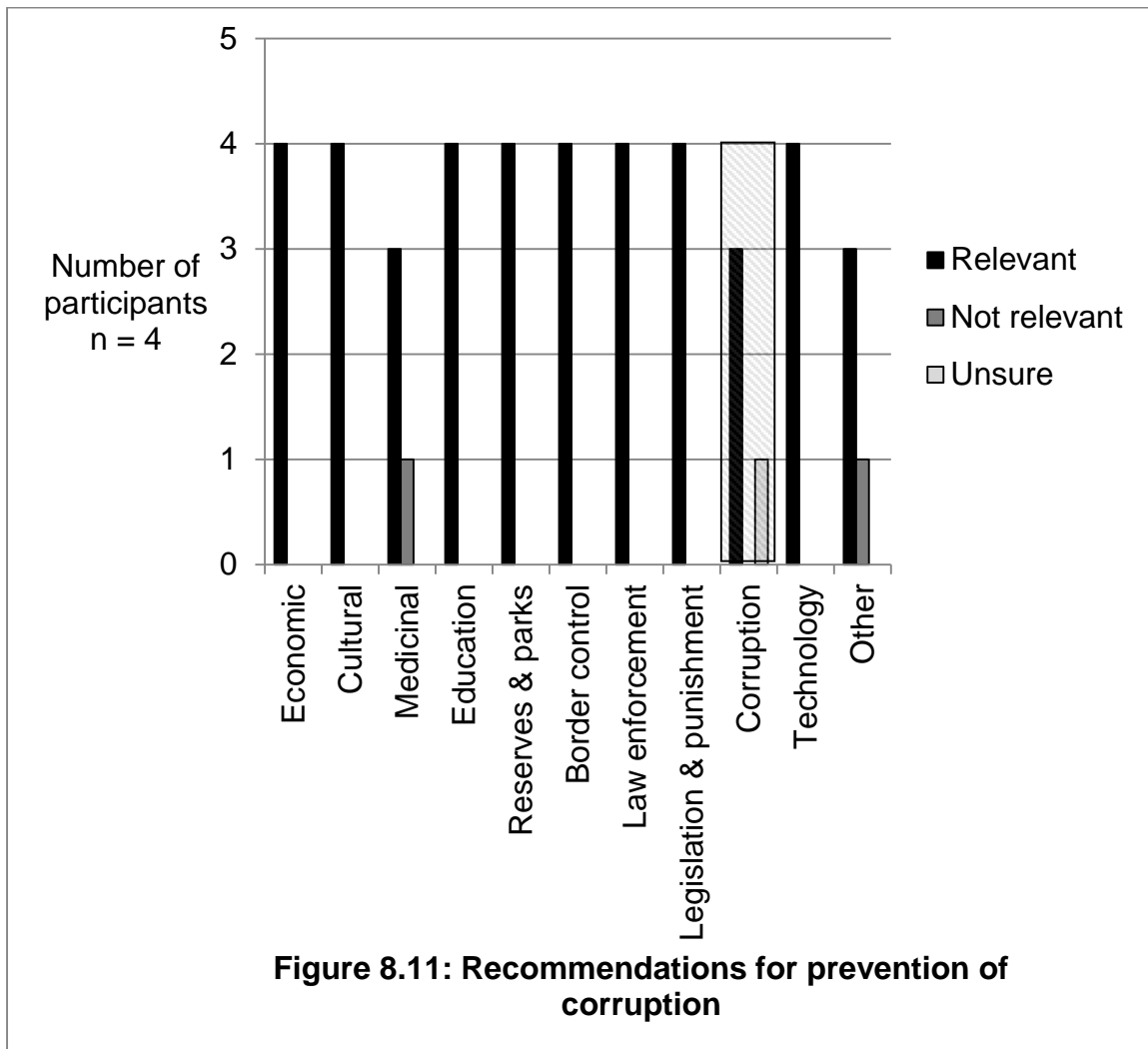
- Crimes against the environment are not recognised as genuine offences.
- These offences and the resulting damage that they cause are not viewed with much significance.
- Conservation crimes have been demoted to subordinate courts.
- The judiciary lacks awareness about conservation crimes.
- Poor rates of prosecutions have led to limited case precedents.
- There are insufficient numbers of specialists working these cases (White & Heckenberg 2014:256-257).

Therefore, in order to solve these issues, it is suggested that specialist courts be established to deal specifically with conservation crimes, and that experts in this field be developed. This will lead to crimes against the environment being viewed more seriously and solutions being put in place to minimise the harm caused (White & Heckenberg 2014:262).

An example of a successfully prepared case against a rhino poaching kingpin, Dawie Groenewald, was provided by one (25%) of the participants. This matter has been prolonged for years as it took a very long time for the National Prosecuting Authority and the SAPS to correctly investigate and formulate the case. There are more than one thousand seven hundred charges, and the accused will be charged under the Prevention of Organised Crime Act. Cases such as these demonstrate the importance of ensuring that legal role-players are adequately trained to deal with conservation issues.

Recommendations to improve legal and punitive measures can be applied throughout South Africa's legal system, including in courts in KZN. It is imperative that legal practitioners are given skills training so that they can demonstrate competence in dealing with wildlife cases. In addition to this, the legal system needs to interact with local communities to help them understand just how serious crimes against wildlife are, and what the consequences will be if they decide to participate in these criminal activities.

