

Incorporating an Earth Jurisprudence approach into South African environmental law for the protection of endangered species: Options and challenges

by
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Declaration

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Abstract

Many South African species and habitats are threatened by various human activities including illegal poaching of species such as rhinos, which is threatening the survival of the species. This study explores the anthropocentric basis of the South African legal system and the resulting failure of our legal system to protect the environment. As a result, this study examines the concept of Earth Jurisprudence as an alternative to the aforementioned traditional anthropocentric legal system. Earth Jurisprudence is a legal philosophy which proposes that rights be extended to other species to ensure the protection of nature.

Through the study of available literature on the subject, this research explores the core principles of Earth Jurisprudence and identifies key case studies where Earth Jurisprudence has been incorporated in legislation, and the catalysts which led to the implementation of an Earth Jurisprudence approach in the abovementioned contexts. By analysing the above data, this research makes a number of recommendations as to how this approach can be incorporated into a South African context, including a cross-cutting limitation clause which could potentially limit the friction between rights for nature and human rights. Finally, the study explores the capacity for legislation to shape social pro-environmental behaviour, and determines that the law is a tool which can be utilised for the purposes of positive social engineering.

Opsomming

Menigte Suid Afrikaanse spesies en habitate word bedreig deur verskeie menslike aktiwiteite insluitend die onwettige stropery van spesies soos renoster, wat die voortbestaan van die spesies bedreig. Hierdie studie ondersoek die antroposentriese basis van die Suid Afrikaanse regs sisteem en die daaropvolgende mislukking van ons regs sisteem om die omgewing te beskerm. As 'n gevolg, ondersoek hierdie studie die konsep van Aards Regspraak as 'n alternatief tot die voorgenoemde tradisionele antroposentriese regs sisteem. Aards Regspraak is 'n regs filosofie wat voorstel dat regte uitgebrei word om ander spesies in te sluit en daardeur die beskerming van die natuur verseker.

Deur die studie van beskikbare literatuur oor die onderwerp, ondersoek hierdie navorsing die kern beginsels van Aards Regspraak en identifiseer sleutel gevalle studies waar Aards Regspraak inkorporeer is in die wetgewing, en die katalisators wat gelei tot die implementering van 'n Aards Regspraak benadering in die voorgemelde kontekste. Deur die bogenoemde data te analiseer, maak hierdie navorsing 'n aantal aanbevelings hoedat hierdie benadering inkorporeer kan word in 'n Suid Afrikaanse konteks, insluitende 'n kruis snydende beperkings klousule wat potensieel die wrywing tussen regte van die natuur en menseregte kan beperk. Laastens, ondersoek die studie die kapasiteit van wetgewing om sosiale pro-omgewings gedrag te vorm, en bepaal dat die wet 'n hulpmiddel is wat kan gebruik word vir die doel van positiewe sosiale ingenieurswese.

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“There is in all visible things an invisible fecundity, a dimmed light, a meek namelessness, a hidden wholeness. This mysterious unity and integrity is wisdom, the mother of us all, ‘natura naturans.’ There is in all things an inexhaustible sweetness and purity, a silence that is a fountain of action and joy. It rises up in wordless gentleness, and flows out to me from the unseen roots of all created being”

(Thomas Merton 1979)

Introduction

One of my earliest memories centres on a much younger version of me sitting at a watering hole in the Kruger National Park in complete silence, eating a sandwich prepared by my mother for breakfast and waiting for the first rays of sunlight to peek over the dry branches of the savannah trees. The excitement of waiting for the animals to start creeping out of the shadows to have a drink of water overcame any sleepiness that may have remained within me. Elephants, impalas and various other animals visited the watering hole over the course of the next few hours and I sat in awe, soaking up the beauty of the scenery. In my child mind, I felt relief for each animal that had not become the meal of a predator the night before, never imagining that they faced greater threats than their natural predators, or that any person would want any of these majestic animals for any purpose other than to marvel at their natural beauty. As I grew older and visited this very spot every year for the following 20 years, I became more disillusioned as I learnt about the ivory trade, illegal poaching and the use of endangered species in traditional medicines, both locally and abroad.

Over the course of the last few years, I have been tempted to avoid reading any news regarding conservation issues in South Africa. The constant media updates describing the rapid loss of biodiversity left me with an enormous sadness and anger. A large part of this feeling is due to the fact that my children will not experience nature the way I did all those years ago. Already many species I admired during my childhood have since become critically endangered. Species worldwide are becoming extinct 1000 to 10000 times faster than they did before humans walked the planet (Pimm et al. 2014). Rhinos are slaughtered by poachers every day, but they are not the only species at risk. Pangolins might soon face extinction due to their popularity as components in traditional medicine, and vultures are also at risk as they are killed for their supposed clairvoyant powers and the unfortunate fact that they tend to give away the location of poachers. As the news of new rhino poaching reached an all-time high in 2013 I found myself considering the state of affairs frequently during my time studying towards a Postgraduate Diploma in Sustainable Development at the Sustainability Institute in Stellenbosch. My frustration built and I considered what strategies could be adopted to change the attitudes of people towards nature. I thought about the miraculous social changes we have managed to bring about in South Africa and globally in the past.

Drawing from my experience in studying and later practicing law, I realised that the aforementioned changes were brought about mostly through a change in legislation. I started considering the power of legislation as a tool for change. The starting point was considering the progression made in accepting and enforcing children's rights and the way in which children are viewed by society as a result of the change in legislation.

If children were hunted the way rhinos are due to a mistaken belief about the ability of their body parts to cure disease, there would be an inevitable global outcry and human rights legislation would be enforced. Why then, do we sit silently and do nothing as similarly innocent animals are slaughtered to extinction? The mere absurdity of the above example serves to highlight the very point that we appear to consider issues of welfare in humans and animals very differently, whether the animal or human in question is able to express emotion or not. A few minor adjustments in our environmental legislation would therefore be unlikely to bring about the level of change in attitude that is necessary. As a result of this realisation, I started exploring more drastic approaches in legal philosophy. I concluded that a change in our supreme piece of legislation, the Constitution, might be necessary.

The necessary distinction which needs to be made is whether the ethics we extend to the rest of the Earth community is based on rights or responsibilities. In other words, does another species have the right to legal protection or do we as humans have the legal responsibility to protect it? In terms of current legislation, we are already entrusted with the protection of nature. In fact, we have established governmental departments specifically for this purpose. The departments entrusted with environmental protection are the Department of Environmental Affairs and, to a lesser degree, the Department of Agriculture, Forestry and Fisheries. The establishment of these entities has proven ineffective at both national and regional level. Therefore, I was led to further consider an Earth Jurisprudence approach as a potential alternative, which would result in a rights based approach.

I had to consider whether an Earth Jurisprudence approach could be applied specifically to conservation legislation in South Africa. I also explored the concept of social engineering and found many positive examples to illustrate that the law could be a powerful tool as a catalyst in a social engineering process, which could, in turn,

result in a complete change of mind-set and behaviour in a large segment of the South African population. This thesis represents an exploration of the following research questions:

- 1) What legislation currently exists in the world which may contribute to an Earth Jurisprudence approach?
- 2) Would the incorporation of the Earth Jurisprudence approach in the South African legal framework improve the protection of endangered species?
- 3) How can an Earth Jurisprudence approach most effectively be incorporated into the laws that frame the legal protection of endangered species in South Africa?
- 4) What would be taken into account in changing South African legislation to incorporate Earth Jurisprudence?

1. Importance of the research

The rationale for this research is as follows: The current legislation dealing with environmental management is inefficient, as demonstrated by the ineffective protection of endangered species. To date, it seems that very little consideration has been given to the various ways in which an Earth Jurisprudence approach could be incorporated into South African law, specifically as regards changes to the Constitution and/or to NEMA (National Environmental Management Act). Furthermore, it appears that few people have considered the possible intersections between the implementation of an Earth Jurisprudence approach and human rights such as the right to freedom of belief and religion.

It is in these two areas that the proposed research will contribute to existing knowledge.

Many South Africans are frustrated at the rapidly declining population of animals such as rhinos. One only has to log onto social media sites to see the large volume of campaigns, discussions and organisations dedicated to this issue. This research is my own call to action. I realise that it may be too late to save our rhinos, or the many critically endangered species in South Africa, but I hope that we can learn from it and prevent a similar tragedy in future. The intended audience for this research includes

academics, environmental lawyers and policy-makers. Environmental organisations and advocacy groups may also find the results of the research relevant in establishing priority areas for their activities. There is a need for justification for alternative approaches when one considers the rapid rate at which certain species are being driven to extinction. The research hopes to draw attention to the underlying problem: the way we view our relationship to these creatures and the rest of the natural world. This research is intended to contribute to South African literature, and to provide a point of departure for other jurisdictions to consider similar approaches.

2. Research methodology

“All progress is born of inquiry. Doubt is often better than overconfidence, for it leads to inquiry, and inquiry leads to invention,” Hudson Maxim (1853–1927).

The term ‘methodology’ refers to the overall approaches and perspectives to the research process as a whole and is concerned with the following main issues (Collis & Hussey 2003):

- Why certain data was collected;
- What data was collected;
- Where the data was collected;
- How the data was collected; and,
- How the data was analysed.

This section will attempt to answer the above questions with regard to this research. Research is a structured enquiry that utilises acceptable scientific methodology to solve problems and create new knowledge that is generally applicable.

According to Dawson (2002), research:

- 1) Is undertaken within a framework of a set of philosophies (approaches);
- 2) Uses procedures, methods and techniques that have been tested for their validity and reliability; and
- 3) Is designed to be unbiased and objective.

2.1 Why certain data was collected and where it was collected

The starting point in this process was an attempt to discover the research design most suited to finding an answer to the aforementioned research questions (Parahoo 2006). My own tendency towards inner reflection and analysis as a problem solving method resulted in a gravitation towards a methodology primarily based on a process often described as a “desk review”. Preliminary interviews with members of the legal community revealed that most of these professionals had not been exposed to the concept of Earth Jurisprudence and that they could provide little guidance as a result.

In an effort to streamline a very philosophical concept which many find difficult to relate to (Earth Jurisprudence) with the rigor required in legal analysis, I realised that I would have to be very selective about the sources I utilised in completing the research. The unfamiliarity of most people with this topic led me to discuss it with only a few credible experts. The rest of the research was completed by locating, reading and analysing peer-reviewed journals, books and articles. The point of departure was the work of Thomas Berry and Cormac Cullinan, which provided an overview of the Earth Jurisprudence approach and its most important principles. This enabled the structuring for the chapter focusing on the Earth Jurisprudence approach.

The majority of literature on Earth Jurisprudence was extracted from books I had in my possession, for example *The Great Work* by Thomas Berry and *Wild Law* by Cormac Cullinan. The large volume of legal textbooks and journals that I purchased and used during my undergraduate studies provided me with a wealth of knowledge regarding the existing legal framework. I accessed the Stellenbosch library online resources and made use of the advanced search function to search international databases. The search was limited to peer-reviewed research to ensure that the bulk of the research referenced was credible and of a high standard.

Search terms used included:

- “Anthropocentric law South Africa”;
- “Earth Jurisprudence South Africa”;

- “Earth Jurisprudence”;
- “Anthropocentrism”;
- “Pachamama”;
- “Earth Jurisprudence South America”;
- “Legal failure to protect the environment”;
- “Human rights and environmental law”;
- “Law as a tool for social engineering”;
- “Environmental behaviour change”;
- “Section 24 South African Constitution”; and
- “Species extinction”.

The remainder of the data was accessed electronically by searching databases such as Hein Online and performing general searches on Google scholar. If these searches proved unsuccessful, I moved on to generic searches on Google. The results of a generic search would inevitably be quite varied, and the majority of my time in such an instance would be devoted to combing through the results critically to find credible sources which could be included in the body of research. I steered clear of vague search terms to ensure that the studies and articles were relevant to the research questions. This directed my study in the direction I wanted to take it, and also saved time in conducting the research. The themes for the research followed the structure of my chapter headings, whilst always keeping in mind the research questions outlined above.

2.2 How the data was collected

Robinson and Reed (1998, p.58) define a literature review as “a systematic search of published work to find out what is already known about the intended research project”. Research is an original contribution to the existing knowledge base (Kothari 2004). I discovered that little is written about my research topic, and the research therefore represents my interpretation and application of existing knowledge in many fields to this particular topic.

The research conducted for this study was conceptual as opposed to empirical. Conceptual research is related to an abstract idea, theory or philosophy. It is generally

used by philosophers and thinkers to develop new concepts or to reinterpret existing ones. On the other hand, empirical research relies on experience or observation alone, often without due regard for system and theory. It is databased research, coming up with conclusions which are capable of being verified by observation or experiment (ibid).

2.3 Data collection

The primary sources utilised to conduct this research is often described as secondary resources (Clarke 2005). This involves the study of research conducted by other researchers, which can be found in books, articles or journals (ibid). Primary sources would include interviews, works of art, etc. As explained above, the process I used and the basis of the research (legal, historical and philosophical) lent itself to the use of secondary over primary resources. Secondary analysis of qualitative data is the use of existing data to find answers to research questions that differ from the questions asked in the original research (Hinds et al. 1997). Authors have applied secondary analysis to data when they have wanted to: pursue interests distinct to those of the original analysis (ibid); perform additional analysis of an original dataset or additional analysis of a sub-set of the original dataset (Hinds et al. 1997; Heaton 1998); apply a new perspective or a new conceptual focus to the original research issues (Heaton 1998); describe the contemporary and historical attributes and behaviour of individuals, societies, groups or organisations (Corti et al. 1995); or to provide case material for teaching and methodological development (Corti and Thompson 1998).

Research by means of a literature review is useful to determine the scope of the research, importance of the research and whether the particular research has been conducted before. This prevents a replication of research. Bless (2000), gives specific reasons for the importance of a literature review:

- To sharpen and deepen the theoretical framework of the research;
- To familiarise the researcher with the latest developments in the area of the research topic;
- To identify gaps in knowledge and weaknesses in previous studies;
- To discover connections and contradictions in various topics;

- To identify what variables must be considered in the research; and
- To identify the advantages and disadvantages of the research methods of the previous researchers in order to improve upon these methods.

Leedy (1989) comments that a literature review is also useful in gaining a better understanding of the research problem, and that the more knowledgeable researcher is better able to analyse the problem.

Bourner (1996) explains that a literature review aims to:

- Identify gaps in the existing literatures;
- Avoid reinventing the wheel;
- Carry on from where others have already reached;
- Identify other people working in the same area;
- Increase breadth of knowledge in the subject area;
- Identify seminal works in a certain research area;
- Provide intellectual context of own work;
- Identify opposing views; and
- Identify methods relevant to the work.

2.4 Research paradigm

Broadly speaking, there are two research paradigms which can be followed, namely quantitative or qualitative (Creswell 2003). Quantitative (or empiricist) evidence is based on statistical evidence which can normally be analysed numerically.

Qualitative (or naturalistic) evidence is more interpretative and will not result in numerical data which can be analysed (Clarke 2005). Creswell advises researchers to choose only one paradigm for their chosen study (2003). This particular research study is qualitative in nature. As the study is based in social science as opposed to natural science, I recognise that concepts are not precise and are based on personal interpretations.

2.5 Methods

Multi-methodological research is discouraged by many experts on the subject (Clarke 2005). One of the primary methods utilised to conduct the research for this thesis was legal historical research. According to du Plessis (2007), legal historical research amounts to a study of the development of material legal norms by also taking into account an analysis of the external influences to legal development such as economic, cultural, social and philosophical aspects. This method assists in establishing the pertinent developments in the legal field and to propose amendments to the legislative framework based on this analysis.

The following areas of legal history are pertinent in this research:

- The legal developments related to women's rights, children's rights, slavery and apartheid and the influential social factors which initiated these developments;
- The circumstances which prompted the process of drafting the Constitution and the South African environmental management legislation;
- Relevant case law to determine how the aforementioned legislation has been interpreted in various contexts; and
- The development of Earth Jurisprudence as a philosophy and where this philosophy has influenced law, including foreign and international law.

Another common research method utilised is a legal comparative research method. This entails a comparison of different legal systems. The comparison in this research is between South Africa's mixed legal system and the South American legal system, specifically focusing on the Constitution and case law of countries such as Ecuador which demonstrate an incorporation of the Earth Jurisprudence philosophy.

2.6 Data analyses

Le Compte and Schensul (1999) define data analysis as "the process a researcher uses to reduce data to a story and its interpretations." Due to the lack of information available on the topic, a comprehensive piece of research such as this was not possible without personal input. The literature was therefore not only analysed objectively, but also reviewed subjectively. As outlined above, analysis of the data took

place as I found and read the data. My analysis was then written shortly after this, to ensure that the information was fresh in my mind. A variation of analytical techniques were used, namely phenomenological analysis, which according to Merriam (1998, p.51) “includes an epochal approach, which involves laying out one’s assumptions about the subject of study, bracketing, imaginative variation (looking at the subject in various different ways), and first and second order knowledge.”

Constant comparative methods were used in the research to determine the relationships between ideas in different articles (ibid). Anthropological analysis was also utilised to compare the legal and cultural positions in different countries (ibid). Merriam describes research as a complex process moving back and forth between data and concepts and making use of both inductive and deductive reasoning. For this particular study, I had to draw a few inferences using inductive reasoning, especially in determining what an Earth Jurisprudence approach would look like in a South African context, and what potential barriers might be faced if such an approach was ever implemented. According to Mouton (2001), the research has reached a point of saturation when no new themes or viewpoints emerge, when there is a repetition of authors or references or when secondary reviews confirm what has been found so far. I found a number of instances where all three of these challenges emerged towards the end of the process, and this satisfied me that the research had been sufficiently exhaustive.

3. Research limitations

Though this research was undertaken with the utmost care and level of effort possible, I acknowledge that there are limitations to this research. The research is by no means exhaustive in every aspect, and is intended to serve as a starting point of a conversation to form part of a very important ongoing discussion around our attitudes towards the rest of the species on Earth and how this underlying attitude may lead to a failure in the systems we rely on for justice. The information presented herein largely represents my own reflections around the topic. My own limitations include flawed human reasoning, inevitable subjectivity, and time constraints to explore a topic which

has many complexities. As Tucker (2008) rightly points out, no legislative process will fix the environmental crisis we face, but it is a start.

4. Thesis outline

Chapter 1: The existing anthropocentric approach. The chapter provides an overview of South African environmental legislation. This chapter also describes the anthropocentric model, its foundation and its shortcomings. It will further argue that the anthropocentrism of the current framework is deeply rooted in the Constitution – both as regards the manner in which section 24 (the environmental right) is framed, and the manner in which the freedom of belief and religion features when the protection of nonhuman species is at stake. Furthermore, the implications of the anthropocentric orientation as evident in legislation such as NEMA are considered.

Chapter 2: The Earth Jurisprudence approach as an alternative. The origin and nature of the Earth Jurisprudence approach are discussed in detail in this chapter. This approach is contrasted with the anthropocentric approach. Similar ecocentric approaches are also discussed, and criticisms of the Earth Jurisprudence movement are outlined.

Chapter 3: International approaches. The Constitution of Ecuador is the focus of this chapter. Other examples of an Earth Jurisprudence approach in legislation, such as in Bolivia and New Zealand are also outlined. The cultural basis for the adoption of an Earth Jurisprudence approach in Ecuador and other jurisdictions are discussed and compared to the South African context.

Chapter 4: Legislative strategies. This chapter critically examines options for implementing an Earth Jurisprudence approach at the level of a statement of fundamental rights, as has been followed in the Ecuadorian Constitution. The technical and substantive difficulties of this approach are explored. This chapter also highlights the potential clashes between the right to religion, belief and opinion contained in the existing Bill of Rights and the interaction of these rights with rights contained in a hypothetical Bill of Species. This chapter also examines whether it is possible to gear

the existing legislative framework towards an Earth Jurisprudence approach through legislative changes that fall short of amending the Constitution. Specific changes to the preamble and chapter 2 of the NEMA are considered.

Chapter 5: The law as a tool for social engineering. The concept of social engineering and different forms of social engineering is explored, and positive examples highlighted.

Chapter 6: Conclusion and recommendations.

5. Key concepts and abbreviations

CITES: Convention on the International Trade of Endangered Species 1973

NEMBA: National Environmental Management: Biodiversity Act 10 of 2004

NEMA: National Environmental Management Act 107 of 1998

TOPS: Threatened or Protected Species Regulations

Anthropocentrism: The idea that humans are placed above and are more important than other animals and nature.

Social engineering: The manipulation of the social position and function of individuals in order to manage change in a society.

Muti/Muthi: Medicine used by traditional communities normally given to them by traditional healers. This medicine may contain herbs, animal parts and, at times, human tissues.

Chapter 1: The Existing Anthropocentric Approach

1.1 Introduction

This chapter aims to highlight the anthropocentric approach which underlies current legislation. In this chapter I will explore the anthropocentric roots of international treaties which influence our legislation, and the evident impact on South African legislation, starting at a Constitutional level and filtering down to NEMA, NEMBA and case law. This chapter also highlights ways in which the anthropocentric approach in environmental legislation has directly led to the inadequate protection of biodiversity, especially endangered species, and serves to explain why an exploration of alternative legal approaches such as Earth Jurisprudence is necessary.

Anthropocentrism was once described by Albert Einstein as “an optical delusion of human consciousness” (Burdon 2011, p.1). His assertion was probably correct, especially if one considers that we could not survive and flourish as a species without the rich resources provided to us by the rest of the Earth community. However, if the human species were to become extinct, the remaining life on Earth would very likely thrive. The rapid depletion of natural resources has led to the suggestion by some experts that this unfortunate scenario may become the reality we must come to terms with sooner rather than later (Koons 2008; Bostrom 2013; Friant & Langmore 2015).

South Africa is one of the most biodiverse countries in the world, but it is also home to a variety of endangered species. In fact, South Africa is the third most biologically diverse country in the world (Wynberg 2002). The *Red Data Book of Mammals of South Africa* indicates that 57 species in South Africa are endangered. These animals are essential components to our rich natural heritage which should be shared with future generations, but many are being driven to extinction by unsustainable human activities. An example which is familiar to most South Africans is that of rhino poaching. Many South Africans are very passionate about rhino conservation and blame the exponential increase in poaching on the failure of the existing conservation legislation.

The scale of this poaching crisis has reached epic proportions (Figure 1.1), to the point that South Africa's White and Black Rhino populations are threatened with a likely extinction. Although the number of arrests linked to this poaching has increased (Figure 1.2), it is by no means enough to curtail this poaching pressure as the risk of being caught is outweighed by the huge commercial value of rhino horn on the illicit international market.

In March 2013, rhino poaching was elevated to a national priority crime. "We see it as a war and will fight it as such," Minister of Water and Environmental Affairs, Edna Molewa, stated in a media briefing (Munusamy 2013). Despite the fact that government appears to be taking a serious stance against rhino poaching in the country, we are still losing more rhinos and other endangered species every day.

