ENVIRONMENTAL ETHICS AND THE PROBLEM OF SUSTAINABILITY: A SOUTH AFRICAN STUDY

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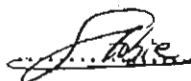
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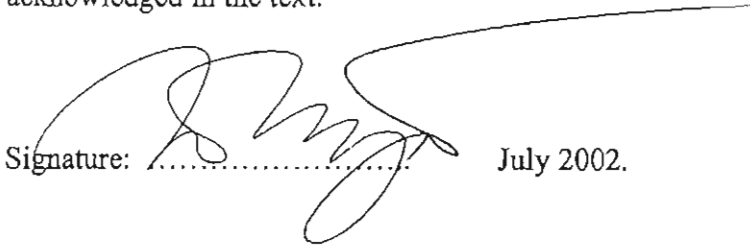
The following individuals and organizations deserve my heartfelt gratitude:

DECLARATION

This study represents original work by the author and has not been submitted in any form to another university. Where use was made of the work of others it has been duly acknowledged in the text.

Signature: .... July 2002.

PREFACE

Chapter one introduces the topic and outlines chapters two, three, four and five.

Chapter two discusses environmental ethics in the light of the three notions of the environment, namely, instrumental value, intrinsic value and the inherent worth. This chapter also discusses philosophical theories of ethics, viz. a consequence-based theory, which is, Utilitarianism, principle-based theories and a philosophical principle of stewardship.

Chapter three discusses the trajectory of sustainable development with respect to selected international events. This chapter also shows how the paradigm of sustainable development has been embraced in nation states, with a special reference to South Africa.

Chapter four critically analyses South Africa's environmental law and its macro-economic policy, GEAR, in the light of environmental ethics.

Chapter five synthesises discussions raised in the preceding chapters and offers some insights as to how policy-making pertaining to environment and development can be improved by incorporating a holistic approach of environmental ethics.

Chapter six summarises discussions that emerged in chapters one, two, three, four and five.

TABLE OF CONTENTS

CHAPTER ONE

SCOPE OF THE STUDY

TABLE OF CONTENTS

CHAPTER TWO

ENVIRONMENTAL ETHICS: A CONCEPTUAL FRAMEWOK

TABLE OF CONTENTS

CHAPTER THREE

SUSTAINABLE DEVELOPMENT: SETTING THE CONTEXT

TABLE OF CONTENTS

CHAPTER FOUR

DISCUSSION AND APPLICATION

TABLE OF CONTENTS

CHAPTER FIVE

TOWARDS A SYNTHESIS

CHAPTER ONE
SCOPE OF THE STUDY

1.0 Introduction

The enormous environmental degradation that accompanied development prior to 1980s led to significant attempts to reverse the "past" trends of development. In an attempt to reverse this phenomenon, new forms of development have since been sought. Efforts have been made such that environmental concerns are taken into consideration in development processes. Laws and policies related to development procedures, which are meant to inhibit environmentally unfriendly behaviour, have been established. This is as the result of the insight that undergirds what has become widely known as sustainable development. This chapter outlines issues that follow in chapters two, three, four, five and six.

1.2 Outline of chapters

Chapter two provides a conceptual framework within which environmental ethics in this thesis is discussed. This will include discussing three notions of environmental values, viz. instrumental value, intrinsic value and inherent worth. The reason for discussing these notions is in line with the argument that it is the first two dimensions that form the core of conservation policies. With respect to this, it is the utility of the environment (in that humans regard the environment as of use to them, be it in terms of consumption of resources or aesthetic purposes hence of intrinsic value) that conservation policies tend to safeguard. If not all, most conservation laws in modern thought are devoid of the recognition of the inherent worth of the environment. As it will be argued in a greater detail in chapter four, understanding the environment in terms of its instrumental value and hence utilitarian, has not only resulted in humanity's truncated view of the environment, but has also rendered attempts to protect and manage the environment less successful. To this effect, environmental law purports to reflect and cushion human interests rather than environmental interests *per se*.

In relation to the above, two ethical theories and a moral principle, namely, Utilitarianism, deontology and stewardship, will be discussed in chapter two. In its

Benthamite classical version, Utilitarianism as a philosophical theory alludes to the need to seek "the greatest happiness for the greatest number" (Goodin 1995:3), and hence it is consequence-based. Unlike Utilitarianism, Deontology is non-consequentialist in that it justifies moral behaviour based on certain pre-established rules. Stewardship, as a moral principle, whether in a negative sense or positive sense, basically points to the idea that humans are lords over nature. Some examples from South Africa's environmental legislation and a macro-economic policy that embody value-judgements that underlie the above philosophical traditions will be cited.

The significance of discussing the above principles and notions of the environment is informed by the contention that different environmental laws or principles and economic policies either explicitly or implicitly embody various elements of the ethical theories and principles. Another claim in this thesis is that, in certain cases, it would be difficult to categorically define the purpose of particular environment/development law or policy in the light of a particular philosophical tradition or moral principle. Hence, granted that there are diverse values and ideologies that underlie our contemporary valuation of the environment, the aim of engaging various approaches to environmental ethics in this study is to unravel "environmental problems in all their complexity, and ... challenge us to escape the limitations of an uncritical ethical perspective" (Des Jardins 1993:15). In relation to this, the insight informing this approach is that, within such a broader purview, environmental ethics "describes the varied ways in which different people understand the world (the different levels of "environmental consciousness")" (*ibid*). For example, some people subscribe to Utilitarian principles while others uphold duty/rights (deontological) approaches to the environment. Basically, the same can be said of environmental laws and development policies. It is within this broad framework that the significance of environmental ethics vis-à-vis environment/development-related laws/policies in South Africa will be discussed. However, the implications of these ethical theories will be discussed in detail in chapter four.

The main aim of chapter three is to discuss how the trajectory of sustainable development, following the realisation that previous trends of development would

jeopardise needs for present as well as future generations, led to the need for rethinking human activities or development processes in relation to the environment. This new form of "environmental consciousness" presupposed that development processes could not be divorced from the environment in that the former depends on the latter and hence the latter dictates the extent to which the former can happen. Selected international events and structures that are deemed as to have contributed significantly to sustainable development paradigm will be discussed.

Chapter three also discusses how South Africa, in the wake of adopting a democratic form of governance, has adopted environmental legislation that alludes to the concept of sustainable development. Uncritically looking at fundamental values entrenched in the Bill of Rights (chapter two) of the 1996 South Africa's Constitution, it could be argued that post-apartheid South Africa, as part of a "global village", embraces the core ideals of sustainable development. In other words, the 1996 South African Constitution seems to be an examplar of the Brundtland Report. One of the pronounced features in the 1996 South African Constitution is the centrality of human rights in chapter two. For example, within a broader framework of human rights, section 24 of the Bill of Rights foregrounds and stipulates people's right to a healthy environment as a facet of human rights.

Chapter four critically analyses various environment/development-related provisions and policies of South Africa. It can be argued that it is the recognition and endorsement of the concept of sustainable development that gave rise to principles such as the "Polluter Pays" Principle (PPP), the Precautionary Principle (PP) and "Duty of Care" (DoC) provided for in South Africa's environmental legislation. There is a correlation between such principles and sustainable development. For example, the "Polluter Pays" Principle (PPP) serves as an incentive to humanity to subscribe to sustainable development. In this regard, environmental laws are put into place to inculcate a particular form of morality that is intended to promote the ideals of a society with respect to the environment. Palmer observes: "environmental law rests on popularly held values concerning the ways in which humans should act in their natural and living environments" (1997:113).

While environmental laws and provisions are significant for regulating human behaviour towards the environment, as already mentioned above, environmental laws and economic policies are meant to promote human well-being as opposed to protecting the environment for its own sake. In other words, environmental laws and development-related policies necessarily tend to safeguard and enhance human values and interests while the non-human values are largely sidelined. This is precisely because our "environmental consciousness" and subsequently, environmental laws and policies are impregnated with anthropocentricism whereby, as Seed says, humans are "the crown of creation, the source of all value, the measure of all things" (1985:243-6). Consequently, as Taylor observes, our moral concerns and interests for non-human species are "in every case based on the contingent fact that our treatment of those ecosystems and communities of life can further the realization of human values and/or human rights" (2000:96). This is an inherent deficiency in environmental laws and economic policies such that this has negative effects on the promotion and achievement of the core ideals of sustainable development.

Having indicated that there are constraints concomitant in South Africa's environmental legislation and provisions, hence, the question that underlies this research is: to what extent can environmental ethics, which is an indispensable and invaluable tool for the holistic understanding of the environment, obviate the deficiencies in South Africa's environmental law and, thereby, reinforce the core ideals of sustainability? The hypothesis to this question is: South Africa's environmental law and provisions need to be informed by ecocentric ethics if the core ideals of sustainability are to be enforced. The central argument is that unless humanity's perception of the environment transcends the human utility of the environment, and embraces an all-encompassing ecocentric approach, no significant protection of the environment will be achieved. This implies that, subsequently, environmental laws have to be tailored in such a manner that an ecocentric dimension is equally taken into cognisance. This perception finds expression in the concepts of intrinsic value, in the philosophical sense and not in the legal orientation, and inherent worth of the (natural) environment, as it will be discussed in

detail in chapter five. In the light of this, I will seek recourse to the ecological models such as the Gaia theory/Land ethic, Ecofeminism, and Deep Ecology.

These ecological theories presupposes that the environment should be protected not simply because of its utilitarian purpose to humanity but, essentially, because of its intrinsic value and inherent worth. This is the insight that undergirds an ecocentric theory of environmental ethics which presupposes that utilitarian and deontological ethical theories and other moral principles be informed by the inclusive insight into creation, thereby, promoting a symbiotic culture through which inherent worth of all life forms and non-life forms of the environment are respected and promoted. Having said this does not mean precluding human utility of non-life systems, however, as Taylor says, the aim is to "maintain a healthy existence in a natural state" (2000:96). This further implies that, while fulfilling human needs and promoting human rights, this should be done within the purview of what Taylor calls "ultimate moral attitude" towards non-human species (*ibid*). While the principle of equal consideration of interest, presumed on the notion of "ultimate moral attitude", "does not allow major interests to be sacrificed for minor interests" (Singer 1993:63), it however, challenges the idea that human species are superior to non-human species. In the light of the above insights, chapter five provides a critique of environmental law with a special reference to South Africa's environmental legislation and economic policies, in particular, the Growth, Employment and Redistribution (GEAR).

1.3 Objectives of the Study

Specific objectives of the study are:

- To discuss and analyse theories of ethics that can provide a conceptual framework for critically re-examining South Africa's environmental policies.

- To explain how environmental ethics can promote a holistic understanding of the environment and the law.

- To document and understand the principles and provisions of environmental laws as mechanisms that regulate environmental management in the quest for sustainable development.

1.4 Significance of the Study

Considering its previous history, probably more than any other country in the world, South Africa faces a formidable challenge of redressing past ills. The Constitution could be regarded as an instrument that is meant to address various ill factors and institutions that tended to undermine morally acceptable values. In 1996, the South African government came up with new legislation in an attempt to address various challenges.

One such challenge is the need for addressing economic disparities amongst South Africans that spilled over from the apartheid legacy. In the course of this overall process, there is a potential tension between the need to meet the economic needs of the people (instrumental aspect), which might result in environmental degradation, and protecting the environment (intrinsic value and inherent dimension of the environment). Boff outlines the dilemma in such a situation: "[w]hen development and environmental conservation are in tension, development is usually chosen and the cost paid in environmental deterioration" (1997:5).

While this study would by no means attempt to disregard the values embodied in South Africa's environmental legislation, however, this study attempts to chart a way forward by suggesting a conceptual framework that can be incorporated into South Africa's environmental law. This will be done by drawing on ecological models of ethics so as to "*understand and evaluate* the moral codes woven into cultures – what they are and how they function to enhance or distort the relationships of human beings to one another and to the Earth" (Engel 1990:6 italic original).

In discussing the significance of ecocentric ethics vis-à-vis the environment, this study provides, by unraveling constraints in South Africa's Bill of Rights and environmental legislation, a critical tool that can be utilised in policy making pertaining to environment/development-related issues. In other words, the discussions that will emerge from this study might be of importance by applying them in public spheres where environmental laws are formulated, and hence, contributing to engendering an edifying

paradigm whereby the environment in its complexity would be respected. Subsequently, one of the objectives of this study is to promote sustainability not only in ecological terms, but also in terms of "transformation of present societal structures, systems, and practices so as to render them sustainable in their own right" (Rasmussen 1996:139). This thesis recognises that there is an ever-increasing debate about the versatility of the concept of sustainable development. While it is recognised that there is a potential conflict between meeting human needs, on the one hand, and environmental concerns, on the other hand, the objective here is mainly to unpack philosophical justifications that have greatly influenced policy issues.

However, realising that the topic is wide, and considering the scope of this thesis, only selected legislations associated with the concept of sustainable development and deemed to be relevant to this study, will be discussed. The aim is essentially to uncover basic utilitarian implications of South Africa's environmental law and its related policies. The main objective of this chapter is not to challenge the integrity of the law but to offer a more complementary approach that ethics (in general) could offer. To achieve this, recourse will be sought to insights emanating from "green" schools of thought such as the Gaia hypothesis/land ethic, Ecofeminism and Deep Ecology to highlight a holistic approach to environmental ethics.

It is of significance to mention that the main focus of this thesis is environmental ethics rather than environmental law. As already indicated above, while ethics provides some philosophical justifications as to what people ought to do, law is a tool for implementing such justifications. However, the emphasis of this thesis is on how the moral framework of the relationship between humans and nature, embodied in environmental legislation, is environmentally constrained and unsound. It is compelling that a more environmentally friendly paradigm should be sought.

CHAPTER TWO

ENVIRONMENTAL ETHICS: A CONCEPTUAL FRAMEWORK

2.1 Introduction

It seems unthinkable for humanity not to have a particular way of relating significance of different entities to their world-views. Every aspect of human life is marked with a dimension of values. It can be argued that different values act as pillars on which varied human life systems rest. Some people will regard the environment as being of value because of its utility to them; either for its consumption or aesthetic purposes. However, some people recognise the inherent worth of the environment. This notion points to the value of the environment that goes beyond its utility, and is hence, independent of its human use. In chapter four, it will be argued that various efforts directed towards safeguarding the environment have not borne significant improvements because environment/development-related policies embody utilitarian-oriented values of the environment rather than the inherent worth of the environment. In this thesis, the "Utilitarian" (capitalised) implies the philosophy (as it will be defined below) while utilitarian or utility (lowercased) means the particular function the environment serves humanity. The latter notion is closely associated with the instrumental value of the environment.

This chapter discusses three notions of environmental values, viz. instrumental value, intrinsic value and inherent worth. This thesis contends that it is the first two concepts of the environment that form the core of conservation policies. With respect to this, it is the utility of the environment (in that humans regard the environment as of use to them, be it in terms of consumption of resources or aesthetic purposes) that conservation policies tend to safeguard. If not all, most conservation laws in modern thought are devoid of the inherent worth. The orientation of environmental law is based on the human utility of the environment and it is hence anthropocentric. An anthropocentric approach to environmental ethics is reflected in economic policies whose main aim is to "maximize the greatest happiness for the greatest number of people". As already mentioned in chapter one, this chapter discusses three categories of moral philosophical traditions which presuppose particular moral obligations humans have towards the environment.

Examples of environmental principles and provisions that reflect respective philosophical theories will be discussed.

2.2 Valuation of the environment and environmental ethics

Values underpin and cannot be divorced from our socio-political and economic institutions. They are functional in human endeavours and structures. Fekete outlines the centrality of values to human life:

> Not to put too fine a point on it, we live, breathe, and excrete values. No aspect of human life is unrelated to values, valuations and validations. Value orientations and value relations saturate our experiences and life practices from the smallest established microstructures of feeling, thought and behaviour to the largest established macrostructures of organisations and institution (1998:4).

In this regard, it can be said that human structures are permeated with varied values. In many respects, moral codes that are embraced in various institutions are informed by particular values. The same can be said of institutions that deal with development/environment-related processes and projects. In fact, one area in life where the discourse of values has become extremely significant and contestable is that of environment. For example, on a personal level, an individual could be a vegetarian because s/he believes in animal rights. At a micro level, a group of individuals could protest against the construction of a road that would disrupt an ecosystem because it believes in the integrity of the ecosystem. In the latter case, the reasoning could be either that the aesthetic beauty will be destroyed or that this would undermine the inherent worth of individual entities in the ecosystem. On a macro level, international "green" organisations such as Earth First! will lobby people at the international level to boycott buying products that do not have ISO 1500 (which can simply be understood as an environmentally friendly certification), the reason being that the production process involved is environmentally unfriendly.

In a nutshell, the notion of environmental values is compatible with environmental ethics in the sense that values give insight into:

value systems...about 'proper conduct' of life in general and about ways of interpreting specific events in terms of more extensive commitments to particular social arrangements and political orders. They indicate the cultural plurality - and often ambiguity – within which notions of 'rightness' and 'wrongness' are formulated, maintained, contested and changed (O'Brien and Guerrier 1995:xiv).

Thus, it can be said that institutions and structural processes embody value-judgements that tend to justify reasons why humans must or must not act in a particular way vis-à-vis the environment. It follows then that particular institutions/structures in society tend to promote and protect particular environmental values by regulating people's behaviour towards the environment. In sum, value-judgements inherent in moral philosophical traditions shape our actions whether individual or collective (O'Brien and Guerrier 1995:xiiv).

2.2.1 Instrumental value

The notion of instrumental value of the environment is associated with an anthropocentric version (bias) of human utility of the environment. It implies that humanity appreciates the environment for its instrumental end or purpose. Thus, "[i]*nstrumental* value is a function of usefulness. An object with instrumental value possesses that value essentially because it can be used [by humanity] to attain something else of value" (Des Jardins 1993:144). Different entities of the environment are valued *for the sake of* their varied use to human beings. As Connelly and Smith say, "[w]e attribute instrumental value whenever we regard the non-human world as valuable in so far as it is of use to human beings" (Connelly and Smith 1999:18). Hence, human valuation is central to this value-concept; "the excluded sphere is appropriately treated as a means to ends of the higher sphere of group, [such that] its value lies in its usefulness to the privileged group, that is, in contrast, worthwhile or significant in itself" (Plumwood 1994:155).

In other words, people have regard for particular aspects of the environment solely for the reason that they satisfy human needs. Consequently, "human action in maintaining any aspect of the natural world is made contingent upon the interests people happen to have (or think they have)" (*ibid.*). In this regard, an environmental entity would not possess

instrumental value independently of human agency. It is only when human beings reckon the utility of the environment that the question of instrumental value becomes intelligible.

As a result, people will be motivated to conserve the environment essentially because it is regarded as a resource that is perceived as instrumental to gratifying their own needs and not necessarily because the environment *is*. From a modern economy perspective, what is imperative behind conserving the environment is the sustainability of environmental resources in order to maintain the well-being of humanity *not* the well-being of the environment *per se*. It is clear that it is the instrumental value of the environment that is imperative rather than its integrity.

It is the awareness that the environment is indispensable for sustaining human livelihood, for example, within and across generations, that the environment is accorded value. It is this value for human welfare that determines moral obligation on the part of humanity towards the environment. In a negative sense, this further implies that in the absence of its instrumental value, the environment would not command moral obligation on the part of humanity. For instance, a particular society would perceive value of a plant species because it bears edible fruit or provides timber or because its parts are used as herbal medicine, and any plant that does not serve functions such as these is, on this account, without value.

2.2.2 Intrinsic value

Opposed to appreciating the environment merely in terms of human utility, though equally anthropocentric, is the notion of intrinsic value. According to Des Jardins, "[a]n object has *intrinsic* value when it is valued for itself and not simply valued for its uses" (1993:144). This notion is compatible with Taylor's notion of what he calls inherent value: "the value we place on an object or a place...that we believe should be preserved, not because of its usefulness or its commercial value, but simply because it has beauty, or historical importance, or cultural significance" (1986:73). To this effect, the value of objects with symbolic importance is applicable only in the sense that they are valued

because of their noncommercial importance, and independently of any practical use to which they could be put (Taylor 1986:74).