### 8.2.9 Corruption



The participants were asked what can be done regarding corruption problems in order to prevent these offences, and their responses will be described below. Three (75%) of the participants agreed that there are prevention methods that can be employed to deal with corruption, which is illustrated in Figure 8.11 above. The themes that were uncovered here related to types of corruption and preventative measures. However, one (25%) of the participants was unsure about how to prevent corruption.

### **8.2.9.1 Types of corruption**

The different types of corruption were discussed by three (75%) of the participants. A distinction was made between corruption based on ignorance, and deliberate corruption. If officials are ignorant and can be easily persuaded into corrupt activities, training can be employed in order to overcome this issue. However, in the case of deliberate corruption, where corrupt officials are complicit in crimes in order to pursue financial incentives, it is a much more challenging behaviour to modify.

An example of possible corruption is the recent controversy surrounding the decision by the Department of Environmental Affairs to relocate rhinos from the Kruger Park, supposedly to safer reserves. While this strategy was claimed to be a protective one, it was discovered that most of the rhino were destined for sale to private game parks, including ones that perform trophy hunting. Political will is needed to apprehend not only the poachers, but also to expose the middlemen, illegal hunters and corrupt officials involved in the criminal syndicates (Rice 2014:7).

It was maintained that organised crimes, such as crimes against wildlife, can only flourish where there are corrupt officials. Unfortunately in South Africa, there are many corrupt officials. Circumstances that may contribute to this corruption are difficult working conditions, long hours, poor pay, and no compensation for overtime. Conditions are sometimes so bad that officials have to pay for their own petrol to conduct investigations.

On the other hand, there are some officials who are simply doing a job and do not put effort in because they do not care about the environment, which is seen as being equally as corrupt as directly participating in the offences. Corruption in this form is very challenging to counteract, especially amongst law enforcement. Furthermore, it was said that problems arise when officials are appointed simply to fill race quotas and to uphold black economic empowerment. Some of these officials may not be qualified or interested in the environment, and it undermines the excellent work that is being done by many dedicated black officials.

### **8.2.9.2 Preventative measures**

White and Heckenberg (2014:288) maintained that corruption affects conservation crimes and exists in all types of organised offences. Crimes committed by those in power also need to be investigated, especially since lawful and illicit actions tend to overlap in many trades. Some ways to prevent these offences are through anti-money laundering undertakings and enquiries by task forces.

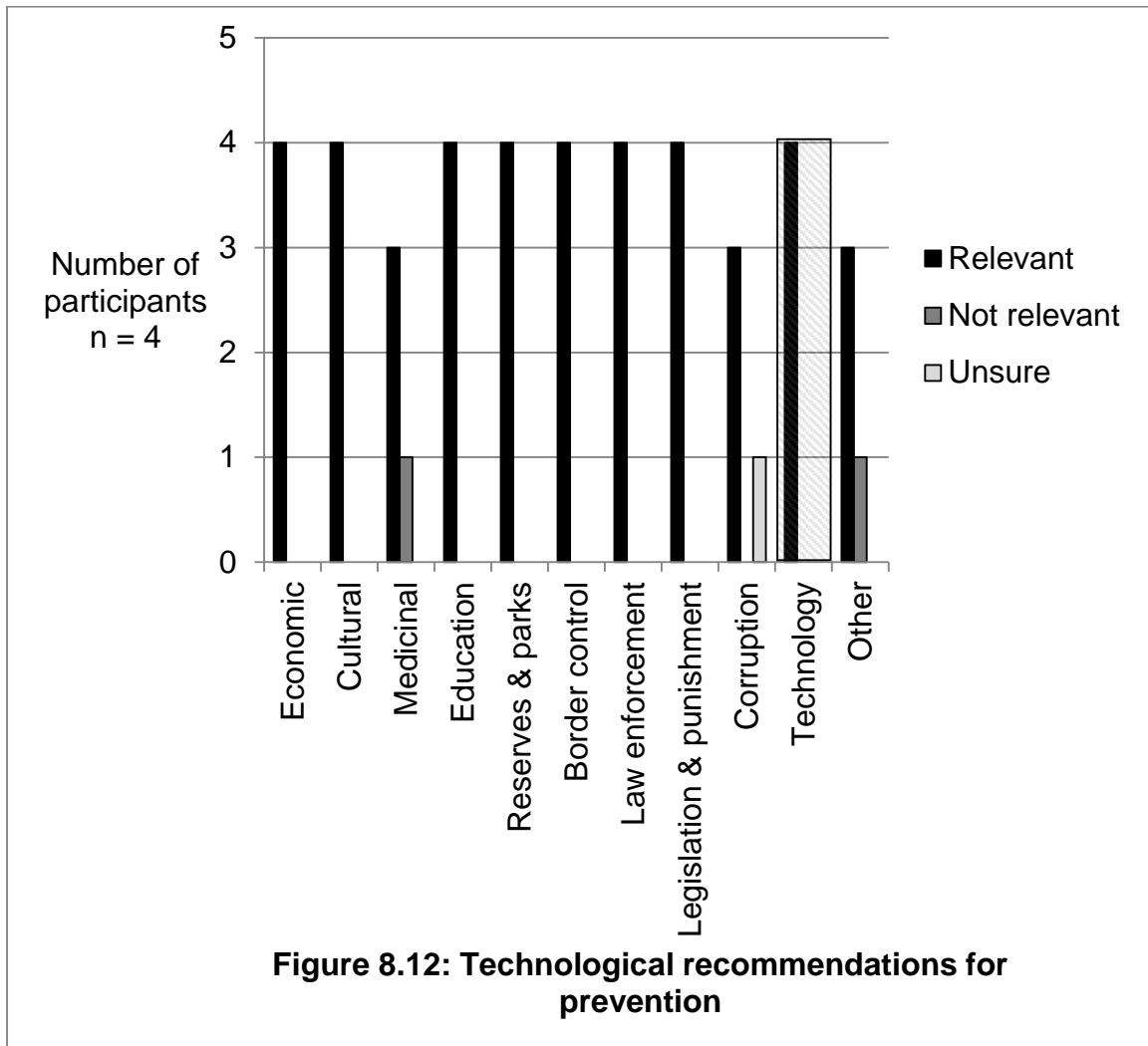
Three (75%) of the participants highlighted possible preventative measures that can be put in place to combat corruption as a contributing factor to the illegal trade in endangered animals. Prevention of corruption will only take place if there is adequate political will to tackle this problem. Systems that promote proper management, supervision and double-checking are compulsory to diminish the opportunities for people to be corrupt. These systems will clearly be ineffectual if highly senior individuals in the government, such as politicians, are involved in the corrupt activities. The only way to circumvent this type of corruption at a high-ranking level is to have whistle-blowers in government and the community. Furthermore, intelligence-based civil actions can be utilised in the fight against corruption.