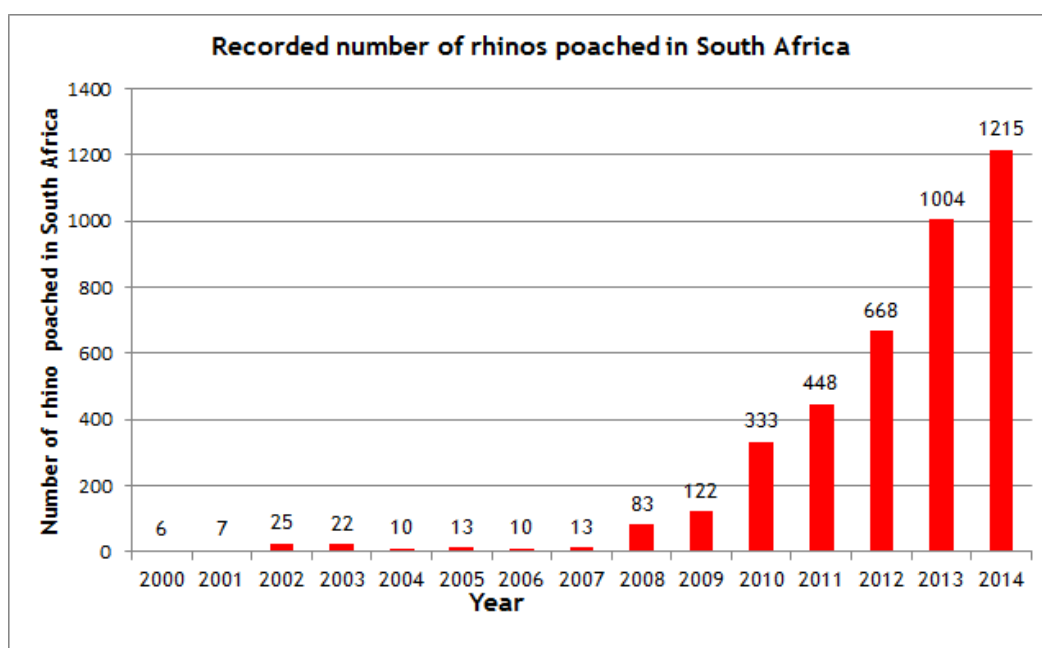


Figure 1.1: Rhino poaching statistics (Department of Environmental Affairs, 2015)

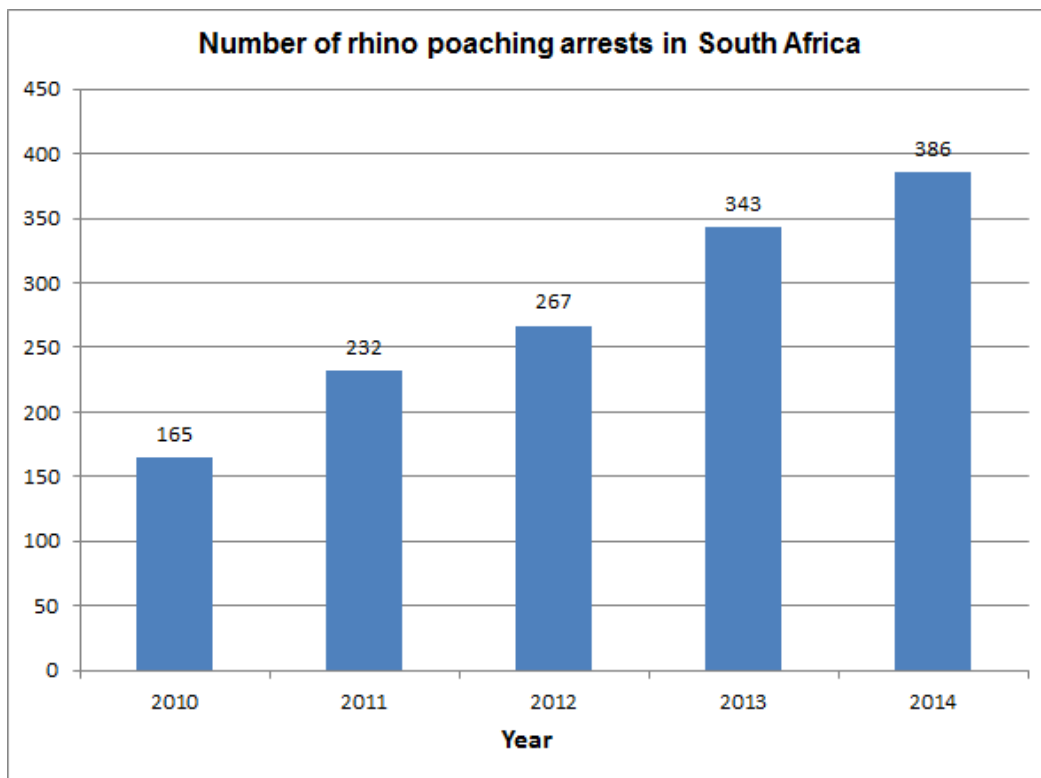


Figure 1.2: Rhino poaching arrests (Department of Environmental Affairs, 2015)

The National Environmental Management: Biodiversity Act 10 of 2004 contains a variety of definitions that pertain to the concept of some species being 'endangered'. These include: 'critically endangered species'; 'endangered species'; 'protected species'; and 'vulnerable species' and, in addition, further clarifying definitions of 'species' and 'indigenous species'. Common to all these definitions is the idea of species who face some form of risk of extinction and/or which are of such high conservation value or national importance that they require protection. For purposes of this research, the use of the term 'endangered species' should be interpreted as encompassing all these definitions.

Since 1994 an extensive and impressive array of legislation has been adopted to protect endangered species. The legislation primarily governing the protection of the endangered species within South Africa is the National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA) and the Threatened or Protected Species (TOPS) regulations, but provincial legislation also regulates this to a large extent and this provincial legislation may well vary from province to province. This in itself is highly problematic and therefore difficult to enforce nationally.

The Constitution allocates various environmental functions to the three spheres of government, which operate in distinctive and interrelated ways. Competencies granted to the national sphere of government include management of water, forest and marine resources. Areas where the national and provincial legislatures have concurrent competencies include environmental management and nature conservation (Wynberg 2002). Each provincial legislature will therefore be permitted to regulate conservation issues in its own legislation, provided that this legislation is not in conflict with NEMBA or the Constitution.

The NEMBA protects endangered species by providing for the Minister of the Environment to publish a list of endangered, vulnerable or protected species in the *Government Gazette*, and to review these lists every five years. The lists of endangered species which require protection are contained in the TOPS regulations. The Act then provides that certain activities in relation to a listed threatened or protected species are 'restricted' and require a permit (NEMBA, section 57[1]).

The lists of critically endangered, endangered, vulnerable and protected species were published in GNR 150 – 1 of 23 February 2007 and amended on 14 December 2007. A new list was published on 31 March 2015, and this amplifies the definition of "restricted activity" as defined by NEMBA.

A 'restricted activity' as per the definition section in NEMBA includes:

- Hunting, catching, capturing or killing any living specimen of a listed threatened or protected species by any means, method or device whatsoever, including searching, pursuing, driving, lying in wait, luring, alluring, discharging a missile or injuring with intent to hunt, catch, capture or kill any such specimen;
- Gathering, collecting or plucking any specimen of a listed threatened or protected species;
- Picking parts of, or cutting, chopping off, uprooting, damaging or destroying, any specimen of a listed threatened or protected species;
- Importing into the Republic, including introducing from the sea, any specimen of a listed threatened or protected species;

- Exporting from the Republic, including re-exporting from the Republic, any specimen of a listed threatened or protected species;
- Having in possession or exercising physical control over any specimen of a listed threatened or protected species;
- Growing, breeding or in any other way propagating any specimen of a listed threatened or protected species, or causing it to multiply;
- Conveying, moving or otherwise translocating any specimen of a listed threatened or protected species;
- Selling or otherwise trading in, buying, receiving, giving, donating or accepting as a gift, or in any way acquiring or disposing of any specimen of a listed threatened or protected species; or
- Any other prescribed activity which involves a specimen of a listed threatened or protected species (Kidd 2011).

The NEMBA, and its orientation to the protection of endangered species, is framed by both the National Environmental Management Act 107 of 1998 (NEMA) and, more broadly, the right to environment entrenched in section 24 of the Constitution (Scholtz 2005).

There are, however, a variety of well-known problems associated with the effectiveness of the existing regulatory system, and this affects the protection of endangered species negatively. These include the confusion and inconsistency that result from having overlapping provincial and national frameworks (Kotze 2009), lack of effective law enforcement (Craigie et al. 2009), inadequate criminal sanctions (Feris 2006) and lack of awareness of environmental regulations (ibid). The deeper problem, however, which the thesis wishes to highlight, is the underlying reliance upon an anthropocentric approach to environmental management. This approach inevitably situates non-human species as legal objects and connotes that such species exist only for human benefit.

Endangered species are often used for extractive purposes, for example hunting, or in indirect ways such as ecotourism. This benefit to humans is evident in the laws that frame the NEMBA. The preamble to NEMA, for instance, provides that “environmental management must place people and their needs at the forefront of its concern, and

serve their physical, psychological, developmental, cultural and social interests equitably." This is inspired by the position internationally. For example, the Rio Declaration on Environment and Development (1992) provides that "human beings are at the centre of concerns for sustainable development." The nomenclature used clearly proposes a system in which human needs are placed at the centre of all legislation, even legislation dealing with environmental issues. The most important regional instrument which also provides guidance to South African legislation and is important to mention is the African Charter on Human and People's Rights (1981), which provides that "*people*" have a right to a general satisfactory environment favourable to their development.

Starting in the 1960s, a number of international declarations have recognised the interconnected nature between environmental protection and the protection of human rights. In 1968 the UN General Assembly passed a resolution (UNGA Resolution 2398) in recognition of the fact that there is a relationship of the enjoyment of human rights and the quality of the environment (Bosselmann 2001). In 1972 the aforementioned position was followed by the Stockholm Declaration, which stated that "both aspects of man's environment, the natural and the man-made, are essential to his wellbeing and to the enjoyment of basic rights – even the right to life itself", (Bosselmann 2001, p.8) and that "man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and wellbeing..." (p.8).

Recently, the Hague Declaration stated that "[t]he right to life is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge of all States throughout the world" (ibid, p.8). In 1990 the UN General Assembly stated that "all individuals are entitled to live in an environment adequate for their health and well-being" (ibid p.8). The United Nations Commission on Human Rights then adopted a resolution in 1990, entitled 'Human Rights and the Environment', which reaffirmed the relationship between conservation of the environment and the protection of human rights (ibid, p.8).

An anthropocentric approach similarly underlies the right to environment in the South African Constitution. Our Constitution provides that "everyone has the right to an

environment that is not harmful to their health or wellbeing and to have the environment protected through reasonable legislative measures.’ The focus here clearly falls on people and their rights, as opposed to placing humans on an equal footing with non-human species. This thesis highlights in chapters below that this position makes it unlikely that this right in the Constitution could be used to protect non-human species where their protection clashes with human interests. This is illustrated in the following hypothetical example: South Africa is home to nine species of endangered vultures. These birds are often poached for use in traditional medicine. If there was an attempt to challenge this practice constitutionally, based on the right to the environment, the counter argument would inevitably arise that the right to freedom of belief in traditional medical practises has been infringed. A case which illustrates the importance placed on the right to freedom of belief is *Prince v President (2002)*¹, where the use of marijuana was permitted despite its classification as an illegal substance, when it was alleged that the prohibition thereof infringed on the appellant’s right to freedom of religion and belief.

Moreover, where the use of non-human species in cultural practices has been challenged, human interests have been protected by the right of freedom of religion, belief and opinion. This occurred recently in a case² heard in the KwaZulu-Natal High Court in which a group of animal activists attempted to interdict the ritual slaughter of a bull in accordance with Zulu cultural and religious beliefs. In this particular case, the applicants attempted to interdict the slaughtering of a bull or any animal at an annual traditional festival. According to the Applicant, the bull is killed by a group of approximately forty men using their bare hands. The bulls’ eyes, genitals and tongue are ripped out whilst it is still alive, and sand or mud is thereafter forced down its throat in an apparent attempt to suffocate it while it is trampled, kicked and beaten to death. The bull dies after being subjected to such treatment for approximately forty minutes. The Applicants pointed out that South Africa is a signatory to the Terrestrial Animal

¹ *Prince v President of the Law Society of the Cape of Good Hope (CCT36/00)* [2002] ZACC 1; 2002 (2) SA 794;

² *Smit NO and Others v King Goodwill Zwelithini Kabhekuzulu and Others (10237/2009)* [2009] ZAKZPHC 75 (4 December 2009).

Health Code of the World Organisation for Animal Health and South Africa is bound by the provisions of this Code. Chapter 7.5 of the Code applies to the slaughter of animals and Article 7.5.1(1) provides that all animals slaughtered outside slaughter houses (abattoirs) should be managed to ensure that their slaughter is carried out without causing undue stress to the animals. The Applicant's version of the events leading up to the death of the bull was unfortunately dismissed as hearsay and a suggestion by the judge to have the events filmed in order to determine whether the slaughter takes place in the way described was refused by the Respondents.

The Respondents argued that the ritual was an extremely important part of the Zulu culture and religious beliefs, because without the ritual the young men would not be properly purified, and the powers would not pass to the king. They therefore contended that the prejudice suffered by the Respondents and by the Zulu Nation in general was much greater than any prejudice suffered by the Applicant. Van der Reyden stated that to tell the Zulu people not to slaughter a bull at the festival would be tantamount to telling Catholics not to take communion. He also went on to add that "common sense dictates and having regard to the history of the Zulu Nation, especially that of the pre and colonial eras, granting an interdict to stop the killing of the bull and ordering the Minister of Police to ensure that effect is to given to the interdict might just be the proverbial match under the powder keg." It is clear from this case that judges are hesitant to interfere with the right to freedom of religion even in a situation where damage is inflicted upon another species, or where our obligations in terms of international treaties are not complied with.

This case potentially illustrates the reluctance of our courts to limit the right to freedom of religion and beliefs (and for that matter, other human rights) where these conflict with the need to protect non-human species – albeit only for the benefit of present and future generations and not for the sake of the species' own survival.

1.2 The foundation of anthropocentrism

The concept of anthropocentrism in relation to the prevailing attitudes towards nature can best be explained with reference to environmental ethics. There are three common

approaches to environmental ethics (Merchant 1990). An ego-centric ethic is rooted in the belief that what's good for the individual is good for society. This approach is generally characterised by capitalism and a religious ethic of human dominion over nature. The extraction of natural resources to serve human interests is a good example of this approach (ibid). A homocentric ethic is based on the belief that policies should reflect what is best for the greatest number of people and that people should protect nature for the benefit of the human race. This is historically associated with government regulation of the private sector (ibid). An eco-centric ethic is based on the assignment of intrinsic value to nature (ibid).

Anthropocentrism dictates that anything, found in nature or made by man, has value only if it serves human interests (McShane 2007). If we compare this concept to the three aforementioned approaches to environmental ethics, an ego-centric approach to environmental ethics is comparable to the concept of anthropocentrism.

Bosselmann (2001, p.24) states as follows: "The anthropocentric limitations of our value system are ethical ones. However, what makes them so dangerous, literally life threatening, is that they are also forming our legal norms. The law cements the view that only humans have intrinsic value and the environment just instrumental value. This necessarily leads to the superiority of human rights over any moral concerns for the environment."

When an anthropocentric approach is adopted, humans can determine the scale of value of nature by determining the level of contribution to the furthering of a person's interests, and thus a natural entity will have more value in the form that best suits the interests of man (MacKinnon 2007). Diamonds, for example, are of little economic value as far as human interests are concerned when unearthed, but when mined, polished and cut, these pieces of carbon have great financial value and are a sought after status symbol. Similarly, a rhino horn is not valuable to humans unless it can be cut off and sold.

Anthropocentrism reflects the dominant attitude regarding the relationship between people and nature. Does the Earth belong to us or do we belong to the Earth? Immanuel Kant, one of the most influential philosophers in history, asserted that

animals are “mere means” or “instruments” which can be used for human purposes (Korsgaard 2012). This attitude has prevailed and is reflected in our legal system as described above, with specific reference to the bull slaughter case.

Peter Kahn (1997) conducted interviews with a group of children of varying ages to track their eco-centric and anthropocentric moral responses to the 1989 Exxon Mobil oil spill. Kahn found that even though both eco-centric and anthropocentric reasoning increased with age, anthropocentric reasoning continued to be used with higher frequency than eco-centric reasoning (Kortenkamp & Moore 2001).

Anthropocentrism can be described as the dominant social paradigm (DSP). Milbrath (1984, p.7) defined DSP as "... the values, metaphysical beliefs, institutions, habits, etc. that collectively provide social lenses through which individuals and groups interpret their social world". This affects not only the way individuals perceive their own actions, but also their perceptions regarding institutionally derived concepts such as justice, progress and the law.

Perceptions, however, are fluid and can rapidly change when additional information or a different perspective is offered. Every person can relate to this in their daily lives as their perceptions may change, for example, about particular people as time progresses, or their feelings towards a character in a book when new information is presented about the character.

The anthropocentric approach can be traced back to the works of Aristotle, who wrote that plants existed to provide food for animals and humans, and animals existed to provide food and aid to humans (Workman-Davies 2010). Thus, in Aristotle’s view, nature exists purely for the purpose of serving human needs. This opinion that we are somehow separated from nature or elevated above it has arguably led to the most irrational destruction of the environment by humans (ibid). Aristotle’s views were echoed by many after him. Marx, for example, argued that the Earth is not the product of labour and has no value, and that therefore it would be important to put production ahead of environmental controls (Elster 1985; Benton 1993).

Many supporters of an anthropocentric approach to environmental ethics argue that an anthropocentric approach and a non-anthropocentric approach will bear the same policy results (McShane 2007). According to this view, the problem is that human interests have been defined too narrowly and in a short-sighted manner. If all human interests were considered in a broader sense, which included the interests of future generations, the justification would exist to protect the environment (ibid). This view, however, does not seem to account for a situation where the interests of humans would clash with the preservation of the environment in a legal situation.

Critics of an eco-centric approach to environmental law have put forward the argument that anthropocentrism is unavoidable in determining the interests of a non-human species, as the appointed (human) guardian of such a species would use their own values to determine the interests of the said species or ecosystems (Scholtz 2005; Kirchhoffer 2012). It has also been argued that the recognition of the need to protect the environment and the incorporation of international and national policies to achieve this is indicative of a deviation from pure anthropocentrism to a softer anthropocentrism which is suitable for the protection of endangered species and the environment (Nickel 1993; Rolston 1993; Bowman & Redgwell 1996; Scholtz 2005). This approach is comparable to a homocentric environmental ethic.

Shelton (1991) states that a compromise is possible, where existing human rights are complementary in a legal system which protects biodiversity on a larger scale, taking into account intrinsic value of non-human species. Bosselmann (2001), however, contends that whilst the softer anthropocentric approaches may result in an improvement in environmental protection in the short term, a more effective long term approach would be to develop all human rights in a manner which embraces and integrates the concepts of interconnectedness and the intrinsic value of nature.

It could be argued that anthropocentrism is not a problematic frame of reference in itself (Nickel 1993) and should simply be expanded to consider the 'rare herb' theory as posed by Alastair Gunn (1980). According to the aforementioned theory the removal of any natural entity is not permissible because it removes the opportunity for the entity to be used in a beneficial manner. If this theory is applied, the destruction of an endangered species should be prohibited as the species might provide a cure for

an illness such as cancer. There is, however, an empirical problem with the above argument; how does one calculate the benefits and harms of two alternative policies of environmental preservation on one hand and social development on the other (Katz & Oechsli 1993)?

We have implemented international and national legislative frameworks and treaties to attempt to conserve the environment, with very little success. In our arrogance, we have ostensibly failed to acknowledge that we do not have enough knowledge of the complex and intricate biological systems around us and the interactions of those systems to effectively decide how these systems should be regulated and to what extent (Ash 2007; Ruhl et al. cited in Pardy 2008). No person or organisation possesses the knowledge of the biology of millions of species and their interactions with other species to the degree that he/she would be able to draft a comprehensive strategy to maintain the delicate balance of the aforementioned interactions.

This is part of the reason why between 18 000 and 73 000 species become extinct every year as a direct result of human activity (Ash 2007). Our rate of consumption as humanity continues to outstrip biospheric capacity (Boudouris 2005; Cullinan 2010; Higgins et al. 2013; Cantrill & Oravec 2015). It is pointed out that even if the knowledge to draft a strategy such as the one described above exists, the universal political will required to enact and enforce it is completely unachievable in practice (Ash 2007). Humans presumably see little value in allocating large amounts of monetary resources to the preservation of species which would not result in the provision of resources for human consumption (Katz & Oechsli 1993; Pardy 2008). Kim and Bosselmann (2014) suggest that environmental laws should have an overarching objective to preserve the Earth's ecological integrity, by using any planetary boundaries as non-negotiable preconditions for human development.

Even within countries, national legislation fails to deal adequately with the protection of endangered species. The example which has been highlighted and warrants further mention is that of the rampant poaching of species such as rhinos in South Africa. Until intrinsic value is given to every inhabitant on Earth, the destruction of the environment will continue (Wapner and Matthew 2009).

1.3 Evidence of anthropocentrism in law and in the South African legal system

1.3.1 Anthropocentrism in international and foreign law

In certain other countries, it seems to have been recognised to a greater degree that our perceived separation from nature is a fundamental cause of the current environmental concerns facing us. Evidence of this view will be discussed in chapter 3 below.

It can be said that by embracing the concept of sustainable development in our legal system, we have taken further steps towards tacitly accepting anthropocentrism. Sustainable development is an anthropocentric concept (Dias 2002; Scholtz 2005). As Tucker (2008) points out, sustainable development is defined too narrowly and unfortunately relates primarily to economic gains. As Constanza, Daly and Bartholomew put it,

Sustainability is a relationship between dynamic human economic systems and larger dynamic, but normally slower-changing ecological systems, in which (a) human life can continue indefinitely, (b) human individuals can flourish, and (c) human cultures can develop; but in which effects of human activities remain within bounds, so as not to destroy the diversity, complexity, and function of the ecological life support system.

(Costanza et al. 1991, p.8)

The first reference to sustainable development in any legal context was made in the *Gabcikovo* case³ where it was defined as the right to development which is limited by the need to protect the environment (cited in Brand & Heyns 2005).

Law is a social creation, based upon the existence of a social contract to protect rights (Paz-Fuchs 2011). Philip Allot (2002, p.298) states, “law cannot be better than society’s idea of itself.” As a result, it is no surprise that many aspects of our law reflect an anthropocentric view of nature (Burdon 2010). To begin with, theories of law in

³ Gabcikovo-Nagumaros Project (Hung. v. Slov.), 1997 I.C.J. 7 (Sept. 25)

western Jurisprudence are predominately anthropocentric despite variations. Nicole Graham (2003, p.15) states:

Legal theory and theories about the law are concerned with relations between individuals, between communities, between states and between these elementary groupings themselves. Rarely do modern Western philosophies of law explicitly theorise relations between humans and land ... the separation and hierarchical ordering of the human and non-human worlds constitutes the primary assumption from which most Western legal theory begins.

Nowhere is this concept more prevalent than in property law. Theorist Eric T. Freyfogle (1995, p.49) notes: "When lawyers refer to the physical world, to this field and that forest and the next door city lot, they think and talk in terms of property and ownership. To the legal mind, the physical world is something that can be owned."

While this is a commonly accepted reality in western society, it appears to be a deeply cultural perspective. Faithkeeper of the turtle clan among the Onondaga people in New York, USA, Chief Oren Lyons illustrates this point when commenting on the disposition of his nation:

The idea of land tenure and ownership were brought here. We didn't think that you could buy and sell land. In fact, the ideas of buying and selling were concepts we didn't have. We laughed when they told us they wanted to buy land. And we said, well, how do you buy land? You might as well buy air, or buy water. But we don't laugh anymore, because that is precisely what has happened.

(Burdon 2014, p.17)

It has been argued that the property status of animals is the major facilitator of continued animal exploitation (Wright 2012).

The gravitation of law towards an anthropocentric approach can appear puzzling when one considers that such an approach seems to be questioned by various experts in

the fields of both science and philosophy. Progressions in fields such as quantum physics appear to point to the interconnected nature of everything in the universe, and that any action taken by human beings will have an effect on the world around us. Capra states that we suffer an illusion that we are “isolated egos in this world” (1983, p.29). Complexity theory, or the new thinking in complexity theory is derived from the Latin word *complexus* which means “that which is interwoven” (Morin 2001 as cited in Jörg 2011). Human beings should not be considered as isolated individuals but as radically interwoven with their social environment (Jörg 2011). According to Norberg and Cumming (2013), a linear perspective in natural systems, where each species exists and each manipulation occurs in isolation, is directly responsible for the failure of the management of ecosystems such as fisheries. This builds on the work of Levin (1998) who described ecosystems as examples of complex, adaptive systems.

1.3.2 Anthropocentrism in South African law

In South Africa, the anthropocentric approach in our existing legislative framework stems from the tone set by the supreme law of South Africa, the Constitution.

The right to the environment as contained in our Constitution may appear to be for the benefit of protecting the environment, but in fact it is a human right and exists for the purpose of furthering the interests of humans (Kotze 2003; Scholtz 2005). For this to be clear, the inclusion of this clause must be considered in light of South Africa’s past. The apartheid government were essentially concerned with the facilitation of resource allocation to the white communities, and exploiting these resources (Kotze 2007). The apartheid ideology was essentially concerned with furthering the racially motivated ideals of a minority in the country, which resulted in poor spatial and economic planning and a lack of state response to environmental degradation (ibid). When considered against this background it is not surprising, then, that the environmental right came about with a principal motive to address the social and political injustices of the previous regime (ibid). The very limited way in which the right was worded in the Constitution is arguably evidence of the number of political trade-offs which occurred during the negotiation process (Kotze 2007; Hughes 2014). In the early 1990s, conservation was viewed with suspicion by most South Africans, who believed that the

apartheid government was more concerned with the protection of wildlife than poverty alleviation (Wynberg 2002).