Even though the intrinsic value of the environment in its original sense seems to be more enlightened than the instrumental value, however, its plausibility for a holistic environmental ethic is questionable in terms of environmental law. This is because, as Connelly and Smith seem to suggest, the notion of intrinsic value is applicable when humanity values any aspect of the natural world for its spiritual and aesthetic virtues (1999:19; see also Des Jardins 1993). Related to this, is the understanding that people who would ascribe intrinsic value to a particular aspect of the natural world would avoid any action that would spoil its aesthetic beauty. In other words, such people are merely spectators rather than, say, "consumers" (*ibid.*). In the light of this, it can be argued that, just as in the case of instrumental valuation where human subjects attribute a value to the environment as a result of its practical usefulness, equally, the notion of intrinsic value is dependent on human agents. An object will have intrinsic value only when an individual attaches a particular significance to it.

Thus, it is the human interests that a policy tends to protect. It is out of the human awe for particular species of the environment that people would in turn be willing to protect them. For example, a wilderness could be preserved because of the ecological "completeness" it offers to a particular neighbourhood. In this regard, the intent of an environmental legislation pertaining to the wilderness conservation is to protect it because people appreciate its ecological beauty. It is this symbolic aesthetic significance (value) that, in the same vein, regulatory mechanisms tend to protect wildernesses so as to serve human satisfaction. In this sense, it becomes morally justifiable to consider the conservation of a wilderness for the sake of other human beings who would equally appreciate the beauty of nature. The philosophy behind environmental law and provisions is that people have to conserve species of aesthetic significance so as not to deprive fellow humans of the same opportunity of experiencing the beauty of nature. Hence, it is not necessarily particular aspects of nature that are protected but, ideally, human interests.

2.2.3 Inherent worth

As opposed to both notions of instrumental and intrinsic values (which depend on human valuation), a profound notion to understand entities of the environment is that of inherent worth. According to Des Jardins, "[a]n object has inherent *worth* if it is good (or has a good) in itself, independently of any human valuing" (1993:146). In other words, an aspect of the environment does not attain its value because of its utility, as is the case with instrumental and intrinsic notions respectively, but essentially because it *is* an end in itself and hence, is non-instrumental and subsequently in that sense, not anthropocentric. The notion of inherent worth is conventionally anchored in the understanding that humans possess inherent human dignity and respect, hence independent of human valuing. Humans enjoy inherent worth essentially because they "possess not only a noninstrumental *value*, but also a special kind of worth or dignity in and of themselves" (Des Jardins 1993:146)(italics original). Subsequently, this leads to the moral justification that people must be treated as "*ends* and never simply as *means*, or as *subjects* and never simply as *objects* (cited in Des Jardins 1993:34)(italics original).

Arguably, the notion of human rights is a legal expression of the recognition of inherent worth attributed to humans. Philosophically, inherent worth provides a moral justification whereby human dignity and integrity are supposed to be protected and promoted. It is human dignity and integrity that thus provide a moral ground that humans be treated as ends in themselves not as means. In this way, the deontological ethic (human rights to a healthy environment) presupposed in the Bill of Rights of South Africa's Constitution alludes to Kant's view of the "categorical imperative", and that arises from the fundamental ethical duty, that is, "act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only" (2000:189).

However, a holistic perspective of environmental ethics presupposes a moral extension of the concept of inherent worth to non-human entities. In other words, the concept of inherent worth requires humans to have moral concern and care for nature as well. David Erenfeld advocates for the preservation of species and their habitats necessarily because "they exist and because this existence is itself but the present expression of a continuing

historic process of immense antiquity and majesty. Long-standing existence in Nature carries with it the unimpeachable right to continual existence" (cited in O'Riordan 2000:120). Having suggested that Erenfeld's insight is edifying in terms of environmental ethics, however, I am aware that the above quotation has a problem of being an expression of what G. E. Moore would call the naturalistic fallacy (see Singer 1993:426). According to Erenfeld, the fact that something has long existence (or "is") means that it "ought" to be preserved. There is a serious philosophical argument as to whether or not one can derive an "ought" claim from an "is" claim. This is not necessarily the case in real life situations. To give one crude example, it would not be morally justifiable to preserve murder just because it has been there since humanity.

This notion of inherent worth forms a basis for biocentric or life-centred ethics. The perception that non-human species equally have inherent worth has far-reaching implications for the relationship between humans and the environment in its entirety. It is the philosophy of the inclusive well-being of nature encapsulated in the notion of inherent worth that the concept of sustainable development, though fallible, seeks to embrace. In principle, as a value-judgement concept, sustainable development at least presupposes concern for the environment. Hence, by and large, one of the contentions of this thesis is that values attributed to the environment tend to provide moral justifications for managing the environment. This purpose is subsumed in environmental laws.

2.3 Environmental ethics
According to Palmer, environmental ethics is "the study of how humans should or ought to interact with the environment" (1997:6). The intent of environmental ethics is to morally evaluate human actions in relation to the environment. The core task of environmental ethics is to distinguish environmentally friendly behaviour from behaviour or processes that have negative effects on the environment. Thus, from a development perspective, environmental ethics presupposes a form of development that *"protects the ecological basis of life [as] the most fundamental element in an ethically defensible concept of ... the good life"* (Wells 1996:11)(italics original). Therefore, the focus of environmental ethics in this thesis entails discussing and analysing selected traditional

ethical theories that have influenced and permeated contemporary thinking and structures in terms of environmental issues. The aim is to *"understand and evaluate* the moral codes woven into cultures – what they are and how they function to enhance or distort the relationships of human beings to one another and to the Earth" (Engel 1990:6)(italics original).

Having affirmed that environmental ethics entails a relationship of interaction between people and the environment (in a holistic sense of the word), it follows then that the assumption is that perceived values of the environment inform the way people interact with the environment. Varied ethical theories embody values which a particular culture associates with the environment, and hence seeks to protect and promote. In other words, instrumental and intrinsic values are incarnate in various traditional philosophical theories. The core values associated with the environment permeate environmentally philosophical thinking which, whether consciously or subconsciously, in turn, provides a framework against which value-judgements are judged in response to environment-related questions or issues. In other words, value-judgements that underlie different philosophical theories regarding the environment have important implications for how people interact with the environment and hence, environmental ethics.

In this regard, the same can be said about the paradigm of sustainable development. As a philosophical ideology, the concept of sustainable development epitomizes the ideals that are meant to provide a framework against which human activity pertaining to development as a whole is perceived and appraised. In the context of South Africa's Constitution, it could be said that the Bill of Rights represents a particular "value system" through which values of the environment are entrenched, and hence it alludes to the concept of sustainable development. The Bill of Rights as a manifestation of a "value system" endorsed in South Africa's Constitution prescribes what is legal or illegal behaviour, reinforcing ideals of sustainable development. But regulation of humanity's behaviour is both a legal and ethical matter; it operates under the premise that, in general terms, regulating people's behaviour vis-à-vis the environment will ultimately serve the purpose of promoting and protecting particular values which South Africa's society seeks

to achieve. In other words, by putting into place, conservation policies, for example, the ideal of meeting people's needs within and across generations will be met. In the same vein, by encouraging environmentally friendly behaviour through principles such as the Polluter Pays Principle (PPP), it is presumed that, in general terms, the integrity of the environment (and of its constituent species, for example, humans' health) will be safeguarded. These are some of the value-oriented rationales that are embodied in moral philosophical traditions discussed below.

2.3.1 Theories of Ethics

2.3.1.1 Consequence - based theory - Utilitarianism

According to consequence based theories, an action is right or wrong depending on the probable consequences/outcomes or practical implications arising therefrom. In this sense, no act is to be judged as good or bad in itself but its wrongness or goodness is dependent on the consequences of the action (Brown (a) 1995:41). An action will be right if its good consequences outweigh bad ones (and vice versa). It is this ethical assumption that undergirds Utilitarianism. In its classical version as developed by Jeremy Bentham and John Stuart Mill in the 19th century, Utilitarianism presupposes that "those actions are right or good that bring about the best end results [for the greatest number]" (*ibid.*). In terms of practical experience, Utilitarian ethical theory is basically associated with utility or satisfaction. The central tenet to this philosophical value-judgement, as originally formulated by Jeremy Bentham, as already quoted above, is the need to seek "the greatest happiness for the greatest number" (Goodin 1995:3). As a consequentialist ethical theory, actions and decisions in the light of Utilitarianism are judged as good *if* they promote the maximum good for the greatest numbers. While Utilitarianism may not necessarily be anthropocentric, as Singer and Bentham would argue, however, in the context of this paper, Utilitarianism is understood as essentially anthropocentric in orientation in that, especially as far as public policies are concerned, the goal is to maximize the greatest happiness for the greatest number of people.

The Utilitarian tradition, with its core ideal of maximising the greatest happiness for the greatest number, has significantly influenced contemporary thinking and structures.

Policy and decision-making, especially in modern democracies, reflect an inclination towards the Utilitarian school of thought in terms of human welfare. This is more pronounced in the neo-classical economics and political arena vis-à-vis environmental policy and regulatory decision-making (Brown (a) 1995:41). In general terms, "Utilitarianism presumes that all means find their justification in the ends they serve" (Hodgson 1997:48). Affirming the pervasiveness of Utilitarian mode of thinking, Glavovic observes that: "[m]odern conservation strategies are based on a simple utilitarian philosophical assumption that environmental conservation will produce the greatest good for the greatest number of people for the greatest period of time" (1995:45). The rationale behind such principles is hand in glove with the need for satisfying needs of the greatest number of people (equity) across generations and within generations respectively. It is this aspect of human utility of the environment that largely undergirds environmental conservation.

For example, taking into account the history of this society, South Africa faces a formidable challenge of addressing diverse disparities that enveloped South Africa prior to 1994. Not least significant is the challenge to address the issue of massive poverty that in the past has dehumanised mass populations of South Africa. Brown highlights this challenge that governments seeks to address in the 21st century by noting: "[a]s the 20th century ends, most developed and developing nations assume that a major function of government, if not the most fundamental and important one, is to provide citizens with a healthy economy and opportunities for meaningful employment" (Brown (b) 1995:52).

In order to redress the past inequalities, South Africa has adopted certain policies which take the form of Utilitarian approach. It suffices to say that, for example, GEAR (Growth, Employment and Redistribution), South Africa's macro-economic policy, is Utilitarian-oriented. Even though GEAR is not an environmental policy *per se*; however, its significance for the objective of sustainable development cannot be underestimated. Within the framework of advancing economic well-being for South Africans, the drive behind GEAR is to "contribute to, rather than hinder, sustainable development" (CENGOPO 1999:10). This pattern of development is informed by, and hence may not

be divorced from NEMA as the overarching environmental legislation of South Africa, which seeks to derive *"lasting benefits* [for people] from the conservation and sustainable use of its rich biological diversity" (DEAT (a) 1997:3)(italics original). Environmental conservation strategies embody instrumental value of the environment essentially because "[t]he badness of environmental effects [are] measured in terms of the effect on human experience" (Williams 1994:48). In this regard, the intent of the environmental law of South Africa is to promote developmental activities that will bring about "lasting benefits" *for* South Africans. In this particular sense, GEAR is Utilitarian.

In the light of the Utilitarian approach, an action will be deemed as moral if its consequences tend to contribute to the goal of promoting and achieving "lasting benefits" for the greatest number and vice versa. It follows then that, in order to obviate the poverty the majority of South Africa's population faces and, instead, desirably achieving the objectives of sustainable development, there are environmentally regulatory mechanisms that South Africa has put into place.

2.3.1.2 Principle-based theories

Rather than determining wrongness or rightness of an action by depending on consequence(s) as it is the case of Utilitarianism, rights and duties theories focus on pre-established rules which are intended to guide moral actions. The underlying point of departure of Kantian ethics, according to Des Jardins, is that ethics (or moral behaviour) should be informed by those principles "on which we choose to act" (1993:33). In the same vein, Davis says that "acting morally, as we ought to act, involves the self-conscious acceptance of some (quite specific) constraints or rules that place limits on the pursuit of our own interests and on our own pursuit of the general good" (1993:205). She adds:

> To act rightly, agents must first of all refrain from doing the things that can be said (and known) to be, before the fact, wrong. The particular requirements to refrain from doing the various things-that-can-be-known-before-the-fact-to-be-wrong are variously called rules, laws, deontological constraints, prohibitions, limitations, or norms (*ibid.*).

A good example of principle-based theories is rights-based theories. In essence, this category of theories presuppsoses "rights of individuals to take actions or of duties to refrain from action" (Brown (a) 1995:43). The principle of duties and the notion of rights, as features of deontological theories, would tend to offset the weakness inherent in the Utilitarian tradition whereby lack of certainty of consequences of certain human actions on the environment would undermine the attempt to determine the rightness of consequences (Davis 1993:205). Or, from a different angle, in practical experience, Utilitarian ethical justifications are put into check by deontological ethical justifications that "certain actions are in themselves right or wrong (*ibid.*). It can thus be argued that enforcement of deontological constraints or norms in society is expected to regulate human action vis-à-vis the environment.

Having said that, however, a clarity is needed to address two questions that eventually follow in relation to the above formulation: 1) what exactly, then, is absolutely right/wrong and how do we decide, and 2) how do we know, without being arbitrary, when to move from a Utilitarian to a deontological stance? Considering that these issues are of critical significance in their own right, however, it would be doing them injustice to discuss them within the scope of this thesis.

2.3.1.2.1 Examples of the principle-based theories

The most crucial and unambiguous expression of deontology in South Africa's Constitution is the provision of human rights. The need for the protection of human rights is essentially informed by the assumption not to treat people as means to an end, but rather as ends in themselves. In this trend of moral framework, people have the obligation of protecting the rights of fellow human beings because they have inherent worth. Respect for and protection of other people's rights is in line with the Golden Rule which states: "As ye would that men should do unto you, do ye to them likewise" (Midgley 1993:10). The implication of the Golden Rule is that just as individuals would expect others to treat them with respect, so would others expect those individuals to treat them with respect.

Environment/development-related examples of the principle-based theories are Precautionary Principle (PP), the "Polluter Pays" Principle (PPP) and the Duty of Care (DoC). The Precautionary Principle is consistent with the notion of ecological sustainability in that it is about relieving pressure on the environment and giving it more 'space'. It is also a practical expression of intergenerational equity because to protect the world for our descendants we need to be sure that our actions will not cause irreparable harm to the environment (Carter 2001:207). According to the "Polluter Pays" Principle, "[w]here there is a significant reduction or loss of biodiversity but inadequate or inconclusive scientific evidence to prove this, action should be considered to avoid or minimise threats" (DEAT (a) 1997:2).

In other words, environmental laws, in one view, as "deontological constraints" serve the purpose of this philosophical tradition. For instance, polluting a river would be contravening the Water Pollution Act (a deontological constraint) that serves to promote morality with respect to protecting an ecosystem. Thus, drawing from Davis' outline, such laws are deontological in nature. However, even though deontological in nature, the aspect of Utilitarianism becomes strengthened granted that their ultimate purpose is to promote the "greatest happiness for the greatest numbers" of human beings. To this extent, there is a fine line between deontological and Utilitarian implications of laws.

Equally, a classic example of environmental principle that has two facets of moral imperative is the PPP. As a form of a "deontological constraint" the rationale of the PPP is to curtail pollution, and promote a pollution-free society. People's right to a healthy environment entrenched in the Bill of Rights of South Africa's Constitution operates on this premise. But in the light of this version of human rights, in providing for this, the Constitution places restriction on individuals (especially developers) to pollute the environment to the detriment of health of others. However, a further assumption is that in prohibiting pollution, other non-human entities will also be protected from pollution. In the context of environmental ethics, this latter understanding points to what may be called environmental rights. For example, the presupposition underlying an environmental right embodied in South Africa's Bill of Rights, as Bray argues, though essentially

anthropocentric (1998:9), also includes protection of the natural environment to 'secure ecologically sustainable development and the use of natural resources' "(*ibid.*)(see also Andrews 1998:2; Theron-Nelson 1999:209).

Another classic example of a principle in NEMA that is deontological in nature is the "Duty of Care" (DoC). In line with this principle, "[a]ll people and organisations should act with *due care* to conserve and avoid negative impacts on biodiversity, and to use biological resources sustainably, equitably and efficiently" (DEAT (a) 1997:1)(my italics). Thus, the DoC principle places an obligation on individuals to take *care* of the environment. Though this principle is essentially legal, in its unambiguous expression, it relates to religious-oriented philosophy of stewardship in the sense that, as Theron-Nelson observes, "by placing emphasis on a 'duty' in a constitutional framework the notion of stewardship is encapsulated" (1999:228).

2.3.1.3 Stewardship
Stewardship is a moral tradition that originates in ancient religions, Christianity being one. There are two different strands that can be associated with the concept of stewardship within the context of the Christian faith, and that might have affected environmental ethics.

An egocentric view that humans are the centre of creation inculcates human propensity of holding a rapacious attitude and behaviour towards nature ('strong anthropocentricism') (Connelly and Smith 1999:11). The natural world and non-human life is perceived and understood narrowly in instrumental terms; they exist for human benefit. It is argued that this understanding of humanity's unquestionable elevated place has led to justifying humans' dominion (in the negative sense of the word) over nature. This has subsequently led to over-exploitation of natural resources.

A similarly anthropocentric, although a nuanced version of the ethic of stewardship opposed to the one defined above, is that understanding of stewardship that presupposes moral obligations on the part of present generations to future generations. According to

Frome, the ethic of stewardship has emerged as "[t]he new awareness – a recognition that a generation or nation or a whole society of nations cannot be the owners of the globe but only its trustees on behalf of succeeding *generations*" (cited in Glavovic 1995:7)(my italics).

The implication of this trend of thought is that the ethic of stewardship "imposes special responsibilities as well as rights, and a demand for compassion and stewardship" (*ibid.*), on the part of humans as highly conscious beings towards nature. In this way, this moral ethic presupposes that "[h]uman beings, although they have a privileged place in nature, are exhorted to act responsibly and with consideration towards the natural world" (Connelly and Smith 1999:12). This version of the principle of stewardship is enlightening for environmental ethics. Rather than, on the one hand, promoting a rapacious attitude and behaviour towards nature and, on the other hand, caring for nature just because of its utility, stewardship entails that humans have to assume environmentally responsible roles whereby the integrity of nature or creation as a whole is cherished and promoted. Drawing from the biblical context, the ethical rationale behind the Genesis garden paradigm is that "humanity's role is to tend and keep the garden which God has granted dominion over; the injunction to replenish implies that it should be kept fertile and not overworked" (*ibid.*). The ethical implications of this principle is that, dominion [in the enlightened sense of the word], refers specifically to the task of perpetuating God's purposes in creation rather than imposing humanity's self-serving ends (see Connelly and Smith 1999; Glavovic 1995). Its significance for environmental ethics is that,

> at the very least it resonates with the sense that certain things should not be done, despite their undeniable human benefits, and that wanton acts of despoliation or cruelty or over-exploitation of natural resources should be avoided as exceeding the legitimate role that [hu]mankind has been granted in relation to the natural order (Connelly and Smith 1999:12-13).

Thus, an ethic of stewardship tends to foster the duty of care and nurturing on the part of humans and hence, respecting the integrity of other forms of life besides human life. The ethical implication of this trend of thought is that conservation policies and processes will

not be based on philosophical justifications such as rights, but essentially because humans are expected to tender and nurture the natural environment.

Having implied that the above principles can be potentially useful conceptual frameworks for environmental ethics, however, it is the flawed interpretation and application of the above moral philosophies that renders them ineffective for comprehensive environmental ethics. Hodgson points out that: "[c]onsistent with the underlying utilitarian philosophy, moral values and virtues, such as duty to others, care for the planet, respect for other species and so on are considered only insofar as they yield utility" (1997:51). It is significant that Hodgson covers all aspects that underlie the key ethical theories considered in this thesis. What is appealing in Hodgson's critique is the exegesis of the anthropocentric nature that environmental ethics takes. As implied in Hodgson's critique, the moral imperative of, whether deontology (duty and rights), Utilitarianism or stewardship, ultimately, however, hinges on human interests. In this sense, traditional ethical theories do not offer us an all-encompassing morality which would tend to protect the "values" of the environment that are independent of human utility.

2.4 Summary

A particular perception of human-nature relationship determines how people interact with the environment. People attribute different values to the environment. Three notions of value attributed to the environment would, in principle, determine how people would manage or not manage the environment. The environment-related values underlying environment/development-related policies reflect varied philosophical approaches to environmental ethics.