It is also crucial to thoroughly vet law enforcement officials before they are employed. It needs to be ensured that these officials will not succumb to bribery and corruption. One needs to ensure that officials have job satisfaction, and that working in their field is a calling rather than simply a job. In South Africa's current socioeconomic environment, with so many people unemployed and desperately looking for work, this will be a challenging undertaking. Some government departments unfortunately seem to be filling positions without concern about whether candidates are suitably qualified or even interested in the work.

While it is very challenging to combat corruption, it is recommended that preventative measures be put in place in all authorities mandated to handle wildlife offences, including the Department of Environmental Affairs, EKZN Wildlife, SANParks and SAPS. Hiring competent and driven candidates, as well as the proper vetting and supervision of staff, is crucial for preventing corruption.



### 8.2.10 Technology



The participants' views as to how technology can be utilised in the prevention of the illegal trade in endangered animals, particularly rhino poaching, will be detailed below. As portrayed in Figure 8.12 above, all four (100%) of them agreed that technology can be utilised in order to prevent these offences. Tracking and tracing, as well as reducing incentives, emerged as the central themes.

### **8.2.10.1 Tracking and tracing**

Technological methods to track and trace these crimes against wildlife were mentioned by all four (100%) of the participants. Technology is expensive to implement, especially with the existing budget cuts, but it can be very effective in preventing these offences if it is applied by competent officials. In this respect, it was held that computerised databases are extremely imperative in linking wildlife offenders and criminal networks. It was additionally maintained that in order to improve the enforcement of legislation, it is necessary to advance the issuing of national permits around wildlife. Officials should also be trained in how to issue permits electronically.

According to Rondganger (2012:3), the importance of permits is clear in certain cases, especially relating to rhino hunting. Since the Department of Environmental Affairs made it more difficult for rhino hunters to obtain permits, there have been fewer hunters entering South Africa from Thailand, Vietnam and China. This is a great improvement on the conditions in the past, where hunters from the East comprised the bulk of the permit candidates. Now hunters have to prove that they have experience in hunting African animals and that they are members of hunting organisations. This is to prevent repeat situations in which permits were given to people without checking that they were in fact legitimate hunters, such as the case where Thai prostitutes were brought over to South Africa to enable the trophy seeker to hunt more rhino. Rademeyer (2012:164) maintains that in this case, rhino poaching syndicates used prostitutes who were trafficked from Thailand to South Africa as a cover to get rhino hunting permits. From November 2010 to March 2011, approximately twenty permits were issued to Thai women to hunt rhino on Marnus Steyl's farm in North West Province (Rademeyer 2012:180).

Further, technology can be used to identify people or wildlife, and to develop chain of custody procedures. For example, drones are being utilised effectively in several locations, including at borders. They may be preferable to use in patrols when compared to helicopters, which tend to make a great deal of noise and alert potential criminals. The images created, however, sometimes make it difficult to distinguish between people and animals, and between different species of animals. Other

examples of technological measures used to combat the illegal trade in endangered animals are applying Global Positioning Systems (GPS) and tracing phones in order to locate offenders. An additional option is to utilise shot detectors, which identify the area in which a gun has been fired, in order to pinpoint crime scenes.

Other technological measures may involve employing canine units, dehorning rhinos or doing horn treatments, such as infra-red rods that are implanted into the horn. These rods are x-ray detectable and make the horns easier to trace, which in turn serves to devalue the horns.

The recommendations for prevention in terms of technology can be applied throughout KZN and South Africa. Technological advancements can be applied by all the relevant role-players, from the government, to EKZN Wildlife and SANParks, to game reserves and parks, to border control, to the criminal justice system, and even to non-governmental organisations involved in the fight against poaching.

#### **8.2.10.2 Reducing incentives**

One (25%) of the participants specifically referred to reducing the incentives to commit wildlife crimes by applying technology to the problem. For example, important work in laboratories is aiding in the fight against rhino poaching. The following questions need to be asked regarding technology, to ascertain whether or not it may be harnessed usefully to prevent the illegal trade in endangered animals:

- Will technology change the incentives for committing these offences?
- Can technology reduce the likelihood that an offender will choose to poach an animal?
- Does technology increase the chances of becoming aware of potential poaching incidents?
- Might technology improve the possibility of identifying an incursion in a game reserve?
- Could technology enhance the prospect of detecting an actual poaching event?
- Will technology better the odds of apprehending illegal entrants?
- Does technology make it more likely that offenders will be convicted?