Kotze notes that the wording of section 24 makes it apparent that there could be a potential conflict between the notion of sustainable development and conservation (2003).

The anthropocentric wording of section 24 has resulted in a lack of specified environmental protection measures which could have been included (Kotze 2007). The inclusion of the word “everyone” refers only to humans and indicates that human interests are of primary importance. The reason for protecting the environment, therefore, is that the environment has instrumental value to humans, as opposed to intrinsic value.

Given the injustices of the past, the government went to great lengths to attempt to restore justice, including environmental justice. Section 9 of the Constitution defines environmental justice as: “... about social transformation directed towards meeting human needs and enhancing the quality of life...” This is clearly worded in an anthropocentric manner, as nature in this context exists only to meet human needs.

In this research it has already been argued that the South African environmental legal regulatory framework is very anthropocentric in approach. A recent report by the Gaia Institute, for instance, examined whether there is evidence of Earth Jurisprudence in existing law by assessing and comparing the laws of various countries across the world. The report found that both the South African Constitution and the NEMA were anthropocentric in approach. Of the latter it was stated that “the notion of the environment as an aspect of ... heritage is recognised but only from an anthropocentric perspective” (Warren et al. 2009, p.25). It is also stated that “the Act is essentially anthropocentric and its interest in the Earth is only as a resource which serves humans” (p.25).

Likewise, in a recent newspaper article⁴, Janice Golding has argued that section 24 of the Constitution is limp, as it fails to set out how humans should interact with the environment. Janice Golding is an independent consultant and commentator with a doctorate in environmental change from Oxford University. She argues that by placing the obligation to promote conservation on the State, it effectively gives the State the right to sanction environmental destruction, as long as it is still fit for human wellbeing. This does not take into account the wellbeing of any other species. It also fails to encourage the ordinary man on the street from taking an active role in protecting the environment because the government is the regulator, and because the jargon is too vague for such a person to fully understand what his/her role is in protecting the environment. Despite the fact that an ordinary person would have the required *locus standi* (capacity to sue) to enforce this right, Section 24 does not give easy credence to laws that grant people the right to sue on behalf of nature. It removes any incentive for people to bring the state to book when it fails in its duty (Golding 2010).

The anthropocentric approach spills over from the Constitution to other legislation dealing with the environment. The NEMA states that “environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged people” (Agyeman et al 2003, p.192). Scholtz argues that the NEMA is phrased in a manner that implies that the health and well-being of people will be the main aim of the administration and implementation of the act (2005).

It may be argued that the inclusion of a right to the environment acts as an additional safety net where even failure in conventional environmental legislation would not hinder the protection of the environment, as a disadvantaged party would be able to have recourse to the Constitutional Court. However, in practice this has provided no remedies to protect species such as rhinos which do not have an immediate benefit for humans. If such species is to be protected by law, it is clear that the traditional anthropocentric approach falls short and that a different approach is urgently required.

⁴ <http://mg.co.za/article/2010-04-13-how-green-is-our-constitution>

1.4 Conclusion

Chapter 1 has successfully illustrated the anthropocentric basis on which the current South African legal system has been created by highlighting examples of anthropocentric wording in legislation and outcomes in case law. This chapter has also highlighted the associated inadequacies of the anthropocentric approach to environmental legislation. The following chapter will contrast the anthropocentric approach with Earth Jurisprudence as an alternative approach and explore how the implementation of Earth Jurisprudence in South African legislation could potentially improve the protection of the environment in South Africa, thereby answering the following research question: *Would the incorporation of the Earth Jurisprudence approach in the South African legal framework improve the protection of endangered species?*

Chapter 2: The Earth Jurisprudence Approach as an Alternative

“As long as I live, I'll hear waterfalls and birds and winds sing. I'll interpret the rocks, learn the language of flood, storm, and the avalanche. I'll acquaint myself with the glaciers and wild gardens, and get as near the heart of the world as I can.” John Muir (1911)

2.1 Introduction to the Earth Jurisprudence approach

This chapter will explore the concept of Earth Jurisprudence, including its origins and how it differs from approaches such as anthropocentrism. The chapter also highlights how Earth Jurisprudence may lead to better protection of endangered species by providing recognition that nature has intrinsic value.

Mike Bell (cited in Schillmoller & Pelizzon 2013, p.4) states that the search for an Earth Jurisprudence is “much like setting out on a journey in unfamiliar territory without an adequate map”.

The idea of moving beyond the aforementioned anthropocentric approach to improve the treatment of animals, including endangered species, is not a new concept. Aldo Leopold, perhaps the best known forerunner for environmental ethics, wrote about this concept in his 1949 essay “the Land Ethic”. Proponents of this approach are of the view that nature should be protected not because it is of value to humans, but because it has intrinsic value (Kortenkamp & Moore 2001). Intrinsic value suggests that nature has value whether it is useful to humans or not (Murray, 2015). Anthropocentrism, on the other hand, can limit the claims we can make about what we should care about and what we should not. McShane (2007, p.175-176) draws the following comparison:

Suppose that I claim to love my friend, but I also claim that she only has value to the extent that she serves my interests. If she didn't serve my interests, I claim, she would have absolutely no value whatsoever. If I said this, you might well wonder whether I was being serious when I claimed to love her. Would it help my case if I told you a long and complex story about all of the ways in which she serves my interests? I could explain that she brings joy to my life, that she inspires me to be a better person, that she allows me to see the world in new ways, and that her friendship is essential to having my life go the way I had always hoped it would go. Still, the story I am telling is an entirely self-centred one, and that is precisely the problem. The love involved in friendship is another-centred emotion. To love something in this way is in part to see it as having value that goes beyond what it can do for you. Certainly it does serve our interests to participate in loving relationships. But to love a friend is in part to deny that her value is just a matter of her serving your interests.... If to love something is to think of it as having a kind of value that doesn't depend on us and our interests, then according to anthropocentrism, to love the natural world is to make a mistake about its value.

So even if anthropocentrism doesn't change what we think it makes sense to do in the world, it might well change how we think it makes sense to feel about the world. In particular, if I am right that the central claim of anthropocentrism is incompatible with the attitudes of love, respect and awe, then insofar as anthropocentrism is true, we are making a kind of mistake when we love the land, respect nature, are in awe of the vastness of the universe, or take other attitudes that are incompatible with thinking that their object's only value is in serving our interests. On the other hand, if these attitudes are appropriate, then we have good reason to worry about the adequacy of anthropocentrism.

People who embrace an eco-centric environmental ethic have been arguing in favour of the intrinsic value of nature for many decades. This has been an argument primarily outside of the legal sphere.

For example, the so-called “welfare” approach assigns “freedoms” to animals as opposed to rights (Wright 2012). These freedoms include:

- 1) Freedom from hunger and thirst;
- 2) Freedom from discomfort;
- 3) Freedom from pain, injury or disease;
- 4) Freedom to express normal behaviour; and
- 5) Freedom from fear and distress.

However, freedoms are not enforceable legally and will therefore often be disregarded.

In the late 1970s, Peter Singer suggested that animals have the right to equal consideration. Singer argued that this would prevent many cases of animal abuse. This idea was however more rooted in moral than legal and as such was never incorporated into any legal system of the time (Wright 2012).

Dias (2002) argues that there are two primary schools of thought when it comes to the exploration of a new environmental ethic. The first is a holistic approach whereby man is considered part of an Earth community as opposed to conqueror of the Earth. The second approach is individualistic in nature and proposes the assignment of rights to individuals of a species. However, the problem that may arise is that it would become very difficult, if not impossible, to draft individual rights for every species on Earth. Similarly, it is difficult to enforce a concept of a holistic Earth community in law. What may be required is a hybrid of these two approaches, in that general rights applicable to individual species can be utilised to enforce the notion that humans represent only a part of a greater community of species inhabiting the Earth.

2.2 The origins of Earth Jurisprudence

The original proposition that rights could be extended to other members of this greater community was formulated as a thought experiment in a university classroom. Christopher Stone, a law professor at the University of Southern California,

hypothesised over 30 years ago that legal rights could potentially be extended to trees and other living and non-living beings on Earth (Stone 1972).

Stone considered the progression of human rights and came to the conclusion that rights for nature was not as far-fetched as it may seem. Stone makes reference to the work of Aldo Leopold, who drew an analogy between attitudes towards nature and the attitude of Ulysses' towards his slave girls. Leopold pointed out that both were considered "property". Furthermore, Stone elaborates on the changing idea of what is considered property by describing the development of children's rights. The concept of children as right-less was prevalent in many communities until recently. We know something of the status of children in Native American communities through the documented instances of infanticide within these communities (Udel 2001).

Similarly, in the time of the Roman Empire (where our legal system originated) children were considered the property of their father, who had the power of life or death over them, though this power was primarily exercised to dispose of infants the father had decided not to rear for whatever reason (Evans-Grubbs 2014). Children were not granted full constitutional rights in the United States of America until the 1970s when the *In re Gault* case⁵ was heard, with the result that basic constitutional protection was extended to juvenile defendants (Stone 1972).

Certain races were previously considered inferior and hence legally discriminated against in many countries, including South Africa and the United States. The United States Supreme Court in the *Dred Scott* case stated that Black people were "a subordinate and inferior class of beings, who had been subjugated by the dominant race...⁶" Similarly, the highest court in California described Chinese people as "a race of people whom nature has marked as inferior, and who are incapable of progress or intellectual development beyond whom and ourselves nature has placed an impassable difference."⁷ These views have thankfully changed dramatically in recent years, partly as a result of social engineering, a process which will be discussed in more detail in Chapter 5 of this research.

⁵ *In re Gault*, 387 U.S. 1 (1967),

⁶ *Dred Scott v. Sandford* 60 U.S. 393 (1857)

⁷ *The People v Hall* 1854

The aforementioned examples illustrate the extreme changes which have taken place in the legal system and in the views of those in the legal profession and the views of the general public. However, similar developments in the field of environmental law have not gained momentum. Part of the problem, as discussed above, is the anthropocentric viewpoint from which legislation has been drafted and interpreted. Bell (2003, p.70) elaborates as follows: “trying to use a human Jurisprudence system to recognize and protect the rights of other species is a bit like sending the fox to guard the chickens.”

A possible alternative may be found in the philosophy of Earth Jurisprudence, a legal philosophy based on the concept that the planet and all the species inhabiting it should be afforded rights, by virtue of the fact that these individual species represent components of a greater community (Berry 2002; Bell 2003; Wright 2013). According to Shiva (2005, p.1): “Earth Democracy connects the particular to the universal, the diverse to the common, and the local to the global.”

This philosophy is very far removed from any of our traditional ideas and ways of thinking as far as our legal system is concerned. However, the basis of the philosophy would likely appeal to many who are concerned about conservation and protecting the environment. Proponents of the philosophy suggest that the failure of our legal system lies in the fact that it operates according to the incorrect assumption that humans and their rights exist outside of natural boundaries (Wright 2013). Mason (cited in Warren, et al. 2009, p.49) states as follows: “Earth Jurisprudence is not simply a matter of conferring rights on nature by some act of human generosity. It is a means of giving legal recognition to nature’s inherent worth by recognising existing facts, namely that the elements of the natural world have an intrinsic right to be what they are whether human law recognises it or not.”

Thomas Berry⁸ is widely considered to be the founder of Earth Jurisprudence as a legal philosophy, which was first hypothesised by him in 1996. Earth Jurisprudence is based on the concept that we form only a small part of a community of beings on Earth and that the wellbeing of each individual is dependent on the wellbeing of the Earth as a whole (Kortenkamp & Moore 2001). Berry therefore believed that human laws could function more effectively if we drew inspiration from the Earth as a source, as opposed to the sources that are currently in use, more specifically human values and perceptions of justice. Human laws should therefore be subject to the laws of nature, and not the other way around. If this approach is followed, it will give legal recognition to the fact that our relationship with nature is mutual instead of one-sided (Wright 2013). Berry once stated that if nature was given a voice, humans would be voted off the planet because of our failure to care for the rest of the beings on the Earth (Jordan 2007).

The Earth Jurisprudence theory started out as one that was purely philosophical, but since then it has evolved and has been further developed by Cormac Cullinan, a South African attorney and writer of “Wild Law” and the Gaia Institute, among others. It has evolved into a set of concrete principles which can be applied to alter existing legislation in a way that would, according to proponents, ultimately assist us in reversing the damage we have done and preserving the environment, an environment which includes human life (Koons 2008).

2.2.1 Principles of Earth Jurisprudence

According to Thomas Berry there are a number of core principles of Earth Jurisprudence (Berry 2006). The following salient core principles will form the subject matter of my detailed analysis and application (ibid):

⁸ An ecotheologian who was famous for proposing that a deeper understanding of the universe around us would be essential to our functioning effectively as human beings. Author of groundbreaking books such as *The Great Work: Our Way into the Future* (1999), *The Dream of the Earth* (1988) and *Befriending the Earth* (with Thomas Clarke, 1991).

Earth is a communion of subjects not a collection of objects. This is the most essential aspect of the way humans traditionally think which will have to change if we are to live in harmony with the environment and cease our destructive behaviours. These results can only be achieved if we change our perceptions of our connection to other species. The mind-set of new generations will have to change in order for humans to begin to see ourselves as part of a larger system. To consider all other living things as subjects and not as objects would require a drastic movement away from the aforementioned anthropocentric way of thinking and move towards a more “eco-centric” environmental ethic, influencing our view of the world around us. This is without a doubt the most challenging Earth Jurisprudence principle for humans to adopt.

Earth is primary and the human is derivative. Thus human law should be derived from Earth law, not the other way around. As previously stated, one of the key characteristics of our existing legal framework is that it is based on an anthropocentric view. It therefore draws on the needs and desires of humans without first considering the consequences for the environment. Promoters of Earth Jurisprudence, on the other hand, advocate an approach where human laws are subject to a set of “greater” laws, or natural laws. Adoption of an Earth Jurisprudence approach into legislation would provide the necessary legal recognition of the reciprocal relationship between humans and nature.

2.2.2 The Gaia Hypothesis

We are more likely to flourish if we regulate ourselves as part of the whole Earth community. The legal system should therefore, foster humans acting as part of the whole. This line of thought originated in the 1960s when James Lovelock formulated the Gaia hypothesis. Stated simply, Lovelock hypothesised that he had discovered a living being bigger, more ancient, and more complex than anything familiar to us in our daily lives. That being, called Gaia, is the Earth. All the life forms on the planet are components of Gaia. Lovelock (1979, p.19) stated that

The name of the living planet, Gaia, is not a synonym for the biosphere- that part of the Earth where living things are seen normally to exist. Still

less is Gaia the same as the biota, which is simply the collection of all individual living organisms. The biota and the biosphere taken together form a part but not all of Gaia. Just as the shell is part of the snail, so the rocks, the air, and the oceans are part of Gaia. Gaia, as we shall see, has existed since the very origins of life, and will continue to exist in the future as long as life persists. Gaia, as a total planetary being, has properties that are not necessarily discernible by just knowing individual species or populations of organisms living together... Specifically, the Gaia hypothesis states that the temperature, oxidation, state, acidity, and certain aspects of the rocks and waters are kept constant, and that this homeostasis is maintained by active feedback processes operated automatically and unconsciously by the biota.

He also goes on to explain his theory to a layman by saying that,

You may find it hard to swallow the notion that anything as large and apparently inanimate as the Earth is alive. Surely, you may say, the Earth is almost wholly rock, and nearly all incandescent with heat. The difficulty can be lessened if you let the image of a giant redwood tree enter your mind. The tree undoubtedly is alive, yet 99% of it is dead. The great tree is an ancient spire of dead wood, made of lignin and cellulose by the ancestors of the thin layer of living cells which constitute its bark. How like the Earth, and more so when we realize that many of the atoms of the rocks far down into the magma were once part of the ancestral life of which we all have come.

(Lovelock 1988)

Lovelock points out that Gaia, being ancient and resourceful enough to have carried out a number of successive changes of the planet in spite of asteroid collisions and other setbacks, is herself probably not endangered by the relatively momentary actions of environmental degradation of the human species, as it befouls and cripples the bio-dynamics of its environment. Rather, the danger is to the human race, not only from our own actions, but also by Gaia's reaction to them (ibid).

2.2.3 Rights for nature

The concept of non-human rights can be confusing to the majority of people. The most common question appears to be what these rights would look like. The Gaia Institute proposes that every living thing should be granted at least the following three rights: to exist, to habitat, and to fulfil their purpose for existence. One could apply these three rights to an endangered species. The right to exist has two elements: Firstly, it can be compared loosely to the human right to life contained in the Constitution. Secondly, the species therefore has the right not to be driven to extinction by any means, or to have its existence threatened by any human action.

The right to habitat directly interpreted means that any action which would threaten or cause the destruction of the habitat of the endangered species would be against its right to habitat.

The right to fulfil their purpose for existence can be interpreted in a number of different ways. It can be better understood when consideration is given to the fact that all animal species form part of a greater eco-system. Once it is removed from an eco-system, it no longer fulfils its natural purpose of maintaining the essential balance within its eco-system.

The Declaration on the Rights of Mother Earth (2008) identifies the following rights of nature: “inter alia the right to life and to exist; the right to be respected; the right to regenerate its bio-capacity and to continue its vital cycles and processes free from human disruptions; and the right to maintain its identity and integrity as a distinct, self-regulating and interrelated being.” Animals are not afforded different rights in the Earth Jurisprudence literature, instead, all natural subjects have the same basic rights.

The notion that animals have rights may be alarming to most, as we may all ultimately be aware of the fact that we do not treat animals the way we would like to be treated in terms of the human rights afforded to us. This may make the prospect of adopting animal rights into existing legislation less appealing to the majority of humans. For this reason, it may be prudent to suggest that rights for animals be limited. In Earth Jurisprudence, the legitimacy of killing an animal depends on the circumstances, and Earth Jurisprudence itself varies based on the ecological characteristics of the locality, local customs, and the relationship which exists between nature and the person killing

the animal. Some writers contrast an indigenous hunter killing a zebra for food in accordance with traditional rituals and customs, with a hunter that is out to make some extra cash (Lee 2006).

Of course, there will be many difficult cases between these two extremes. The rights of one member of the Earth community will be weighed up against the rights of other members to determine what is just in a given situation. According to Wright (2012, p.18),

Animal Rights would protect all animals, domestic or wild, whereas Earth Jurisprudence makes some distinction between these two categories. In addition, the absolute nature of the rights accorded to animals in the abolitionist approach means that protection is complete and impassable, whereas an Earth Jurisprudence approach to rights offers far more protection than the present welfare paradigm, but does not guarantee the life and liberty of animals.

Rights are a respected and well-developed element of our justice system, and the extension of rights in the past has resulted in many positive changes, both legally and culturally. For example, the abolition of slavery resulted in the wider acceptance of concepts we take for granted today, such as human rights and equality. Similarly, in the early 1990s the dismantling of the apartheid system in South Africa was primarily achieved through agreements and the change of our legal system to include comprehensive rights, as contained in our Constitution (Pribean and van Marle 2003). Many people were opposed to the ideas of abolishing slavery, just as many who benefited from the apartheid regime were opposed to the end thereof (Sonneborn 2010). However, more than a decade later in South Africa, few people can comprehend that such an unjust and inhumane system was permitted in the first place. This will be discussed in further detail in Chapter 5.

Margil (2011) convincingly argues that the situation we face with the extensive environmental degradation and lack of legal protection for the environment is similar to the history of slavery in the United States of America, where even in the northern parts of the country where slavery was technically prohibited, much of the economy

was reliant on the continuation of slavery. This led to a reluctance from the government to put a stop to slavery once and for all. Similarly, our reliance on natural resources results in a reluctance to extend further legal protection to nature.

The above situations are clear examples of how the amendment of law can be a catalyst to change general perceptions and cultural behaviour. We can therefore see the law as more than a mere reflection of a current social understanding. It can also be used as a tool to alter the status quo. It is not unreasonable, then, to hope that if the law was changed to reflect a greater respect for the natural world, which respect will be contained in rights for all members of the Earth community, the preconditioned attitudes which we have held to date will change as a result of the aforementioned legal transformation. If we felt as strongly about the slaughtering of our endangered species as we do about the abuse of women or children, it would simply not be tolerated on any level, as it would represent a violation of well-established rights.

The most significant work within this particular paradigm in a South African context is undoubtedly Cormac Cullinan's *Wild Law* (2003). In this important work, Cullinan identifies the core characteristics of Earth Jurisprudence and stresses the importance of such a concept in our society, as we are primarily responsible for the environmental degradation that is currently taking place. Thus Cullinan proposes that a legal framework which encourages a view that humans are part of a larger network of beings will ultimately be beneficial, not only to non-human species but to humans too. Cullinan recognises the existence of an "Earth community" including all non-human subjects and not just human beings. This is a good starting point, but *Wild Law* does not suggest practical changes to South African law or any other country, nor does it propose how legislation could be altered or extended to facilitate implementation. It lacks concrete examples of how the ultimate goal can be achieved. It further does not consider the practical implications of challenges such as the interaction between human rights and "wild law".

Lee (2006) criticises Cullinan for his utopian vision, suggesting that we do not need Earth Jurisprudence as it would require an unachievable level of self-regulation which cannot be differentiated as an issue of legality as opposed to morality. Lee proposes that property law enforces a more balanced distribution of natural resources instead of reliance on self-restraint which will result in unsustainable utilisation such as the

overgrazing of a piece of land. Lee states as follows: “Even if the danger of overgrazing is realised, foregoing the additional animal is not a rational choice for any single individual since the remaining herders will still overgraze, locking into a system of increasing the herd without limit” (2006, p.10)

Of course, there are examples of situations where communities have, without the concept of property laws, self-regulated in the manner advocated by Cullinan. The most notable example is that of indigenous communities. An example highlighted by Boulot and Sungaila (2012) as that of the Aboriginal tribes in Australia.

The most vexed issue with which Earth Jurisprudence theorists have probably had to grapple, is that of the implementation of an Earth Jurisprudence approach. It is one matter to sketch the high-sounding ideals of this philosophy and approach – it is quite another to think through the extensive legal reforms that a consistent application of the underlying philosophy and approach would require. There is some disagreement within the Earth Jurisprudence community as to whether this is a viable possibility. A recent report issued by the Gaia Institute, for instance, referred to Cullinans’ *Wild Law* with some criticism (Warren et al. 2009). Although the authors shared Cullinan’s view that something needed to be done, they feared that no government would accept the Earth Jurisprudence messages advocated in his book, a view which has also been aired by other critics (Warren et al. 2009; Benton, cited in Higgins et al. 2013). When describing the South African legal system, the authors of the aforementioned report stated the following:

There is no real sense of an Earth community existing as a living entity in its own right. The Constitution is redeemed slightly by its recognition of traditional communities... There could be an opening in the existing Constitution for arguing Earth Jurisprudence principles under the umbrella of ‘public interest’ but the possibilities are limited by the obvious view that ‘persons’ empowered to approach the court are human or juridical persons and do not include non-human members of the Earth community (although they do include non-human members of the human community such as corporations and associations)... There is no requirement to establish or maintain mutually enhancing relations

and there is no mechanism for adapting to changing conditions or challenges... There is no recognition of any of the key Earth rights.

(Warren et al. 2009 p.24)

Warren et al., (2009) acknowledges that Earth Jurisprudence is a drastic change from the approaches we are familiar with, and further express their opinion that we are a long way off from appreciating this perspective. In most legal systems, including South Africa, environmental protection is justified for the purpose of achieving sustainability and not to achieve living harmoniously with nature. The authors point out that despite the extensive legal provisions promoting public participation, these provisions are rarely utilised due to a lack of legal culture that acknowledges a reciprocal interconnected relationship between the environment and humans, or the need to give legal recognition thereto. The research presented in this study also draws a strong parallel between the legal recognition of nature and culture, indicating that if a culture is anthropocentric, the laws made will also be anthropocentric. The point is raised that in the authors' opinion, humans cannot actually make laws for trees or rivers, as they are already governed by their own natural laws. As such, any attempt to make laws for the environment will have an anthropocentric element. As a result, any laws that will be successful in incorporating Earth Jurisprudence in the context of a culture that views the relationship between human beings and nature as mutually beneficial. The following suggestions are presented:

- “Use and interpret laws such as constitutions or general acts to establish Wild Law principles – that would make law making uniform and ensure that these principles were always taken into account when laws were made;
- Use and develop the arguments that enable existing provisions to give effect to Wild Law principles;
- Stop using the word ‘resource’ when we speak about nature – it implies that we value the Earth for its economic value only;
- Promote the enjoyment of nature – it should be the right of every human to have access to nature – the more we know about nature the more we will value it for itself– schools can have a large role to play in developing this;

- The right to protect and respect the environment should be part of the right to life which most constitutions recognise, thus acknowledging the interdependency of human life and the rest of nature. This may be more palatable to governments than granting rights to all members of the Earth community;
- Support the call for a Universal Declaration of the Rights of Nature. Greater balance between humans and the other members of the Earth community can be achieved by granting rights to all members of the Earth community. Where there is a dispute someone will be able to represent those other members and a balance can be achieved on an individual basis in a court of law;
- Support the call for a Nature's Rights Act at a national level akin to the Human Rights Act in the UK;
- Educate judges, lawyers and environmental professionals about the need to promote the interests of nature, environmental challenges we face and ancient societies' relationship with the Earth and how to integrate these elements into the decisions they make in their professional capacity. They will then be better able to make a judgment when trying to balance interests and they may engage emotionally with the subject;
- Promote the use of intuition as a valuable resource – we are part of nature and have something embedded within us that may allow us to make the right choice; or
- Redefine public interest to include the interests of the other members of the Earth community” (Burdon, 2011, p.200-201).