This chapter shows that, on the one hand, an economic policy such as GEAR is Utilitarian in that its orientation to environmental ethics alludes to maximizing benefits for the people of South Africa. In this sense, as it has been argued above, that because central to GEAR is the need to promote human needs and not the environment, it is anthropocentric. While its goal is to inculcate an environmental consciousness, the utility of the environment rather than protecting the environment for its own sake, holds sway in

its scope. On the other hand, some provisions of South Africa's environmental legislation such as the "Polluter Pays" Principle and the human rights provision are deontological in the sense that there are pre-established rules which are meant to guide people's behaviour pertaining to their relationship with the environment. Having said that, however, the "Polluter Pays" Principle, for example, alludes to the Utilitarian tradition in the sense that the aim is to promote the healthy environment of people, and hence it is anthropocentric. However, the fact that the main aim is to meet human needs is the constraint that frustrates environmental management processes and procedures, and hence there is need that inherent worth be recognised in policy-making processes.

CHAPTER THREE

SUSTAINABLE DEVELOPMENT: SETTING THE CONTEXT

3.1 Introduction

This chapter sets out significant events that are regarded as having made remarkable contribution to an environmental consciousness paradigm. It outlines landmark events, and the establishment of important environmental organisations that characterised increasing awareness pertaining to how environmental issues and development were perceived as being intrinsically intertwined. Most significantly, through the establishment of the World Commission on Environment and Development and its oft-quoted publication, *Our Common Future,* the concept of sustainable development was founded. It is this report that has since widely influenced environmental thought and processes both on national and international levels.

On the one hand, regarding the international aspect of the debate around sustainable development, this chapter recognises and discusses World Conversation Strategy (WCS), the Brundtland Commission (1987) and the Rio Earth Summit (1992) as some of the events and institutions that marked headway in matters relating environment and development. On the other hand, at a national level, this chapter discusses how South Africa's environmental legislation and policies embody the core values of the concept of sustainable development. This is in line with the observation that chapter two of South Africa's Constitution, the Bill of Rights, embodies environmental rights, as a facet of human rights. However, this chapter indicates that the thrust for sustainable development is reflected in South Africa's National Management Policy (NEMA) which further gives expression to other related environmental principles and provisions such as biodiversity, conservation and GEAR as a macroeconomic policy. In sum, the main aim of this chapter is merely to show the trajectory of the concept of sustainable development since it was embraced on the international level and how it has since permeated environmental legislation and development processes in nation states. At national level, a special reference to South Africa will be made. Further, chapter four will provide a critical analysis of South Africa's environmental legislation and the related development policies.

3.2 The International Context

> In the 1950s, 1960s and 1970s one could confidently believe in certain grand theories about development. Advocates of modernisation could believe that growth and development were much the same thing and that development involved a process of catching up. Latecomer societies had to learn from those pioneer societies which had already moved to a state of modernity beyond the state of Rostow-like 'take-off.' Meanwhile, dependency theorists and Marxists alike could look forward to the collapse of the capitalist world economy.... Today, these nostrums comfort us no longer (Corbridge 1993:123)(my italics).

Based on the above quotation, one could say that prior to the above decades, development was taken for granted. Due to the experiences of economic benefits that marked the era of economic boom, humanity was almost oblivious to the latent environmental degradation that accompanied development then. Prior to the World Wars, economic systems had instilled hope for an economically brighter future for humanity. It was only when the world economic systems, especially Northern industrial countries, started showing significant signs of crumbling that nations realized that all was not rosy with the modes of development pursued then. In sum, as Sachs seems to indicate, following the post-war spin-offs, a bleak future loomed as a result of uncompromised development trends (Sachs 1992:26). Environmentally conscious people were starting to become disillusioned with the vicissitudes of economic prosperity. The old certainties no longer seem to hold true (Corbridge 1993:123). One area that caused great concern as a result of development was that of environmental degradation. In other words, the questions of means (the environment as a resource) were in conflict with the questions of ends (economic growth): "environmental degradation is linked with patterns of economic development" (Connelly and Smith 1999:57). In this regard, the hegemony underlying economic growth, from then on, began to be questioned. Instead, for example, it occurred that "[i]nfinite growth...is based on self-delusion, because the world is a closed space, finite and of limited carrying capacity" (*ibid.*). In a nutshell, the imperative behind sustainable development was a result of

> the awareness of the major environmental threats facing humanity...leading to an appreciation of the need to integrate environment and development, and of the

growing interdependence between developed and developing countries and the imperative of international cooperation to ensure sustainable development, worldwide (Commonwealth Secretariat 1991:3).

The insight into the need to rethink development trends, then, was hence in the wake of the realisation that "the environment has been under a heavy strain from a persistent lack of or a lopsided type of development (as has been the experience of the developing world during much of the post World War II period) or from rapid economic growth" (Intal 1998:239).

Based on the above state of affairs, one could say that it was such an experience that marked a shift in developmental thinking and, hence, the concept of sustainable development which, in a nutshell, "is as much about democracy as it is about limits to growth and our relationship with the non-human world" (Connelly and Smith 1997:61). For example, Sweden first moved a motion for the environment in 1972 at the UN Conference on the Human Environment held in Stockholm as a result of its concern about "acid rain, pollution in the Baltic, and the levels of pesticides and heavy metals in fish and birds" (Sachs 1992:27). Issues such as population, food, human settlements, water, desertification, science and technology, renewable energy, were recognised as of international significance. This led to the initiation of groundwork by the Stockholm Conference on Human Development that "set out to alter the post-war perception of an open global space where many nations can individually strive to maximize economic growth" (*ibid.*).

It was this paradigm shift in environmental consciousness, as a result of the experiences of development-induced problems, that led to unfolding of subsequent international events and processes pertaining to the connections between environment and development. In the words of Pearce *et al*, the "sustainable development debate has tended to shift the focus away from growth *versus* the environment to one of the potential *complementarity* of growth and environment" (1989:21). From a relatively different angle, Carter echoes this by saying: "[s]ustainable development and its half-sister, ecological modernisation, offer an alternative policy paradigm to the traditional model of

environmental policy" (2001:195). By and large, this is significant because "[t]he shift to sustainable development ... primarily [marks] an ethical shift" (Kothari 1990:33).

3.2.1 World Conversation Strategy (WCS)

In response to reconcile the perceived conflict between environmental protection and continuing economic growth, the International Union for the Conservation of Nature and Natural Resources (IUCN) and its counterparts attempted to chart a way forward for sustainable development through the WCS. Adams identifies The World Conservation Strategy (IUCN 1980) and Caring for the Earth (IUCN 1991) as two events associated with the debate of sustainability where it "became the dominant *leitmotif* of the discourse of development planners, commentators and bureaucrats .... had become an accepted part of the rhetoric of Third World and First World politicians, and had provided a potent new slogan and campaigning theme" (1992:207).

The significance of the WCS for sustainable development arises from the fact that it "confirmed a growing belief that the assimilation of aims of both conservation and development was the key to a sustainable society" (McCormick 1986:177). In other words, the point of departure of the WCS was "the premise of the need to conserve ecosystems and [they subsequently] sought to demonstrate why this made good economic sense" (Adams 1992:211). The nexus between sustainable development and conservation is embodied in the explication of the latter as it implies "the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations" (as in Adams 1992:209).

It is essentially by harmonising concerns for the environment and development, in this manner, thereby alluding to sustainable development, that the WCS must have influenced environmental thinking and policy-making. This claim can be substantiated in the remark that the final version of the WCS made room for "a consensus between the practitioners of conservation and development" (Talbot 1984:14). Although the insights in the WCS then shaped environmental thinking by promoting ecological sustainability, however,

according to Baker *et al.*, its limitations was that it did not draw connections between social and economic issues (1997:2). However, having taken environment/development discourse to this height, the fact still remains that the WCS provided a conceptual framework against which the ideals of sustainable development could be furthered.

3.2.2 The Brundtland Commission

While the awareness about the twin problem between conventional economic growth and environmental degradation emerged on the international scene in 1970s, as reflected in the publication of the Club of Rome report *The Limits to Growth* in 1972 (Meadows *et al*), the concept of sustainable development gained remarkable international significance in the 1980s. It was as a result of the publication of *Our Common Future*, otherwise known as the Brundtland Commission Report, by the World Commission on Environment and Development (WCED 1987), that the concept of sustainable development reached its zenith. Adams writes that *Our Common Future* "captures the 'spirit of Stockholm 1972' [by placing] elements of the sustainable development debate within the economic and political context of international development, and it puts environmental issues firmly on the political agenda" (1992:211).

The Commission opened up a significant avenue whereby the objectives of development and environment were portrayed as intrinsically intertwined. In other words, as Sachs puts it, the Brundtland Report then, announced "the marriage between the craving for development and concern for the environment" (1992:28). With this insight in mind, the thrust of development discourse was that development and environment were not to be divorced from each other. The challenge was "to redirect the pattern of development, as well as the policy and institutional environments, to more effectively manage the trade-offs among economic growth, social equity, and environmental protection" (Intal 1998:239).

While the concept of sustainable development rejuvenates the need for promoting human welfare by wedding environment to development, its objective nevertheless necessitated a comprehensive approach to institutional policy-design so as to achieve the desired

sustainability. In fact, the advocates of sustainable development in the late 1980s and the early 1990s saw the need for integration of environmental, social and economic aspects in policy making as "being simply to bring the three areas of policy and decision-making into closer contact to enable them to *inform* each other, rather than allowing each to continue to be a separate policy stream" (Holtz 1998:284)(my italics). To that effect, the report emphatically called for global action so as to promote sustainable development based on the insight that "the sustainability of a healthy economy depends on sustaining a healthy environment" (Owen 1998:117). According to Sachs, this is encapsulated in the formula: "No development without sustainability; no sustainability without development" (1992:29). This form of thinking subsequently informed its articulation of the oft-quoted definition of the concept, as I have already quoted above, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987:5). According to Baker *et al.*, the Report recognised the significance of the fact that the concept provides "a framework for the *integration* of environmental policies and development strategies" (1997:3)(italics original) and hence challenges the understanding that environmental protection can only be achieved *at the expense of* economic development" (*ibid.*)(italics original).

Having alluded to the Commission's conceptualisation about the interdependence between environment and development, the focus in conventional debate has since shifted from earlier argument about the compatibility between the two objectives to a present preoccupation with how different forms of development can be environmentally sustainable (*ibid.*). Put differently, as in the original version of the Brundtland Report's understanding of sustainable development, some crucial issues, which still undergird contemporary environment/development thinking and processes, whether implicitly or explicitly, are evident. Equally crucial issues added to the list as concerns for sustainable development are utilitarian-oriented concepts of inter-generational and intra-generational equity in resource use. The former idea refers to "including the needs of future generations in the design and implementation of current policy" (Baker, *et al.* 1997:4). The latter notion points to "the importance of meeting the basic needs of present generations, where poverty is seen as both a cause and a consequence of sustainable

behaviour" (*ibid*.). These concepts, although anthropocentric, are ethically significant in the sense that they presuppose an equitable use of resources amongst and across generations. Notwithstanding the overall environmental insights that sustainable development offers in the public arena, there are crucial constraints that accompany the concept of sustainable development and its implications (Baker *et al*. 1997; Richardson 1997; Rist 1999). These will be spelt out in greater detail in subsequent chapters.

3.2.3 Rio Earth Summit

Granted that the discourse of sustainable development was taken to its height at Brundtland Commission, the next step then was how its core ideals were to be concretized. However, in the wake of the realisation that "economic and social systems and ecological conditions" (Baker *et al*. 1974:4) are complex from one country to another and hence, according to the Brundtland Report, it was the responsibility of policy makers (in particular contexts) to translate the recommendations into practice. This need saw the birth of the Rio Earth Summit of 1992. Thus, the purpose of the Rio Summit was to further the aims of the Brundtland Commission. This is substantiated by the Principles adopted at Rio. For example, Principle four of the Rio Declaration states that "in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it" (UNCED 1992 (b)).

Indeed, as a follow-up event to the Brundtland Report, in trying to address the dilemma that poverty is a major cause of environmental degradation, Principle four of the Rio Declaration responds to this by stipulating that "eradicating poverty is an indispensable requirement for sustainable development" (UNCED 1992 (a)). The focus of this challenge pertaining to sustainable development was the national level. In other words, the Rio Summit was meant to chart a way forward of how core principles of sustainable development identified at international level were to be fostered at nation-states level and its particular domestic constituencies or localities. This is reflected in the heading of chapter two of Agenda 21: "international cooperation to accelerate sustainable development in developing countries and related domestic policies" (UNCED 1992 (b)).

3.3 Local Context

Since the dawn of democracy in South Africa in 1994, there have been various socio-economic and political developments in the country. The new political dispensation caused South Africa to resurface on the international scene. Circumstances around this political development necessitated South Africa to revise its policies in various sectors in accordance with the ideals promoted at the international/regional level. Consequently, this development has led South Africa to affirm, either in principle or in practice, ideals or values that are deemed instrumental to ultimately achieving the common good.

One area where transformation has been initiated is that of policy and decision-making pertaining to development vis-à-vis the environment. Just as in many other countries on the continent and in the sub-Saharan region, and the world beyond, South Africa has embraced and seeks to uphold the ideals of sustainable development. CENGOPO seems to confirm this by stating: "South Africa is responding to environmental change by signing international agreements, passing national laws and developing national policies, implementing management strategies, monitoring and research, raising awareness, and through education" (1999:28). It is equally echoed by CENGOPO: "[c]hanges in sectoral policies have mainly been towards more sustainable practices" (CENGOPO 1999:10). Thus, there have been attempts that development policies are tailored in such a way that economic needs and environmental concerns are harmonised. This is also the case to respond to the "constitutional culture" that South Africa has embraced and seeks to promote. This "constitutional culture" is embedded in chapter two of South Africa's Constitution, the Bill of Rights.

3.3.1 South Africa's Constitution: the Bill of Rights

South Africa's Constitution can be regarded as an umbrella tool that aims to safeguard and promote the values that South Africa seeks to achieve pertaining to the environment. The DEAT says: "[t]he starting point for developing environmental policy in South Africa is the Constitution. The adoption of a democratic Constitution and Bill of Rights has made government accountable to the people" (DEAT (b) 1997:38).

One of the pronounced features in the Bill of Rights of South Africa's Constitution is the centrality of human rights. Within a broader framework of human rights, for example, section 24 of the Bill of Rights foregrounds and stipulates people's right to a healthy environment as a facet of human rights. In this section, everyone has the right to:

(a) an environment that is not harmful to their health or well-being; and
(b) to have an environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
    (i) prevent pollution and ecological degradation
    (ii) promote conservation; and
    (iii) secure ecologically sustainable development and the use of natural resources (DEAT (a) 1997:1).

It is significant to note that the Bill of Rights is regarded as "a cornerstone of democracy in South Africa.... It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equity and freedom" (Constitution of the Republic of South Africa *s* 7(1). In this sense, the Bill of Rights is of paramount importance because it embodies the overall vision of what sort of society South Africa is striving to be. It encompasses the fundamental values and virtues that are deemed to be instrumental in achieving a particular vision whereby "development and the environment are *partners*" (DEAT (b) 1997:5)(my italics). Hypothetically speaking, it is this vision that informs environmental/development thinking and policy-making in South Africa. Thus, as an examplar of the Brundtland Commission, South Africa's Constitution alludes to the core ideal of sustainable development which itself, *prima facie*, presupposes a harmonious relation between humanity and the environment.

The goal of promoting a harmonious relationship between people and the environment is entrenched in the National Environmental Management Act (NEMA) (1998). It seeks to promote human behaviour or activities that are deemed environmentally friendly in South Africa. As DEAT states, NEMA provides a "general framework within which environmental management and implementation plans must be formulated" (1998:12). Its fundamental objective is to regulate the manner in which the environment is managed (or not managed). In this Act, the environment is defined as "the natural environment and the

physical, chemical, aesthetic and cultural properties of it that influence human health and well-being" (DEAT 1998:2).

It is the above aspects of the environment that NEMA aims to protect, evidently, taking into consideration the values embodied in the Bill of Rights above. This is taken into cognizance in addressing national priorities which the government seeks to achieve. One such national priority is South Africa's macro-economic policy, Growth, Employment and Redistribution (GEAR). With respect to this policy, the government strives to, among other things, create jobs, create equity, increase exports and promote growth in Growth Domestic Product (GDP) (CENGOPO 1999:9). Although these objectives initially do not necessarily arise from a sustainable development paradigm, according to CENGOPO, the ultimate idea is that "they contribute to, rather than hinder, sustainable development" (1999:10). The significance of environmentally conscious approach to development is also spelt out in the Environmental Management Policy which presupposes the "ownership of sustainable development as the *accepted* approach to resource management and utilisation in South Africa, thus entrenching environmental sustainability in policy and practice" (DEAT (b) 1997:13)(my italics). In sum, South Africa's environmental legislation and development-related policies such as GEAR allude to the ideals of sustainable development.

3.4 Summary

This chapter has discussed the environmental paradigm shift which generically became known as sustainable development. This paradigm shift marked humanity's awareness that development activities brought about adverse environmental effects which would compromise the well-being of present as well as future generations. In essence, it was understood that there was a close connection between development and the environment. This form of environmental consciousness manifested in the establishment of various international events. In connection to this, this chapter has discussed international events and structures such as the World Conservation Strategy (WCS)(1980), the Brundtland Commission (1987) and the 1992 Rio Earth Summit, and insights into environmental matters that defined them in their own respects. What characterised these was the

fundamental imperative that environmental concerns needed to be incorporated into development policies and activities.

However, it has also been pointed out that the above developments on the international scene have since widely shaped environmental thought and processes. At national level, a special mention has been made of South Africa as having embraced a form of environmental consciousness that alludes to the concept of sustainable development. One of the main reasons why South Africa have subscribed to this paradigm shift is that in its subsequent resurfacing on the international scene due to the new political dispensation that was ushered in in 1994 necessitated South Africa to adopt values that are deemed as edifying at the international level. This need was responded to through the adoption of a new Constitution the aim of which is to promote a particular "constitutional culture" as entrenched in chapter two, the Bill of Rights. South Africa has formulated environment/development-related laws and policies that are meant to respect and promote the democratic values that are embodied in the Bill of Rights. The National Environmental Management Act (NEMA)(1998) has specially been cited as a piece of South Africa's environmental legislation that embodies sustainable development-related ideals. NEMA as an overarching environmental legislation subsequently permeates development-related policies of South Africa such as the Growth, Employment and Redistribution (GEAR).

CHAPTER FOUR

DISCUSSION AND APPLICATION

4.1 Introduction

Having shown in chapter three that South Africa has adopted environmental legislation meant to foster sustainable development, however, there are constraints associated with it. Even though environmental concerns are incorporated into South Africa's environmental law, they are only determined from human perspectives and concerns.

This chapter will discuss how flawed South Africa's Bill of Rights, environmental legislation and its macro-economic policy are in terms of a holistic environmental ethic. What runs through this chapter is the thesis that the Bill of Rights and relevant environmental provisions characterise a dualistic understanding of reality whereby humans and nature are regarded as separate. According to Plumwood, in this trend of thought, "what is characteristically and authentically human is defined against or in opposition to what is taken to be natural, nature, or the physical or biological realm" (1994:147). While it may not be refuted that South Africa's Constitution tends to inculcate an environmentally conscious culture, the intent of environmental legislation initially is human rights rather than environmental rights per se. Environmental law is meant to serve as a means to promoting human rights provided for in the Bill of Rights. This is the tenet of what Plumwood (1994) and Sterba (2000) call the Discontinuity Problem. Using this principle as an analytical tool, the contention is that the environmental crisis is merely a manifestation of asymmetrical relationships between humans. This chapter discusses different ecological models that tend to challenge a truncated view of reality as highlighted in the Discontinuity Problem.