- Can technology increase the probability that criminal networks will be disrupted?

Moreover, it is important to weigh up the advantages versus the hazards of using technology, and to do an analysis of the logistics involved, depending on the desired impact. If one looks at the rhino poaching situation, there are hazards relating to the crime, such as the size of the game reserves. These risks thus create variable results when technology is applied. However, analytical technology enjoys fewer disadvantages as it leads to the gathering of intelligence, which can be proactively dealt with.

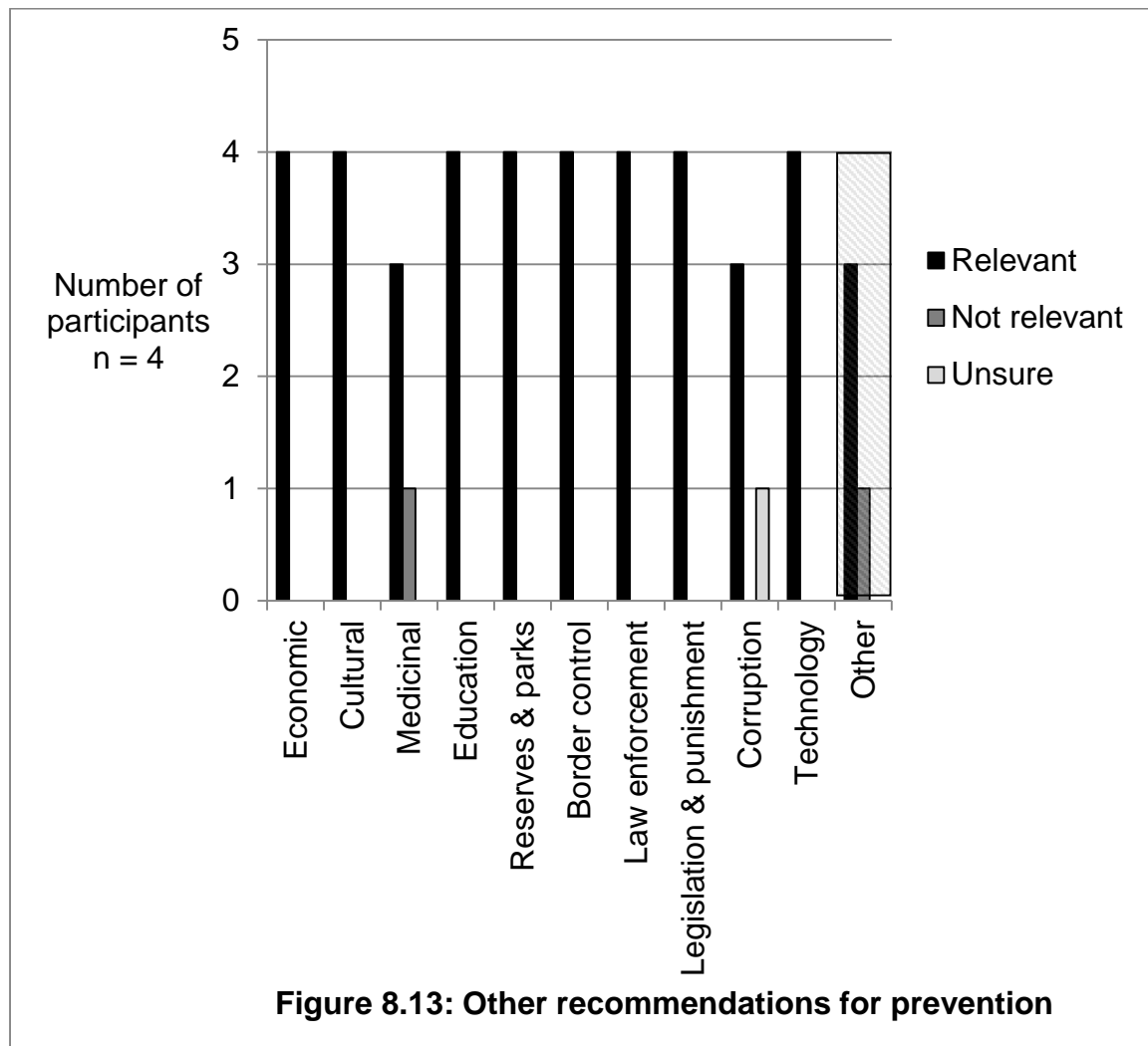
For example, Mdletshe (2012:2) maintains that King Shaka Aviation gave a helicopter for rangers to use in a pilot project in the Hluhluwe-iMfolozi game reserve. In a period of five months, the helicopter was used in fifteen call outs and one hundred and five patrols in the park, which uncovered twenty-eight illegal cars and allowed rangers to arrest ten armed poachers. This shows that using technology, such as helicopters, is very beneficial in the war against poaching and may increase the probabilities of detecting incursions and apprehending suspects.

Reducing the incentives to commit crimes against wildlife by using technology can occur throughout KZN and South Africa. Technology can disrupt the activities along the entire trade chain, from identifying incursions in a game reserve, to apprehending and convicting offenders, and to destroying the entire organised criminal network. Technology must create a high degree of risk for the offenders to be apprehended while committing their deeds, and will thus serve as a deterrent.