When asked to demonstrate the practical viability of an Earth Jurisprudence approach, many advocates point to the Constitution of Ecuador which is said to articulate various 'rights of nature'. In September 2008 disillusionment with foreign multinationals displacing people and damaging the richness of Ecuador's biodiversity (which includes the Galapagos Islands) led to a successful vote to constitutionally enshrine nature-based rights. The Ecuadorian Constitution recognises that people are trustees of nature who are obliged to protect and preserve it. It also recognises that all living things and eco-systems have fundamental and inalienable rights to exist. The preamble states that 'We have decided to construct a new form of coexistent citizenship, in

diversity and in harmony with nature, to achieve the good life.’ This indicates the knowledge that a ‘good life’ cannot be possible if human beings do not co-exist in harmony with nature.

However, if Warren et al., (2009) are correct in their analysis, the same principles will not as easily be adopted in South Africa, as ecocentric elements of our culture as embodied in traditional knowledge has largely been suppressed by the infiltration of westernised ideals, whereas the Ecuadorian culture is very different in the sense that ecocentrism is embedded in a living culture. Friant and Langmore (2015, p.65) describe the indigenous Ecuadorian perception of the Earth as follows:

Nature is conceptualized as *pachamama*, (mother Earth), the source of all life, of which humans are an intrinsic part, thus placing people as equal inhabitants of the Earth, sharing the same limited yet plentiful environment. This symbiotic relationship with *pachamama*, leads towards the creation of a mode of life in harmony with the natural cycles of life and death.

This will be discussed in more detail Chapter 3 of this research.

Cullinan (2003) argues that killing other species may be justifiable in light of customary or religious beliefs. The problem with Cullinan’s analysis is that if traditional customs and rituals are respected and taken into account when considering legal reform to protect nature, the poaching of rhinos may be considered acceptable in light of the fact that they are killed so that their horns can be used in traditional medicines. This would make implementation in a South African context virtually impossible, given the emphasis already placed on upholding traditions and religion. Furthermore, it could be argued that the exploitation of natural resources forms part of Western culture and should therefore be respected.

However, this is not to say that animals can never be killed for any purpose. The starting point in determining rights for animals would be determining their natural purpose. Wright (2012, p.13), makes the following comment in relation to the rights of domesticated animals:

...their domesticated nature essentially means that it is now the function of these animals to provide the products that they have been bred for: domesticated animals would not be in existence but for human use and would serve no function if transferred to their original habitats, in contrast to their non-domesticated ancestors.

This approach is more likely to be followed in South Africa.

The dominant anthropocentric approach in South African legislation would suggest that it would be highly unlikely for South African law makers to draft laws which would prevent us from making use of domesticated animals for agricultural purposes.

Animals used for entertainment, however, might be a different story. For example, People for the Ethical Treatment for Animals (PETA) are currently bringing a case in a Federal Court in California, requesting that the court declare that five wild-caught orcas performing at SeaWorld are being held as slaves in violation of the 13th Amendment to the US Constitution. The 13th Amendment states that “neither slavery nor involuntary servitude... shall exist within the United States, or any place subject to their jurisdiction”. This is the first ever attempt to apply the 13th Amendment to nonhuman animals. Cullinan states that efforts to have animal rights recognized in US courts have largely failed, not because “the American judiciary is particularly insensitive to animals but because recognizing that animals should be treated the same way as humans goes against the grain of the whole legal system”.

This position is slowly changing, however. In April 2015, a court in New York, USA declared that two chimpanzees are “legal persons”.⁹ Even though this decision is ground-breaking in many ways, it would likely only be re-applied to species displaying numerous similarities to humans, and is thus still anthropocentric. This is elucidated more when one considers the anthropocentric nature of the term “legal person”.

Regan (2004) criticises Earth Jurisprudence for being based on environmental holism which upholds the protection of ecosystems at the expense of individual animals.

⁹ <http://www.nonhumanrightsproject.org/2015/04/20/judge-recognizes-two-chimpanzees-as-legal-persons-grants-them-writ-of-habeas-corpus/>

However, it is important to note that according to most proponents the rights of animals are not absolute in Earth Jurisprudence, just like human rights, their rights can be limited if it would serve the purposes of the greater Earth community (Wright, 2013).

Some critics may argue that the incorporation of an Earth Jurisprudence approach would result in the unfortunate situation that weeds are permitted to grow and cannot be removed, or that viruses may not be destroyed. This is why there should be strict limitations to the rights of nature, similar to the limitations imposed on human rights in the Bill of Rights. One of the cross-cutting limitations would be that one species may not threaten the existence of another species. This would prevent not only the senseless poaching of endangered animals, but also a situation where potentially life threatening viruses are permitted to spread and threaten human survival. It may also assist in controlling the spread of invasive species. This position will be discussed further below.

Another criticism levelled at the Earth Jurisprudence approach is that the non-human species upon which these rights are conferred are not able to exercise any associated obligations. Rolston (cited in Burdon 2011), notes that non-human species would not be able to recognise the rights of humans. Burdon (2011), dismisses this notion as absurd. Furthermore, rights have been conferred on unborn children who are undoubtedly unable to recognise the rights of people or fulfil any corresponding obligations. This can be seen in the case of the nasciturus fiction, which provides that an unborn child can inherit property¹⁰.

The concept of Earth Jurisprudence is clearly far removed from the prevailing anthropocentric characteristics within the South African legal system. This legal philosophy, however, is not novel and has evolved and become strengthened in many ways since the 1970s. Its progression has reached a point where such Jurisprudence can now be codified into practical and applicable legislation which is appropriate for a South African context. The sovereign nature of rights in the South African legal system is an indication of how powerful such an amendment could potentially be if rights were extended to nature, including endangered species, as advocated by Thomas Berry.

¹⁰ Christian League of South Africa v Rall 1981 (2) SA 821 (O)

The enforcement of the aforementioned rights would be akin to the enforcement of human rights in the Constitution, and would thus have more clout than the existing environmental legislation, with the potential for harsher accompanying penalties in the event of non-compliance. When one considers the immense progress made in South Africa through the adoption of rights-based legislation – including the abolishment of slavery, the introduction of rights for women and the obliteration of the apartheid regime- the adoption of rights for nature is the methodology which would appear to potentially have the greatest probability of success in South Africa if it is accepted that considerable change is necessary if the country's biodiversity is to be protected.

2.3 Conclusion

Chapter 2 has provided a broad overview of the development of the Earth Jurisprudence philosophy, both internationally and in a South African context, where it has become a key focus areas for influential legal professionals in the environmental law sector, such as Cormac Cullinan. This chapter also serves to contrast this approach with anthropocentrism, and highlights that Earth Jurisprudence might lead to more effective legislative environmental protection. Chapter 2 briefly introduced the first example of Earth Jurisprudence incorporated into law, which will be explored further (along with other key case studies) in Chapter 3.

Chapter 3: International Approaches

Chapter 2 provided an overview and the history of Earth Jurisprudence, and briefly introduced the Constitution of Ecuador as the first example of an Earth Jurisprudence approach incorporated into legislation. Chapter 3 will feature three primary case studies where an Earth Jurisprudence approach was incorporated into law. The Constitution of Ecuador will be the primary case study, serving as the only example of an Earth Jurisprudence approach incorporated into the Constitution (the supreme piece of legislation) of a country. This chapter will also explore the catalysts which led to the inclusion of Earth Jurisprudence in Ecuador, Bolivia and New Zealand in order to establish whether a similar approach could be followed in South Africa.

3.1 Perceptions of nature as influenced by culture

Anthropocentrism could be interpreted as a symptom of our culture, which encourages and prizes an obsession with individual accomplishments and future goals (Winborn 2014).

From the earliest times in human history Western cultures have embraced a microphase awareness of our place in the Earth system, yet we find ourselves now at a place where humans as a whole have a macrophase impact (Tucker & Grim 2007). Microphase refers to our individual survival, achievements, freedoms, and aspirations; macrophase refers to our place as a collective human community within the Earth system (ibid). The current African culture is primarily anthropocentric (Mbiti, 1994), as the Western cultures that have crept into and influences a great many aspects of life in South Africa (White 2010). Indigenous knowledge has become lost in many instances as migrant labourers move out of rural areas to explore opportunities within urban, often westernised, cities and towns in Africa (de Costa 2014; Demos 2015). However, many South American indigenous cultures, on the other hand, still embrace their indigenous culture, and so reject anthropocentrism and embrace the notion that humans can never be separated from nature, as a mutually beneficial relationship exists (Magallanes-Blanco 2015).

Andean cultures focus on the wellbeing of the community as opposed to individual accomplishment, and focus on living in the right relationship with nature (which they refer to as Pachamama, Mother Earth), which requires a person to live in the present and placing value on collective experiences in nature (Winborn 2014).

Indigenous cultures often provide the richest examples of cultures that live harmoniously with nature and, in most instances, place great value upon it. Ingold (2000) points out that unlike Western conservation practices where minimal interactions between humans and nature is advocated, indigenous cultures rely on participation and interaction with nature to achieve conservation objectives.

In his study of the Mbuti Pygmy tribe in the Ituri Forest in the Democratic Republic of Congo, Colin Turnbull observed that the community referred to the forest as “Father” and “Mother” because they recognised that, like a parent, the forest provides them with food, clothes, protection and even affection (cited in Ingold 2000).

In Native American cultures, deities such as mother Earth and father sky provided a link between humans and nature, and regulated the use and exploitation of nature (Armstrong & Botzler 1993). Similar relationships with nature can be found in the histories of Old World cultures such as those found in Egypt and Greece (ibid).

Miriam-Rose Ungunmerr-Baumann, an Aboriginal woman (cited in White 2010, p.12) states as follows: “We had no money. Nature was our bank. We looked after its capital and drew on its interest.”

Boys in the Aboriginal culture are taken on a journey through nature when they reach an age of appropriate maturity (Ingold, 2000), often referred to as the “walkabout”. They are escorted by an older brother or brother-in-law as they are taken to various locations around the country, each of which has a different significance, and they are told the story of each location and of how it was shaped during the Earth-forming process (ibid). Stories of ancestors roaming the Earth in the formative period known as “the Dreaming” bring these locations, whether it is a watering hole or a mountain, to life in the mind of the young Aboriginal boys, and bring a sense of respect for nature and its connection to the ancestors. In such a way, the boy gains a deeper level of

knowledge and understanding of nature and his connection thereto (ibid). It can be argued that the way we are taught to perceive and interpret the world around us is embedded in our culture and in our daily interactions with our environment.

The Western perception of conservation is that humans are responsible for the survival of wild species and areas, whereas for indigenous tribes, the perception is inverted (Ingold, 2000). Richard Nelson (1983, p.240), in describing the Koyukon tribe of Alaska, states as follows:

The proper role of humankind is to serve a dominant nature. The natural universe is nearly omnipotent, and only through acts of respect and propitiation is the well-being of humans ensured . . . In the Koyukon world, human existence depends on a morally based relationship with the overarching powers of nature. Humanity acts at the behest of the environment. The Koyukon must move *with* the forces of their surroundings, not attempting to control, master or fundamentally alter them. They do not confront nature, they yield to it.

According to Ingold (2000), different worldviews are specific constructions of one external reality. He argues that our perceptions of the environment are created by our active engagements with the environment. Macnaghten (2006) argues that many experts of social studies and history agree that perceptions of nature have always been shaped by history or culture and claims that even the environmental movement that arose in the late 1960s, 1970s and 1980s was driven by a cultural unease with technological modernity. One prominent example is *Silent Spring* by Rachel Carson (1962), a book that led to a fundamental change in policies regulating the use of pesticides and the banning of particularly harmful pesticides such as DDT (Lutts 1985; Maguire & Hardy 2009).

Globally, colonisation has a greater impact than the conquest of land or the expansion of economic power. It has resulted in the restructuring of many aspects of the lives of the indigenous populations, including cultural and spiritual, into a system which gives power to the colonisers (White 2010) or leads to embracing foreign belief systems that do not include nature or indigenous value systems.

3.2 Ecuador and other case studies

3.2.1 Ecuador

In late 2008 Ecuador's President Rafael Correa celebrated the ratification of the new Ecuadorian constitution as a historical moment (Whittemore 2011). The key factor setting the new constitution apart from others globally is the granting of inalienable rights to nature and the shift away from a purely anthropocentric approach (Suarez 2013; Whittemore 2011).

Ecuador is one of the smallest countries in South America, and has a population of over 12 million people (Lucero, 2001). Despite the natural beauty found in the Galapagos Islands and the large portion of Amazonian rainforest in the country, the Ecuadorian environment has been threatened by environmental degradation. Around 40 % of the population consists of native Indian people, who primarily lived in the Amazonian Forests but have been forced, in many instances, to abandon their traditional way of life and seek employment in the metropolitan areas (Joussemet 2008). This is mainly due to a subversion of their way of life due to developmental processes beyond their control, which amongst other things, have destroyed large areas of the forests they once called home (Bryant 1998; Muggah 2014; Whittemore, 2011). A large percentage of people in Ecuador are Quechua, the descendants of the Inca Empire (Ogburn 2007).

Ecuadorian constitutional principles are often cited when concrete examples of the adoption of rights for nature are requested. The constitution of Ecuador incorporates rights for nature as follows:

Chapter: Rights for Nature – Art. 1. Nature or Pachamama, where life is reproduced and exists, has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution. Every person, people, community or nationality, will be able to demand the recognition of rights for nature before public institutions. The application and interpretation of these rights will follow the related principles established in the Constitution.

Art. 2. Nature has the right to an integral restoration. This integral restoration is independent of the obligation of natural and juridical persons or the State to indemnify the people and the collectives that depend on the natural systems. In case of severe or permanent environmental impact, including that caused by the exploitation of non-renewable natural resources, the State will establish the most efficient mechanisms for restoration, and will adopt adequate measures to eliminate or mitigate the harmful environmental consequences.

Art. 3. The State will motivate natural and juridical persons as well as collectives to protect nature; it will promote respect towards all the elements that form an ecosystem.

Art. 4. The State will apply precaution and restriction measures in all the activities that can lead to the extinction of species, the destruction of the ecosystems or the permanent alteration of the natural cycles. The introduction of organisms and organic and inorganic material that can alter the national genetic heritage in a definitive way is prohibited.

Art. 5. The persons, people, communities and nationalities will have the right to benefit from the environment and from natural wealth that will allow wellbeing. The environmental services cannot be appropriated; their production, provision, use and exploitation, will be regulated by the State.

It is important to note that Ecuador has 8 different indigenous groups (Whittemore 2011). The advocacy efforts of these groups over the last 20 years have placed them among the strongest and most successful new social movements in Latin America (Jameson 2010; Bowen 2011). This movement is partially credited for the creation of the ground-breaking 2008 constitution, as the sections aimed at protecting the rights of nature were drafted by the indigenous groups, partly as a result of the widespread outrage caused by Chevron dumping millions of tons of toxic waste in the Amazon as emanating from their mining operations (Kimerling 2013). The proposed rights of nature were presented as a manifesto to the president before these sections were incorporated into the constitution (Jameson 2010).

However, a similar constitution may not be adopted in another country as easily (Daly 2012). It is important to identify the differences between countries such as Ecuador where an Earth Jurisprudence approach has been implemented and the cultural and legal landscape in South Africa, in order for us to implement realistic principles which are appropriate for our specific jurisdiction. Volkmann-Carlsen (2009, p.1) notes:

Adopting Ecuador's constitutional approach in many countries would require nothing short of a fundamental change in both the legal and cultural atmosphere. The prevailing view that nature is property is deeply rooted in the Abrahamic tradition of monotheistic faiths, which include Christianity, Islam, and Judaism. This tradition shaped an understanding of nature as a divine gift to be dominated for the benefit of humankind. This is not, however, the only way to conceptualize the natural world. Many indigenous cultures take a more eco-spiritual approach, positing nature as sacrosanct and viewing humans as members of a balanced, natural system. It's no fluke that the Andean Earth goddess Pachamama, or Mother Universe, figures into the new constitution. The indigenous concept of *sumak kawsay*, or harmonious/humane living, also appears. With 40 % of its population indigenous, Ecuador was almost certainly predisposed to becoming an early adopter of nature's rights on a constitutional scale.

Prior to the adoption of the 1998 Constitution in Ecuador, the rights of indigenous people were not very well protected (Becker 2011; Jameson 2010). The adoption of the new legislation in 1998 led to the recognition of Ecuador as a multi-ethnic country (Jameson 2010). However, the rights of the indigenous communities to their land or to have the environment protected were not enforced adequately despite the legislative changes (Becker 2011). This resulted in vast levels of destruction in the Amazon Basin, especially by major oil companies and mining operations (Bryant 1998; Kuecker 2007; Kimerling 2013; Whittemore 2011). The new 2008 Constitution promises to be a more effective instrument in protecting indigenous interests. This was largely due to the aforementioned influence of indigenous groups on the policy-making process (Becker 2011).

Whittemore (2011) argues that the new constitution will have to overcome many challenges before it is readily and successfully implemented in case law. President Correa, who proposed the Constitutional changes as a result of the indigenous influence, has a record of furthering financial and economic interests above environmental interests (Becker 2011; Whittemore, 2011). Furthermore, the economy of Ecuador is dependent largely on extractive industries that harm the environment (Kuecker 2007; Whittemore 2011), with nearly one-third of Ecuador's spending budget derived from petroleum projects (Whittemore 2011). In January 2009, President Correa opposed the language in the new legal amendments, including the right to water, by passing a new mining law that opened up the country to large-scale metal mining by foreign companies (ibid). The mining threatens indigenous water supplies and the "right to water" held by indigenous communities who cannot survive without clean water" (ibid). This resulted in the indigenous communities protesting and distancing themselves from Correa (Jameson 2010).

In addition, the Ecuadorian Constitutional Court carries with it a history of corruption which started in the nineteenth century (Whittemore 2011). Ecuador therefore currently has a very fragile legal structure. Whittemore (2011), also points out that the constitution is worded so vaguely that it is difficult to determine who would have the appropriate standing to enforce the rights of nature in court, and that a further problem is that the constitution provides no resolution should the new environmental rights come into conflict with equally-weighted human rights.

On March 30, 2011, the Provincial Court in Loja, Ecuador ruled in favour of the rights of nature in a case to prevent the pollution of the Vilcabamba River (Suarez 2013; Shelton 2015; Humphreys 2015). A road was being built through the mountains of southern Ecuador by the provincial government, who failed to perform an environmental impact assessment before construction commenced (Daly 2012; Suarez 2013; Humphreys 2015). The flow of the river was being altered by excavation materials being dumped in the river (Suarez 2013). The excavation materials narrowed the river and quadrupled its flow (Daly 2012; Schillmoller & Pelizzon 2013; Shelton 2015). This was also negatively affecting the nearby community living down the stream by creating severe soil erosion and flooding (ibid). The decision to rule in favour of the river was based primarily on the consideration of the rights of the community (Suarez

2013). The court stated as follows: “We cannot forget that injuries to Nature are “generational injuries” which are such that, in their magnitude have repercussions not only in the present generation but whose effects will also impact future generations”¹¹.

Therefore, even though this is a historic precedent and remains one of the only cases where Earth Jurisprudence has been tested and applied, the decision was still ultimately based on anthropocentric considerations. It would be interesting to see what the outcome of such a case would be had there not been any human concerns to consider. Though Ecuador is certainly a leader in the implementation of such an approach at the highest legal level, it still has a long way to go in demonstrating whether this approach can truly enforce the rights of nature in a situation void of any human interests. Both Daly (2012) and Suarez (2013) point out that the implementation of the ruling against the local government has been a long and difficult process.

3.2.2 Bolivia

On April 22, 2010 in Bolivia, the Universal Declaration of the Rights of Mother Earth was codified (Maloney 2015). This historic declaration provides for the protection of environmental rights. It states as follows:

Preamble

We, the peoples and nations of Earth: considering that we are all part of Mother Earth, an indivisible, living community of interrelated and interdependent beings with a common destiny; gratefully acknowledging that Mother Earth is the source of life, nourishment and learning and provides everything we need to live well; recognizing that the capitalist system and all forms of depredation, exploitation, abuse and contamination have caused great destruction, degradation and disruption of Mother Earth, putting life as we know it today at risk through phenomena such as climate change; convinced that in an interdependent living community it is not possible to recognize

¹¹ Wheeler c. Director de la Procuraduria General Del Estado de Loja

the rights of only human beings without causing an imbalance within Mother Earth; affirming that to guarantee human rights it is necessary to recognize and defend the rights of Mother Earth and all beings in her and that there are existing cultures, practices and laws that do so; conscious of the urgency of taking decisive, collective action to transform structures and systems that cause climate change and other threats to Mother Earth; proclaim this Universal Declaration of the Rights of Mother Earth, and call on the General Assembly of the United Nation to adopt it, as a common standard of achievement for all peoples and all nations of the world, and to the end that every individual and institution takes responsibility for promoting through teaching, education, and consciousness raising, respect for the rights recognized in this Declaration and ensure through prompt and progressive measures and mechanisms, national and international, their universal and effective recognition and observance among all peoples and States in the world.

Article 1. Mother Earth

- 1) Mother Earth is a living being.
- 2) Mother Earth is a unique, indivisible, self-regulating community of interrelated beings that sustains, contains and reproduces all beings.
- 3) Each being is defined by its relationships as an integral part of Mother Earth.
- 4) The inherent rights of Mother Earth are inalienable in that they arise from the same source as existence.
- 5) Mother Earth and all beings are entitled to all the inherent rights recognized in this Declaration without distinction of any kind, such as may be made between organic and inorganic beings, species, origin, use to human beings, or any other status.
- 6) Just as human beings have human rights, all other beings also have rights which are specific to their species or kind and appropriate for their role and function within the Universal Declaration of the Rights of Mother Earth April 22, 2010 communities within which they exist.

7) The rights of each being are limited by the rights of other beings and any conflict between their rights must be resolved in a way that maintains the integrity, balance and health of Mother Earth.

Article 2. Inherent Rights of Mother Earth

1) Mother Earth and all beings of which she is composed have the following inherent rights:

- a) the right to life and to exist;
- b) the right to be respected;
- c) the right to continue their vital cycles and processes free from human disruptions;
- d) the right to maintain its identity and integrity as a distinct, self-regulating and interrelated being;
- e) the right to water as a source of life;
- f) the right to clean air;
- g) the right to integral health;
- h) the right to be free from contamination, pollution and toxic or radioactive waste;
- i) the right to not have its genetic structure modified or disrupted in a manner that threatens its integrity or vital and healthy functioning;
- j) the right to full and prompt restoration the violation of the rights recognized in this Declaration caused by human activities;

2) Each being has the right to a place and to play its role in Mother Earth for her harmonious functioning.

3) Every being has the right to wellbeing and to live free from torture or cruel treatment by human beings.

Article 3. Obligations of human beings to Mother Earth

1) Every human being is responsible for respecting and living in harmony with Mother Earth.