4.2 The "Discontinuity Problem" and Sustainability

The main focus of this chapter is to discuss how problematic our ethical frameworks and systems and, in this regard, South Africa's Constitution and its concomitant development/environment-related policies is for sustainability. This is not to say that other problems, for example, poverty and the booming population, do not contribute to environmental degradation. However, the assumption of this thesis is that environmental

degradation and hence unsustainability is rooted in a perception of reality which reinforces relationships which characterises hierarchical trends. It is humanity's environmental consciousness. Environmental degradation is merely a manifestation of this state of affairs. As Murray Boochin (founder of Social Ecology informed by Karl Marx) elaborates:

> [T]he roots of environmental problems lie in human relations to one another rather than (as deep ecologists suggest) in human misunderstanding of their connection with the natural world. Many human societies...are organized into hierarchical layers of dominance and oppression, where some classes of people and some kinds of human qualities or abilities are regarded as superior to others- for instance, men are thought superior to women, intellectual skills superior to physical skills (cited in Palmer 1997:17).

Relationships of dominance and oppression are extended to, and it suffices to say, they are more pronounced in relationships between humans and non-humans. It is especially with respect to this fashion of relationships that Ecofeminism has become a force, as it will be discussed in chapter five. However, from an Ecofeminist perspective, Gaard provides an outline about how relationships of dominance and oppression manifests themselves:

> human/nature dualism ... underlies and undermines our relations to the environment, other people, and that which is embodied and unmediated in ourselves. One effect of this split is that we understand personal and collective histories from a culturally ingrained, dualistic perspective. This perspective perpetuates dynamics that have consistently oppressed women and other nondominant groups, and exploited nonhuman nature (1993:7).

Humanity's consciousness pertaining to the environment is truncated. The above quotation characterises the Discontinuity Problem. In the light of this notion, anthropocentric ethics presupposes a "dualism to a network of related dualisms" (Plumwood 1994:153). According to this view, "humans are superior overall to the members of other species" (Sterba 1996:645). According to Plumwood, antagonistic perceptions of reality arise whereby being a human is understood in opposition to or against nature (1994:147). What ultimately follows then is that anthropocentrism inculcates the fallacy that humans are "the crown of creation, the source of all value, the

measure of all things" (Taylor 1986:243-6). The argument here is that the human claim of human superiority is fallacious because it is self-defined. The terms and criteria used to buttress this claim of superiority are subjective; they are influenced and fraught with human ideals and, therefore, interests. Consequently, the claim of human superiority is reliant on circular logic in that the determining features are, in essence, in tune with boundaries defined by human beings. This is a manifestation of "shallow ecology" in that "[it] views humans as above or outside of nature, as the source of all value, and ascribes only instrumental, or 'use', value to nature" (Capra 1996:6). As result, the "Discontinuity Problem" characterises nature-human relatedness in a dichotomous manner such that it culminates in the understanding of reality that

> typically polarizes difference and minimizes shared characteristics, construes difference along lines of superiority/inferiority, and views the inferior side as *a means to the higher ends* of the superior side (the instrumental thesis). Because its nature is defined oppositionally, the task of the superior side, that in which it realizes itself and expresses its nature, is to separate from, dominate, and control the lower side (Plumwood 1994:146)(my italics).

It is the hypothesis of this chapter that this perceived antagonism is the *root* of the problem. By creating boundaries between human and non-human species, and subsequently, regarding humans as superior to non-human species, grounds for satisfying human welfare tend to hold sway in anthropocentric environmental and utilitarian ethics. The environment is valued for its utility rather than its non-instrumental value. By dogmatically asserting the superiority of humans over other entities, humanity creates "species-boundaries" that selfishly qualify other humans while non-human species are thrown out of the moral community. While on some philosophical accounts it is only those beings who can mutually interact morally that constitute a "moral community", however, in the context of this discussion, the term is used advisedly. For example, since animals cannot interact morally with humans, and are not necessarily part of the moral community, this does not rule out the idea that they nevertheless deserve our respect. In contrast, the Discontinuity Problem as an expression of anthropocentricism, engenders an ethic that is human-centred, or from a feminist perspective, andocentric.

The apt version of anthropocentricism alluding to the problem of discontinuity is powerfully revealed in Singer's evocative concept of speciesism, that is, "a prejudice or attitude of bias in favour of the interests of members of one's own species and against those of members of other species" (Singer 2000:54). It promotes anthropocentric approaches to environmental ethics whereby one's perception of reality is looked at from a human perspective. The philosophy that underlies anthropocentricism, as already shown above, is that humans are the centre of creation and hence superior to other entities in the universe. As Mary Boochin argues, "[t]he idea that the natural world is inferior to human beings and are there to be exploited and abused stems from, and is an expression of, the hierarchical nature of human relationships with one another" (cited in Palmer 1997:17).

4.2.1 The "Discontinuity Problem" and the Bill of Rights

Chapter two of the Constitution, the Bill of Rights, epitomises what Bell (2001) calls "human jurisprudence"; "a system of laws designed to recognize the pre-eminence of the human species" (2001:9). One of the pronounced features that suggest this about South Africa's Constitution is the centrality of human rights.

Chapter two of South Africa's Constitution, the Bill of Rights, reflects a utilitarian approach to the environment. Critically analyzing this clause, one discovers that points (i), (ii) and (iii) are meant to qualify the foregoing right which comprises (a) and (b). Granted that "rights are the appropriate method of addressing the question of value" (Theron 1997:29), the phrase "right to a healthy environment" implies that what really is of value is not the environment *per se* but the health of South Africans. Environment in this case is ascribed instrumental value vis-à-vis human health. In the same light, the phrase "[the right] to have an environment protected", qualifies the goal to benefit present and future generations of humans. Thus, environmental law such as the Anti-Pollution Act is a means of achieving the value of human health. This observation can further be substantiated in the principle of *local standi* or standing to sue provided for in chapter three of South Africa's Constitution. Section 7(4)(b) allows a range of people and persons to apply for appropriate constitutional relief. These include:

- a person acting in his or her own interest;
- an association acting in the interests of its members;
- a person acting on behalf of another person who is not in a position to seek such relief in his or her own name;
- a person acting as a member of or in the interest of a group or class of persons; or
- a person action [sic] in the public interest
- a person acting on behalf of the environment (DEAT 1998:8).

Even though people would be led to believe that Section 24 of the Bill of Rights "embodies an environmental right" (Bray 1998:9), as the last aspect above entails, it is conspicuous that the principle of *local standi* reflects that, in all the above aspects, court relief is only meant for humans. Would it not make a difference if a clause would be included whereby, for example, environmental groups would seek constitutional relief in the "interest" of environmental entities? Since "[h]aving a right to something (in this instance, to a healthy life) usually means that other individuals have a duty to protect that right" (Palmer 1997:51), in this respect, it becomes evident that a "right to ..." represents human interests and needs. To this effect, it becomes appealing to deduce that the Bill of Rights is a form of human jurisprudence that essentially tends to protect the rights of humans. To further the aims of the Constitution vis-à-vis environmental management, NEMA contains a number of environment-oriented principles.

4.2.1.1 The Polluter Pays Principle (PPP)

According to the Organisation for Economic Co-operation and Development, the PPP "provides that environmental policies should be based on the principle that the polluter should pay" (OECD cited in Henderson 1995:60). The ideologies which NEMA tend to serve can be reflected in its principles. Even though this principle cannot be undermined as it helps to curtail environmentally unfriendly behaviour, however, what underlies the principle is the utility of a pollution-free environment for people; this is encapsulated in South Africa's Bill of Rights; "a right to a healthy environment". In sum, the environment is regarded as a means to an end, a human need – pollution-free society. Further, this principle is ethically constrained in the sense that damage done to an ecosystem cannot be tantamount to money. This is the reflection of modern market economies which are obsessed with objectifying environmental entities. Environmental

laws in this way allude to market values that are purely utilitarian and anthropocentric. This trend of regarding the environment as an object does a disservice to the concept of an "Earth Jurisprudence" which regards "[t]he universe is a communion of subjects, not a collection of objects. As subjects, the component members of the universe are capable of having rights" (Bell 2001:7).

Hence, in light of the above, Bray is right to acknowledge that "the Bill of Rights embodies an environmental right which is essentially anthropocentric in nature" (1998:9). To this extent, it can be argued that the Bill of Rights embodies environmental principles that take the form of an anthropocentricism that is primarily concerned with pollution, resource depletion and health of humans rather than the integrity of creation *per se*. In this case, as Palmer observes, "[i]ndirectly, the environment is perceived as important because a healthy natural environment is usually thought to be vital for the well-being of present and future human beings" (1997:92). For these reasons, the environment is ethically important in terms of sustainability; with a damaged environment, it might be impossible to meet the needs of present people or for future people to meet their own needs (Palmer 1997:93). In other words, the ethical foundations of the Bill of Rights and subsequently, environmental principles such as the PPP are based on a variety of human values: "the preservation of human health and safety, human social and economic requirements, human aesthetic and cultural pleasures" (Palmer 1997:116). In sum, it is the interests of people, human health, safety and needs and hence sustainability, that the law tends to protect. To this effect, as Palmer deduces, the environment is regarded as a means to achieving these human ends (*ibid.*).

Hence, in an attempt to effect a desired change, South Africa has formulated policies and provisions which are commensurate with a vision that cultivates an environmental morality. Its vision, that is meant to give an expression to the Bill of Rights, has been embraced within a broader framework of environment/development-related issues in varied sectoral structures and processes so as to realise values and virtues which South Africa deems to be instrumental to achieving an ideal moral society vis-à-vis environmental concerns. Put differently, the above vision permeates various aspects of

institutional policy- and decision-making. For example, within the scope of the original vision, the overall aim of conservation is to foster "[an] environmentally conscious nation, whose people are in harmonious coexistence with the natural environment, and which derives lasting benefits from the conservation and sustainable use of its rich biological diversity" (DEAT (b) 1997:20).

In principle, by harmonising the relation between humans and the environment in this manner, it can be said that NEMA and its subsidiary provisions incorporates an ethically based approach to environmental decision-making and processes whereby, philosophically speaking, the dualism between human and non-human worlds is diluted. Though it suggests "a philosophical position where humanity and nature are separate from one another" (Palmer 1997:115), yet, this is environmentally significant because, "it envisions harmony between the two rather than enmity" (*ibid.*).

4.3 National Environmental Management Act (NEMA)(1989)

NEMA (1989) as a piece of environmental regulation is the cornerstone of South African environmental policy. Being informed by the idea that "many inhabitants of South Africa live in an environment that is harmful to their health and wellbeing" (DEAT 1998:2), NEMA in that regard highlights the following issues:

everyone has the right to an environment that is not harmful to his or her health or wellbeing;

the State must respect, protect and fulfil the social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities;

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;

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;

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 (*ibid.*).

Regarding NEMA as a cornerstone of environmental management of South Africa, the above statements reflect particular values and ethical positions that inform development/environment-related processes and projects in South Africa. It can be regarded as "a law that incorporates an ethically based environmental approach to…decision-making" (Sagoff 1981:60). This is affirmed in South Africa's vision whereby "people are in harmonious coexistence with the natural environment (DEAT (a) 1997:1). In this regard, the aim of NEMA is to regulate "human conduct for a particular purpose" (Glavovic 1995:41). In sum, it can be deduced that NEMA embodies principles and provisions that are intended to inculcate a morality and ideals that would engender ethical commitment on the part of the public.

However, even though the rationale of NEMA is an effort to harmonise the apparent conflict between development needs and environmental concerns, it seems that, in the true sense, the environment is only subsumed in the human appraisal of 'environmental concern'. In other words, while it is significant that NEMA embraces environmental concerns, however, its ethical orientation is purely anthropocentric. Chapter one, principle two of NEMA reflects: "[e]nvironmental management must place people and their needs *at the forefront of its concern*, and serve their physical, psychological, developmental, cultural and social interests equitably" (DEAT 1998:6)(my italics). The contention of this chapter is that all the related environmental policies are informed by this ethical position, an anthropocentric approach to environmental ethics. This can be substantiated in the manner in which "environment" is defined in NEMA:

> the surroundings *within* which humans exist and that are made up of
>   (i)   the land, water and atmosphere of the earth;
>   (ii)   the micro-organisms, plant and animal life;

(iii)   any part or combination of (i) and (ii) and the interrelationships among and between them; and

(iv)   the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence *human health and well-being* (Office of the President 1998:8, xi)(my italics).

What is suspect about this definition of environment is that it is *with reference to* humanity that the other components of environment, for example the land, are defined. While the preposition "within" denotes a relationship of location, however, it does not paint a picture of a relationship of interconnectedness between humans and other entities of the environment as more profound schools of thought such as Deep Ecology, Ecofeminism and the Gaia hypothesis presuppose. Within the anthropocentric scope of understanding, humanity provides a point of reference for this relationship. Put differently, the connotation inherent in defining "environment" is that other aspects of environment are accorded significance with reference to people.

The above definition of the environment as that which surrounds humans is problematic in the sense that it seemingly negates the fact that humanity is intrinsically part of the environment. Cobb seems to raise the same concern: "The term 'environmental problem' is already too anthropocentric. It suggests that there are human beings and that everything exists as only our environment" (1980:447). The environment is not necessarily out there. If air and water are constituent of the environment, how do we explain the fact that we breathe air and that our bodies are seventy per cent water. The expression "influence human health and well-being" supports the argument that the environmental concerns are not necessarily with environment but with regard to people. In this regard, it can be said that NEMA characterises an anthropocentric ethic and is hence regarded as a means to an end inasmuch as "nature is seen only in relation to what it can provide in the service of humankind (O'Riordan cited in Baker 1997:10).

In this fashion, NEMA necessarily incorporates environmental concerns because "a healthy natural environment is usually thought to be vital for the well-being of present and future human beings" (Palmer 1997:92). It is presumed that unless the environment is managed, it will hinder the goal of sustainability, that is, meeting our present needs and

for future generations to meet their needs. In the absence of human needs, thus it can be argued, the environment is valued instrumentally as a means for achieving human ends. A thing's being of human utility forms part of the sustainability equation. It is in this regard that the environment is accorded moral respect (Palmer 1997:93). It is human rationality that presupposes the instrumental value of the environment, and hence undergirds sustainable development.

4.3.1 Integrated Environmental Management (IEM)

What underlies the concept of sustainable development is the need for taking environmental concerns into cognisance in development procedures and processes. To foster this objective, and to obviate the constraints that accompanied Environmental Impact Assessments (EIAs), in 1984, South Africa's Council For The Environment formulated IEM (Ridl 1994:62). Its purpose is to "guide, rather than impede the development process" by resolving or mitigating "any negative environmental impacts and to enhance positive aspects of development proposals" (*ibid.*). This is a recommendable step which signifies the extent to which South Africa regards sustainable development as an ethical ideal.

However, having said this, the extent to which tools like IEM present the holistic nature of environmental ethics becomes ethically questionable. It seems it is more inclined towards human concerns and interests than those of non-human species. Ridl observes:

> IEM as it is applied in South Africa tends to favour humanistic bias in the evaluation process; it is the social and economic impacts, both positive and negative, which dominate the value judgements which are applied. 'Environmental impact' is perceived as an impact which has a direct bearing on human well-being (1994:69).

Or, as Cobb comments about the anthropocentric nature of the term "environmental problem", "[t]he problem is that this environment may not continue to serve human needs adequately" (1980:447).

The claim that Ridl makes that 'environmental impact' relates to developmentally

adverse effects on human well-being can be substantiated in the manner in which, for example, "Interested and Affected Parties" is defined as:

> Parties directly affected by the proposed development
> Parties who are not directly affected but may have the public interest at heart
> The authorities under whose jurisdiction the proposed development or activity
> falls (Ridl 1994:74).

The above definition of "Affected and Interested Parties" is open to criticism as far as holistic environmental ethics entails. The conspicuousness of the environment is underlined by its omission from the above. It implies that 'environmental impacts' are in this sense only by implication. What environmental techniques and procedures purport to be 'environmental impact' necessarily impinges on the welfare of people not the physical environment *per se*. Put differently, 'environmental impacts' are determined in line with human measure of costs and benefits associated with development vis-à-vis human well-being. In light of this, it can be deduced that it is humans (and in this case the "Interested and Affected Parties") while it could be biodiversity that will be affected as a result of development in a particular place. In this sense, IEM as a tool to achieving sustainable development embodies a "watered-down anthropocentricism". This points to the fact that "a modicum of attention is paid to environmental – as distinct from ecological – concerns, within the overall context of continued plundering of Earth's resources" (Orton cited in Richardson 1997:46). As Ridl further claims, using a human index to appraise 'environmental impacts' will characteristically lead to "placing short term material wealth ahead of long term environmental prosperity" (1994:69-70).

It is fascinating to critically consider the question posed: "Considering South Africa's need for economic growth, can we afford to allow development to be held back by environmental concerns" (Ridl 1994:3)? This is an appealing question that underlines the ethical dilemma in balancing economic needs, on the one hand, and environment concerns, on the other. The need to balance the two above aspects is probably more significant in South Africa than in many countries where sustainable development goals are pursued (considering the massive inequalities engendered by the apartheid regime legacy). An attempt to address such disparities is the main objective of GEAR: "through its macro-economic policy, Growth, Employment and Redistribution (GEAR), the

government strives to, among other things, create jobs, create equity, increase exports and promote growth in Growth Domestic Product (GDP)" (CENGOPO 1999:9).

However, addressing issues such as poverty depends on a natural resource base. It has been argued that both growth and employment are instrumental to addressing environmental ills before sustainability can be achieved (WCED 1987:63). However, Redclift argues that "[i]n practice, increased private consumption is seen as the key policy lever" (1999:63). The argument against this is that consumption will result in chain-like phenomena which will have knock-on effects on the environment and hence, will compromise sustainability. Striving for growth and employment would require, for example, private investments. But investors such as multinational companies use enormous stocks of natural resources in the particular localities of their operation and hence, exploit various resources. This will subsequently put pressure on natural resources. There are equally other ethical issues that accompany investment operations such as production processes. For example, the manufacturing industry is one of the most income-fetching in South Africa. Increase in manufacturing industry will result in huge pollution of different sorts. This is the predicament which many countries face. A classical example in South Africa is the case of the South Durban Industrial Basin (SDIB). Air pollution, arising from industrial emissions of toxic substances, has manifested and resulted in increased cases of ailments such as asthma and leukemia. The oil refineries and chemical plants in the area emit toxic gases such as carbon dioxide, benzene, ethyl benzene (Mercury 24/07/2000). Even though the severity of the problem has elicited intensified public opposition and attracted media hype, however, it happens that in a policy arena where there is a conflict of interests, the economic needs and interests tend to override environment concerns. Redclift seems to provide a better exegesis of political economy vis-à-vis environmental issues:

> The creation of wealth, as a policy objective, tends to confine environmental factors to the closet, enabling politicians to wring their hands over the supposed high levels of unemployment that higher environmental standards herald, or the dangers of interfering with market forces which are assumed to work best when they are free from government control (1999:62).

4.3.1.1 South Africa's Biodiversity Policy and Conservation

In South Africa, as already mentioned above, the need for providing for and promoting the "common good" is evident when one studies the Bill of Rights in South Africa's Constitution and its macro-economic policy – Growth, Employment and Redistribution. Conservation of the environment does not stand independently of its objective to promote human welfare. It is, rather, the value of conserving the environment for maximum human benefit that is a determinant in environmental management. Unless we recognise that conservation of the environment will lead to achieving the maximum good as a consequence, the significance of environmental conservation becomes diluted in the light of an anthropocentric approach to environmental ethics. The basic drive is not necessary to conserve natural resources, but to meet human needs and interests. The implication is that it is only when human survival is threatened that consideration is, in turn, given to environmental management.

To put it into perspective, it is curiosity about human welfare with respect to environmental management, that is the core of environmental policies as opposed to concern with the environment itself. The distinction here is that the former orientation does not embody inherent worth of the environment and vice versa. It is precisely because human welfare is at risk that the need for conserving the environment becomes compelling. In line with this observation, O'Riordan concurs by saying: "[f]or the poor South these [environmental crises] are potentially devastating dangers, but they are not so clearly a matter of priority as is the day-to-day requirement survival that affects most of its people" (2000:34). Thus, it is the ethos of human survival that essentially informs the need for environmental management rather than of protecting the environment itself. It is the need for maximising the "collective good" that informs the principles of sustainable development. In this case, one may argue that what is at stake is not the natural environment but human survival. In other words, human survival is central to environmental conservation policies as opposed to the inherent worth of the environment *per se*. It is this anthropocentric and hence utilitarian approach to environmental ethics that underlies South Africa's Biodiversity Policy. Its concern for human survival is highlighted in the following manner:

What will happen if we do not take immediate action? We will undermine the natural resource base upon which people depend; we will foreclose existing and future economic opportunities of using biodiversity; and we will jeopardise ecological processes which are necessary to keep our country fit for life (DEAT (a) 1997:3).