#### **8.2.11 Other factors**

When asked if there are other relevant prevention strategies, one (25%) of the participants answered in the negative, stating that the research had covered all the appropriate tactics, which is represented below in Figure 8.13. On the other hand, three (75%) of the participants mentioned other factors that can help to prevent the illegal trade in endangered animals. In this regard, the participants highlighted an

integrated framework for prevention, the criminal market, a focus on biodiversity, and collaboration versus competition. These final issues will be discussed below.



### 8.2.11.1 An integrated framework

According to one (25%) of the participants, it is necessary to implement an integrated framework for the prevention of the illegal trade in endangered animals, which will incorporate short-, medium- and long-term solutions for consumer and range states.

In this regard, Ferreira and Okita-Ouma (2012:55) feel that short-term solutions may involve disrupting organised criminal networks, proactive anti-poaching techniques, making range and end-user governments aware of these offences, and educating consumers about the consequences of their actions. On the other hand, medium- to

long-term methods may include researching the drivers of the demand and the value of the trade chain, instituting awareness campaigns, and examining the various trade options.

For the purposes of this research, these strategies are viewed as important since preventing these offences, as well as changing the hearts and minds of people regarding conservation issues, may be cross-generational endeavours that need to occur across nations.

#### **8.2.11.2 The criminal market**

Identifying the criminal market was highlighted as a preventative measure by one (25%) of the participants. In this regard, it is crucial to detect the criminal activities; examine the circumstances around the offences; find out why, how and where the crimes are occurring; and investigate the trade chains and criminal networks. Only after these steps have been taken will it be possible to apply resolutions to prevent the crimes against wildlife.

These views were reinforced by White and Heckenberg (2014:290), who stated that the criminal markets need to be investigated so as to properly comprehend the social undercurrents of the illegal trade in endangered animals.

For example, while the solution for rhino poaching is likely comparable to the answer for abalone poaching, the remedy for the rhino horn trade will be dissimilar to that for the lion bone trade. The commonalities between these trades instead lie in the supply and demand structures. It is therefore critical to establish which species are exploited in the criminal market and what legislation is in place to protect them. The laws involved will be conditional upon how endangered a species is.

These preventative measures are recommended for implementation across nations, including in KZN and South Africa, as the trade chain is highly extensive and organised in nature.

### **8.2.11.3 A focus on biodiversity**

One (25%) of the participants was of the view that the government needs to focus on protecting biodiversity in general, thereby including crimes against all species rather than focusing only on rhino offences. This is due to the fact that other species are also dwindling because of the illegal trade, and the government cannot afford to pay attention to only one type of animal. Also, the techniques that are being applied to rhino-related crimes can be used to deal with other wildlife offences, as many of the contributing factors (such as budgetary constraints and corruption) are similar.

The descriptions provided in Chapters 1 and 2 relating to the nature and extent of the illegal trade in endangered animals demonstrate that role-players need to focus on biodiversity as a whole, rather than only a specific species. These crimes are so extensive and serious that they undermine national security and destabilise economies, and thus must be dealt with comprehensively. The above recommendations regarding focusing on biodiversity can be applied by authorities in KZN and South Africa when dealing with crimes against our wildlife.

### **8.2.11.4 Collaboration versus competition**

The significance of all of the relevant role-players working together in cooperation was promoted by one (25%) of the participants. There are many good people who are doing outstanding work, including non-governmental organisations. However, it was emphasised that the governmental, non-governmental and private role-players should collaborate, rather than being in a constant competition with one another. People are too focused on their own views and egos, and making sure they get all the credit. Instead they should be directing all their energies toward saving the animals, including rhinos in the current poaching crisis.

White and Heckenberg (2014:223) were of the view that the transnational nature of conservation crimes require that many different authorities and organisations share similar goals and are mobilised at the same time. Nations need to have political will to work together and the numerous role-players need to be motivated to cooperate

with one another. Tackling crimes against wildlife will necessitate collaboration, and the drive to engage with others across barriers of time, space, culture and language. Furthermore, it will require that all role-players appreciate the matter at hand and coordinate their efforts, while applying international legislation and sharing information.

The above-mentioned participant also stated that methods that are used to prevent rhino crimes can be applied to other wildlife crimes. Furthermore, it was stated that while people are arguing their own points, Africa is losing approximately one hundred elephants per day to poaching. Five cycad species out of thirty-seven have additionally become extinct in South Africa. One day we might also lose our rhino and will then be left with a stockpile of horn, while role-players are arguing for and against the legal trade in horn instead of actually taking action to prevent rhino poaching.

Finally, the participant upheld that the government needs to cooperate with the various authorities by providing enough funding for them to perform their duties in conserving nature. Budget cuts must be stopped, and adequate finances should be sent to every participating department. Conservation should be treated with just as much priority as feeding people, providing employment, and building schools and hospitals. If the role-players do not begin to work together, South Africa is going to lose the war and lose our rhino.

These recommendations for collaboration can be applied throughout governmental, non-governmental and private entities across South Africa and KZN, as well as internationally, in order to combat the international organised crime of the illegal trade in endangered animals. It is crucial for all role-players involved in combating wildlife offences to cooperate with one another, share information and come up with prevention strategies to deal with these crimes.



### **8.3 Summary of findings**

A summary of the findings of this research project will now be provided in order to recapitulate what has been discussed and to emphasise the most prudent points. In this regard, attention will be paid to the nature and extent of the illegal trade in endangered animals; the victims, offenders and modus operandi involved; the adjudication of these offences; the causes and consequences of these crimes; criminological theories that offer explanations; and recommendations for prevention. These topics are explored with the goal of investigating the elements of the illegal trade in endangered animals, in order to offer suggestions for preventing these crimes.