2) Human beings, all States, and all public and private institutions must:
a) act in accordance with the rights and obligations recognized in this Declaration;

- b) recognize and promote the full implementation and enforcement of the rights and obligations recognized in this Declaration;
- c) promote and participate in learning, analysis, interpretation and communication about how to live in harmony with Mother Earth in accordance with this Declaration;
- d) ensure that the pursuit of human wellbeing contributes to the wellbeing of Mother Earth, now and in the future;
- e) establish and apply effective norms and laws for the defense, protection and conservation of the rights of Mother Earth;
- f) respect, protect, conserve and where necessary, restore the integrity, of the vital ecological cycles, processes and balances of Mother Earth;
- g) guarantee that the damages caused by human violations of the inherent rights recognized in this Declaration are rectified and that those responsible are held accountable for restoring the integrity and health of Mother Earth;
- h) empower human beings and institutions to defend the rights of Mother Earth and of all beings; Universal Declaration of the Rights of Mother Earth April 22, 2010
- i) establish precautionary and restrictive measures to prevent human activities from causing species extinction, the destruction of ecosystems or the disruption of ecological cycles;
- j) guarantee peace and eliminate nuclear, chemical and biological weapons;
- k) promote and support practices of respect for Mother Earth and all beings, in accordance with their own cultures, traditions and customs; and
- l) promote economic systems that are in harmony with Mother Earth and in accordance with the rights recognized in this Declaration.

Article 4. Definitions

- 1) The term “being” includes ecosystems, natural communities, species and all other natural entities which exist as part of Mother Earth.

2) Nothing in this Declaration restricts the recognition of other inherent rights of all beings or specified beings.”

In January 2014, the International Tribunal for the Rights of Nature was established to enforce the provisions of the Universal Declaration of the Rights of Mother Earth. The Tribunal heard its first 8 cases on 17 January 2014.¹²

3.2.3 New Zealand

Four years after the Ecuadorian Constitution came into force, the Whanganui River in New Zealand was granted rights similar to the rights of a juristic person after the longest legal battle in the history of New Zealand, initiated by an indigenous Maori tribe of the region in 1873. *“Ko au te awa, Ko te awa ko au - I am the river and the river is me”* is an expression which describes the deep spiritual relationship the Iwi peoples (Maori) hold with the Whanganui River. The Whanganui Iwi recognises the river as their ancestor and as a living being integral to their health and well-being (Hsiao 2012; Shelton 2015). This relationship is now recognised by law for the first time in New Zealand (Postel 2012; Shelton 2015). This was expressed in the following principles (Hsiao 2012, p.373):

- *“Te Awa Tupua mai i te Kahui Maunga ki Tangaroa - an integrated, indivisible view of Te Awa Tupua in both biophysical and metaphysical terms from the mountains to the sea;*
- *Ko au te awa, ko te awa ko au - the health and wellbeing of the Whanganui River is intrinsically interconnected with the health and wellbeing of the people;*
- *Te Mana o Te Awa - recognising, promoting and protecting the health and wellbeing of the River and its status as Te Awa Tupua; and*
- *Te Mana o Te Iwi - recognising and providing for the mana and relationship of the Whanganui Iwi in respect of the River.”*

One of the most critical points to note in the judgement delivered in the above case is that the riverbed was returned to the River itself, not to the Whanganui Iwi. This

¹² <http://www.Earthlaws.org.au/world-ethics-tribunal-for-the-rights-of-nature-and-mother-Earth/>

decision reflects a genuine intent to recognise the Whanganui River as an entity in and of itself with intrinsic value and associated rights (ibid).

3.2.4 Bolivia: Advocacy and indigenous rights

Bolivia, another South American country which depends greatly on extractive industries such as mining, also followed the example set by Ecuador in 2010 by drafting a Law of the Rights of Mother Earth (Pachamama), driven in part by the first indigenous president, Evo Morales (Walters 2011; Humphreys 2015). This legislation bestowed equal rights on all life systems (both eco-systems and human communities) which make up a living Earth (Gudynas 2011; Suarez 2013).

Bolivia, like Ecuador, is a country arguably in dire need of stricter laws protecting the environment. When Enron famously collapsed financially in 2001, the Rio San Miguel-Cuiabá gas pipeline, owned by Enron and Shell became notorious worldwide for the degradation of the last and most intact dry tropical forest in the world, the Chiquitano forest in Bolivia (Hindery 2004).

Mother Earth is defined in the legislation as "the dynamic living system formed by the indivisible community of all life systems and living beings whom are interrelated, interdependent, and complementary, which share a common destiny". The law grants the following seven rights to all of the systems of Mother Earth (Somma 2012):

- To life: It is the right to the maintenance of the integrity of life systems and natural processes which sustain them, as well as the capacities and conditions for their renewal;
- To the Diversity of Life: It is the right to the preservation of the differentiation and variety of the beings that comprise Mother Earth, without being genetically altered, nor artificially modified in their structure, in such a manner that threatens their existence, functioning and future potential;
- To water: It is the right of the preservation of the quality and composition of water to sustain life systems and their protection with regards to contamination, for renewal of the life of Mother Earth and all its components;

- To clean air: It is the right of the preservation of the quality and composition of air to sustain life systems and their protection with regards to contamination, for renewal of the life of Mother Earth and all its components;
- To equilibrium: It is the right to maintenance or restoration of the inter-relation, interdependence, ability to complement and functionality of the components of Mother Earth, in a balanced manner for the continuation of its cycles and the renewal of its vital processes;
- To restoration: It is the right to the effective and opportune restoration of life systems affected by direct or indirect human activities;
- To live free of contamination: It is the right for preservation of Mother Earth and any of its components with regards to toxic and radioactive waste generated by human activities (ibid).

The law was first drafted by a strong alliance of grassroots organisations in Bolivia representing the indigenous and agrarian populations, as well as traditional farming communities (Hindery 2013; Humphreys 2015). It is worthwhile to note that the Quechua indigenous communities in Bolivia are related to those in Ecuador, and therefore share similar fundamental beliefs about the relationship with nature (Borsdorf & Stadel 2015).

The new legislation should, in theory, give these communities a greater say over what happens to the environment around them. It remains to be seen, however, whether the extension of rights will put an end to activities such as the destruction of the Amazon rainforest by oil companies.

In the above examples where Earth Jurisprudence principles were incorporated into law, the common crucial factor for success has been the unrelenting efforts of the indigenous populations to have their relationship with the Earth around them recognised by law. This demonstrates that a small community of people, who understand that legal recognition of this relationship is vital to change, can motivate the incorporation of new legislation which could bring about new attitudes in the rest of society.

In both the examples of Ecuador and Bolivia, the organised indigenous movements advocated for a plurinational state, which implies a strengthening of marginalised communities (Jameson 2010; Fontana 2014). The *Pacto de Unidad* (Unity Pact), an umbrella organisation bringing together indigenous communities in Bolivia, defines plurinational states as a model of political organisation which provides for the decolonisation of nations and of people, which strengthens territorial autonomy (Fontana 2014). Hitzhusen and Tucker (2013) highlight the important role that indigenous religious and cultural communities have to play in protecting the environment. Similarly, Grim and Tucker (2014) argue that it is necessary to pay attention and engage with religious communities if we hope to sustain life on Earth.

3.3 The Case for Earth Jurisprudence in Africa

In contrast to the fundamental beliefs which are still part of a living culture in Ecuador and Bolivia, the currently dominant cultural beliefs in Africa are very different. Whatever fundamental beliefs existed/exist regarding the relationship between humans and the Earth, this has not been recognized by law and has faded in the process of colonisation with the imposition of Western ideals on indigenous communities (Du Toit 2005).

Indigenous tribes in Africa are a good example of truly sustainable living, where the focus is on human development over market economics, strong communities over consumerism and living in harmony with nature over exploitation of natural resources. Indigenous knowledge was often not recognized and was considered inferior by western colonial populations (ibid). Wangari Maathai described the transition she experienced as a child from a lifestyle which was sustainable and close to the Earth to a more consumer-driven lifestyle brought on by western influences during the colonization period in Kenya (Maathai, 2007).

In her Nobel Prize acceptance speech of 2004 she stated as follows:

I reflect on my childhood experience when I would visit a stream next to our home to fetch water for my mother. I would drink water straight

from the stream. Playing among the arrowroot leaves I tried in vain to pick up the strands of frogs' eggs, believing they were beads. But every time I put my little fingers under them they would break. Later, I saw thousands of tadpoles: black, energetic and wriggling through the clear water against the background of the brown Earth. This is the world I inherited from my parents. Today, over 50 years later, the stream has dried up, women walk long distances for water, which is not always clean, and children will never know what they have lost. The challenge is to restore the home of the tadpoles and give back to our children a world of beauty and wonder.

(Maathai 2007, p.2).

In the Southern African region, the situation is even more difficult to assess. There is much less knowledge about the land and environment in South African cultures. This is partly because the relationship of indigenous populations to the land, as it were, is relatively recent in world historical terms. While anatomically modern humans emerged somewhere in the southern African region long ago, current population date only to about 1200 years at a maximum, and there were very few people at that time (Klein 1992). We can't say firmly who they were, until even more recently. The balance of opinion is that black African people probably moved into what is now Limpopo around 1500 years ago, but not before (Ehret 1998; Beck 2000). This is very recent.

Additionally, the evidence that these were Bantu-language speaking peoples more or less genetically contiguous with current populations is weak (Berniell-Lee et al. 2009). Not until about 1000 years ago is this evidence stronger, and it is safe to say that no current ethnic identity is older than around 200-300 years (Ehret 2001; Thornton 2013). Overall, there is only a very limited historical presence in what is now South Africa. The San people who were the original indigenous population in southern Africa are all but extinct, and none living today are where they were in even the recent past (Thornton 2013). The knowledge only exists in 19th Century records, not in living people today (ibid). The fact that the indigenous San culture is extinct does not make their beliefs and relationship with the land irrelevant. However, it does make any advocacy for an Earth Jurisprudence approach from the San people an unlikely possibility.

African environmental ethics is a fairly new subject of research (Mangena 2014), undertaken perhaps in an attempt to recover African identity, which is in part an attempt to address symbolises the damage Africa incurred during the colonial and apartheid eras, its struggle with illiteracy, poverty, and hunger, and its seeming triviality in global news (Du Toit 2005).

Mangena (2014) argues that in certain traditional African environments, such as in the Shona culture, the existence of a person finds expression in that person's association with non-human animals through concepts like totemism and spiritualism. He goes on to state that as a result, without this association, human beings are incomplete. Mangena further argues that the concept of intrinsic value for nature in westernised cultures would be vastly different to the African culture as the African connection with nature is more centred around animal totems and spirituality (2015).

One of the only truly indigenous African philosophies which has been recognised in South African law is the concept of Ubuntu. This is a humanist philosophy, which places a particularly strong emphasis on the importance of the relationships between an individual and the community around him/her, and which includes the natural environment (Mnyongani 2012). Children are taught from an early age that everything they learn must be passed along to another person (Schoeman 2012). This also helps to build a solid foundation of caring for one another and respecting other members of the community, especially elders. During colonialism, the fundamental respect for other people started disappearing as indigenous beliefs were suppressed and human rights were not recognized (ibid). With the drafting of the new Constitution, the concept of Ubuntu was incorporated into our law for the first time in the *S v Makwanyane* case, where the Constitutional Court determined that capital punishment is inconsistent with the fundamental human rights in the Constitution.

Mnyongani (2012) points out that the traditional African perspective is consistent with what could be described as an anthropocentric worldview. Nevertheless, there is evidence that indigenous South African communities are candidates to advocate for an Earth Jurisprudence approach in South Africa. In 2010 a tourism company proposed a development next to the Phiphidi Waterfalls in Limpopo. This is considered

a sacred site amongst the Venda people, and the Ramunangi clan is acknowledged by the surrounding communities as the custodian of the waterfall (Ratiba 2015). The Ramunangi clan is tasked with performing a rain ritual called "Thevhula" which is believed to ensure good rain and subsequent good harvests (ibid). A tribal chief from the Ramunangi instituted legal action against the developer with the assistance of a civil society organisation called Dzomo La Mupo (meaning Voice of the Earth). The court ruled in favour of the Ramunangi and granted an interdict to prevent the development from proceeding (ibid). The case in question provides an interesting example of how the right to religion and culture as contained in the Constitution could potentially interact with an Earth Jurisprudence approach in a positive manner, serving to bolster its application.

It will not be a solution to simply transplant the solutions illustrated above from other countries into South Africa. However, it is possible to draw comparisons between the recovery of an African identity and the pursuit of a plurinational state in countries such as Bolivia. It is therefore possible that similar advocacy efforts could result in the inclusion of Earth Jurisprudence in South African law. South Africa may have a potential advantage over other countries such as Ecuador, New Zealand and Bolivia in this regard, as the relevant ethnic groups in South Africa represent a majority of the population.

3.4 Conclusion

Chapter 3 used three case studies to illustrate the process undertaken to incorporate Earth Jurisprudence in other countries and how the various pieces of legislation are worded. The strong advocacy from indigenous groups as a catalyst was highlighted and contrasted with the position in South Africa. This chapter assisted in answering the research question: *What legislation currently exists in the world which may contribute to this approach?*

The largest challenge facing the Earth Jurisprudence movement is the interactions and potential conflicts between the proposed rights for nature and human rights such as the right to own property (Fish 2013; Humphreys 2015). In Chapter 4, I will explore

these conflicts in more depth and also explore possible ways to overcome these challenges in a South African context.

Chapter 4: Legislative Strategies

Chapter 3 highlighted examples where Earth Jurisprudence has successfully been incorporated into legislation, and established that South Africa has a unique context which requires a unique approach. Chapter 4 will explore the various options for incorporating Earth Jurisprudence into South African legislation, including the Constitution, policies and national environmental legislation. Chapter 4 will also examine the history which led to the adoption of the Constitution of South Africa, and the process required to amend the Constitution. This chapter will also explore the potential conflicts which could arise between human rights contained in South African law and rights for nature. I will argue that the successful incorporation of an Earth Jurisprudence approach in the South African Constitution will require the inclusion of a Bill of Species with a cross-cutting limitation clause. I will also examine relevant changes to other legislation to bring it in line with an Earth Jurisprudence approach.

4.1 The history of the South African Constitution

If one considers the history of South Africa before the incorporation of the new South African Constitution in 1996, the law in existence was based on exclusion of certain people on arbitrary grounds, and a denial of equality and basic human rights (Sarkin 1998; Chaskalson 2003; Gibson 2004; Goodsell 2007).

When apartheid was abolished, the Constitution was drafted to guarantee equality and basic rights to all South African citizens (Certification of the Constitution 1996: Goodsell 2007). Furthermore, progressive implementation of new legislation was permitted to achieve equality (De Vos, 2012). Oomen (2005) discusses on the magnitude of this accomplishment by reflecting on the following statement published by a local newspaper in 1993, which made reference to the Interim Constitution: “We, the people of South Africa, have wrought a miracle. We have accomplished what few people anywhere in the world thought we could do: we have freed ourselves, and made a democracy, and we have done so without war or revolution.”

To remedy the injustices of the past, certain groups can be advanced in the name of affirmative action, even if another group is disadvantaged to a certain degree (De Vos 2012; Leibbrandt 2011 et al.). The difference between this position and the position of the old regime is that this disadvantage is justified and not arbitrary (Leibbrandt, 2011 et al.). To accept that any member of the Earth community can consistently be discriminated against and human interests be placed above the interests of the former in law, is to accept that other members of the Earth community do not possess traits that render this discrimination unfair or unjustified (Bilchitz 2009; Metz 2010). This could be perceived as a very bold blanket statement to make, however, even if we judged concepts of “fairness” or “justice” by purely anthropocentric standards, as many animals certainly express, and animals feel emotions or pain just like humans do.

Anyone who has spent time with a dog knows the extent of emotions these creatures can express, and the fact that they dream, which indicates a processing of emotions and daily experiences (Stephenson 2012). Chartier (2010) points out the fact that animals engage in aspects of friendship, play, inner peace and mental health as much as humans do.

4.2 How the Constitution was drafted

In April 1993, a multi-party negotiation process was initiated, which led to the enactment of the Interim Constitution (Certification of the Constitution 1996). A Constitutional Assembly and new Constitutional Court were established (ibid). The Constitutional Assembly did not act as a replacement for Parliament rather it consisted of representatives from the two houses of parliament, had its own chairperson, commission, administration, rules and procedures (Van Heerden 2007). This promulgated Constitutional Assembly was given the task to draft a new constitutional text within two years (Certification of the Constitution 1996).

The adoption of a new text required a two-thirds supermajority in the Constitutional Assembly, as well as the support of two-thirds majority of provincial senators representing provincial government if the text affected them (ibid). If a two-thirds majority could not be obtained, a constitutional text could be adopted by a simple

majority and then put to a national referendum in which sixty per cent support would be required for it to pass (ibid). The new constitutional text would then be tested by the Constitutional Court against 34 principles contained in the Interim Constitution. It had to comply with all 34 principles to pass, and thereafter to be certified by the Constitutional Court after hearing written and oral representations (ibid).

After a large-scale public participation process to gain recommendations from the public, followed by reviews and amendments, the new Constitution was signed by President Nelson Mandela on 10 December 1996 and came into force on 4 February 1997 (Van Heerden 2007; Klug 2010). Since 1996, the Constitution has been amended 17 times (Constitution Seventeenth Amendment Act, 2012).

4.3 Amendment of the Constitution

As the supreme law which bestows all rights and responsibilities on both citizens and the State, it is not easy to amend the Constitution (nor should it be). Section 74 of the Constitution provides that in order to amend the Constitution a bill to do so can only be passed if at least two-thirds of the members of the National Assembly vote in favour of the amendment. If the amendment affects provincial powers or boundaries, or if it amends the Bill of Rights, at least six of the nine provinces in the National Council of Provinces must also vote in favour of the amendment (Van Heerden 2007; Adebe 2014).

4.4 Constitutional enforcement

The rights, freedoms and responsibilities entrenched in the Constitution are enforced by the Constitutional Court (Melber 2014). The separation of powers contained in the Constitution theoretically makes it impossible for the State to interfere with the powers of the Constitutional Court (Labuschagne 2004; O'Regan 2005; Ebadolahi 2008; Rautenbach 2012).

The enforcement of environmental rights, however, is a fairly new concept, as few of these cases have been brought before the Constitutional Court since its inception (Olenasha 2001; De Wet & Du Plessis 2010; 2014). As the enforcement of the existing

right to the environment is still an undetermined concept, the enforcement of completely new environmental rights is completely foreign territory which must be examined for purposes of this thesis.

To understand the enforcement of human rights it is important to note that all rights in the Bill of Rights are not enforced equally by the State, as these rights are divided into first, second and third generation rights. First generation rights (such as the right to life) are capable of, and should be, immediately enforced by the State. Second generation rights (such as the right to housing) should be progressively enforced by the State as permitted by the capacity of the State. Third generation rights (such as environmental rights) are not always enforced as strongly as the other generations, and unlike the other generations of rights, are accessible not only to individuals, but also to collective groups (Olivier 2002; Kende 2003; McLean 2009).

Currie and de Waal (2013) explain that when an issue is brought to a court a few procedural issues must be considered before substantive issues are explored. Firstly, the court must consider whether the Bill of Rights applies directly or indirectly to a given situation. Direct application is geared towards showing inconsistency between the Bill of Rights and ordinary law or conduct that is in contention. This means that the conduct in question is weighed against the appropriate clause in the Constitution. If the conduct or legislation is inconsistent with the Constitution, then a finding will be made that the Constitutional clause has been violated. Indirect application means that the ordinary law is interpreted in a manner that conforms to the values and spirit of the Constitution. Courts are required to try to resolve disputes by applying constitutional principles to ordinary law before resorting to the Constitution itself. This is the principle of avoidance. This means for example that the National Environmental Management Act (NEMA) or any other Act will be construed to give effect to a certain right without having to invoke the Constitution.

When interpreting the Bill of Rights, courts must consider international law and may consider foreign law (Olivier 2002). This is progressive for the enforcement of environmental rights, as courts in South Africa will have to consider international conventions that it is signatory to when interpreting the Constitution (ibid). Secondly, courts not being constrained from applying comparable foreign law can borrow from

the Jurisprudence of other jurisdictions. Section 39(2) of the Constitution states that “[w]hen interpreting any legislation, and when developing the common law or customary law, every court, tribunal or forum must promote the spirit, purport and objects of the Bill of Rights.”

If a court finds that a right has been infringed upon or threatened, it will proceed to see whether the infringement is saved by the limitation clause (Rautenbach 2014). This is in view of the fact that not everything that seems to infringe the Constitution is unconstitutional and that not all rights are absolute and some rights may be subject to limitations (ibid). The limitation clause states as follows:

1) The rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors, including

- a) the nature of the right;
 - b) the importance of the purpose of the limitation;
 - c) the nature and extent of the limitation;
 - d) the relation between the limitation and its purpose; and
- less restrictive means to achieve the purpose.

2) Except as provided in subsection (1) or in any other provision of the Constitution, no law may limit any right entrenched in the Bill of Rights.

When the court is satisfied that the infringement is not saved by the limitation clause, it will proceed to give the requisite remedies. These could be in the form of interdicts, severance, administrative law remedies, invalidation of legislations and declarations of rights (Ebadolahi 2008; Boggenpoel 2014).

4.5 Constitutional strategies

Bilchitz (2009) states that minimum protection may be afforded to animals if it is read into the existing wording in the Constitution if one considered that the scope of the Act may extend beyond humans to other animals, and he further argues that progressive implementation may result in further enforcement of animal rights in future. Metz (2010) argues that although the failure to recognise animal rights on a constitutional

level is unjust, a more weighty injustice would be done if the rights of animals were recognised.

Metz (2011, p.5) argues that if a person driving a bus had the choice to run over either another person or a mouse, “the right thing to do would be to run over the mouse”. He states that this is because the mouse has a lower status. This could, however, become a grey area and serves to highlight the potential bias associated with assigning varying levels of “status” to humans or other animals. If a mother driving a bus would rather run over an adult than a child, this may be justifiable in the mind of the mother herself, but it is based on bias and puts her at risk of discriminating without credible justification in the eyes of the rest of society.

Even if one argues that rights should be granted based on self-awareness or the ability to make subtle ethical distinctions (Schmahmann & Polacheck 1995), this is not necessarily a justified position, and moreover it is not a position currently followed in South African law. Young children or mentally disabled individuals are protected from discrimination by law, even though they may not be fully aware of the implications of certain situations or unable to express themselves as easily as others¹³. Furthermore, the Bill of Rights applies to juristic persons, who are not human. In fact, their legal personality is considered a fiction as these corporations are not living (Certification of the Constitution 1996; Brand & Heyns 2005; Bilchitz 2009).

The same cannot be said for living ecosystems. According to Bilchitz (2009, p42): “If the Constitution fails to treat each individual similarly, then it is condemned to repeat the moral mistake at the heart of apartheid. To do so will involve failing to realize its task as a transformative document. The Constitution thus must be read in such a way as to avoid this moral mistake.” As discussed above, Bilchitz (2009) argues that a presumption for animal rights can be read into the Constitution as it already exists. However, he also admits that this interpretation of current legislation by humans would lead to an inescapable bias towards humans over animals. For this very reason, I will consider the more difficult but more structured option of amending the Constitution to

¹³ The Teddy Bear Clinic for Abused Children and Another v Minister of Justice and Constitutional Development and Another, [2013] ZACC 35

very specifically include rights for the rest of the Earth community, in order to avoid the aforementioned bias.

As described above, the Constitution is the supreme law in South Africa (Van Heerden 2014). It is often viewed as the single piece of legislation which managed to bring together a divided nation when we were undergoing a massive transition in a peaceful manner (Oomen 2005). Many political and social transitions in the world have not gone quite as smoothly and have resulted in civil wars and ongoing tension (DeRouen 2007).

Some would argue that a constitution is not necessary, as many nations function without it. According to van Heerden (2014, p.2): “The purpose of a constitution was an attempt to regulate the relationship between individuals and the governors, and to establish the broad rights of individuals.”

Why do some nations require a constitution? According to Barry et al. (1978, p.4), “Some framework of commanding status is necessary to bring together peoples who are still somewhat suspicious of each other’s willingness to renounce efforts to dominate”. This statement is without a doubt a very accurate reflection of the political tension that was present in South Africa when the Constitution was originally adopted. This single piece of legislation has guided our society to where it is now, and has been hailed as one of the most progressive in the world (Melber 2014).

4.6 A rights-based approach

The concept of “rights” is used in spheres from law to media and is often used to draw attention to the violation of something which people hold dear and which they feel they are entitled to. The limitation of these rights is also often recognised as a necessity (Bosselmann 2001). A number of techniques are employed in international law to define the boundaries of human rights. One option is to prescribe corresponding duties for the bearers of rights. Another option is to qualify the right by stating that a person may not abuse his rights in such a way that it infringes on the rights of another person.

A third option which is highlighted above is to include a limitation clause (ibid). In order to address the apparent conflicts between human rights and rights for nature, boundaries for both sets of rights must be defined.