In this regard, the intent of the policy is essentially to safeguard interests and needs of South Africans. This implies that concern for the loss of biodiversity arises out of the fact that it impinges ultimately on the well-being of people rather than of the environment itself. This can further be substantiated in the manner in which the phrase "benefits derived from" recurs in defining the utility purpose of South Africa's biodiversity. The policy outlines a wide range of benefits which, *inter alia*, include:

- maintenance of the hydrological cycle, and thus the provision of clean water;
- maintenance of atmospheric quality, which in turn provides pure air to breathe and helps to control the climate;
- the generation and conservation of soils, which are essential to agriculture and forestry;
- protection from erosion;
- nutrient cycling;
- pollutant breakdown and absorption;
- control of many potential crop pests and vectors of disease;
- the pollination of many crops;
- maintenance of a vast resource of genetic materials from which South Africa and other countries have developed crops, domestic animals, medicines and industrial products; and
- perhaps most importantly, the insurance and basis for adaptation which biodiversity provides against large changes in climate and ecosystem processes a factor of particular concern to South Africa, whose climate is expected to become increasingly drier as global climate changes (DEAT (a) 1997:4).

What clearly emerges from the above outline is that biodiversity caters for human-related welfare. Within this constitutionalised environmental framework, biological diversity is of moral significance for the sake of amenities it offers to South Africans as opposed to its being. Hence, what underlies South Africa's conservation policy (as all conservation policies elsewhere) as an issue-problem policy is the idea that conservation is an issue primarily by virtue of its utility for humanity. Thus, South Africa's biodiversity is accorded moral respect within the understanding that human life derives well-being and

meaning from it. South Africa's government evokes environmental consciousness and environmentally friendly practices which, purposefully, are meant to serve various needs of its citizens. DEAT spells out the central aim behind the conservation of South Africa's biodiversity:

> Over and again, the need to link biodiversity conservation to the needs of South Africa's people has been highlighted as a major concern, as well as the importance of integrating conservation into an overall strategy for conserving and using natural resources sustainably. These concerns have been foremost in informing the development of this policy (DEAT (a) 1997:7).

What emerges from the above discussions is that sustainability, as it emerges from the international policy context, is defined by the fact that "human activities such as pollution, habitat destruction, over-exploitation and foreign plant and animal invasions are resulting in the ever-increasing loss of the earth's biological wealth [of which] [t]he implications ... are considerable" (DEAT (a) 1997:1).

It is significant that Canter distinguishes between the "goal of preserving the functions of ecosystems" (1995:202) and "the duty to protect ecosystems *as such*" (*ibid.*). The former seems to be more in line with utility value of ecosystems than the non-human aspect of it. Thus, people will preserve an ecosystem because they have a goal which they want to achieve by doing so. In contrast, "the duty to..." implies an obligation which inherently arises from the being of ecosystems. It is the being of an ecosystem's existence that necessitates humans to safeguard them. In this sense, it can be argued that the duty presupposes a moral obligation that necessarily has no intention behind it. In this regard, as already cited above, affirming the pervasiveness of utilitarian mode of thinking, Glavovic observes that: "[m]odern conservation strategies are based on a simple utilitarian philosophical assumption that environmental conservation will produce the greatest good for the greatest number of people for the greatest period of time" (1995:45). In this regard, the utilitarian, duty-based and the stewardship understandings are regarded as ineffectual because their focus of the "common good" aims at an exclusively *human* common good" (Palmer 1997:48). This can be substantiated in the affirmative statement of the South African Government which says that "the eradication of poverty; the

sustainable development of its economy; and the social development of its people" (DEAT (b) 1997:3), as its three overriding priorities, in conjunction with the national environmental policy presently being formulated, "provide the context within which consideration will be given to achieving the three objectives of the Convention on Biological Diversity" (*ibid*.). It is thus the significance of development that has been recognized on an international level as a prerequisite to human dignity that necessitates environmental conservation. In other words, the right to development is not only an expression of human rights but is a fundamental one.

Hence, even though Langa sees the necessity of having "a Constitution which evinces a consciousness, a sensitivity to saving the environment" (Langa 1996:28), and that people realise that "the continued well-being of the environment is itself a life and death issue" (*ibid*.), the problem is precisely that it is from a Utilitarian and instrumental perspective that the environment is defined as "a life and death issue". It is different forms of environmental degradation (such as those cited above) that render sustainability to hold sway both at international and local levels. Environmental degradation in many forms tends to define sustainability in the sense that it is humanity's interests and needs that hold sway in our contemporary environmental consciousness. In this regard, environmental law and related policies still embody value justifications that human needs override environmental concerns. Moral concern for the environment is a canopy for humanity's sustainability of livelihoods. In this regard, what environmental law tries to discourage and address, in the first instance, are the repercussions of environmental degradation (as a result of human behaviour) *for* human purpose for continued well-being. Thus, two central principles define the Brundtland's concept of sustainable development: intergenerational equity and intergenerational equity.

This implies that the survival or fate of non-human entities and hence their value, in this case, is determined from a human perspective. With respect to this understanding, non-human life systems and nature are only valuable for the very fact that, in whatever way, they are functional to humans. It follows then that our moral concerns, obligations and interests for non-human species and the natural environment are informed by, and tend to

promote "human values and/or human rights" (Taylor 2000:96). This is what is meant by sustainability in modern political and economic thought. The ethical implication of this is that non-human life systems and the natural environment are means to attaining human ends. An anthropocentric approach to environmental ethics has been influential in environmental laws and related processes, as Palmer comments:

> The law – whether statutory or case law – is concerned not with the natural or living environment *in itself* but with *human* use of, and interest in, the environment. The law, then, reflects the anthropocentric approach to environmental ethics...it does not reflect...[those]...values in the environment *unrelated* to human use (1997:113)(my italics).

It is this fallacious understanding of the environment embodied in some traditional ethical theories that has led to criticisms against human-oriented approach to environmental ethics. In the words of Brown (a): "utilitarian and deontological ethics, and more prominent Western theories of justice, did not make environmental entities the focus of ethical concern [such that] the emerging environmental crisis became a strong challenge" (1995:46). As Palmer says by citing America's environmental legislation,

> the environment [is] purely a resource for meeting human needs rather than something that has value in itself. It suggests that, provided means could be found to meet the needs of present people without damaging the prospects for future people, environmental protection would not matter (Palmer 1997:93).

From the instrumental value perspective, human beings' relationship to nature is perceived only in terms of human utility of the environment. Instrumental value of the environment has been expressed in economic quantification whereby, generally speaking, environmental entities suffice the market principle of demand and supply in modern economies. Humans' relationship to the environment is perceived in terms of material goods and services the natural environment offers, say, for consumption. In this regard, Robinson deduces that "[c]onsumption and accumulation of capital are accorded moral aspect" (1989:43).

4.4 Local Agenda 21

As already discussed in chapter three, Agenda 21 arose within the international context of sustainable development adopted at the United Nations Conference on Environment and Development (known as the Earth Summit) held in Rio de Janeiro in 1992 as *"a comprehensive global action plan to achieve sustainable development"* (Durban Metro 2001:1)(italics original). The need was recognised at Rio that sovereign states, taking into account unique circumstances within their national boundaries, had to implement procedures and principles pertaining to sustainable development that were identified at this Conference. This need gave birth to Local Agenda 21; "the mandate for sustainable development at the local level" (*ibid.*).

One of the goals of Local Agenda 21 in line with the 1992 Rio Earth Summit requirement, and as a thrust of the Brundtland Commission, is to secure the needs of the yet-unborn while meeting present needs. As a typical expression of inter-generational equity, Local Agenda 21's "Concern for the future" requires that "plans and actions address short and long-term trends and needs and consider the needs of future generations" (*ibid.*).

This environmentally ethical demand is explicitly underlined in what could be described as the key principle of Local Agenda 21: "[e]cological limits – all citizens and communities must learnt (sic) to live within the Earth's carrying capacity" (Durban Metro 2001:2). While this statement is environmentally sound, however, this principle is essentially anthropocentric. The phrase "carrying capacity" is a key to unlocking the ethical position and value that underlie this principle. The criterion that will determine sustainability of human survival is the alleviation of human burden on the "carrying capacity" (Nürnberger 1999). Hence, its goal is to curtail human behaviour that tends to undermine the Earth's carrying capacity hence unsustainability. It is social factors such as over-population, accompanied by economic factors, for instance over-exploitation of natural resources that are central to this canon. This suggests that concern is directed towards human survival, not necessarily the environment itself. For example, the moral obligation of water resources management based on the utility of water: "[f]resh water is

vital for drinking, sanitation, agriculture, industry, urban development, hydro power generation, inland fisheries, transportation, recreation and many other human activities (DEAT 1998:35). Thus the environment is taken into consideration because its demise will have repercussions on human well-being. To this effect, Engel concludes that "[a]lmost all of the language of Agenda 21 pertaining to sustainable development and conservation of biodiversity suggests that the *reasons* for conserving biodiversity are derived from the instrumental values and uses that biological resources provide humans" (1990:16)(my italics).

4.4.1 GEAR: whose sustainability?

Taking into account the history of South Africa, this country faces a formidable challenge of addressing the past socio-economic and political ills that enveloped it in the previous decades. Not least significant is the challenge of addressing the issue of massive poverty that in the past has stricken mass populations of South Africa. Brown suggests that "[a]s the 20th century ends, most developed and developing nations assume that a major function of government, if not the most fundamental and important one, is to provide citizens with a healthy economy and opportunities for meaningful employment" (Brown (b) 1995:52).

In general, poverty alleviation is not merely an economic issue but it is equally a significant ethical issue in that poverty undermines humanity's dignity vis-à-vis human welfare as entrenched in South Africa's Bill of Rights. This has seen South Africa adopting macro-economic policies such as GEAR as a means to redress poverty. But poverty alleviation can only be achieved through utilisation of natural resources. This implies that resource utilisation is an integral part in the equation of poverty alleviation. Considering the fact that poverty is regarded as the major cause of environmental degradation (WCED 1987:3), it becomes politically and ethically justifiable that just as many governments, South Africa attempts to pursue "sustainable development-related policies that attempt "to attain both environmental protection and development objectives" (Brown (b) 1995:53). However, in practice, the potential dilemma arises when a nation's economic policy such as GEAR, as it will be argued below, "is both

relevant to development targets and potentially in conflict with environmental protection goals" (*ibid.*).

It can safely be argued that environmental concerns are incorporated into GEAR as the result of "the realization in national governments and multi-lateral institutions that it is impossible to separate economic development issues from environmental ones" (Ahmed and Mlay 1998:1). Hence, GEAR is a manifestation of a kind of development that characterizes sectoral policy changes inclined to more sustainable practices in South Africa (CENGOPO 1999:10). However, while enormous effort has been made, as GEAR reflects, the fact is that the instrumental valuation of the environment is ingrained in humanity. It is this aspect of an anthropocentric view that still pervades policy-making circles and hence, undermines the ideals of sustainable development. A nuanced thrust for growth can still be discerned in development/environment strategies. As Connelly and Smith remark, "[w]here environmental concerns are taken into consideration by contemporary political institutions, it is common that it is their economic value that is seen to be significant" (1999:59).

It is this syndrome that, as it will be discussed below, characterises South Africa's development/environment-related policies and procedures, and which GEAR reflects. GEAR is an example of a policy that defines our relationship with nature which, as Redclift would deduce, still endorses progress as a norm (cited in O'Riordan 2000:78). GEAR takes the form of what Pearce, *et al.* call the concept of 'weak' sustainable development; its aim is "to integrate capitalist growth with environmental concerns" (1989:13), whose objective is economic growth (*ibid.*). The philosophical underpinnings underlying GEAR can thus be unravelled by referring to two fundamental dimensions of this form of sustainability inherent in GEAR. According to Pearce and Warford, on the one hand, sustainable development means "the sustainable growth of per capita real incomes over time – the traditional economic growth objective" (1993:9). On the other hand, sustainability is taken as the sustainable use of resources and the environment. In the light of this understanding, for Pearce and Warford, the issues are reduced to the belief that:

> Just as sustainable economic development ... implies some reasonably constant rate of growth in per capita real incomes, without depleting the nation's capital stock, so the sustainable use of resources and the environment ... implies some rate of use of the environment which does not deplete its capital value (*ibid.*).

South Africa's Bill of Rights shares the ethical problem inherent in predominantly Western understanding of rights and duties to the non-human entities. Coupled with economic rationality advocated in public policy, the environmental ideology that Hays discussed in 1972 is ingrained in our environmental consciousness. In the midst of environmental crises, policy-makers have tended to look up to technology as the means of sustaining economic growth. Hays characterised the technocentric mode of modern environmentalism as "the application of rational and 'value-free' scientific and managerial techniques by a professional elite, who regarded the natural environment as 'neutral stuff' from which man could profitably shape his destiny" (cited in O'Riordan 1981:1). This is an anthropocentric view that Capra exposes in "shallow ecology" in that "[it] views humans as above or outside of nature, as the source of all value, and ascribes only instrumental, or 'use', value to nature" (1996:6). For example, from the perspective of utilitarian ethics, it would be morally justifiable to destroy an ecosystem so long as it maximises the well-being of people regardless of the impact the development activity may have on non-human life systems. As already pointed out, chapter two of South Africa's Constitution, the Bill of Rights, shares this premise. The conceptual moral framework that the law provides for environment management is limited to human utility of environment. What emerges from this perception of reality is a reductionistic and atomistic interpretation of existence.

4.5 Summary

The discussions that emerge from this chapter suggest that various facets of environmental legislation and the macro-economic policy of South Africa are flawed. The characteristics of the "Discontinuity Problem" run through the Bill of Rights. Its scope of environmental concerns revolves around the concern for human well-being. As it is central to environmental legislation, philosophical justifications that are entrenched by environmental law are anthropocentric in nature. Value-judgements that are reflected in the environmental provisions discussed in this chapter reflect a Utilitarian approach to

environmental ethics. This is the rationale of the concept of the sustainable development paradigm embraced in our contemporary institutions and processes. Environmental concerns are only incorporated into South Africa's environmental legislation essentially because they affect people. However, the fact that NEMA places obligation on, for example, developers, it is deontological. In this sense, environmental law necessarily addresses environmental concerns that are ultimately perceived to threaten human well-being.

CHAPTER FIVE
TOWARDS A SYNTHESIS

5.1 Introduction

The previous chapter suggests that our contemporary ecological crises are a result of mechanistic and reductionistic views of reality informed by social problems manifested in relations of dominance and subjugation. It is these trends of thought that suffuse human-nature relationship resulting in different forms of environmental degradation.

The aim of this chapter is to discuss different ecological paradigms which, through respective conceptual frameworks they presuppose, transcend an anthropocentric approach to environmental ethics. Suggestions will be made as to how a more comprehensive ethic can be fostered by using insights that emerge from different ecological models and principles. This chapter also discusses different agents of change that have the potential to raise environmental awareness and initiate transformation in various dimensions of life. The change that is called for with regard to this is the social, political and economic transformation that is imbued with an inclusive sense of reality.

5.2 The edifying paradigm of social ecology

The recognition that ecological crisis is a result of asymmetrical power relations in society is central to social ecology. With regard to this, the underlining term here is "social", and hence social ecology attempts to unravel and trace the roots of ecological degradation in social settings and relations which are perceived as asymmetrical in various respects (as will be discussed below). As discussions below will illustrate, the thrust behind environmental models that tend to move away from traditional environmental thought is the "recognition of the often over-looked fact that nearly all our present ecological problems arise from deep-seated social problems" (Bookchin 2000:225). With regard to this observation, "present ecological problems cannot be clearly understood, much less resolved, without resolutely dealing with problems within society" (*ibid.*). A number of ecological models that tend to challenge the nature of the relationship that is implicitly embodied in environmental law influenced by social forces. The common denominator that underlies this category of environmental philosophical

theories (models) is that they tend to deconstruct a perception of reality which depicts human beings as the only species that command respect. However, it is also important to mention that there are minor variations in their presuppositions of environmental ethics. This part discusses three models of environmental ethics, viz. Deep Ecology, the Gaia hypothesis/the Land Ethic and Ecofeminism.

5.2.1 Deep Ecology

Deep ecology can be regarded as an all-embracing environmental theory that discusses deeper and holistic view of nature by asking "questions about human life, society, and Nature" (Devall and Sessions 2000:149). It posits an inclusive understanding of reality. It recognizes the world as "a network of phenomena that are fundamentally interconnected and interdependent" (Capra 1996:7), as opposed to seeing the world "as collection of isolated objects" (*ibid.*). It is in this web of life that humanity's place is embedded. This assumption is informed by the insight that, according to Capra, "[d]eep ecology recognizes the intrinsic value of all living beings and views humans as just one particular strand in the web of life" (*ibid.*). What Capra understands as the "intrinsic value", however, in the context of this thesis, implies the inherent worth.

Thus, deep ecology is compatible with social ecology in the fact that it radicalizes the traditionally held view that humans are the pinnacle of creation hence the rest of creation revolves around them, and is subject to their dominance. Rather, the premise of this philosophy is that just as any other component of creation, humans are integral part of the environment and constitute just one aspect of existence and reality. This is the premise of biocentric equality, "intimately related to the all-inclusive Self-realization in the sense that if we harm the rest of Nature then we are harming ourselves. There are no boundaries and everything is interconnected" (Devall and Sessions 2000:149). This ethic of interrelatedness and interconnectedness between different aspects of existence, for example people and animals, prevails in some traditional African societies. For example, in the eyes of Yoruba, "Freedom and individuality are always balanced by destiny and community .... Every person is a nexus of interacting elements of the self and the world which shape and are shaped by his [sic] behaviour" (Ray 1982:132).

What emerges from this world-view, such as that of Yoruba and Native Americans, is the reality of the inclusivity of both living and non-living entities. Thus, what becomes morally acceptable is behaviour or action that tends to promote the stability of a web of relatedness and interdependence. This is so because, within such a context, what happens in one sphere of reality will have repercussions on another aspect of reality. Therefore, it makes sense for the notion of human rights to be understood in the context of a "nexus of communal relationships" (*ibid.*). In no way does this fall short of the insights of a systems approach whereby a variety of different elements "function together as a unit, each affecting, and in turn affected by, all other elements" (Environment Canada 2000:1). This would imply that "sustainability-talk" and practices centre around, and aim to promote the flourishing of a community of which humans are just one entity. Subsequently, this further implies that rights would be recognized in terms of the dynamics of communal life, as what ultimately matters. Expression of rights will be accompanied by moral obligations that will safeguard the well-being of the entire biotic community. People will conserve not necessarily because they perceive that their survival is threatened but because of their fellow beings. As Callicott acknowledges, in this regard,

[W]e may have the germ of an African environmental ethic. Add to the intense sense of social embeddedness an equally vivid sense of embeddedness in the *biotic* community, and anthropocentric African communitarianism might then be transformed into a non anthropocentric African environmentalism (Callicott 2000:272).

In the light of systems theory, and as it is implied in deep ecology, humans do not exist separately from aspects of existence be it trees or animals. Re-interpreting the implication of systems theory in the light of democracy, Murove observes that this will imply that "human beings have to live in plurality with other things in existence" (1999:85). Hence, South Africa's Constitution and its relevant environmental provisions (as discussed above) lack in providing for an environmentally sound ethic that would promote an all-encompassing reality of existence whereby non-humans are recognised in spite of their instrumental and intrinsic values. In other words, NEMA presupposes sustainable development as a goal which is "limited to the fairly shortsighted interests of one species,

the human species" (Naess 1997:61), as opposed to "the long-term defence of life conditions on Earth (*ibid.*).

5.2.2 The Gaia theory/Land ethic

This hypothesis subscribes to a systems approach to reality. As formulated by Aldo Leopold, Gaia principle presupposes more egalitarian form of existence rather than regarding man as 'apart from nature' (Attfield 1983:63). The Gaia theory as an expression of social ecology and indeed, as a system oriented model, lies in the fact that it "changes the role of *Homo sapiens* from conqueror of the land community to plain member and citizen of it. It implies respect for his [sic] fellow-members, and also respect for the community as such" (Leopold 2000:140). Its profundity lies in the fact that it "enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land" (*ibid.*).