Through these discussions within the research study, it is further hoped that interest in conservation criminology as a subject will be encouraged, and that more criminologists and other experts will begin to investigate crimes against the environment.

#### **8.3.1 Nature and extent**

The illegal trade in endangered animals, with an emphasis on rhino poaching, was found to encompass an extensive and harmful range of offences. While rhino poaching has been increasing dramatically each year since 2008 and thus has been greatly publicised in the local and international media, crimes against other species are less well-known. The illegal trade in endangered animals is an organised conservation crime that occurs across nations, and serves to undercut national and international security and threaten economies. It brings in enormous financial profits that can be compared to the illegal trades in persons, weapons and drugs.

#### **8.3.2 Victims, offenders and modus operandi**

It was found that the main victims of these crimes in KZN are the animals themselves, most notably rhinos. However, other animals, such as elephants, lion, leopard, cheetah and wild dog are also negatively affected throughout KZN, South Africa, and Africa as a whole. Elephants are particularly victimised when Africa is examined in

general, and the recent killings of a few elephants in South Africa points to this becoming a potential future threat. Local citizens are also victimised in that our animals, which form a great part of our cultural heritage and identity as South Africans, are being annihilated. Ill individuals who utilise Traditional Chinese Medicine to try to cure their ailments may also be seen as victims of their circumstances, as they are making futile attempts to treat their sicknesses instead of seeking proper medical attention.

The perpetrators of these crimes in KZN are mostly poachers, who tend to be young black males, who are unemployed and have a low to average level of education. Their modus operandi may entail exploiting game reserve staff to obtain information on the whereabouts of rhino, locating and killing a rhino by shooting it, and then removing the horn using an axe or hand saw. Then the horn is smuggled out of the reserve and transported to a point of entry or exit, such as an airport or the Mozambican border.

### **8.3.3 Adjudication**

The adjudication efforts by park officials, police and courts were found to be lacking in some common areas. A lack of the required expertise in handling wildlife crimes was a challenge across the board. The good work of a very few specialists is being weakened by issues surrounding inadequate budgets, insufficient staff numbers, and corruption. Furthermore, if offenders are prosecuted and convicted, they are not receiving adequate punishments, and tend to get off with light fines and short prison terms. The overriding theme that emerged was that crimes against the environment are not yet viewed as the serious, organised offences that they are. Thus, these cases are not prioritised and authorities are not awarded the necessary resources in order to properly resolve them.

#### **8.3.4 Causes**

The study brought to light a multitude of causes of the illegal trade in endangered animals, including those with economic, cultural, medicinal and educational foundations, as well as those relating to the vulnerability of game reserves, insufficient border control, poor law enforcement, inadequate legislation and punishment, and corruption. It was established that conservation crimes result in large profits, and thus involve huge financial incentives that revolve around the supply and demand curves.

These offences may have a cultural source, in that offenders in range states do not have a philosophy of appreciating wildlife, and consumers in end-user states utilise animal products for cultural reasons, such as to enhance their social standing. Similarly, the use of animal products finds its roots in Traditional Chinese Medicine, which has been around for thousands of years and promotes false myths about animal derivatives, such as rhino horn, curing medical ailments. It is this lack of awareness and education about conservation issues that is so crucial in explaining these crimes, and forms the basis for demand reduction and behavioural change campaigns.

The inadequacy of security measures in game reserves and parks, as well as on South African borders, serves to encourage the illegal trade in endangered animals. The low risk of detection serves as an incentive for traffickers, who exploit the sheer scale of the protected areas, as well as the poor fencing and relatively weak controls. While legislation is generally very good, the enforcement of the law is insufficient and is undermined by a lack of expert skills and interest in conservation. What's more, punishments serve no deterrent value due to their leniency, and offenders are not taught a lesson. Finally, corruption undercuts every effort to address the causes of the illegal trade in endangered animals, and serves to strength criminal networks and threaten national security.

### **8.3.5 Consequences**

The illegal trade in endangered animals has negative consequences for the wildlife involved, as well as for people and the economy. When animals are poached, biodiversity is affected and this impacts on the entire ecosystem. The worst case scenario is an animal becoming extinct, which is a predicted outcome in the rhino poaching situation. People are also disadvantaged by these crimes, as the game reserves and wildlife populations that our taxes serve to upkeep are being threatened. Conservation crimes, especially against rhinos as one of the Big Five, are also destroying our cultural heritage. Crimes against endangered animals have an effect on tourism, as the brutality of poaching in particular may frighten tourists and discourage them from visiting the country. Since tourism is such an integral source of our income in South Africa, our economy will suffer as a result of the illegal trade in endangered animals, and people will lose their jobs.

### **8.3.6 Criminological theories**

Various criminological theories were used to explain the illegal trade in endangered animals, which were the rational choice, anomie, neutralisation, self-control and routine activities theories. The neutralisation theory was found to be particularly relevant, as it can explain why offenders justify their terrible actions and do not view crimes against animals as very serious. In addition to this, the routine activities theory was thought to be a highly applicable theory, as it explains that these crimes are occurring due to the presence of suitable victims, the absence of capable guardians, and the presence of motivated offenders. Wildlife offenders are extremely motivated by the financial benefits that their crimes bring, and are not deterred by the current lenient enforcement or punitive measures. Furthermore, the victims are helpless animals and are easy targets for armed poachers.