One option for the incorporation of an Earth Jurisprudence approach into current legislation is to amend the Constitution to include a new Bill of Species to acknowledge and enforce the rights of the rest of the Earth community. This could also lead courts to interpret the word “everyone” in the Constitution more widely, so that this term could also apply to other members of the Earth community (Bilchitz 2009). Drawing inspiration from other jurisdictions is possible and advisable. However, it is important that the Bill of Species be tailored to suit a South African context. The text in the Bill of Species could be worded in a manner similar to the following:

Bill of Species

- 1) This Bill of Species recognises our interconnection with nature as an Earth community, and recognises the rights of other members of the Earth community to exist, to persist and to continue vital cycles, structures, functions and processes that sustain all beings.
- 2) The State will uphold and protect these rights in a progressive manner in accordance with its capacity to do so.
- 3) The rights in this Bill of Species are subject to the limitations contained in the incorporated limitation clause in section 3 of this Bill.
- 4) Any rights contained in the Bill of Rights are subject to limitations contained in the incorporated limitation clause in section 3 of this Bill.
- 5) The Bill of Rights applies to all law, and binds all members of the Earth community.

Fundamental Rights and Freedom of all Beings in the Earth Community

Every being in the Earth community has:

- a) The right to exist;
- b) The right to habitat or a place to be;
- c) The right to maintain its identity and integrity as a distinct, self-regulating being;
- d) The freedom to relate to other beings and to participate in communities of beings in accordance with its nature.

Limitation of Rights

Any right within the Bill of Species or the Bill of Rights is subject to limitation to the extent that it is reasonable and justifiable keeping in mind the well-being of the Earth community as a whole and when:

- a) The enforcement of the rights of one species will result in critically endangering the survival of another species or driving another species to extinction.
- b) The enforcement of the right of one species will lead to undue suffering of another species.
- c) The enforcement of the right of one member of a species has no impact on the enforcement of the rights of the rest of its species but will detrimentally affect the rights of another species, taking into account:
 - The importance of the right of the former species; and
 - The extent of the prejudice suffered by the latter species.

4.7 Barriers to a rights-based approach

Given the long and difficult process of amendment to the Constitution highlighted above, and the aforementioned complex negotiation and adoption process that finally culminated in the adoption of the current Constitution, it would admittedly be a challenge to amend the Constitution to include such a far-reaching section. The history of South Africa and the struggle to obtain equal human rights for all South Africans may make it difficult to gain the necessary acceptance to place the rights of humans and nature on equal footing. In addition, there could potentially be clashes with existing human rights. These potential bottlenecks will be explored in further detail below.

4.7.1 Conflict between Earth Jurisprudence and other rights

4.7.1.1 The right to freedom of belief

The right to freedom of religion, belief and opinion is contained in section 15 of the Constitution, which states as follows: “Everyone has the right to freedom of conscience, religion, thought, belief and opinion.” Furthermore, section 30 of the Constitution provides that: “Everyone has the right to use the language and to

participate in the cultural life of their choice, but no one exercising these rights may do so in a manner inconsistent with any provision of the Bill of Rights.”

These rights described above can be interpreted to include the right to freely use traditional medicine, as it is part of a cultural practice which contains a set of beliefs and ideologies. This can be a sensitive issue, as highlighted by Williams et al. (2014 p.1): “The balance between culture, ritual, commerce and conservation is an emotive issue, particularly where charismatic animal species are used for traditional medicine.”

The use of animal parts in traditional medicine is not only prevalent in Asian countries, but is also especially popular in the indigenous groups of South Africa because of the general belief that illness is a result of human actions or ancestral interference as opposed to what would be attributed to viruses etc. in western cultures (McKean & Mander 2007). There is also the belief that some animal parts can enhance spiritual wellbeing or even create supernatural powers. Many animal parts are also believed to cure various forms of sexual dysfunction. Many species considered “high value” in the traditional medicine trade may have low reproductive rates, have long life spans and occur at relatively low densities in the wild, which makes them less resilient to harvesting for the traditional medicine trade and promotes vulnerability (Whiting et al. 2011).

Endangered animals are often poached for use in traditional medicine. An estimated 27 million South Africans make use of traditional medicine (referred to as “muthi”) to cure various ailments (Mander et al. 2007). This accounts for 72% of the Black African population in South Africa (ibid). If this figure is compared to Ethiopia, where 68% of the population makes use of traditional medicine, the prevalence would indicate that despite varying degrees of economic development, the use of traditional medicine is a well-established and firmly entrenched cultural practice across Africa (ibid). Whiting et al. (2011) state that the lack of access to western medical facilities is a contributing factor to the prevalence of the consumption of traditional medicine. However, a survey done in 1998 revealed that muthi consumers are not exclusively poor or rural, that 97% of consumers choose traditional healers over western doctors and that muthi is often more expensive than the available western medicinal counterparts (Mander et al., 2007).

Many of these medicines contain animal body parts, and often these animals are already endangered (Whiting et al. 2011). There has been evidence to suggest that the use of these animals in traditional medicines may be a major contributing factor to the rapid decline of these species. If one considers that as the primary source of medicine for traditional healers, an estimated 20 000 tonnes of indigenous plants are harvested from forests, grasslands and woodlands in eastern South Africa every year with only a maximum 50 tonnes per annum being cultivated, it is clear that these harvesting practices are unsustainable, especially considering that in over 80% of cases, the entire plant dies in the harvesting process (Mander et al., 2007).

It is rumoured that the local trade in medicinal plants alone is worth over R1 billion annually. In total, the traditional medicinal plants and products traded in South Africa is estimated to be worth R2.9 billion per year (ibid). It is, however, difficult to obtain reliable data as much of the trade is illegal and occurs in secret or takes place in very remote rural regions. Whiting et al. (2011) highlight the need for baseline data and proper quantification of the use of animal parts in muthi and current studies are restricted to muthi markets in large urban regions of South Africa and limited studies have investigated the rural trade.

According to the National Reference Centre for African Traditional Medicines, the traditional medicinal trade consists not only of medicine procured and made locally, but also what is referred to as “complementary medicine”. This includes traditional medicines imported from other regions, including Asia¹⁴. The importance of traditional medicine to a large percentage of people in South Africa has been recognised by government, and there have been numerous discussions around the subject recently, and suggestions have been made that new legislation be introduced to regulate the traditional medicine trade and the traditional healers that distribute this medicine.¹⁵

¹⁴ A Model for South Africa: The National Reference Centre for African Traditional Medicines (NRCATM) <http://www.sahealthinfo.org/traditionalmeds/traditionalpart1.pdf> , accessed 10 July 2015.

¹⁵ Kahn, T 2014, ‘Complementary medicine industry resists change’ *Business Day*, 27 February, accessed 10 July 2015

South Africa is a very multi-cultural society, and all cultural beliefs are equally upheld and respected in the Constitution, especially considering the fact that during the apartheid regime many cultures were not respected and were considered and also treated as inferior (Ntlama, 2012). In light of this history, any limitation to these rights could potentially be challenged by those holding the belief that medicine made from the body parts of endangered species will improve their health.

4.7.1.2 The right to health care, food, water and social security

Section 27 of the Constitution states as follows:

- 1) Everyone has the right to have access to—
 - a) health care services, including reproductive health care;
 - b) sufficient food and water; and
 - c) social security, including, if they are unable to support themselves and their dependants, appropriate social assistance.
- 2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.
- 3) No one may be refused emergency medical treatment.

The same conflicts that exist between an Earth Jurisprudence approach and the rights contained in section 30 would probably be applicable to section 27.

4.7.1.3 The right to housing

Section 26 of the Constitution states as follows:

- 1) “Everyone has the right to have access to adequate housing.
- 2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right.
- 3) No one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances. No legislation may permit arbitrary evictions.”

Previous Constitutional Court judgements highlight the Court’s tendency to place the needs of people above environmental concerns, even in the case of two conflicting rights in the Bill of Rights. *In Minister of Public Works and Others v Kyalami Ridge*

Environmental Association and Another 2001 3 SA 1151 (CC), the Court ruled in favour of the government providing informal housing to a large number of displaced people from a nearby informal settlement, despite the fact that environmental concerns were raised by a local environmental association and that the government did not take the necessary steps or fulfil administrative and other requirements in locating the land for the new housing.

The Court ruled that the environmental association has not provided sufficient evidence that the right to the environment would be infringed and that the actions of the government would *significantly* damage the environment. This raises the following questions: what would constitute sufficient evidence, and how would significant damage be defined in future? It is alarming to think that the environment would be irreparably harmed before appropriate legal measures would be considered by the Court. Kidd (2001, p.39) states as follows: “The Act (NEMA) uses the word 'may' because it should not be necessary for someone relying on these principles to show that an action by government will significantly affect the environment, but only that it may significantly affect the environment.”

4.7.1.4 The right to property

Section 25 of the Constitution provides as follows:

- 1) “No one may be deprived of property except in terms of law of general application, and no law may permit arbitrary deprivation of property.
- 2) Property may be expropriated only in terms of law of general application
 - a) for a public purpose or in the public interest; and
 - b) subject to compensation, the amount of which and the time and manner of payment of which have either been agreed to by those affected or decided or approved by a court.
- 3) The amount of the compensation and the time and manner of payment must be just and equitable, reflecting an equitable balance between the public interest and the interests of those affected, having regard to all relevant circumstances, including:
 - a) the current use of the property;
 - b) the history of the acquisition and use of the property;
 - c) the market value of the property;

- d) the extent of direct state investment and subsidy in the acquisition and beneficial capital improvement of the property; and
 - e) the purpose of the expropriation.
- 4) For the purposes of this section:
- a) the public interest includes the nation's commitment to land reform, and to reforms to bring about equitable access to all South Africa's natural resources; and
 - b) property is not limited to land.
- 5) The state must take reasonable legislative and other measures, within its available resources, to foster conditions which enable citizens to gain access to land on an equitable basis.
- 6) A person or community whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to tenure which is legally secure or to comparable redress.
- 7) A person or community dispossessed of property after 19 June 1913 as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to restitution of that property or to equitable redress.
- 8) No provision of this section may impede the state from taking legislative and other measures to achieve land, water and related reform, in order to redress the results of past racial discrimination, provided that any departure from the provisions of this section is in accordance with the provisions of section 36(1).
- 9) Parliament must enact the legislation referred to in subsection (6).”

Clearly if an Earth Jurisprudence position is adopted, the notion of nature as property subject to property laws is not compatible with the greater Earth Jurisprudence philosophy. Therefore this is a potential area of conflict within the existing legal framework if an Earth Jurisprudence approach were to be adopted. Alexander (2010) argues that property laws in a free-market economic system results in unsustainable economic growth and consumption, and argues convincingly that world leaders must determine economic limits to growth in addition to ecological limits to growth.

Amendments to the property clause would provide an approach more in line with Earth Jurisprudence. Such amendments could potentially replace the concept of property rights with regard to nature with guardianship over nature. Each person therefore

would not only have to respect the rights of nature but would also have an additional responsibility to act as an enforcer of the rights of nature over which he/she has been given guardianship. The portions of the Earth community which in terms of our legal system is currently viewed as *res nullius* (owned by nobody) or *res communis* (not subject to ownership) could be placed under the guardianship of specific civil society organisations who are conservation experts as custodians and enforcers of the rights of these members of the Earth community. This would be a similar position to that of a minor child who has a court appointed curator or guardian to act on his behalf in litigious matters.

Given the fact that much of South Africa's apartheid history was characterized by an arbitrary deprivation of property, this would no doubt be a very sensitive issue and care must be taken to avoid the injustices of the past as we move forward to a better future.

4.8 Enforcement of Constitutional strategies

In terms of NEMA, people are already given *locus standi in judicio* (the capacity to litigate without assistance) in terms of section 32, which states as follows:

1) "Any person or group of persons may seek appropriate relief in respect of any breach or threatened breach of any provision of this Act including a principle contained in Chapter 1, or any other statutory provision concerned with the protection of the environment or the use of natural resources:

- a) in that person's or group of persons own interest;
- b) in the interest of, or on behalf of, a person who is for practical reasons, unable to institute such proceedings:
- c) in the interest of or on behalf of a group or class of persons whose interests are affected;
- d) in the public interest; and
- e) in the interest of protecting the environment."

However, this provision has not been utilized commonly, and when it has arisen in court, the courts have unfortunately ignored it on many occasions. Furthermore, in the

few instances section 24 of the Constitution has been raised in a court case, it has been due to a direct and detrimental impact on the applicants such as the effects of noxious chemicals, for example *Tergniet and Toekoms Action Group v Outeniqua Kreosootpale (Pty) Ltd*, or the impacts of noise pollution, for example *Laskey v Showzone CC*.

The provisions in the Constitution itself pertaining to the enforcement of any right does not echo the broad provisions of NEMA as set out above. Section 38 of the Constitution states as follows: “Anyone listed in this section has the right to approach a competent court, alleging that a right in the Bill of Rights has been infringed or threatened, and the court may grant appropriate relief, including a declaration of rights. The persons who may approach a court are:

- 1) Anyone acting in their own interest;
- 2) Anyone acting on behalf of another person who cannot act in their own name;
- 3) Anyone acting as a member of, or in the interest of, a group or class of persons;
- 4) Anyone acting in the public interest; and
- 5) An association acting in the interest of its members.”

Therefore the Constitution does not make provision for a person to act in the interest of the environment. This may act as a deterrent to those who wish to approach the court in this capacity. If an Earth Jurisprudence approach is hypothetically adopted, the section in the Constitution dealing with the enforcement of rights would have to be broadened to mirror the existing provisions of NEMA described above.

Legal proceedings are very expensive and time consuming endeavours. The process of getting a matter heard before the Constitutional Court is no easy feat. The Constitutional Court is not a court of first instance. This means that a matter must first be assessed by a lower court before the Constitutional Court will adjudicate on it (Dugard 2006). It is no surprise, then, that people are not likely to take a matter to court unless they have incentives to do so. The risk of infringing a fundamental right and getting oneself into trouble, even indirectly by allowing another person to infringe the right in question, can be a strong incentive, especially when the right in question is Constitutionally entrenched.

4.9 Statutory strategies

In light of the aforementioned challenges that would arise if the Constitution were to be amended to reflect an Earth Jurisprudence approach, the amendment of other pieces of legislation must be considered as a less far-reaching potential course of action.

As highlighted above, the most important piece of legislation in South Africa related to the environment (next to the Constitution) is NEMA. As pointed out by Warren et al. (2009), there is some evidence of thinking resembling an Earth Jurisprudence approach in NEMA. An example can be found in Section 2(4) which states as follows: “Sustainable development requires the consideration of all relevant factors including ... (v) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource.”

Warren et al. (2009, p.26) argues that the intentions of the legislation is as follows:

The promotion of environmental education and the raising of environmental awareness is for the purpose of community well-being and empowerment. The dominant rationale is management of the Earth to serve human interests so that, although sustainable development and the precautionary principle, pollution, degradation of ecosystems etc. will be permitted, albeit to a minimum, where they cannot be avoided. As with many instruments dealing with the environment, some influence of natural law is inevitable. For example, the interconnectedness of the Earth is recognised and must influence any management decision that may affect any component but this is entirely from an anthropocentric perspective. There is no recognition of any of the key Earth rights. While the interconnectedness of ecosystems is recognised there is nothing mutual or reciprocal about the relationship envisaged. The sole purpose of care for the environment is to enhance the human experience and while power is granted to the State to intervene and impose obligations where environmental harm is being caused, there is nothing to suggest

that this provision has the interests or rights of the non-human community in prospect.

The NEMA would need dramatic amendments to bring it in line with an Earth Jurisprudence approach. For starters, Chapter 2 of NEMA which, as mentioned above, highlights that environmental management in South Africa must place people and their needs at the forefront of its concern. This clearly anthropocentric principle is not in line with the more interconnected approach advocated by Earth Jurisprudence proponents. Further examples of incompatibility with an Earth Jurisprudence approach which would require amendments are highlighted below.

4.9.1 NEMA, NEMBA and sustainable development

Section 2(4) of NEMA provides that sustainable development, according to the principles in the Act, requires consideration of all relevant factors, including eight which are specifically listed. These include:

- 1) "That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- 2) That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- 3) That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
- 4) That waste is avoided, or where it cannot be altogether avoided, minimised and reused or recycled where possible and otherwise disposed of in a responsible manner;
- 5) That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
- 6) That the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;
- 7) That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

- 8) That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.”

If these provisions are dissected and analysed, the following conclusions can be drawn: In terms of NEMA, nature is viewed as a resource for human use (as is evident in parts v, vi, and viii); The exploitation of nature is condoned when this exploitation is considered “reasonable and equitable”. Any exploitation of nature must take into account the consequences of its “depletion”. The use of the word “depletion” is associated with over-consumption, which confirms the anthropocentric stance that the purpose of the existence of nature is the consumption thereof by humans. Considering the consequences of depletion of nature therefore only takes the needs or wants of humans into account. (See v).

NEMA has clearly proved insufficient in dealing effectively with the illegal poaching of animals such as rhinos due to the lack of intervention in situations where the degradation of ecosystems and the loss of biodiversity do not have a direct detrimental effect on humans. As a result, action is taken when it is too late to prevent irreversible damage, and the actions taken are insufficient because there is no certainty regarding the effectiveness of the legal system in dealing with these threats. Wildlife crimes are often pushed to the bottom of the pile and poachers often get minimal sentences which do not act as a deterrent¹⁶. Any monetary loss to the poachers is minimal compared to the monetary gains from the illegal trade of animals or animal body parts (Knapp 2012).

The supportive legislation, for example the provincial legislation, has not assisted in preventing the destruction of ecosystems and loss of biodiversity. The provincial laws governing environmental management and the protection of endangered species are very fragmented, and have been since before 1994 (Kidd 2011). Each of the old four provinces had their own nature conservation ordinance (applicable to both fauna and flora) dealing with the aforementioned issues (ibid).

¹⁶ Reitz, M 2015. ‘Protecting South Africa’s Biodiversity’, *Africa Geographic*, 25 June, accessed on 13 July 2015.

The Act dealing specifically with Biodiversity, NEMBA, contains wording which does not denote a strong stance in favour of the protection of endangered species. Instead of providing for trusteeship as has been done in other pieces of legislation dealing with environmental management (for example, the National Water Act), the NEMBA contains what is described by Kidd (2011) as a “rather anaemic provision” in section 3: “In fulfilling the rights contained in section 24 of the Constitution, the state through its organs that implement legislation applicable to biodiversity, must manage, conserve and sustain South Africa’s biodiversity and its components and genetic resources and implement this Act to achieve the progressive realisation of those rights.”

A recurring component of this Act is the fact that it delegates law-making power to the Minister (the member of cabinet responsible for national environmental management). Section 9 in particular empowers the minister to create norms and standards to regulate conservation and to create indicators against which performance can be measured. However, the Act fails to provide guidelines for how the Minister should exercise these powers.

The primary tool which has been created by the Minister is the National Biodiversity Framework, which was implemented in 2009 and is applicable for 5 years. This provides for five strategic objectives including:

- 1) An inclusive and enabling policy integrating biodiversity management objectives into the economy;
- 2) Enhanced institutional effectiveness and efficiency ensuring good governance in the biodiversity sector;
- 3) Integrated management of aquatic and terrestrial ecosystems to minimise the impact of threatening processes on biodiversity;
- 4) Enhanced ecosystem services and improved social and economic security; and
- 5) The enhancement of human well-being through the sustainable use of natural resources.

In addition to the National Biodiversity Framework, the Minister is also empowered by NEMBA to draw up bioregional plans which entail identifying a geographical area as

containing several ecosystems and drawing up a plan for the management of the biodiversity in the specified region.

In section 43 of NEMBA, a third interesting strategic option for the protection of biodiversity is presented:

1) “Any person, organisation or organ of state desiring to contribute to biodiversity management may submit to the Minister for his or her approval a draft management plan for:

a) an ecosystem:

- i) listed in terms of section 52; or
- ii) which is not listed in terms of section 52 but which does warrant special conservation attention; or

b) an indigenous species:

- i) listed in terms of section 56; or) which is not listed in terms of section 56 but which does warrant special conservation attention; or
- ii) a migratory species to give effect to the Republic’s obligations in terms of an international agreement binding on the Republic.”

Any person may therefore take steps in presenting a strategy for the protection of an endangered species. This provision is encouraging for those who may feel helpless in trying to put a stop to environmental degradation and the poaching of endangered species. In terms of the provisions contained in NEMBA, bioregional management plans may not be in conflict with NEMBA or NEMA. Therefore the anthropocentric clauses in the Acts must be changed before any bioregional plans will be successful in recognising the intrinsic value of nature. This will be discussed in more detail below.

In terms of NEMBA 2(b) the purpose of NEMBA is “*to give effect to ratified international agreements which are binding on the Republic*”. An example of such an agreement it has given effect to is CITES (Chapter 4 of NEMBA). CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. South Africa is a signatory to this convention. CITES does not replace the national laws, but must be

enacted through NEMBA to give force to the Convention in the local legal landscape (Du Plessis & Kotze 2007).

CITES controls the international trade of species and regulates it so as to prevent the trade of the species or specimens from contributing to the endangerment of the species (Wijnstekers 2011). For example, if an animal is removed from one zoo to be rehomed in a zoo in a new country, permission must be obtained in terms of CITES. If the removal would contribute to the endangerment of the species, the removal will not be permitted. Despite this convention, the illegal trade in endangered animals is still taking place (Swan & Conrad 2014). This is potentially due to the fact that by permitting the trade in endangered species in the first place, we are giving credence to the anthropocentric approach which has resulted in the diminished and endangered status of other species.

Despite the fact that NEMBA has primarily given effect to international treaties of an anthropocentric nature, it could eventually give effect to Earth Jurisprudence approaches such as those found in the Universal Declaration for the Rights of Mother Earth (Designed to be supplementary to Universal Declaration for Human Rights). As highlighted in Chapter 3, in 2008, 30,000 people from 100 countries met in Bolivia for the World People's Conference on Climate Change and the Rights of Mother Earth (World People's Conference). The World People's Conference adopted the Universal Declaration of the Rights of Mother Earth which, in its preamble, states that "we are all part of Mother Earth, an indivisible, living community of interrelated and interdependent beings". This is a promising statement indicating that some people are willing to move beyond a narrow anthropocentric worldview and embrace an approach granting rights to nature.

In the classic legislative landscape, Earth Jurisprudence is considered a theory which forms a small part of environmental laws, and may be acknowledged in parts of environmental legislation such as the New Zealand and Bolivia examples. However, it is rarely acknowledged as an overarching concept which should provide guidance to the rest of the legal system. Cormac Cullinan notes in *Wild Law* (2003, p.13) that: "relatively few governments seem ready to acknowledge that the symptoms cannot be cured without addressing the underlying causes". The exception is Ecuador, which

has set an example by incorporating the concept and principles of Earth Jurisprudence in its most important piece of legislation, the Constitution. An example of a reformed legal system, guided by the principles of Earth Jurisprudence, can be found in the figure below:

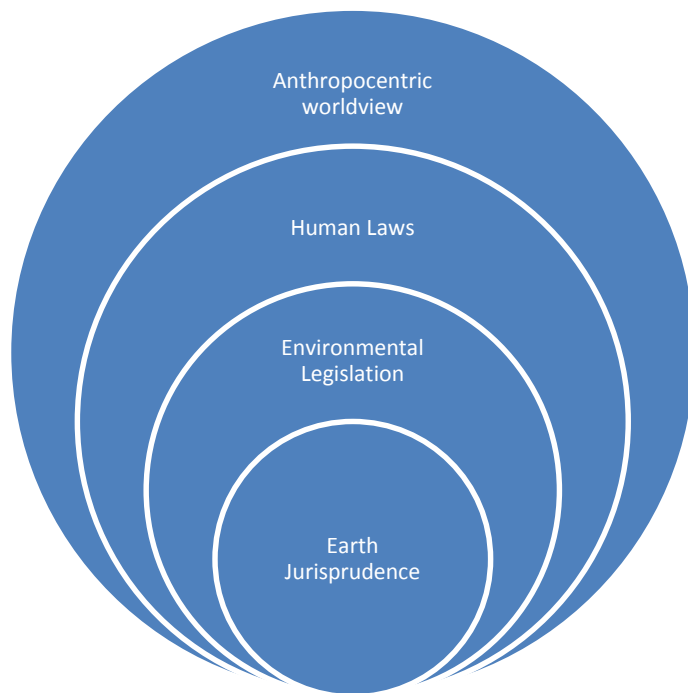


Figure 4.1: Current legal framework

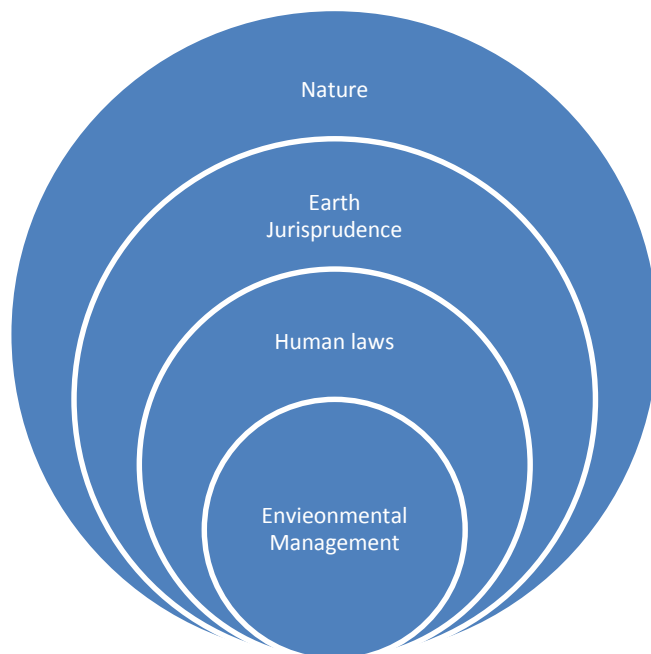


Figure 2.2: Reformed legal system

4.9.2 A thought experiment: An eco-centric environmental legislation for South Africa

What would NEMA and NEMBA look like if based on principles that were eco-centric as opposed to anthropocentric?