Just as other ethics models discussed in this thesis, a land ethic emphasizes the totality of existence which embraces different entities. Its focus is on "wholes" as opposed to individuals. According to a land ethic it is these "wholes", unique in their respective right that matter most. In other words, it focuses on the "integrity of creation". In terms of environmental ethics, a land ethic by no means precludes human activities such as management and use of 'resources' *per se,* however, "it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state" (*ibid.*). It is important to note here that a land ethic is not anti-development, as the quote seems to suggest, but it highlights the need for "a limitation on freedom of action in the struggle for existence" (*ibid.*). In other words, a morally acceptable behaviour presupposes a "differentiation of social from anti-social" (*ibid.*). Anti-social here would imply behaviour or actions that do not have regard for other members of a community. In contrast, social behaviour is that which recognizes the diversity of life and promotes it.

5.2.3 Ecofeminism

Amongst any other environmental models discussed in this thesis, Ecofeminism could perhaps be regarded as revolutionary. Vance projects Ecofeminism as "a sisterly bond, a

fundamental rejection of all forms of domination, whose necessary goal is diversity rather than dualism" (cited in Gaard 1993:7). While other theories are equally anti-anthropocentric, Ecofeminism specifically challenges the patriarchal world-view, that is, man's superiority over woman, and the implication of this for man-nature relationship. As a social ecology theory, Ecofeminism relates environmental exploitation and/or degradation to an uneven power relation, which it likens to men's domination over women:

> human/nature dualism ... underlies and undermines our relations to the environment, other people, and that which is embodied and unmediated in ourselves. One effect of this split is that we understand personal and collective histories from a culturally ingrained, dualistic perspective. This perspective perpetuates dynamics that have consistently oppressed women and other nondominant groups, and exploited nonhuman nature (1993:7).

According to Feminism, it is socially constructed stereotypes that give breadth to the perceived male superiority over women that have rendered subjugation of women. It is on this that Ecofeminists builds; the narrow understanding of reality between man and nature has rendered nature vulnerable to man. Thus, both woman and nature are objectified and are subsequently raped by man to gratify his needs. Hence, it is against this background that Ecofeminism "provides a distinctive framework both for reconceiving feminism and for developing an environmental ethic which takes seriously connections between the domination of women and the domination of nature" (Warren 2000:213). The dominant paradigm, which feeds into androcentrism, is dualistic whereby, "[t]he human mind is subject; all else - including the natural world, and other people - consists of objects, to be manipulated, therefore dominated, in the interests of the mind's desires" (Plumwood 1994:160). Another feature of this paradigm is that it is entrenched in instrumental rationality. This gives rise to understanding reality narrowly. In concise terms, it is reductionist whereby, for example,

> a forest is reduced to commercial wood, and wood is reduced to cellulose fibre for pulp and paper industry. Forests, land and genetic resources are then manipulated to increase the production of pulpwood. This distortion is legitimized scientifically as overall productivity increase, regardless of whether it might decrease the output of water from the forest, or destroy the diversity of lifeforms that constitute a forest community (Shiva (a) 1993:25).

In relation to this, persuasive arguments have been raised as to how patriarchy similarly reduces the female body to sex-object. Just as a forest is reduced to wood and wood to fibre, so too is a woman's body reduced to breasts and buttocks, and thence to sex object. Ecofeminists argue that, just as the dominant ideology constructs a dualistic framework between human beings and nature, so it does in portraying gender relationships, that is, between male and female. To sum up, just as nature is perceived as an object of exploitation and abuse, so too are women.

To counter such an androcentric bias, Ecofeminists advocate a perception of reality that values the significance of diversity other than reductionist portrayal of reality; "biodiversity is a web of relationships which ensures balance and sustainability [of those relationships]" (Shiva (b) 1993:171). Within this paradigm, diversity is a strength rather than a complication. It follows then that the moral framework that emerges is that of embracing and nourishing diversity, which in turn, constitutes a web of life. From a sustainability perspective, for example, biodiversity in sustainable agricultural systems implies "co-existence and interdependence of trees, crops and livestock, which maintains cycles of fertility through biomass flows" (*ibid.*). An ethic that arises from this paradigm is an ethic that endorses the richness of life that flows from diversity as opposed to "I-thou" mode of relationships. To put it differently, the ethical implication of this is that understanding reality should be integralist where all aspects of creation are regarded to form the web of life as opposed to a truncated view.

5.3 Towards a social ecology paradigm

To a large extent, humanity's consciousness has largely been "colonised" by occidental scientific thinking as far as traditional theories discussed above suggest. A rights-based ethics is one example that reflects Western oriented thinking and has pervaded environmental policy-making. This ethical approach is preoccupied with setting limits as to what is morally considerable or not, or, what entity enjoys moral standing or not. This fashion of thinking promotes an anthropocentric and utilitarian view of ethics. Denying other entities rights ideologically creates a buffer for justifying the utilitarian and anthropocentric view of ethics. This is not to say, for example, that the notion of rights is

unimportant in an ethical discourse. But the point is that the people's preoccupation with, for example the notion of rights, handicaps humans to go beyond what is perceived to be persons, on the one hand, and on the other hand, what "human-in-existence" or kinship is. "Human-in-existence" points to the moral framework that presupposes humans only constitute one dimension of creation, and that their place in the cosmos is determined in relation to their co-existence with and relatedness to other entities. However, as the Discontinuity Problem suggests, being a human being is understood in opposition to or against nature (Plumwood 1994:147). This is an anthropocentric view that Capra exposes in "shallow ecology", in that, as already cited above, it "views humans as above or outside of nature, as the source of all value, and ascribes only instrumental, or 'use', value to nature" (1996:6).

According to Murove, the ethical constraint inherent in this framework is that it "cannot enable us capture our relatedness with the environment" (1999:81). Hence, in order to understand our contemporary environmental crises comprehensively, humanity has to probe into the nature of perceptions that are embodied by and that undergird our various systems and institutions that reinforce relationships between and amongst humans and between humans and non-humans (including nature). As already discussed above, to regard socio-economic factors such as poverty and increased populations as the main contributing factors to environmental degradation would be turning a blind eye to the root cause of environmental problems and hence, an understatement. Various forms of environmental crises we face today find their roots in the perception of reality that is purely anthropocentric in nature. As conceptual tools such as the Discontinuity Problem discussed above highlights, environmental decay is as a result of mechanistic and reductionistic view of reality which inherently lacks an understanding of "our nature and destiny as a species ... *in relationship*" (Berry cited in Bell 2001:15)(italics original). It is this flawed perception of reality that permeates varied institutional systems and mechanisms be it social, economic and political spheres.

5.3.1 Transcending anthropocentric environmental ethics

This thesis recognises that anthropocentricism embodied in various spheres of human institutions and systems is the fundamental problem for promoting an environmentally sound ethic. It is the contention of this thesis that unless the "Discontinuity Problem" is deconstructed and overcome and, instead, we appreciate that humanity constitute one part of the *whole* reality, our various attempts to achieve the goals of sustainability will only be palliative. To put it succinctly, unless individual human beings re-appreciate their place in the cosmos as constituting only one dimension of creation, and that they have a moral obligation towards promoting the "common good" of nature, environmental laws and hence sustainability will be ineffective to achieve a holistic goal. Philosophically, this implies that ecologically flawed statements such as; 'Our message, is, above all, directed towards people, whose well-being is the ultimate goal of all environment and development policies' (WCED 1987:xiv), needs to be revisited and reconstructed. Such dogmatic statements elevating humans as the central focus of environmental conservation, and hence human superiority over non-human entities are embedded in traditional philosophical theories which project nature as merely of either instrumental value or intrinsic value as opposed to having inherent worth. This ingrained misconception manifests in, and is reinforced by a dominant growth-driven economic theory which regards environmental entities merely as "resources" for human exploitation and consumption. Shiva (a) comments:

> Commercial capitalism is based on specialized commodity production and therefore demands uniformity in production, and the uni-functional use of natural resources. Reductionism thus reduces complex ecosystems to a single component, and a single component to a single function. Further, it allows for the manipulation of ecosystems in a way that maximizes the single-function (1993:24-25).

The inherent interpretation of rights in the political thought, as it has been argued about the Bill of Rights of South Africa's Constitution, is only applicable and limited to the interests of humans. Such limited interpretation tends to justify interests of humans to flourish while those of non-human entities are regarded as secondary. It reduces a holistic understanding of how ethically wrong are repercussions of human activities vis-à-vis a wider environment. There are other entities such as plants that are not covered in our use

of language. This limitation is significant in the sense that it may render some entities as having no moral relevance that would demand an ecological ethics on the part of humans. The inherent problem in the Western scientific and reductionistic thinking which is preoccupied with setting limits as to what is morally considerable or not, or what entity enjoys moral standing or not, is that it promotes an anthropocentric and utilitarian view of ethics. The notion of human rights is one example that in the process has tended to elevate humanity's interests, needs and preferences to the detriment of other entities of the cosmos. The idea of separating humans from nature is axiomatic to our modern view of reality, and economics not being an exception. Cobb observes:

> [T]he narrow limits within which the ecological consciousness has become effective express very deep-seated features of our Western mode of thinking. We think of what is most real as individual, physical entities, more or less self-contained, and only secondarily entering into relations with other entities.... Newtonian science and laissez-faire economics are both expressive of this sense of reality" (1980:442).

Cobb further argues that "[t]he limitations of our anthropocentric norms appear when we speak about the value of other animal species [as contrasted with humans]. In economics that question can only mean the value of other species to human beings" (1980:447). The traditional tendency of ascribing rights to entities based on criteria (which in the end warrants their entitlement only to humans) to a large extent cripples our ethical thinking and practices. Within the moral framework of human jurisprudence which asserts human rights, it is the reasoning that humans are inherently endowed with dignity and respect that justifies the claim that "[w]e should never treat a person as a mere thing to be used for our own purposes and intentions" (*ibid.*). As cited earlier, the inherent worth embodied in human jurisprudence implies that humans treat other humans as "*ends* and never simply as *means*, or as *subjects* and never simply as *objects* (cited in Des Jardins 1993:34).

This fundamental duty presupposes reciprocity on the part of humanity, and it informs the philosophical/legal basis to the notion of rights. In essence, within environmental ethics, the notion of rights distinguishes deontological approaches from utilitarian and

stewardship approaches and hence allows for an ethic that justifies treating entities with respect for inherently what they *are*. However, rather than promoting a holistic environmental ethic whereby all life systems (not to mention the natural environment) are protected and enhanced, the rights-based approach is insular in that it zeroes in on one aspect of the environment; that is, humans. Understanding of this sort tends to undermine complexity of relationships in the cosmos. According to Murove, the ethical constraint inherent in the perception of reality that this framework postulates is that it "cannot enable us to capture our relatedness with the environment" (1999:81). This is not to say, for example, that the notion of rights is unimportant in an ethical discourse. But the point is that the humans' preoccupation with, for example the notion of rights, handicaps humanity to go beyond what is perceived to be human, on the one hand, and on the other hand, what it is to be "human-in-existence" or to possess kinship. In the light of what Plumwood calls the "Discontinuity Problem", the former is understood as in opposition to or against nature (1994:147). An anthropocentric understanding of right-based ethics is ethically flawed in that it serves the purpose of particular species, and hence is suspect in the light of an "Earth Jurisprudence" environmental ethic. On the contrary, as Cobb argues, "[t]he interconnectedness of things crosses all the lines of demarcation established by [various human institutions and systems]. Each of these investigates that aspect of the whole sphere of organic relations amenable to its methods and grasped by its concepts" (1980:443), and each is reinforced by its accompanying prejudices.

Although the rationale behind NEMA is to promote a form of "environmental citizenship" on the part of developers through, for example, the principles of the "Polluter Pays" (PPP) and Duty of Care (DoC), its constraint still lies in the fact that it still subscribes to environmental values which are contingent on human interests and needs vis-à-vis the environment. As already shown in the previous chapter, the moral obligation embodied in NEMA is intended to sustain human life and systems to the detriment of non-human life systems. As already exemplified above, the omission of the environment as "An Affected Party" is an act of omission on the part of policy makers; it is ethically questionable in light of the holistic understanding of the concept of "earth community". Indeed, in most instances, it is the environment that gets affected most in pursuing

development projects yet NEMA does not suggest this. Utilitarian, and hence anthropocentric ethics is the main drive behind development/environment- related tools such as IEM which requires that "positive aspects of the development be maximised and the environmental costs minimised so as to ensure that the cost to society is outweighed by the benefits to society" (Ridl 1994:74). This implies that so long as development activities offer "common good" to society, that is, human society, it is morally justifiable to disrupt natural systems. The implication is that developers will comply with NEMA's principles and go ahead with their projects presupposedly to avoid punitive measures rather than because they recognise and respect inherent worth of say, an ecosystem. Within the understanding of the concept of "environmental citizenship", this can be regarded as "shallow environmental citizenship" that adheres to social and economic forces. Lemons picks up on this issue as he observes:

> nonhumans are not represented at all, yet the effects of climate change on the nonhuman environment may be even greater than on humans.... Despite the intensity of these impacts, nonhuman nature is completely without representation in our decision processes. It must depend entirely on the preferences of human sympathizers for support (Lemons *et al.* 1995:130).

Protecting nature merely for the sake of its utility is not edifying for environmental ethics as Canter exposes this weakness inherent in Western ethical paradigms:

> [p]rotecting ecosystems without regard to their use to humans, however, is a goal not necessarily supported by Western ethical systems. A person operating within a Western anthropocentric ethical framework might value an ecosystem highly but feel no obligation to protect it (Canter, *et al.* 1995:202).

The ethical implication of a market economy, which responds to the whims of ever-wanting laws of demand and supply (which are typical utilitarian justifications) not only disrupts the ontological rhythm of relationships across components of the cosmos of which humans are part but also stresses the carrying capacity of natural resource bases. The cosmos has negatively responded to intense human economic activities. These include global warming and extinction of species.

Although the paradigm of sustainable development has in human history been held as significant in articulating the intrinsic connection between environment and development, however, it falls short of an ethic that promotes the inclusive reality; it is growth-oriented. Though core ideals of sustainable development are incorporated in policy-making, the ultimate aim is to gratify human interests. As far as policy issues pertaining to sustainable development are concerned, it is not resource sustainability that is promoted but human survival. In other words, the latter informs the former. Whether sustainable development is invoked as a feature moral obligation or simply because of the perceived mutual interdependency of development and environment, human utility of the environment still remains the main objective. The concept of sustainable development is human oriented; its thrust is embedded in the dogma that growth is indispensable.

In political and economic thought processes and institutions, sustainable development is based on the assumption that the natural resource base is resilient. This view of the non-depreciation of the natural resource stock is characterized in sentiments of optimism and determination: "[i]f needs are to be met on a sustainable basis the Earth's natural resource base must be conserved and enhanced" (WCED 1987:57). In the same vein, as already quoted above, IUCN is explicit about the goal for conservation; "[to] yield the greatest sustainable benefit" within and across generations (cited in Adams 1992:209). This version of maximizing output for the greatest numbers for people has led to the currency of the term oxymoron in the sense that "sustainable development is economic growth achieved by economic efficiency within a system, subject to constancy of the natural capital stock − that is, the stock of environmental assets is held constant while the economy is allowed whatever social goals are deemed appropriate" (Baker, *et al.* 1997:13). As a legitimating conceptual paradigm, it could be said that sustainable development is meant *"to rehabilitate a largely discredited concept* [of growth] *by giving it a spiritual boost that it would be in a bad taste to refuse"* (Rist 1999:95)(italics original). Otherwise, the thrust of this form of development is still Utilitarian and hence prescribes to human sustainability. In the Brundtland Report the environment is regarded as a resource. In line with this view, what only needs to be done is to determine how this resource base can be stabilized. It is undeniably the perceived connection between

environment and development, in environment policy-making, that is given the guise of moral obligation. This need for satisfying human needs through the sustainability of the natural resource base is given moral expression in policy-making processes and structures.

In contrast, this thesis suggests that unless humans come to grips with a holistic view of existence, sustainability will be an illusion. The main objective of sustainability should be to enhance the integrity of all life forms. This is a call for a change of perception on part of humanity as a species, not only because it shares existence with other beings but, more significantly, because people have enormous capacities that can be used to promote well-being of the "earth community". This is the bottom line that undergirds the concept of "environmental citizenship." It entails

> more than just 'buying green' and recycling at the office; it involves environmentally responsible decision making in everything we do. This means caring for the environment when we are acting as members of communities or organizations, as well as when we are acting just as individuals. In other words, we can think of individuals, communities, and organization as all being potential environmental citizens" (Environment Canada 2001:1).

A call for "environmental citizenship" is edifying considering that environmental law reflects human-nature relatedness in terms of costs and benefits that come into play in this relationship, and are determined from, at least hitherto, corrupt human perception of reality which elevates human values. Environment Canada describes citizenship as "about recognizing one's membership in the community of all living things, and acknowledging responsibilities toward this community" (2001:7). From a different perspective, Bookchin shares this sentiment: "[s]ocial ecology is an appeal not only for moral regeneration but also, and above all, for social reconstruction along ecological lines" (2000:226). What this implies is that as opposed to being mere members of an "Earth community", humans must take an active stand to rethink about their role in matters concerning the environment of which they are part. This is significant in South Africa as the country is on a pilgrimage of reconstruction. Social ecology and "environmental citizenship" pose a challenge for the reconstruction of a world-view with

regard to human-nature relationship. By and large, this arises from the idea that the "primary right and responsibility of the citizen is to participate actively in the life of the community" (Environmental Canada 2001:6). This is a significant point in that it accentuates that an individual's citizenship is defined in relation to the life of a community. In this regard, it is safe to believe that in such a context, a citizen's behaviour and actions are supposed to be in sync with the rhythm or fabric of his/her/its community. Hence, taken together, "environmental citizenship" is the shorthand term that describes "the ethical obligations that link us with other members of the biosphere" (Environment Canada 2001:7). Further, Environment Canada spells out the parallel between environmental citizenship and the concept of ecosystems: "an understanding of the ecosystem perspective is essential for environmental citizenship, while active environmental citizenship reinforces the holistic approach required by the ecosystem approach" (2001:1). According to Potter, "[e]nlightened anthropocentricism calls for long-term survival [and] the long-term survival of species diversity" (cited in Connelly and Smith 1999:229).

Hence, as a form of moral extensionism, which simply can be regarded as expanding our moral horizon, an "Earth Jurisprudence" as an alternative model of environmental ethics provides a framework that is holistic by not only going beyond species-based notion of rights, but by regarding the non-human world as equally having rights. According to this ethic, "[e]very component of the Earth community has three rights. The right to be, the right to habitat, and the right to fulfill its role in the ever-renewing process of the Earth community" (Bell 2001:7). The implication of the idea of "human-in-existence" is that humanity's existence is "a shared existence with the natural environment, we belong together. Our well-being and the well-being of the environment cannot be separated from each other" (*ibid.*).

The perception of life in this fashion challenges the utilitarian and instrumental view of the environment entrenched in Western dominant ethical theories. Rather than drawing a clear-cut line between our place as humans in the universe and the natural environment, there is a need for the resurgence of an ethic that promotes democratic freedoms while

checking the potential effects that might spin off from such values. An "Earth Jurisprudence" ethic is enlightening in terms of relationship between humans and their environment. This thesis suggests that for the goals of sustainability to be achieved, an ethic of egalitarianism needs to inform our moral frameworks, whereby, as Kothari suggests:

> Respect for life has to be a fundamentally spiritual notion, based on faith in the inalienable rights of all living beings. The basic sanctions behind them are not contractual but transcendental. They are not primarily claims bestowed by law but are inherent in the very nature of life (Kothari 1990:33).

Against the general moral framework that the above moral models, one can generally say that South Africa's environmental legislation is inherently constrained to provide a holistic ethic for sustainability. This thesis contends that NEMA, as an overarching legislation that aims to promote sustainability, suspiciously embodies a hierarchical form of relationships between human beings and the environment. It is thus compelling that a holistic ethical paradigm should be sought so as to offset the above highlighted constraints in moral frameworks regarding human and nature relationship. In order to provide for an alternative conceptual framework for a more holistic environmental ethics, and hence sustainability, recourse will be sought in Bell's paradigm of an "Earth Jurisprudence".