### **8.3.7 Recommendations for prevention**

The recommendations for prevention addressed each of the analysed causes of the illegal trade in endangered animals. It was established that demand reduction

campaigns need to be instituted in consumer countries, and that education programmes should be designed and implemented in both range and end-user states. Local communities that surround game reserves need to be supported and uplifted by providing them with economic alternatives to poaching. In addition to this, it is crucial to improve security measures at game reserves and at South African borders, which will be best served through the use of technology and sniffer dogs. It is also crucial to train officials within the criminal justice system about the importance of conservation, and to set up specialist units and courts to deal with crimes against wildlife. However, without the political will to tackle these offences and identify corrupt officials, the illegal trade in endangered animals will not be adequately prevented.

#### **8.4 Conclusion**

If it were not for the lack of political will to deal with conservation issues and the lack of capable guardianship over wildlife, the illegal trade in endangered animals would not be allowed to flourish to the extent that it is currently. It was found that many officials who are supposed to be protecting our wildlife (and thus our heritage) are unmotivated, indifferent and corrupt. Their criminal actions are undermining the admirable work that is being done by a few experts in the area of conservation. Officials who are working in the conservation field are expected to do so under relatively poor conditions, and are not being adequately compensated or recognised for their efforts. They are also not always allocated the sufficient resources that are necessary for them to perform their duties efficiently.

Should these unacceptable conditions persist, the poaching rates will continue to intensify dramatically. Unfortunately, this may lead to the extinction of species, such as the rhino, in the not-too-distant future. In order to help to prevent this from happening, the recommendations in this study should be applied by governmental, non-governmental and private entities. In addition to this, more research is needed into conservation criminology matters, as this is an extremely important contemporary and developing field.

Conservation criminology thus depends on the awareness of issues that impact on biodiversity. This includes understanding both the causes of these crimes, as well as the biological and societal consequences that result. Fundamentally, conservation criminology is based on the view that crimes against nature need to be tackled from a criminological perspective so that they are dealt with comprehensively. It is furthermore expected that research projects such as this one will contribute positively and practically to the studies of both conservation and criminology in general.

### **8.5 Suggestions for future research**

Future research into the illegal trade in endangered animals, particularly rhino poaching, could be carried out in the other provinces of South Africa in order to draw comparisons with the situation in KZN and to obtain a broader perspective of this criminal phenomenon.

Another valuable study may be into the effectiveness of deploying armed forces to protect South African National Parks and game reserves, in order to make recommendations for future action.

Furthermore, an important research topic may be regarding the issue of legalising the trade in rhino horn. This study could investigate the advantages and disadvantages of legalising the trade and make recommendations on which course of action to take.

A suitable topic for future research would be an emphasis on the illegal trade in endangered animals and their products (particularly rhino horn) on the black market in Asian countries. There is a great need to study the criminal market in consumer countries in order to prevent the crimes from occurring in range states.

In addition to this, another area of potential research is regarding how education can reduce consumer demand for endangered animals and their products. A point of focus here could be public awareness campaigns, particularly in the media, as well as education programmes in schools, workplaces and prisons.

An interesting but problematic and complex area of study may be regarding conservation crimes weakening the political stability of nations. This could be examined in particular by an investigation into the link between the illegal trade in endangered animals and the funding of other organised crimes, such as acts of terrorism.

An additional area of focus may be to create an in-depth offender profile of a conservation criminal, such as a rhino poacher. This could be achieved by studying convicted offenders. However, profiling other key role-players in the illegal wildlife trade may be challenging, due to a lack of access to the criminals higher up the trade chain.

# APPENDICES



***APPENDIX ONE***  
***INFORMED CONSENT FORM***

## **Informed consent form**

### **Researcher**

Title: Miss

First name: Megan

Surname: Griffiths

Position: Master of Arts student

Institution: The University of South Africa (UNISA)

Department: Criminology

Home/work number: 0315731729

Fax number: 0315731729

Mobile: 0792644769

Email address: griffithsml@telkomsa.net / griffithsml@gmail.com

### **Supervisor**

Title: Doctor

First name: Friedo

Surname: Herbig

Position: Professor

Institution: UNISA

Department: Criminology

Work number: 0124296277

Fax number: 0124296009

Mobile: 0762723284

Email address: herbifjw@unisa.ac.za

### **Title of dissertation**

The illegal trade in endangered animals in KwaZulu-Natal, with an emphasis on rhino poaching.

**Purpose of study**

The purpose of the study is the exploration of the illegal trade in endangered animals in KwaZulu-Natal, with an emphasis on rhino poaching, in order to contribute to conservation criminology research and make recommendations for preventing such crimes.

**Methods**

The researcher will be gathering information by means of collecting data from records, as well as by conducting questionnaires and personal or telephonic interviews, which will be done with the help of an interview schedule. The researcher may make use of a Dictaphone to record the interviews. The interviews will be approximately fifteen minutes to half an hour, but may end sooner naturally or at the request of the participant or researcher, depending on the circumstances.

**Risks and discomfort**

The participants will not be compelled to answer any questions they do not wish to. Participation in the study is voluntary, and the participants can withdraw from the study at any point without offering reasons for doing so and will not face negative consequences from doing so. Privacy, confidentiality and anonymity will be respected. Only the researcher and her supervisor will have access to the raw data obtained from records, questionnaires and interviews. Participants may contact the researcher to ask any questions.

**Benefits**

The benefit for the participants of taking part in the research will be their contribution towards making recommendations for the prevention of the illegal trade in endangered animals, particularly rhino poaching. In addition to this, another benefit will be their contribution to furthering conservation criminology research in South Africa.