The one recurring criticism against an Earth Jurisprudence approach that has been raised by its critics is the lack of concrete examples of what an eco-centric approach in law would actually look like (Lee, 2006), and therefore it is increasingly important to attempt to flesh out examples of real “wild law” to contribute to the important on-going conversations. The full scope of potential amendments to all environmental legislation is too broad to be considered as part of this study. Instead of such a broad analysis, only the legislative provisions dealing with or having an effect on endangered species were considered for purposes here.

The following are potential amendments which could be effected to the existing legislation to bring it in line with eco-centric thinking:

4.9.2.1 NEMA

- 1) Ash (2007) suggests that the word “management” should be avoided in all environmental legislation, as the word connotes mastery. For this reason, the title of NEMA and NEMBA is inappropriate.
- 2) The definition of “person” could be expanded to not only include juristic persons but also certain other members of the Earth community.
- 3) “Public interest” could be included as a definition and could be worded so as to make it clear that these interests include the interests of all members of the Earth community.
- 4) The legislation could emphasise the importance of avoiding degradation in the first place as opposed to resorting to rehabilitation of the environment as the standard procedure.
- 5) The removal of the preamble of NEMA which states as follows:
 - a) “Everyone has the right to an environment that is not harmful to his or her health or well-being;

- b) The State must respect, protect, promote and fulfil the social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities;
 - c) Inequality in the distribution of wealth and resources, and the resultant poverty, are among the important causes as well as the results of environmentally harmful practices;
 - d) Sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations;
 - e) Everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.” This provision could be replaced by a provision with wording that acknowledges our interconnectedness with nature. This provision could further acknowledge that our history contains a lot of inequality and injustice, and that rectification of the injustices of the past will only be rectified by acknowledgement of our duty to actively enact legislation to preserve nature due to its inherent value.
- 6) Furthermore, Section 2(2) which states as follows: “Environmental management must place people and their needs at the forefront of its concern, and serve their physical psychological, developmental, cultural and social interests equitably” should be removed from the principles of NEMA, as it is an inherently anthropocentric statement which is not in line with an Earth Jurisprudence approach.
- 7) Section 2(4) which provides which factors must be taken into account in achieving sustainable development and which is elaborated on above should be amended to provide for factors which are more eco-centric in nature and are perhaps based on the principles by which indigenous communities have lived in harmony with the Earth for many generations. These factors could include:
- a) Humility, which according to Mason (2008, p.1) is the first lesson of Earth Jurisprudence. This principle captures the essence of being guided by

the systems of Earth in making decisions, “like an artist who is guided by his materials or the scholar who knows how little, not how much, we know of ourselves and this universe or the lawyer who learns that law is discovered, not made, and that justice, not will, is the natural organising principle of human society and Earth community” (ibid) It is the humility which is found when caring for the soil or trees.

- b) Generosity is the second lesson of Earth Jurisprudence (ibid). We must learn to give as abundantly as the Earth gives to us without a consumerist or selfish mentality. We must abandon our “toddler thinking” where we claim everything we touch as our own. We must recognise the systems within which we play a part. “To give and to give and to give is only to end up depleted and exhausted. To take and to take and to take is to end up engorged and even more exhausted. The natural balance is to give while receiving what is needed to be able to carry on giving. The economics of Earth Jurisprudence is not about scarce resources; it is about proper use, distribution and replenishment of natural abundance” (ibid).
- c) Mason (2008, p.1) states as follows: “Patience is the third lesson of Earth Jurisprudence. In the universe and in Nature, everything comes in its own good time. Years follow the Earth round the sun, season following season with the tilt of the axis. Months and tides follow the moon; days and nights follow the spin of the Earth. Each has its own time providing activity and rest, harvest and replenishment, change and consistency, all in proper time” (ibid).
- d) Restraint, is the fourth, final and possibly most important lesson of Earth Jurisprudence. Restraint is how the natural balance of the Earth community is and will be maintained in order to survive intact. If any species, including any person, takes more than what is due to him out of necessity, there will be a shortfall somewhere. Mason (2008, p.1) argues: “If the grasslands expand, forests and jungles contract; where the forests expand grasslands contract: each the inevitable counterpart of the other. Where human demands expand, Mother Earth’s other children lose their diversity and their livelihoods, and sooner or later people do too”.

- 8) The Act may, in Chapter 2, in addition to other institutions created in the Act, provide for the creation of environmental courts to adjudicate on matters which are relevant to the protection and conservation of all members of the Earth community.

4.9.2.2 NEMBA

- 1) In order to still give effect to the numerous provisions in NEMBA related to the management of invasive species but still remain aligned with an Earth Jurisprudence approach, a provision similar to the limitation clause in the hypothetical Bill of Species described above could be incorporated. This provision would prevent one species from flourishing to the detriment of another species. Invasive species are by definition threatening to the survival of an indigenous species (or even multiple species). It would make sense to control the population and spread of the invasive species to preserve the natural continuation of the threatened indigenous species. If the aforementioned situation occurred, it would be an appropriate situation to draft one of the plans required in the Act. As specified in NEMBA, this plan could be drafted by anyone as a draft management plan to preserve an ecosystem or indigenous species.
- 2) The provisions in NEMBA which regulate the procurement of permits for purposes of trading in animal parts, hunting or engaging in any other activity which is limited by current legislation would probably change rapidly under an Earth Jurisprudence approach. As every member of the Earth community has inherent value which is not linked to the commercial value it may have to humans, and every member of the Earth community must be afforded the reasonable opportunity to fulfil their purpose for existence, the alignment of legislation such as NEMBA with the Earth Jurisprudence philosophy will likely result in a decline in the trade of any species. This will also have an impact on whether there will be any permit system at all in environmental management legislation.

4.9.3 Environmental Conservation Act

In the Act, section 21 makes reference to the environment as a resource. In terms of making decisions under this Act, the Minister can identify activities that have the

potential to have detrimental effects on environment. The aforementioned section states as follows:

- 1) “The Minister may by notice in the Gazette identify those activities which in his opinion have a substantial detrimental effect on the environment, whether in general or in respect of certain areas.
- 2) Activities which are identified in terms of subsection (1) may include any activity in any of the following categories, but are not limited thereto:
 - ...c) resource removal, including natural living resources; and
 - d) resource renewal;....”

4.9.4 Government policy

At times, it can be difficult to assess which direction a country is heading in or the ultimate vision of policy-makers simply by looking at legislation. When legislation is enacted, it often represents compromises which have been made along the way and may differ from the original line of thinking. For this reason, it is useful to analyse policies which may not have been implemented yet or which preceded the implementation of legislation.

4.9.4.1 South Africa’s national biodiversity strategy and action plan 2005

In the foreword of this policy document it is acknowledged that radical changes in attitude and actions will be required to conserve South African biodiversity. However, a few sentences down the purpose of preserving biodiversity is presented as follows: “...conserve and manage terrestrial and aquatic biodiversity to ensure sustainable and equitable benefits to the people of South Africa...”

According to the action plan, it was discovered that 34% of terrestrial ecosystems are endangered during an assessment of these ecosystems. More alarmingly, 82% of river ecosystems are endangered and 64% of marine bio zones are endangered. It is stated that the primary concern regarding the loss of biodiversity is the lack of clean water resources and food for the future generations in South Africa, especially marginalised and poor populations. The policy document states that: “It is critical that the value and importance of biodiversity to people’s livelihoods is recognised and biodiversity

management (including conservation, access, use and rehabilitation) must be integrated with poverty alleviation strategies and local economic development.”

It is stated that in the two years prior to the implementation, systematic biodiversity planning was conducted to identify key areas for biodiversity conservation strategies. The use of the word “planning” in this context is interesting and clearly represents the anthropocentric viewpoint that humans have the ability to “plan” how biodiversity will develop and grow, and to control this process. The strategy was then developed through a series of debates which were conducted during workshops on the topic.

The lack of resources and capacity to implement legislation effectively, whether it be due to financial constraints, staff shortages or an organisational culture, is emphasised as a barrier to implementation. There is also recognition that many failures in implementation results from failure at a systemic level, and that commitment is required from the highest level of government to really conserve biodiversity effectively.

The following five strategic objectives were identified:

- Strategic Objective 1: An enabling policy and legislative framework integrates biodiversity management objectives into the economy.
- Strategic Objective 2: Enhanced institutional effectiveness and efficiency ensures good governance in the biodiversity sector.
- Strategic Objective 3: Integrated terrestrial and aquatic management across the country minimises the impacts of threatening processes on biodiversity, enhances ecosystem services and improves social and economic security.
- Strategic Objective 4: Human development and well-being is enhanced through sustainable use of biological resources and equitable sharing of the benefits.
- Strategic Objective 5: A network of conservation areas conserves a representative sample of biodiversity and maintains key ecological processes across the landscape and seascape.

This policy demonstrates, perhaps even more clearly than legislation mentioned, how anthropocentric the future vision for biodiversity conservation in South Africa really is. This represents not only the point of departure for government but also represents the vision for the years going forward. This represents a major challenge for the embracing of a vastly different philosophy such as Earth Jurisprudence.

4.9.4.2 Sustainable Development National Strategy and Action Plan 2011

In this a more recent policy document, the following five strategic objectives were identified:

- Strategic Objective 1: Enhancing systems for integrated planning and implementation.
- Strategic Objective 2: Sustaining our ecosystems and using natural resources efficiently.
- Strategic Objective 3: Moving towards a green economy.
- Strategic Objective 4: Building sustainable communities.
- Strategic Objective 5: Responding effectively to climate change.

The most important objective in the list above is the second strategic objective. For this objective to be achieved, the government has identified 40 interventions.

The most important interventions include:

- 1) Curtail water losses at water distribution systems to an average percentage reduction (saving) [from 30 to 15% by 2014];
- 2) Reduction (saving) of demand as determined in the reconciliation strategies for seven large water supply systems by 15% [assessment of water requirements and water monitoring systems implemented by 2014];
- 3) Increase the number of Blue Flag beaches [to above 29 beaches];
- 4) Rehabilitation of land affected by degradation [3.2 million ha by 2014];
- 5) Percentage of coastline with partial protection [from 12 to 14% by 2014]; and
- 6) Percentage of land mass protected (formal and informal) [from 6.1 to 9% by 2014].

In July of 2014, the first monitoring and evaluation exercise was undertaken to establish the progress made towards the aforementioned interventions. However, due to a lack of baseline data and indicator information it was impossible to determine progress with any level of certainty.¹⁷

¹⁷http://soer.deat.gov.za/dm_documents/NSSD1_Draft_Report_20_May2014_final_draft_for_comment_vQ62Q.pdf

The protection of endangered species does not feature as a key area for intervention, perhaps due to the fact that the conservation of these species does not hold an immediate benefit for the human population. The anthropocentric nature of the strategy can be clearly seen in the following statement extracted from the document:

Natural resources (water, soil and biodiversity) form the basis of life, economic activity and human wellbeing. Functioning ecosystems generate goods (natural products, such as water, timber, flowers, food and medicines) and services (waste recycling, water and air purification, flood attenuation, recreational opportunities and carbon sequestration). The depletion or wasteful use of natural resources, and/or degradation of ecosystems poses a threat to the achievement of socioeconomic objectives.

This policy document is a clear indication of how far away we are from incorporating an approach which recognises the intrinsic value of other species, despite the fact that this policy does, to its credit, make reference to the fact that humans form part of the wider ecosystem.

4.10 Conclusion

One could choose to amend the Constitution or national legislation and policy, but based on the aforementioned analysis I argue in favour of a Constitutional amendment. This proposal is in light of the inferior nature of national legislation which will be scrapped if found to be in conflict with the Constitution. Secondly, as argued by Christiansen (2013, p.217-218): “the Constitutional Court holds a uniquely influential position in the field of comparative constitutional law with its expansive rights protections, permissive jurisdictional rules, hard-wired consideration of foreign and international law, and its unrivaled reputation among academics and jurists.”

Chapter 4 has successfully answered the following research questions:

- *How can an Earth Jurisprudence approach most effectively be incorporated into the laws that frame the legal protection of endangered species in South Africa?*

- *What would be taken into account in changing South African legislation to incorporate Earth Jurisprudence?*

Chapter 5 will explore why the law might be the most appropriate tool to create real change in society, which may result in better protection of endangered species.

Chapter 5: The Law as a Tool for Social Engineering

“The rise of the welfare state in the West, the establishment of socialism in the East and the emphasis on development politics in much of the Third World indicate that public policy in almost every contemporary society tacitly upholds the legitimacy and efficacy of social engineering.” (Potts, 1982)

5.1 The law as a tool for social engineering

Chapter 4 explored the potential amendments that can be incorporated into South African legislation to bring it in line with an Earth Jurisprudence approach. Why choose the law as a tool to shape the way people perceive nature when there are other options such as education that can be utilised? In Chapter 5 I will argue that law is not only an effective way to shape the way society behaves and thinks, but is also a tool which provides rapid results in a large percentage of the population. I will also argue, however, that it is not an effective tool if used in isolation. Given the dire need for rapid action as illustrated by the plight of rhinos in Chapter 1, the law may be a required tool to achieve the necessary change in society. Chapter 5 assists in answering the following research questions:

- *What would be taken into account in changing South African legislation to incorporate Earth Jurisprudence?*
- *Would the incorporation of the Earth Jurisprudence approach in the South African legal framework improve the protection of endangered species?*

The term social engineering can conjure images of oppressive systems where social injustices are rife. An example of such oppressive social engineering can be found in the example of mass sterilisation of Native American women in the United States up until the 1970s (King 2007). A number of positive examples of social engineering do exist, however. Affirmative action instituted in the United States (and in South Africa) is one positive example (ibid).

According to Bosselmann (2001, p.17):

Christopher Stone (author of “Should Trees Have Standing”) himself recognises the limitations of his ‘rights for nature’ theory and in the final pages of his article discusses the importance of a changed environmental consciousness. He states that legal reform, together with attendant social reform will be insufficient without a radical shift in our feelings about our place in the rest of Nature.

According to Moore (1973, p.722), the underlying rationale for using law as a tool for social engineering is as follows:

Social arrangements are susceptible to conscious human control, and the instrument by means of which this control is to be achieved is the law’, a formulation in which “the law” is a short term for a much more complex aggregation of principles, norms, ideas, rules, practices and the role played by agencies of legislations, administration, adjudication and enforcement, backed by political authority and legitimacy. The complex “law” thus compacted into one term, is abstracted and far removed from the social context in which it exists, and is explained and made sense of as if it were an entity capable of controlling that context.

If we consider culture and consider the law, it may seem intuitive to separate the two concepts into two distinct categories. However, if we consider environmental crimes, the question of whether the issue before us is a reflection of a cultural problem or a legal problem becomes increasingly pertinent, especially with regard to the increase in poaching of endangered species for use in the traditional medicine market. This illustrates the way on which these two concepts interact, both positively and negatively.

It may often seem apparent that the law must change as society changes, so as to better reflect the changing cultural norms and also to react against those practices which may be harmful to society as a whole. However, does the law simply operate reactively or can it be applied proactively to effect social change? Is the law simply the

reflection of a set of beliefs or a culture as it exists, or can the law be utilized to reflect a culture as it should be and used to drive society towards that goal?

Patrick Devlin (1965, p.125) famously argued that the law should be used to enforce the norms of a society's culture:

Society means a community of ideas; without shared ideas on politics, morals, and ethics no society can exist.... If men and women try to create a society in which there is no fundamental agreement about good and evil they will fail; if, having based it on common agreement, the agreement goes, the society will disintegrate. For society is not something that is kept together physically; it is held by the invisible bonds of common thought.... A common morality is part of the bondage. The bondage is part of the price of society; and mankind, which needs society, must pay its price.

Devlin imagines that law enforces "the invisible bonds of common thought" that hold us "together" as a society, and that this "fundamental agreement" in turn legitimates law. Law is thus the ultimate source of society's identity and authority (Post 2003). Cochrane (1971) disagreed with Devlin and argued that society controls the law and not the other way around. Moore (2000) states that both arguments are true and serves to indicate that law and society are interdependent entities.

To this end, the law as a tool for positive social engineering must be considered. Mill (1859) was one of the primary proponents of social engineering through legislation and argued that when legal duties are considered, the best interests of society as a whole must be taken into account and not just self-interest. If legislation granting rights to nature is adopted, this would be due to the fact that the interests of the Earth community as a whole is taken into consideration.

In 1942 Roscoe Pound, one of the most influential jurists and legal scholars of all time, originally proposed this idea as follows: "The law may be thought of as a task or a great series of tasks of social engineering, as an elimination of friction and a preclusion of waste, so far as possible, in the satisfaction of infinite human desires out of a fairly

finite source of the material goods of existence” (cited in Makkar 2010, p.2). This idea clearly very closely mirrors the concept of sustainable development, and suggests that the tool to achieve sustainable living is the law. Social engineering would not be possible without the existence of social institutions and normative laws being established or changed by man (Rhees 1947). Moore (1972) argues that social engineering is the primary motivation behind the majority of enacted pieces of legislation. Nalbandian (2011, p.147) states as follows:

Unlike many jurisprudential theories, Pound’s theories tend to appeal to the more pragmatic and realist students of legal theories. There is the implicit and very rarely expressed criticism against Jurisprudence as a subject the idea that legal theories are theoretical and therefore quite artificial, having little bearing on reality and suggesting wholesale changes that are unrealistic. Pound’s theory on the other hand sets itself up as the opposite of a theory. It is suggesting that it will look at the law as it is, and then addresses the issue of how it will change and grow based on social wants, needs and demands pragmatically and relatively.

McManaman (2013) agrees with Pound and states that law is a task of social engineering designed to get rid of friction and waste to satisfy human interests and demands out of a limited supply of resources.

Hoffman (cited in Tyler & Jackson 2013, p.85) writes:

The legacy of both Sigmund Freud and Emile Durkheim is the agreement among social scientists that most people do not go through life viewing society's moral norms as external, coercively imposed pressures to which they must submit. Though the norms are initially external to the individual and often in conflict with [a person's] desires, the norms eventually become part of [a person's] internal motive system and guide [a person's] behaviour even in the absence of external authority. Control by others is thus replaced by self-control [through a process labelled internalization].

The law can be described as a tool to balance competing interests in a society (Mayneni 2007). In this instance, I will interpret the term “society” in a similar manner to the term “Earth community” as described by Thomas Berry above. As discussed in Chapter 2, human interests in our society have been recognized and elevated beyond other interests. This has led to an imbalance which has resulted in the extinction of many species, water scarcity, climate change and a range of other environmental and social problems.

The law must fulfil three tasks according to Pound (1942):

- 1) Recognise relevant interest;
- 2) Define the limits within which such interest are to be legally recognised and given effect to it; and
- 3) Secure the above interest.

Pound explains that the law is based on a certain set of assumptions within society (ibid). In any given situation, one interest will be of greater value than another and this interest will be secured and legally upheld as it benefits the maximum members of society (ibid). In the case of the Earth community, one could look at the example of an oil company extracting oil in the Amazon and causing destruction to the forest in the process. If interests are weighed up by taking into account all relevant interests in the entire Earth community, the interests of the oil company would not be secured, as the interests of the forest ecosystem, the human communities depending on the ecosystem, and the dependence of the global population on rainforests for basic requirements such as oxygen and medicine would be of greater importance. This is clearly a very different approach to the approach currently enforced, and requires a reassessment of the interests which should be considered and which are perhaps currently ignored. Pound stated that the assumptions upon which we base law are never absolute and must change according to the situation and needs (ibid).

Makkar (2010) points out that when legislation to correct imbalances is implemented, it must be accompanied by “social preparedness” by educating society about the

reasons for the legislative change and to convince them that the results of the legislation will be for the common good.

King (2007) argues that the legislative policies instituting affirmative action measures in the United States effectively changed the way different racial groups perceived one another, thus in some ways bridging a social divide. He highlights the six key elements that should be present for successful positive social engineering to take place:

- 1) A specific problem must be identified. In this instance, the degradation of ecosystems and loss of biodiversity as a result of specific human activities is the problem which needs to be addressed;
- 2) When the specific problem has been identified, experts must identify the most appropriate policy tool to address the problem;
- 3) The level of commitment from policy makers in pursuing effective solutions is a key factor to determining the success or failure of a solution. Political buy-in is therefore vital to the success of the social engineering initiative;
- 4) A fourth factor which determines the success of the initiative is the nature of the target population and their political strength or weakness;
- 5) The practicality and availability of policy tools which could expedite the social engineering initiative is an important factor in determining which tool would be best suited to effect the necessary change; and
- 6) Lastly, the political power or weakness of critics, or the very presence of opposition at all, is a determining factor. When critics of the initiative lack political power, the initiative is more likely to succeed.

According to Potts (1982), legal social engineering requires two phases: the pre-engagement phase and the working phase. It is only when the two phases are synchronous and mutually reinforcing can law actually control social processes. Different forms of social engineering were explored by Karl Popper (1961), who distinguished between “piecemeal social engineering” and “Utopian social engineering”. Popper suggested that:

Just as the main task of the physical engineer is to design machines and to remodel and service them, the task of the piecemeal social

engineer is to design social institutions and to reconstruct and run those already in existence....Holistic or Utopian social engineering, as opposed to piecemeal social engineering,...aims at remodelling the 'whole of society' in accordance with a definite plan or blueprint...

(Popper 1961, p.21)

Utopian social engineering, according to Popper, is not based on research or experience of social evils but is a reflection of the political will of one or few persons. Utopian social engineering also attempts to recreate a society from scratch which, Popper argues, is a recipe for disaster as it will inevitably lead to oppression and violence. Piecemeal social engineering, however, can be inspired by a utopian vision, but leaves room for democratic processes and is not an attempt to reform society completely but rather guide it in the right direction and use the action of social engineering as the first step in a journey to a better society (ibid). By proceeding one reform at a time, they may be able to build a series of alliances such that a majority supports each reform. This is how the Constitution of South Africa was drafted (Ebadolahi 2008).

Popper (1961, p.22) stated that:

The politician who adopts this [piecemeal] method may or may not have a blueprint of society before his mind. He may or may not hope that mankind will one day realize an ideal state, and achieve happiness and perfection on Earth. But he will be aware that perfection, if at all attainable, is far distant and that every generation of men, and therefore also the living, have a claim...

As discussed above, the concept of using law as a tool for social engineering is not novel. It has been used on many occasions in different settings. The method has been credited for developing India's welfare state and benefiting the poorest in society (Popper 1961). Similarly, new policies designed to empower women in the 1960s and 1980s were implemented in China and advocated through mass communication by the national media, resulting in increased emancipation of women (Gupta et al. 1999). Of course, the motive behind social engineering initiatives has not always been so

noble. The example of the establishment and later abolishment of the apartheid regime in South Africa is indicative of how powerful this methodology can be (Potts 1982), both in creating a mind-set en-masse and then changing it.