5.3.2 Towards a holistic perspective of environmental ethics

There has been an increasingly interesting debate about how environmental ethics can be holistic and hence effective. This has led to a paradigm shift in the interpretation of rights. The notion of animal rights is a classical example of the need to enlarge our moral concern. Advocacy for animal rights has been the result of various morally repugnant tortures and treatment to which animals have been subjected. However, with the progressive trend of ecological consciousness, intense need has emerged for humans to enlarge their moral concern to the non-animal domain. The idea is not to object to the idea that humans are unique in their own way, but from ethical and legal perspectives the rationale is to dilute a dimension of anthropocentricism inherent in human rights and thereby conscientising people about the moral significance of non-human entities.

Juxtaposing an "Earth Jurisprudence" ethic with Leopold's "land ethic", Bell suggests that human rights need to be complemented by an ecological ethic that, as already cited above, limits: "freedom of action in the struggle for existence" (2001:27). In philosophical terms, human rights need to be an expression of "a differentiation of social from anti-social conduct"(*ibid.*). As moral agents capable of making rational, moral judgments, and as the Rule of Nonmaleficence suggests, humanity has "the duty not to kill an organism and not to destroy a species-population or biotic community, as well as to refrain from any action that would be seriously detrimental to the good of an organism, species-population, or life community" (Taylor 1994:87).

The paradigm of an "Earth Jurisprudence" is non-anthropocentric and hence ethically enlightening in the sense that it fosters a morality that can bridge the perceived gap between humans and animals. To put it differently, an ethic of "Earth Jurisprudence" tends to challenge the human tendency of perceiving non-humans *simply* in terms of their instrumental value. It bases its argument for moral concern on transcendence. The moral imperative for moral concern for other beings other than humans is given breadth in an "Earth Jurisprudence."

5.3.2.1 An "Earth Jurisprudence", the philosophy of *ubuntu* and environmental ethics

Sustainability ultimately rests on the democracy of all life, on the recognition that human beings are not masters but members of the Earth family (Kothari 1990:32).

Building on the insights of an "Earth Jurisprudence", it would be required that policy-making processes entail that utilitarian and deontological ethical theories and other moral principles be informed by a holistic insight into existence as presupposed in ecological models discussed in this chapter. This not a revolutionary call whereby humanity would need abandon all "its activities, knowledge, and institutional structures, or surrender all its achievement and start all over again in a clean, new state" (Kothari 1990:33); it is rather a call for evolution. In other words; "our view of which values and purposes should

- 73 -

inform our actions and institutions must be consciously *re*-viewed; and, where choices are called for, these should be exercised" (Kothari 1990:33). Thus, the idea is to encourage a symbiotic culture through which inherent worth of a biotic *community* is respected and promoted. According to Taylor, this can only be achieved by adopting an "ultimate moral attitude" towards non-human species in order to "maintain a healthy existence in a natural state" (2000:96). In this sense, the principles of the "ultimate moral attitude" and "equal consideration of interest" call for a shift from categorically elevating instrumental values of non-human species to valuing them essentially for their inherent worth. In terms of species relatedness, it implies that human beings have to move away from speciesism, which Singer defines as "a prejudice or attitude of bias in favour of the interests of members of one's own species and against those of members of other species" (2000:54). In one sense, to expand the horizon of moral community, conditions attached to the entitlement of "rights" have to be redefined free from an anthropocentric view of environmental ethics. As Attfield reasons, this implies, nonetheless, that

> the peculiar value of the fulfilment of characteristic human capacities can be granted without denying the possibility of rights on the part of nonhuman animals... . Nor can it be necessary for an environmental ethic to be committed to treating species-boundaries *in themselves* as a proper basis for discrimination and differential treatment (1983:62)(italics original).

Cobb echoes the need for embracing a more edifying anthropocentricism in policy-related spheres because, for example, biocentricism can act as "a check on the shortsightedness of most policies proposed from anthropocentric motives – a check that is needed also from the perspective of enlightened anthropocentricism (1980:448). Thus, as an alternative environmental approach to ethics, an "Earth Jurisprudence" affirms the integrity of the entire creation. It is compatible with biocentric ethics because it basically legitimizes the flourishing of all life systems in the universe. The contention that runs through a life-centred theory is that the environment should be protected not simply because of its utilitarian purpose to humanity but, essentially, because of its inherent worth. In the light of this, humans have *prima facie* moral obligations that are owed to non-human life systems essentially because they are integral to the Earth's biocentric community (Taylor 2000:96).

In the same vein, the philosophy of an "Earth Jurisprudence" should equally be brought to the centre stage to illuminate the interrelatedness and interdependence that exist between human and non-human species. This model is in essence compatible with the holistic principle of person-in community. Even though it has been argued that the animal rights talk is merely for political convenience sake (Singer 2000:55), the rights-based ethics can be revisited and be seen in a new light. This thesis suggests that the essence of an "Earth Jurisprudence" needs to inform an inclusive view of human reality which Prozesky evokes for South Africa:

> A position which offers an inclusive picture of human reality, which implies that humans are essentially valuing beings, which insists that the natural and social environment are essential to the very meaning of humanity, let alone to the practical business of living worthily and well, and which assigns such a marked centrality without also encouraging selfish, egocentric patterns of existence, is manifestly one that has very great relevance to the situation in South Africa and indeed to the wider world. It deserves to be much more widely known than it is, and its educational, economic, ecological and political implications need to be much more fully explored in South Africa (1995:58).

From an environmental ethics perspective, an "Earth Jurisprudence" ethic entails "interconnected totality, with nothing actual being capable of existing in detachment or isolation from everything else" (Prozesky 1995:55). In this way it transcends the legal language of human rights that distorts the ethical implications of our relationships to nature. "Environmental redemption" can be sought in philosophical underpinnings of an "Earth Jurisprudence" ethics. It is by utilising wisdom inherent in African traditions that South Africa (and Africa as a whole) can capture the broader reality of existence, and thereby challenge the atomistic view of reality. In this regard, the objective of sustainable development should be to promote the well-being of all the entities in existence. It denotes the acknowledgement of interdependence and interrelatedness that exist between entities. In this way, it could be said that an "Earth Jurisprudence" inculcates the morality that promotes the well-being of different entities, essentially as a result of relatedness and interdependence, as opposed to categorically perceiving humans as apart from or outside nature. Thus, humans will have duty to care for the environment essentially because they

do not exist in isolation, but essentially because their existence is shaped and affected by other entities, and vice versa. The philosophy of *ubuntu* alludes to the idea that humans form part and are part of nature. The implication of this philosophy is that humanity's existence is "a shared existence with the natural environment, we belong together. Our well-being and the well-being of the environment cannot be separated from each other" (Murove 1999:85). This perception of existence is thus compatible with deep ecology or Gaia theory in the sense that both environmental ethical theories are community-oriented or holistic in approach; they recognise inter-relatedness of and inter-dependences amongst species.

An "Earth perspective" school of thought presupposes that the circle of moral concern needs to be extended to embrace non-humans even though they do not constitute a moral community but because they have inherent worth. To this effect, the argument goes, humans have a duty to treat non-human entities as ends themselves not simply as means but because they have inherent worth. This affirmation of inherent worth is in line with a theistic worldview. It is reasoned that it is a deity or a creator who accords the inherent worth of an entity. This implies that the inherent worth of an entity is independent of its any relevant use. Any form of existence has inherent worth by virtue of its *being*. In this case, the "good" of a thing derives from its being.

Rights in this regard are understood in the sense that different constituents of the "earth community" have relationships toward each other. It is the form of relationships of interdependence and interrelatedness that an "Earth Jurisprudence" presupposes that gives expression to these rights. The mutuality of harmonious relationships determines how these rights can be of help to reinforce the coexistence of various entities that form a single community. To put it differently, from this perspective, rights would act as a lever strengthening, rather than disrupting the stability and integrity of this form of existence. This implies that "[h]uman rights do not cancel out the rights of other modes of being to exist in their natural state" (Bell 2001:17). In the light of this, it will be argued that rights theory does not necessarily disregard human utility of animals; however, it challenges the

perception that the environment is only of instrumental value: they deserve moral concern essentially for what they are.

Perhaps, the plausibility of this notion can be better captured in the tradition-oriented world-view of reality of existence. For example, citing the African world-view of reality Mbiti writes:

> [F]or African peoples, this is a religious universe. Nature in the broadest sense of the word is not an impersonal object or phenomenon: it is filled with religious significance. Man [sic] gives life even where natural objects and phenomena have no biological life" (Mbiti 1969:56).

It is crucially important to understand that, as Mbiti indicates, Africans' perception of nature is embedded in their religious and hence, public domain. It implies that nature is not merely regarded as a resource receptacle hence impersonal. Rather it forms part of their religious (and spiritual) being. Hence, the phrase "man gives life" is, in its own right, significant for environmental ethics; it points to an ethic of care and awe. It presupposes an ethic of care that is transcendent; not based on contractual understanding of relationships, but essentially based on experiential reality endowed with spiritual dimension or essence. In this regard, humans cannot extricate themselves from this embedded existence. Here, it is presumed that it is expected of "man" to protect and promote the well-being of nature that determines his/her destiny. This is manifested in the attitude "fully illustrated by the way they 'read' God into various objects and phenomena" (Mbiti 1969:51).

The same can be said about non-human life systems as President Nelson Mandela's statement seems to suggest as he says: "Each one of us is intimately attached to the soil of this beautiful country. Each time one of us touches the soil of this land, we feel a sense of personal renewal" (DEAT (a) 1997:4). Although the preceding quote might not necessarily be environmentally informed, however, in the midst of the need for moral regeneration in South Africa, such rhetorical statements need to be re-appropriated in public policy discourses and be regarded as a litmus for our commitment to moral revival in the wider application of this need.

In the same vein, unlike in the reductionistic-mindset worldview, perhaps another appealing feature of African traditions is that the identity of humans is identified with that of animals as the totemic system seems to suggest. By implication, there exists a bond between humans and non-humans. According to the totemic tradition, "the totemic animal is related to people in the sense that it preserves the memory of their identity as to who they are, where they come from" (Murove 1999:22). This subsequently rendered animals as sacred in the sense that special respect was shown by not selling a totemic animal, not using it "for food or other utilitarian purposes which would make it subservient to the individual members of society. We can say that while other things might be said to be possessed, the totem is the subject of predication by direct identity" (*ibid.*).

The ethical implication of the inclusive view of reality supersedes an understanding of (totemic) animals merely in terms of their instrumental value. Rather, African totemic philosophy implies human-animal relatedness by virtue of *being* which further subsumes their utility to humans. In this case, one would not talk of animal rights (assuming that this language would exist in the African traditional context) without realising its implications for human beings. Such a holistic perception of reality resonates with other non-African, but equally traditional world-views. For example, Kothari cites the women of Gharwal, the backbone of the Chipko movement, who "risked their lives to save their trees, though anthropocentric, clearly believe that trees have rights, and that the rights of trees are of a higher order than those of human beings. This is because, it is argued, trees provide the *conditions* for life on Earth" (Kothari 1990:32). Surely, this understanding of human-nature relationship surpasses the legal and contractual interpretation of morality.

As opposed to a world-view that is reductionistic and mechanistic, the frame of mind of this nature presupposes a more inclusive ethic that is integralist and embraces other realities of existence. It posits that everything in existence is of inherent worth. It basically suggests that the environment should be protected not simply because of its

utilitarian purpose to humanity but, essentially, because of its inherent worth. An ethic that is embodied in this world-view reflects, as already cited in chapter three, what Taylor calls "ultimate moral attitude" which presupposes that human beings have *prima facie* moral obligations that are owed to non-human life systems essentially because they are integral to the Earth's biocentric community (2000:96).

While the philosophy of *ubuntu* etymologically presupposes human domain of relationships and could be said thus anthropocentric, however, its interpretation can be enlightening for environmental ethics. Mbiti seems to suggest that the inclusive understanding of reality in the traditional African life is characterised by "corporate morality, customs and traditional solidarity" (1969:214). As the above quote suggests, *ubuntu* would provide a moral framework that is all-encompassing. Within this framework, it is a type of morality that would recognise the essence of communality, and that which would enhance solidarity defined in the context of communality that surpasses the conventional understanding of *ubuntu*. It would rather imply that existence-in-relationships goes beyond human relationships. The environment in many dimensions shapes human life. Thus, according to this version of *ubuntu*, being human implies living in accordance with, in general terms, the ideals that tend to safeguard and promote relationships of co-existence. In this regard, relationships would encompass those amongst humans and between humans and nature. The ethical implication of the wisdom that undergirds this philosophy is that humans ought to be morally conscious of their place in the cosmos vis-à-vis non-humans. In this context, the language of rights does not come first, it is rather, the harmonious relationship between humans and the environment that is fostered. In this context, it can be argued, environmental ethics about human-nature relationship is based on the intimacy of their existence. A holistic understanding of reality in this manner is supported by Whiteheadean process thought; "reality is a single continuum admitting of no fundamental ontological divisions" (Prozesky 1995:55).

To interpret reality of existence in a mechanistic and reductionistic manner will be undermining the ethical implication of such a world-view. It is such a mentality that has in the first place created environmental problems. In sum, it is this mechanistic way of

thinking that led Mbiti to challenge non-African writers about Africans' rich understanding of nature: "[i]t is unfortunate that foreign writers, through great ignorance, have failed to understand this deep religious insight of our peoples; and have often ridiculed it, or naively presented it as 'nature worship' or 'animism' " (Mbiti 1969:56).

5.3.2.1.1 A Bill of Rights for The Planet Earth

As already mentioned, within the moral framework of an "Earth Jurisprudence", and in light of the above ecological models, it implies that the language of rights is transcended and replaced with a notion of rights that arises out of the recognition of being of non-humans. According to Kothari, "[t]he basic sanctions behind them are not contractual but transcendental. They are not primarily claims bestowed by law but are inherent in the very nature of life" (1990:33).

The inclusive understanding of reality embedded in an "Earth Jurisprudence" is compatible with ecological theories discusses above. The type of morality embodied in such ecological models challenges the "species-based" ethics which emphasises the well-being of an individual. For instance, with an "individualist" approach, it would not be justifiable to morally cull an individual animal for the greater good of the species/herd. In contrast, rather than giving weight to one species, ecological theories discussed above highlight the significance of promoting a web of life. This comprehensive approach to ethics provides a broader understanding in terms of relationship between humans and their environment. Boff claims:

> Ethics means ... responsibility for everything that exists and lives. ... [Yet], [t]he dominant ethics of present-day society is utilitarian and anthropocentric. It denies ... the intrinsic value of certain other living creatures in nature. It does not understand that rights do not belong only to humankind and to nations, but also to other beings in creation. There is a human and social right, but there is also *an ecological right* (1991:30)(my italics).

The articulation of ethics in this manner is thus compatible with an "Earth Jurisprudence" advocated by Environment Canada. As one alternative approach to environmental ethics, an "Earth Jurisprudence" presupposes a new epistemology which recognises that the Earth and its well-being is fundamental and that the well-being of humanity is derivative

as opposed to indicative (Bell 2001:15). This way, it challenges our form of human jurisprudence which sees "ourselves as being at the top of a pyramid of species, calling the shots, and acting in our own best interests. Other species have no rights" (2001:22). Its point of departure is that "*the Earth and its species are not a collection of objects but are, rather, a communion of subjects*" (cited in Bell 2001:14)(italics original). In this sense, humans are morally obliged to respect and promote the natural environment essentially by virtue of its existence. In other words, all human actions should be assessed in the light of whether such acts promote or degrade the existence of creation in its entirety. The fundamental idea here is to embrace the attitude of humility with respect to understanding our place in nature vis-à-vis other entities. This is the philosophical assumption that underlies Boff's (1991) reasoning of an ecological right. Thus, to move away from a human jurisprudence that is impregnated with human biases, there is need for a paradigm shift that "humans [ought to] redefine our role as a species and reintegrate ourselves within an integrated community of species" (Bell 2001:22). Moreover, Judge Douglas confirms that "[b]y conferring legal rights on natural objects we give a voice to inarticulate creatures" (cited in Palmer 1997:119).

It is in line with the above insights that this thesis deems Bell's insights of rights edifying for South Africa's Constitution in articulating environmental law. Hence, if the objective of sustainable development is to be achieved, environmental laws/policies must embrace non-market values of the environment. Hodgson argues that a "government committed to the protection of the natural environment must campaign on the basis of moral imperatives such as duty and compassion, involving concern for animals and succeeding generations of humans, and not simply a calculus of costs and benefits" (1997:60). In this regard, interests of non-human entities must be incorporated into environmental laws by extending "utilitarian and deontological theories to all sentient beings" (Brown (a) 1995:46). The idea is to recognize the "common ground" between "the rights of humans and the rights of the other than human world.... that the Earth is a one-time gift with limited carrying capacity and resilience" (Bell 2001:25). In sum, from an "Earth jurisprudence" perspective, sustainability would mean embracing an ecocentric worldview that presupposes morally egalitarian "understanding of the value of different

forms of life, adopting a holistic approach that recognizes the interrelatedness of all life" (Baker, *et al.* 1997:16).

It is in this ethical framework that the claim of human superiority and hence human rights can be critically discussed. Subsequently, environmental laws need to be imbued with this deeper epistemology that embodies a holistic perception of existence; based upon a dynamic and functional cosmological ecology (Berry cited in Bell 2001:15-16). Surely, humanity can use their unique capacities that can be used to contribute towards the well-being of an "Earth community". It is the very reason that humans are capable of, for example, seeing and then judging that necessitates them to act morally. Berry observes:

> The dominant characteristic of the human species is our reflective capacity. As Thomas Berry has noted, "human consciousness is the universe reflecting upon itself". *This reflective capacity confers upon us certain ethical and moral responsibilities to care for the planet and the integrated earth community* (cited in Bell 2001:15-16)(italics original).

What needs to be inculcated in this regard is to promote an "ultimate moral attitude" towards non-human species in order to "maintain a healthy existence in a natural state" (Taylor 2000:96). One may argue that within this purview of understanding, the form of development that is morally acceptable and environmentally feasible is the type of development that will foster the well-being of both human and non-human entities. In terms of humanity's livelihood, it implies that the focus should be on basic needs rather than luxurious needs. Building on Boff's theory of ecodevelopment, Murove suggests that "development has to foster solidarity among all living things as co-partners to our human well-being" (1999:183). In other words, in economic language, development should measure "well-being in terms other than that of annual consumption" (Richardson 1997:48).

5.3.2.1.2 Revisiting the fallacy of neo-liberal economic theory
The ethical implications of a "land ethic" challenge the idea implicit in neo-liberal economics that resources are infinite. The implementation of neo-liberal economics models places heavy stress on the environment. As already cited above, core objectives

of sustainable development and GEAR mitigate against the very idea of sustainability. By no means can a growth-oriented type of economics be sustainable into infinity. Considering the fact that modern economic structures have borne environmental ills, Boff advocates that sustainable development should rightly be ecologically oriented. Ecodevelopment, the term which Boff seemingly prefers to sustainable development, points to "a form of development that takes the ecological factors into account for the reason that nature comprises a form of capital along with the means of production and labour" (1995:22). Economics should go beyond the "international political correctness" which the concept of sustainable development seems to address. Environmental principles such as those discussed above, which regards the environment as merely a resource vitiates the morality embodied in an "Earth Jurisprudence." They mitigate the ethic of solidarity and belongingness that reinforces a web of life constitutive of individual species that are unique in their own sense.