**Thank you for your participation in the research.**

I, the undersigned, agree to participate in this study voluntarily and without duress.

Signed at

---

Date

---

(Print name)

---

***APPENDIX TWO***  
***SURVEY QUESTIONNAIRE***

**THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL, WITH  
AN EMPHASIS ON RHINO POACHING**

**SURVEY QUESTIONNAIRE**

**Name of participant:**

**Organisation:**

**Position:**

**Length of service:**

*\* The above information regarding the participant is for the researcher's records and will remain anonymous.*

**1. What is your perception of the characteristics of the perpetrators of these crimes?** *(Are there differences between the characteristics of perpetrators of rhino-related crimes and those of other endangered animals in KZN?)*

**1.1 Race?**

**1.2 Gender?**

**1.3 Age?**

**1.4 Economic status?**

**1.5 Education level?**

**1.6 Other characteristics?**

**2. From your understanding, what are the characteristics of the victims of these crimes?**

**2.1 Which animals are mostly victimised?**

**2.2 Are South African citizens also victimised in terms of the killing of our wildlife?**

**2.3 Are ill people in traditional Asian cultures victimised due to being given incorrect medical advice?**



**3. What is your view regarding the modus operandi or methods by which these crimes are committed, particularly in terms of rhino poaching?**

**3.1 How are the reserves/parks targeted and infiltrated?**

**3.2 How are the animals captured or poached inside the reserves/parks?**

**3.3 How are the animals or their parts trafficked?**

**4. In your opinion, what are the causes of the illegal trade in endangered animals in KwaZulu-Natal, particularly in terms of rhino poaching?**

*(Causes from within KZN, SA and Asian countries.)*

**4.1 Economic causes; supply and demand?**

**4.2 Cultural causes?**

**4.3 Medicinal uses?**

**4.4 Poor education?**

**4.5 Vulnerability of reserves/parks?**

**4.6 Inadequate border control?**

**4.7 Poor law enforcement?**

**4.8 Inadequate legislation and punishment?**

**4.9 Corruption?**

**4.10 Other causes?**

**5. From your perspective, how are these crimes being investigated inside reserves/parks?**

**6. In your observation, how are these crimes being investigated by the police?**

**7. From your point of view, how are these crimes being adjudicated and punished within the court system?**

**8. What do you believe are the perceived and actual consequences of these crimes?** (*Consequences within KZN, SA and Asian countries.*)

**8.1 Social/cultural consequences?**

**8.2 Biological/conservation consequences?**

**8.3 Economic consequences?**

**8.4 Tourism consequences?**

**8.5 Other consequences?**

---

**Signature of participant**

---

**Date**

**Thank you very much for participating.**

*The information provided by the participant will be used exclusively for scientific research purposes in the completion of a Master of Arts degree in Criminology through the University of South Africa.*



***APPENDIX THREE***  
***INTERVIEW SCHEDULE***

**THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL, WITH  
AN EMPHASIS ON RHINO POACHING**

**INTERVIEW SCHEDULE**

**Prevention of the illegal trade in endangered animals in KwaZulu-Natal,  
particularly in terms of rhino poaching.**

**Date:**

**Interview number:**

**Interviewer: Megan Griffiths**

**Interviewee:**

**Organisation:**

**Position:**

**Length of service:**

*\* The above information regarding the participant is for the researcher's records and will remain anonymous.*

**1. What prevention methods can be employed to overcome economic causes, especially relating to supply and demand?**

**2. How can these crimes be prevented when it comes to cultural issues?**

**3. What can be done to prevent the use of animal derivatives in traditional medicine, particularly rhino horn?**

**4. What steps can be taken in terms of education in order to prevent these crimes?**

**5. How can reserves/parks be made less vulnerable to these crimes?**

*(Prompts: dehorning, training, security measures, deploying police/army)*

**6. What can be done to improve border control measures in order to prevent these crimes?**

*(Prompts: training, sniffer dogs)*

**7. How can law enforcement methods be improved to prevent these offences?**

*(Prompts: training, re-establish Endangered Species Protection Unit as a separate SAPS unit)*

**8. How can legislative and punitive measures be improved in order to prevent these crimes?**

*(Prompts: training, dedicated task teams in courts, separate court for environmental crimes, harsher sentences)*

**9. What can be done about corruption problems in order to prevent these offences?**

**10. How can technology be utilised in the prevention of these offences?**

*(Prompts: DNA databases)*

**11. Other prevention strategies?**

*The information provided by the participant will be used exclusively for scientific research purposes in the completion of a Master of Arts degree in Criminology through the University of South Africa.*

***APPENDIX FOUR***  
***EDITING CERTIFICATE***



**ChickPea Proofreading and Editing Services  
by Dr Laura Budler**

This is to certify that

THE ILLEGAL TRADE IN ENDANGERED ANIMALS IN KWAZULU-NATAL, WITH AN  
EMPHASIS ON RHINO POACHING

by  
MEGAN LAURA GRIFFITHS

submitted in accordance with the requirements for the degree  
Master of Arts: Criminology

at the University of South Africa

Supervisor: Dr FJW Herbig

was professionally edited by Dr Laura Budler of ChickPea Proofreading and Editing  
for Students and Professionals, finalised 01 February 2015.

Date: 01/02/2015

Signature: 

Dr Laura Budler  
[www.chickpea.co.za](http://www.chickpea.co.za)  
084.618.2095

***APPENDIX FIVE***  
***TURNITIN REPORTS***



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