Bristow (1997) highlights an interesting example of positive social engineering that took place in the United States of America during the First World War. Soldiers in the training camps were turning away from their families and associated values and indulging in alcoholism and what was viewed as immoral activities with prostitutes. As a result, venereal disease was becoming more common. Men had changed since the industrial revolution, with more becoming more focused on their own economic gain than the wellbeing of society. They were also increasingly threatened by the changing roles of women, which was viewed as encroaching. Social reformists decided to take action, not only to restore a sense of shared morality to the American Army and to society, but also to use these common values to unite soldiers who were divided along lines of class, race, religion and ethnicity. As the soldiers were soon to be sent to France to face conditions which were difficult and would challenge every fibre of their being, the social reformists wanted to avoid simply shielding the soldiers with external measures. Instead, they wanted to create a mind-set or “state of consciousness” which would provide a guide and better equip these men to deal with the harsh environments they were to face. This was called the “invisible armour”. The training camps became locations where a new way of thinking about common values and social responsibility. This was achieved through ongoing education and calls to action. Men were encouraged to act as “worthy representatives of their country” by treating women as equals, upholding standards of morality and practicing self-control. Posters were displayed to remind the soldiers that their actions had consequences not only for themselves, but also the rest of the nation and even their own children. To enforce the new way of thinking, the program also utilised various law-reforms.

Similarly, Chiang (2001) describes the case of Chinese scholars who had studied in America and who were inspired by and decided to utilise social engineering to address some of the social issues that had plagued China for many generations. These scholars moved from academia to government work and spontaneously started progressive social reform programs in many states of China in the 1930s. This was called the “rural reconstruction movement”. Eventually, literacy campaigns,

cooperatives and agricultural extension programs had been implemented in more than twenty provinces in the country. The belief in the power of social engineering echoed the perennial Chinese idea that knowledge should be used to govern society.

In the same way that family values changed and were discarded to a degree during the industrial revolution, our modern society is more focused on economic gain than what is best for the Earth community. As a result, other species are endangered due to human activities like extraction of resources or poaching. For example, rhino horn can be sold for up to USD\$65 000 per kilogram, making the illegal poaching and trade of these animals an economically lucrative activity (Challender & MacMillan 2014). There will definitely be consequences for future generations if the trend of environmental destruction for personal gain does not cease. There have been various campaigns launched by primarily non-profit organisations in an attempt to raise awareness of the price of our behaviour. However, these educational campaigns have been insufficient as a tool to create the rapid and wide-spread change necessary. Therefore the best available option is to use legislation as a tool to initiate the process which will possibly result in a new societal mind-set.

Recognising the potential of humans to cause our own self-destruction without social engineering (albeit in a post war context), Simpson and Field (1947, p.147) stated as follows:

This means that we must make law to control man, and yet leave man in control of law...human nature can be controlled, and we should no more become defeatist when the enemy is mankind's own suicidal impulses than if it were an army of Martian invaders or the cooling of the sun. We may well have better success with controlling the human race than with the Martians or the Second Law of Thermodynamics.

This approach could encourage humans to consider our actions in light of the effects on the whole Earth community. It could potentially serve to enforce the view that the Earth community is intrinsically connected and that the destruction of one element will inevitably lead to the destruction of the system.

Achieving this change in mind-set could be possible if an Earth Jurisprudence approach is incorporated into our legislative framework. There are different options for incorporation, from a Constitutional to a national legislative level. The options and barriers to these options will be explored further below. One issue which we must be cautious of avoiding (if the above discussion is taken into consideration) is a utopian approach where there is risk of violence, dissent and complete rejection. It is more appropriate to follow a piecemeal approach and proceed with the strategy as a series of reforms towards a greater goal. If one implements either a utopian or a piecemeal social engineering approach to South Africa, there may be unintended consequences in other areas. This is acknowledged and one area of potential conflict which is recognised and which will be discussed further is certain provisions in the Bill of Rights. To effectively implement legislations which would lead to the desired change in behaviour, the legislation must be supported by communication and education initiatives, as highlighted in aforementioned examples.

Whilst the law is a possible tool to initiate social engineering and resultant behaviour change, it is unlikely to be effective if utilised in isolation. An example of the failure of legislation to bring about the desired behaviour change is that of the laws governing (and criminalising) the cultural practice of female genital mutilation in Ghana (Aberese Ako & Akweongo 2009). Despite legal reform designed to stop this practice in the Upper Eastern regions of Ghana, there has been very little change in behaviour regarding this issue (ibid). A lack of political support to effectively enforce these legal provisions and adequately educate citizens has been identified as the primary reason for the failure of the legislation to bring about the desired changes (ibid).

5.2 Behaviour modification theories

One of the most influential theories regarding behaviour change is the Theory of Reasoned Action and Planned Behaviour, formulated by Ajzen and Fishbein in 1980. As the name implies, the theory of reasoned action is based on the assumption that people generally make sensible choices, taking into account all available information to make a decision. This implies that people always act in terms of their underlying intentions. This theory postulated that intention is the most immediate determinant of

behaviour, and that intentions can be affected by various factors, including beliefs and perceptions (Fishbein & Ajzen 2010). According to this theory, intention is based on two factors, namely personal and external social influences. People are more likely to change their behaviour if they believe they will benefit from it, or when they feel social pressure to do so, and when they feel that they are personally able to control the behaviour (ibid). This theory is therefore designed to predict any voluntary behaviour, unless intention changes (ibid). The theory of planned behaviour is an extension of the theory of reasoned action and serves to illustrate how all behaviour can be influenced, not just voluntary behaviour. It adds an additional elements, namely the perceived ease or difficulty of performing the behaviour, or the perceived behavioural control (ibid).

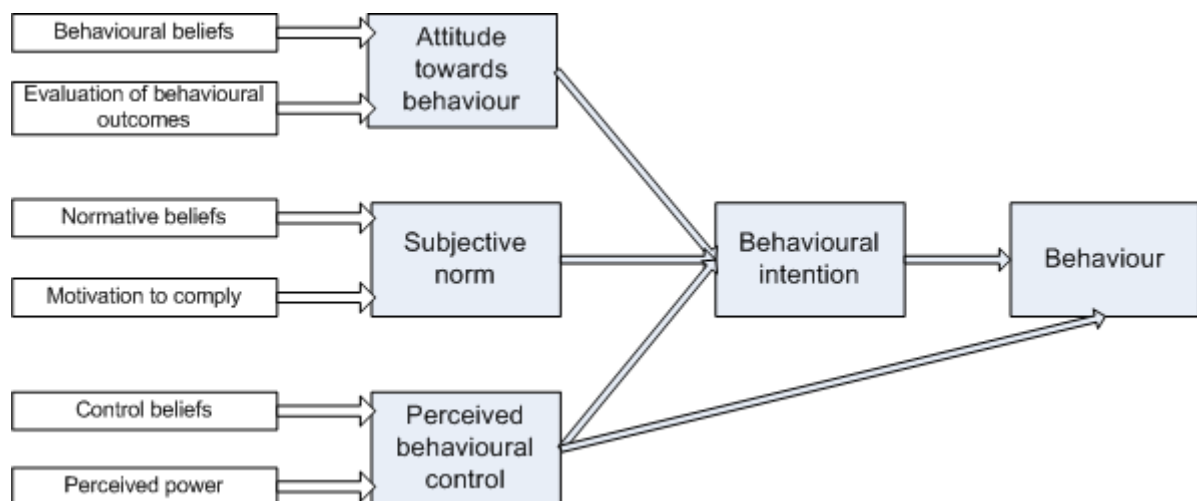


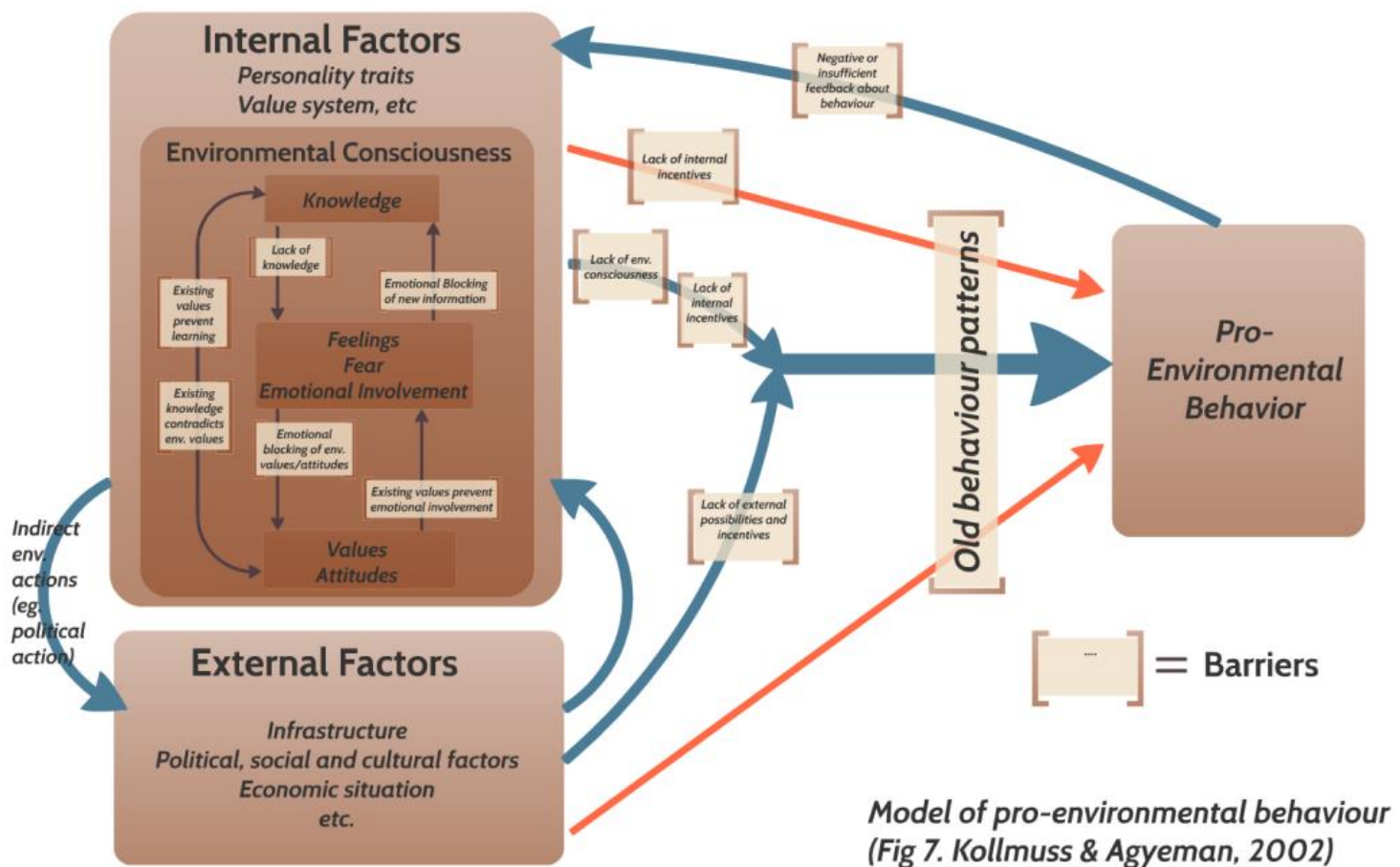
Figure 5.1: Theory of reasoned action and planned behaviour (Source: Ajzen & Fishbein 2010)

The Theory of Reasoned Action and Planned Behaviour has been implemented successfully in initiatives aiming to reduce the rate of obesity amongst young adults in the United States of America (Hackman & Knowlden 2014).

Many modern behaviour change theories evolved from the above theory, but one of the most relevant for purposes of this discussion is Stern's value-belief-norm theory (Stern et al. 1999) which sought to predict the determinants of bio-centric behaviour. Stern (1999) argues that our beliefs are based on our individual values, which ultimately determines our behaviour. Stern (2000) describes three basic internal

values, and according to him people are either altruistic, biospheric or egoistic. The behaviour of each group will differ based on a cost benefit analysis. Those with a dominant egoistic value orientation will consider the costs and the benefits to themselves. If the benefit to them outweighs the cost, they will behave in an environmentally friendly manner. Individuals with an altruistic value orientation will be more inclined to consider the perceived benefits and costs to other people before making a decision regarding environmentally friendly actions. Those individuals with a biospheric value orientation are more likely to take into consideration the benefits and costs for the biosphere and environment and are thus likely to behave in an environmentally friendly manner most of the time. There is a large overlap between individuals with biospheric and altruistic value orientations (Stern & Dietz 1994; Corraliza & Berenguer 2000; Bardi & Schwartz 2003).

Kollmuss and Agyeman (2002), developed a comprehensive model to explain pro-environmental behaviour and the associated drivers behind this behaviour, drawing from various behaviour theories such as the theories highlighted above.



Model of pro-environmental behaviour (Fig 7. Kollmuss & Agyeman, 2002)

Figure 5.2: Factors influencing pro-environmental behaviour (Kollmuss & Agyeman 2002)

The model illustrates the lack of singular influence environmental education (or knowledge) wields over pro-environmental behaviour (ibid).

Kollmuss and Agyeman (2002) state as follows:

We do not attribute a direct relationship to environmental knowledge and pro-environmental behaviour. We see environmental knowledge, values, and attitudes, together with emotional involvement as making up a complex we call 'pro-environmental consciousness'. This complex in turn is embedded in broader personal values and shaped by personality traits and other internal as well as external factors. We put social and cultural factors into the group of external factors even though it might be argued that social and cultural factors could be seen as a separate category which overlaps with internal and external factors. We also pondered if our model would differ at different stages in people's lives, and we agreed that it would not, but that the different factors inherent in it, and the synergies between them, would play greater or lesser roles during the development process. In addition, the longer the education, the more extensive is the knowledge about environmental issues. Yet more education does not necessarily mean increased pro-environmental behaviour. The arrows in the figure indicate how the different factors influence each other and, ultimately, pro-environmental behaviour. Most are self-explanatory. The two narrower arrows from internal and external factors directly to pro-environmental behaviour indicate environmental actions that are taken for other than environmental reasons (e.g. consuming less because of a value system that promotes simplicity or because of external factors such as monetary constraints). The biggest positive influence on pro-environmental behaviour, indicated by the larger arrow, is achieved when internal and external factors act synergistically. The black boxes indicate possible barriers to positive influence on pro-environmental behaviour. The model lists only a few of the most important barriers. In the diagram, the largest of them represents old behaviour patterns. This is partly for graphical reasons—the barrier has to block all three arrows—but it is also because we want to draw attention to this aspect.

We believe that old habits form a very strong barrier that is often overlooked in the literature on pro-environmental behaviour.

The diagram illustrates that the biggest positive influence on pro-environmental behaviour occurs when external and internal factors are combined (Kollmuss and Agyeman 2002).

In light of the above, Prager (2012), makes the following recommendations when using policy to change behaviour:

- 1) Know your target audience – different types of people react to different kind of incentives;
- 2) Know what behaviour you want to change towards which other kind of behaviour; or know what kind of actions you want people to get involved in;
- 3) Consider which factors are likely to influence behaviours and shortlist which key influencing factors the policy/ intervention will target. Identify what has worked in the past; and
- 4) Find innovative ways of governance: rather than informing people and telling them what to do, take them on board, include them as partners in deciding on which conditions that drive behaviours should be changed and how best to achieve this.

Public participation and careful deliberation is therefore necessary, similar to the process which was undertaken during the drafting of the current Constitution. Individuals with different value orientations should be considered and accommodated as far as possible. All individuals should be aware that they are still in a position to control and make decisions regarding their own behaviour.

It has been argued that behaviour change interventions cannot replace legislation to change environmental behaviour (John & Richardson 2012). Oliver (2013) argues in support of Mill that when human actions are harming others in society, governments are entitled to intervene and draft legislation which will change behaviour and prevent the harm from occurring in future. Legislation and other interventions are complementary in achieving behaviour change (Loewenstein et al. 2012).

5.3 Conclusion

It is probably unrealistic to anticipate that a change in legislation which incorporates an Earth Jurisprudence approach, even at a Constitutional level, would rapidly change the perceptions of every South African to one more in line with biocentrism. Rather, it would serve to change behaviour and subsequently perceptions. After all, as Ahmed (cited in Melber, 2014, p.203) states:

South Africans often proudly proclaim that our Constitution is one of the most progressive in the world. Yet if you ask most South Africans how they really feel about gay rights, abortion and the death penalty, their answers, more often than not, contradict the values enshrined in the Constitution.

However, Chapter 5 has highlighted that by using the behaviour change guidelines above, policy and legislation could effectively be used to create more eco-centric behaviour, and will be more effective if education and public participation is rolled out simultaneously, thereby ensuring that external and internal factors are combined for the greatest impact. The law could therefore be an effective tool for positive social engineering to ensure that the inclusion of Earth Jurisprudence in legislation has a positive impact and changes the behaviour of South African society.

Chapter 6: Conclusion and Recommendations

6.1 Conclusion and recommendations

This research was guided by the following research questions, as set out at the beginning of this document:

- 1) What legislation currently exists in the world which may contribute to this approach?
- 2) Would the incorporation of the Earth Jurisprudence approach in the South African legal framework improve the protection of endangered species?
- 3) How can an Earth Jurisprudence approach most effectively be incorporated into the laws that frame the legal protection of endangered species in South Africa?
- 4) What would be taken into account in changing South African legislation to incorporate Earth Jurisprudence?

These questions were answered as follows: Chapter 1 of this research successfully highlights the anthropocentric approach which underlies current legislation. This chapter explores the anthropocentric roots of international treaties which influence our legislation, and the evident impact on South African legislation, starting at a Constitutional level and filtering down to NEMA, NEMBA and case law. This chapter also highlights that the anthropocentric approach in environmental legislation has directly led to the inadequate protection of biodiversity, especially endangered species. Earth Jurisprudence as an alternative to this anthropocentric approach is explored in Chapters 2 and 3.

Chapter 2 presents the literature review covering key contributions from experts such as Cormac Cullinan, James Lovelock and Thomas Berry to illustrate how an Earth Jurisprudence approach may improve the legal protection of endangered species. Additionally, the key principles of Earth Jurisprudence were introduced and analysed.

Chapter 3 explores the implementation of Earth Jurisprudence in other countries and highlights the processes that led to the adoption of this approach in countries such as Ecuador and Bolivia. This in turn highlights the lessons we can learn and the feasibility

of applying this approach in a South African context. I discovered that in all three case studies the catalyst to the adoption of an Earth Jurisprudence approach was the advocacy from indigenous communities. Comparatively, a different approach may be necessary in South Africa. I argue in favour of directly adopting legislation without prior advocacy in Chapters 4 and 5.

Chapter 4 explores options for legislative amendments on a Constitutional level and in subordinate pieces of legislation to incorporate an Earth Jurisprudence approach into South African legislation. This chapter also explores the potential challenges which could arise if the suggested amendments are adopted. For this reason, I proposed a limitation clause which would limit the friction between human rights and rights for nature.

Chapter 5 explores the concept of the law as a tool for the purposes of social engineering, an important consideration when deliberating such a drastic legal amendment.

South Africa, as a developing country in one of the fastest growing and developing continents worldwide and one of the countries with the most biodiversity in the world, is in the position to make important decisions about the future of the rest of the Earth community, including the future of endangered species. These decisions will have a tremendous impact on all other species, and very possibly the future well-being and survival of human societies. We are in a position to set an example and lead the way by implementing progressive legislation, just as we have done before in the drafting of our Constitution.

This research has highlighted a few of the inadequacies of our legal system in dealing with environmental crimes such as the poaching of endangered species. The primary reason for the aforementioned inadequacies as put forward in this research is the anthropocentric viewpoint used to consider the wellbeing and survival of other species and the fact that that we have drafted and implemented legislation in accordance with this anthropocentric view.

This study has determined primary underlying philosophy in the legislation protecting South African endangered species is anthropocentric. This is embedded deeply in our highest legislative document, the Constitution. As a result, it is reflected in all subordinate legislation and policy documents. We view ourselves as masters of all other species, and as separate to the rest of the natural environment. As a result, we have defined other species as “resources” with no intrinsic value other than our exploitation of them, and have condoned the inhumane treatment of animals in laboratories and the use of endangered plant and animal species in traditional medicine. This study also drew attention to the link between the fundamental arrogance of such an anthropocentric worldview and the extinction of many species and the critical endangered status of many more. Our view of endangered species as inferior therefore prevents us from protecting them adequately, through legislative measures or otherwise.

Earth Jurisprudence provides an alternative philosophy which could result in better protection of species such as rhinos by giving these species rights based on their intrinsic value. Examples of this approach, implemented in other countries, have been highlighted above. The most prominent example is Ecuador, where the constitution incorporates rights for nature. There are other examples in Bolivia and New Zealand, but Ecuador remains the only country which has incorporated Earth Jurisprudence into its constitution. As highlighted above, the common denominator in all of the international examples highlighted is strong advocacy from indigenous groups and their representatives, who have a history of recognising their own interconnectedness with nature. Within the South African context, this relationship with other species is not similarly embedded. However, there is some evidence in case law that there are communities in South Africa who could be strong advocates of an Earth Jurisprudence approach in our legislation. Furthermore, there is ample evidence of similar successful legal reform with far-reaching consequences, such as the entrenchment of children’s rights and women’s rights, or the abolishment of slavery and apartheid. It is not necessarily a viable option, however, to wait for a similar level of grassroots advocacy to encourage policy-makers in South Africa to follow the international examples highlighted above if we hope to save some of the critically endangered species in South Africa.

South African society in general is unlikely to wholly embrace Earth Jurisprudence in the next few years, as there are few high-profile advocacy initiatives aimed at initiating relevant policy changes to incorporate this concept. Therefore it could be more effective for policy-makers to adopt a more strategic approach and purposefully reshape our legal system to incorporate an Earth Jurisprudence approach. A potential strategy which could prove successful in this regard is using the law as a tool for social engineering. In this way, the law can be used as a tool to proactively reshape society instead of merely reflecting the current position of society. This research has illustrated that the most effective means to incorporate Earth Jurisprudence into South African law is by amending the Constitution to reflect the intrinsic value of the Earth community as a whole. This could include the addition of a Bill of Species which would effectively protect the rights of other species alongside the rights of humans. An additional limitation clause would prevent the rights of one species being upheld to the detriment of the survival of another species. This approach would be most effective to prevent a number of potential clashes between the principles embodied by Earth Jurisprudence, and the existing human rights in the Constitution. Furthermore, as highlighted above, case law indicates that our courts have a tendency to favour human rights above the interests of other species. The aforementioned limitation clause would be worded in such a way that it would effectively protect human interests and ensure the survival of endangered species in South Africa if an action which threatens the survival of the aforementioned species is challenged in the Constitutional Court. Given the lengthy period and extensive deliberation which took place before the Constitution was drafted in the first place and the onerous process to amend it, a comprehensive consultation process would be required prior to the amendments to ensure an equitable outcome.

However, since the Constitutional right to the environment has not been tested extensively in the Constitutional Court, additional amendments to national pieces of legislation such as NEMA and NEMBA may be required to reflect and adequately enforce the intention of any amendments to the Constitution. When the aforementioned legislation is analysed, it becomes clear that an anthropocentric approach is also deeply embedded in this legislation. The amendments to subordinate legislation would therefore be extensive, and would require a re-evaluation of concepts such as re-defining what is considered valuable and how economic value is measured.

The importance of this research lies in the exploration of the catalysts which led to the adoption of Earth Jurisprudence in other parts of the world, and the legislative amendments required for South Africa to adopt a similar position. The examination of a potential Bill of Species and an additional limitation clause to balance the rights for nature with Constitutional human rights represents an original contribution to the existing research on Earth Jurisprudence in a South African context.

6.2 Further research opportunities

Ash (2007, p.230) recommends that: "...to control for anthropocentric bias deriving when developing agreements that affect other species, the rational actors (humans) should include under the 'veil of ignorance' those positions that derive also from the differences of species."

Due to time constraints all possible implications of the possible amendments laid out in this research have not been researched. The amendments suggested in this research do not represent the only available options to amend existing legislation. It is therefore recommended that further research be conducted to determine the viability of these specific amendments to legislation, as well as other potential amendments, to bring it in line with Earth Jurisprudence.

Additional research on the broader impacts of such an approach could assist in identifying bottlenecks and may provide an incentive for law-makers to consider such an approach more earnestly.

Any person who is appointed as a guardian of the rights of nature would have to draw up necessary management plans in light of these rights (Shelton 2014). Environmental agencies and NGO's are already responsible for drafting guidelines and management plans to an extent (ibid), but the content and extent of these plans is a subject which merits further consideration.

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