To promote sustainability, humans as conscious beings ought to be "environmental citizens" who need to consciously challenge the fallacious fundamental epistemology that nourishes neo-liberal economics. Concomitant to a neo-liberal economic theory are epistemological presuppositions (Daly and Cobb 1989), which, amongst others, are GNP and *homo economicus*. With respect to the former, GNP as an indicator of a healthy economy and a good market is deficient as far as an understanding of sustainability espoused in this thesis entails. Not only to mention that GNP does not reflect the complex dynamics of poverty, illiteracy and effects of economic activities vis-à-vis ecological communities (Murove 1999:200), its scope of measurement is purely economical and hence reductionistic. From an anthropocentric view, GNP only measures material well-being, disregarding spiritual and cultural aspects of life. From an environmental ethics perspective, its constraint lies in the fact it only reflects an instrumental value of the environment. In other words, the environment is a commodity whose use is to satisfy human needs. Thus, as Daly and Cobb say, GNP is a feature of misplaced concreteness (see also Murove 1999:200). As opposed to reflecting reality in such a reductionistic manner, Murove argues that "[f]or the GNP to give a true reflection of the well-being of society and and [sic] the environment, it should be based on the welfare of our common

existence instead of measuring [only] income" (1999:200). Further, as already mentioned above, the growth orientation in neo-liberal economic theory raises other ethical issues such as increased consumption patterns which, in turn, lead to increases in pollution levels and an increased pressure on the environment. In the same light, the whims of the economic market, for example, growth of national economies, are still looked up to as yardsticks for the attainment of the goals of sustainable development. This is to the disservice of the objective of sustainable development. Connelly and Smith expose this weakness:

> It...is far from a suitable measure of environmental sustainability in that growth usually entails environmental and social degradation. A single accurate measure of such a complicated objective as sustainable development is unlikely to be forthcoming and perhaps the best way of responding to such concerns is to develop *broad quality-of-life* indicators to guide policy decisions and other interventions into the *non-human* world (1999:131)(my italics).

According to Murove, this notion presupposes that

> a)...the individual's wants are insatiable and that (b) as individuals acquire particular goods, their desire for additional consumption of that good diminishes. Only commodities consumed by an individual contribute to that individual's satisfaction or utility function (1999:201).

To understand an idea of "Economic man", as one aspect that neo-liberal economics feeds into, well explains the reason why modern consumption has become a fetish. Modern people's consciousness has been colonised through wild advertisements such that wants (as opposed to needs) have been created. Modern markets have been flooded with created artificial needs. But goods and services available to modern people on markets accompany environmental degradation of many forms. On one hand, the environment is only regarded as a receptacle from which humans can exploit resources and, on the other hand, as a "sink" which is out there to absorb by-products from consumed goods and services. All such developments compromise the resilience of nature.

5.3.2.2 Agents of change

The challenge for raising environmental awareness cuts across a range of societal spheres. Sustainability is not only about sustainable use of "resources", it touches many aspects of life. It is a social/cultural issue, a political issue and needless to mention, an economic issue. We cannot talk of sustainable development only in economic respect without considering its social and political implications. To this effect, for sustainability to be effective, concerted effort has to emanate from different spheres of life or disciplines. In his book *Prosperity, Poverty and Pollution*, using the insights of Korten, Nürnberger discusses agents of change which command "the full range of levels of competence" (1999:361). This thesis will now turn to focus on selected agents of change which, in spite of their respective constraints, can help to enhance bringing about transformation in policy issues and related processes.

5.3.2.2.1 International organisations

At the highest level, the agents of change include "international organisations" which, among others, include the United Nations, the International Court of Justice, the Commonwealth and the Organisation of African Unity. According to Nürnberger, their areas of competence include issues such as "conventions on basic values and their implementation such as human rights and environmental protection" (*ibid.*). It is significant that these issues are regarded as "basic values" and fall under the ambit of international bodies. On the one hand, this is significant because various forms of environmental degradation are not confined within geographical borders. Pollutants emitted in one region affects people in another region. On the other hand, the assumption here is that these basic values run through different cultures and transcend national and regional borders. The recognition that issues of human rights and environmental are core values is in itself ethically significant. However, the main obstacle to promoting these values is that more weight is given to, for instance, human rights, when the two mentioned values seem to be in conflict. As previous discussions suggest, the main problem is that our understanding of reality is purely anthropocentric. Subsequently, what arises from this anthropocentric approach is the need to satisfy human needs. It seems

such philosophical principles cannot justify, for instance, environmental protection to override human utility of the environment (as an expression of human rights).

5.3.2.2.2 The mass media

At another level, Nürnberger identifies "the mass media" as a sphere where change can be initiated. Indeed, the mass media has the potential to influence the direction of current societal issues. In the book *Media, Culture and the Environment*, Anderson (1997) makes a thorough discussion about the influence of the media has had in environment-related issues such as raising environmental awareness and policy-making. For example, Anderson comments about the recognition made by Greenpeace of "the role of the global media can play in exerting pressure on the global market" (1997:84-85). According to Nürnberger, the sphere of competence of the mass media includes "information, analysis, exposure of public evils, political advocacy, and the maintenance of the collective value system" (1999:363). As far as this realm of influence entails, the mass media have the potential either to reinforce or destroy dominant ideologies in currency. The issues outlined above are critically important for the discussion in perspective.

As already argued above, on a negative note, the mass media have contributed to the present environmental degradation through wild advertisement. The market, using the mass media as a channel, has succeeded in raising curiosity among people about certain goods and services. One day this good is on the market, the following day it is outdated. This creates a circular phenomenon which do not only leaves people in a consumption bondage (in terms of wants), but also lead to the depletion and over-exploitation of resources, and hence unsustainability. On a positive note, the mass media can use its influence to deconstruct the fetish that the market unleashes. It can be instrumental to challenging and exposing ideologies and policies which embody values that are not socially, politically, ethically and economically acceptable, and impinge on the well-being of society. Suffice it to say, it is through different channels of information that people currently have environmental crises. In the same vein, through information dissemination, the mass media can help to raise people's awareness about environmentally friendly behaviour. The business news over media should not only be

about depreciation of Rand, Yen, Dollar and Kwacha. Or, people must not only be bombarded with statistics on the stock exchange. These dynamics on the market cannot be divorced from the utility of the environment. In sum, the mass media can be used to turn the tide by raising ecological consciousness and thereby catalysing ecological reconstruction.

5.3.2.2.3 The "greens" and other stakeholders

Equally significant for the ecological reconstruction we immensely need, is the role of "voluntary groups and non-governmental organisations". This category includes activists, pressure groups, and religious groups. In an effort to raise ecology awareness, names of environmental groups such as the Earth First! and Green Peace speak volumes with regard to their overall contribution in "green"-related matters. A classical example is the significant role local pressure groups of Durban (in conjunction with other international environmental pressure) in lobbying other role players to expose high levels of pollution that have caused ailments such as asthma amongst residents in South Durban Industrial Area.

5.3.2.2.4 Religious communities

Of special importance is the role of religious communities. According to Nürnberger, their particular sphere of competence is "to cater for the transcendent dimensions of life: a system of meaning, assurance of one's right of existence, and authority" (1999:363). Religious communities owe their allegiance to some form of a deity. They affirm that every aspect of creation, as an expression of the inherent worth, is unique in its own right. According to the religious orientation, every aspect of creation derives its worth from its *being* independent of human valuation. It is by building on such affirmations that religious institutions can challenge fallacious ideologies and structures that have favoured and promoted a narrow understanding of life and advocate laws and policies that promote the integrity of creation.

Emanating from the framework of a comprehensive reality which religious entities tend to profess, religious communities have a crucial role to deconstruct the fallacy of

"economic man" inherent in neo-liberal democracy. Intrinsic in religious belief is the comprehensive being of reality. Humans are not only economic beings they are also spiritual beings; "Man shall not live by bread alone". Meaning of life cannot only be sought in material wealth. This quotation disproves the epistemological presupposition of a neo-liberal economic theory which elevate material well-being of humanity while relegating spiritual aspect of life. Human life is not only fulfilled by material needs, and existence does not only depend on material wealth, but needs to embrace spirituality. The responsibility that religious communities have in offering "a vision of what ought to be" (Nürnberger 1999:363) has manifested in religious communities challenging and exposing social, economic and political structures that are deemed to be in conflict with a particular vision.

The same can be said about the role of these communities in challenging biased views of reality. Various forms of environmental degradation in our contemporary times are not parallel to the biblical quotation "the world is good" in Genesis. Thus, religious communities need to revisit this quotation and challenge the norms and goals that go astray from a comprehensive reality of existence. In terms of sustainability, religions have rich insights as to how humans interact with the environment. For example, though anthropocentric, the principle of stewardship originated in ancient religions illustrates moral obligation of human beings towards nature. The message behind this principle is clear; people are not masters but trustees. This version is opposed to the flawed interpretation of "stewardship" that implies humanity's dominion over nature. This truncated understanding inculcates "wanton acts of despoliation or cruelty or over-exploitation of natural resources" (Connelly and Smith 1999:12-13).

Drawing on the more edifying version of stewardship, international church organisations such as the WCC need to exert pressure at international level. In sum, religious communities have the duty of turning what *is* into *what ought to be* as the Genesis quotation cited above suggests. In line with this, international efforts such as the lobby to Kyoto Protocol need to be intensified and censure arrogance as that shown by contemporary leaders such as President Bush of the United States of America pertaining

to the ratification of the Kyoto Protocol. Thatchers and Reagans of the day are obsessed with economic policies based on neo-liberal economic theory which, as argued above, undermines the limited capacity of earth resources.

5.3.2.2.5 The nation state

Nürnberger cites a *nation state* as another agent of change, and its sphere of competence includes "the rule of law" (1999:363). While this aspect has been discussed in depth above, the suggestion to be made here is that, by and large, there is need that South Africa's Constitution and its environmental legislation be imbued with an "Earth Jurisprudence" content.

Evidently, what emerges from the social ecology oriented models discussed above is the insight into the dynamics of inclusive reality. As a common feature, they challenge the traditional perceptions that depict reality in reductionistic, dualistic and mechanistic form. In their various orientations, they allude to the fact that there is inherent interconnectedness between different species which ultimately form the whole cosmos. It follows then that the thread that run through these theories is that a sound ethic is that which promotes the ultimate good of the whole. In light of sustainability, as opposed to economic-related paradigms that focus on individual species, these models presuppose the type of sustainability that takes into account the ultimate well-being of the entire earth community. It is in light of the understanding of interrelatedness and interconnectedness that forge the unity that concepts such as biocentric and ecocentric approaches to environmental ethics are central to such models. This makes sense because what affects a particular constituent of the "whole" subsequently affects others. Thus, we cannot talk of the well-being of humans without hinting at the well-being of the environment. This is exactly the rationale of systems theory which posits that "wholes are more important than parts to the extent that they cannot be reduced to the sum of their parts" (Cobb 1992:56). In sum, sustainability should entail promoting a culture of symbiosis between different entities. The ethical implications of this moral demand is that humans must consciously and willingly get out of their "self-contained" ego and embrace and enhance the reality of the existence of relatedness and interdependency. Using the insights of Capra (1992),

Nürnberger's call for a new mindset. One aspect of this new mindset that Nürnberger advocates is the need for humanity to "develop a *vision of comprehensive well-being* for the entire system of concentric contexts" (1999:380)(italics original). Nürnberger expounds:

> Inevitable trade-offs have to be built into the vision. Comprehensive well-being, to be comprehensive, must be optimal, or balanced well-being, rather than maximised well-being of one part at the expense of other parts. When cancer cells thrive, they destroy the body on which they feed (1999:380-381).

What is ethically significant in the above articulation of well-being is that it presupposes inclusive well-being of existence. It provides for an ethic of totality of reality rather than pieces, individuals and parts of existence.

Evidently, comprehensive well-being in this perspective is premised on qualitative rather than quantitative terms as the terms "optimal" or "balanced" denote. The dominant development and economics paradigms embraced in our institutions pervade processes which run full grain against the world-view of inclusive reality. The gist behind growth-oriented economies is void of an ethic that regards the environment for its inherent worth. People continue to rape nature, though in a relatively modified manner. This change has arisen from the alarming signs and symptoms that threaten human survival. To be again in touch with the rhythm intrinsic with nature, certainly humans have to readjust in terms of their interaction with nature. It is high time that legalistic understanding of obligation (for example duty-based and utilitarian-based) constructuarism be replaced with transcendental implications of such theories. For example, "[p]olitics and economics [as] advanced symbioses in which the original free-for-all competition has [to be] replaced, in part, by cooperative mechanisms with an ethical content" (Bell 2001:27). In the same vein, the objectives of nature conservation need to be imbued with an "Earth Jurisprudence ethic" that "necessarily limits some of our individual rights in the best interests of the rights of the Earth community as a whole" (Bell 2001:26). This will imply that the notion of "rights" has to be revisited and reinterpreted. For example, Theron-Nelson advocates that phraseology of a right be replaced with a duty (1999:228), which

does not necessarily means "derogating from the importance of protecting the environment" (*ibid.*). On the contrary, it will mean "introducing a perspective that is more in line with our moral conceptions, without challenging the basic framework of our legal institutions" (*ibid.*). In this sense, as Attfield reasons, this would entail that

> the peculiar value of the fulfilment of characteristic human capacities can be granted without denying the possibility of rights on the part of nonhuman animals... . Nor can it be necessary for an environmental ethic to be committed to treating species-boundaries *in themselves* as a proper basis for discrimination and differential treatment (1983:62)(italics original).

5.4 Concluding remarks

It is one of the contentions of this thesis that the intent of environmental law is to protect and promote values associated with the environment. In other words, the assumption that informs this thesis is that environmental law embodies varied values that humanity in a particular society attribute to the environment. Further, it is such values embodied in environmental law that tend to safeguard and hence promote and that determine how people tend to interact with the environment. In this thesis, the relationship between humans and the environment (as an expression of environmental ethics) is discussed in the light of environmental law that, which supposedly, embodies a certain type of a constitutional culture. Thus, as Christopher Stone suggests, the nexus between environmental law and ethics is that: "ethics provides a framework of morality, what societies collectively decide what they ought to do; while law provides a tool enabling societies to implement their ethical decision making in practice (cited in Palmer 1997:112). In the context of this thesis, the assumption is that, broadly speaking, "the law does rest on values endorsed by the majority of those in the country it governs and provides a tool for the realization and enforcement of such values" (Palmer 1997:113). Hence, "[l]aws should therefore be formulated with reference to their purpose and have a sound philosophical base. The reasons for regulating human conduct should determine or at least affect the format and content of the law" (Glavovic 1995:41). Environmental law can be used as a lever to invoke an "enlightened-self" in citizens which will promote "environmental citizenship." A form of "environmental citizenship" is entrenched in

indigenous jurisprudence, "founded upon a relationship with the planet and other species provides us with some insights. This relationship is fundamental and extends to the recognition of rights of other than human species". Hence, "[o]ne task on the agenda of the ethics of sustainable development is to reconceptualize our inherited moral ideas so that they can do justice to the full complexity of interactions within and between biological and social communities" (Engel 1990:19).

5.5 Summary

The discussions in this chapter complement the thesis that suggests that traditional understanding of reality has handicapped humanity to appreciate that people only constitute only one part of reality. It is the reductionistic and dualistic interpretation of reality embodied in different human institutions and systems that has rendered our environmental policies, and subsequently, sustainability ineffective. The environment is valued only as a resource which is out there for humanity's gratification. In contemporary thought, people regard our contemporary ecological crises as a result of mechanistic and reductionistic views of reality informed by social problem manifested in relations of dominance and subjugation. It is these trends of thought that suffuse human-nature relationship resulting in different forms of environmental degradation.

The deficiency inherent in dominant development/economic-related processes and structures in articulating reality becomes apparent when considering the insights that emerge from different ecological paradigms discussed in this chapter. This chapter suggests that the point of departure for regenerating a new ecological wisdom needs to be compatible with a social ecology paradigm. According to this paradigm, humans need to perceive themselves as part of the "whole". The contention with regard to social ecological paradigm is that, only when this inclusive perception of reality is embraced, that humans need to reconsider their place in the universe. In other words, the transformation that is needed should illustrate a principle of "ecological citizenship"; humanity's consciousness should be informed by the fact that they have moral obligation towards other entities by virtue of their intrinsic relatedness to them. In connection to

this, this thesis suggests that different agents of change have an indispensable role to play in catalysing this transformation.

CHAPTER SIX
CONCLUSION

6.0 Conclusion

In chapter one I discussed how the concept of sustainable development emerged from an understanding that environment and development are intrinsically intertwined. The trends of development prior to 1970s manifested in the ill signs of environmental degradation and undermined the possibility of meeting human needs in the long term. South Africa has been cited as an example that has adopted environment/development-related laws and policies that are meant to promote and achieve sustainable development.

One of the contentions of chapter two is that values are indispensable in human life; they form part of human life systems. This could be on a personal level or on a contextual level. In other words, human structures, whether micro or macro, are permeated with value-judgements. In the context of this thesis, three principles associated with the environment have been discussed, viz. instrumental value, intrinsic value and inherent worth. In terms of environmental ethics, the first two are anthropocentric in that they have to do with human use of the environment. Human consumption of the environment is an example of instrumental value while aesthetic beauty of the environment is an aspect of intrinsic value. Unlike these expressions of the environment, the third notion of value, inherent worth, presupposes the value of the environment independent of its usefulness to people. The environment is inherently worthy for what it *is*, regardless of its human utility.

Chapter two has also discussed three theories of ethics that, by and large, presuppose the reasons why the environment should be protected. These are: consequence-based and duty-based approaches, and stewardship. The consequence- based approach takes the form of Utilitarianism. According to the original form of Utilitarian ethics, actions are morally acceptable if they bring about maximum happiness for greatest numbers of people, and vice versa. This chapter suggests that regarding the environment merely for its instrumental value is a constraint in promoting sustainability. It has also been shown how environmental principles entrenched in NEMA allude to the fact the environment in

South Africa is protected for instrumental and intrinsic values. Deontological principles in environmental ethics such as the Precautionary Principle (PP), the "Polluter Pays" (PPP) and Duty of Care (DoC) are used as means to safeguard human interests and needs. People's environmentally unfriendly behaviour, for example pollution, is curtailed through PPP addressing a human rights demand enshrined in the Bill of Rights of South Africa's Constitution. It has been argued that these principles also subscribe to the Utilitarian philosophy. The provision for human rights in South Africa's Constitution has been cited as an example of deontology in that it entails respect for fellow human beings. In this way, environmental ethics in South Africa's Constitution and environmental legislation is anthropocentric. The last traditional moral theory discussed in this chapter is stewardship. Two versions of this moral philosophy apply. The first portrays humanity as masters over the rest of creation. This dominance has supposedly contributed to contemporary environmental degradation. The other version is more environmentally-oriented. It is endowed with an insight of care: humans are trustees not lords.

Chapter three discussed how the concept of sustainable development was articulated in different world events. While the insights about the connection between environment and development emerged in different international events, the currency of the concept of sustainable development reached its zenith at the Brundtland Commission. Chapter three has also discussed how the core principles of sustainable development have influenced environmental thought in nation states. Special reference has been made as to how South Africa has embraced the ideals of sustainable development, not only as a response to international environmental demands, but also to effect change necessitated by the new political dispensation ushered in during 1994. This chapter showed that South Africa's environmental legislation and development-related policies embody an environmentally conscious legislation whose main objective is to promote sustainable development.

Chapter four discussed different approaches to environmental ethics that South Africa's environmental legislation and economic policies such as GEAR manifest. By using the concept of the "Discontinuity Problem", the Bill of Rights is critically analysed to uncover human-centric bias embodied in it. What emerged from this analysis is that

humans are portrayed as being apart from nature. In this regard, the Bill of Rights is a typical example of "human jurisprudence" that tends to safeguard human rights and such that it foregrounds human needs and interests. It has also been shown in this chapter that this dualistic understanding is reflected in NEMA, IEM, South Africa's Biological Policy and Conservation, Local Agenda 21 and GEAR. The main argument raised with respect to these policy-related tools is that all are meant to address human interests and needs as opposed to environmental concerns. Limited concern for humans as reflected in the above instruments of legislation undermines the goals of sustainability. With respect to this, it is human sustainability that is promoted. 'Environmental impact' and concerns are determined from human perspective.

Issues discussed in the preceding chapter are taken on a higher plane in chapter five which started with a critique of dualistic interpretation of reality in light of ecological models. The insights inherent in ecological models discussed environmental schools of thoughts that philosophically challenge a mechanistic perception of reality. They offer a conceptual framework that suggests the interconnectedness and interrelatedness of different entities of cosmos. Subsequently, what this implies in terms of environmental ethics is an ethic of inclusive concern. This is highlighted in the recognition of the model of an "Earth Jurisprudence" rather than the dominant human jurisprudence. The implication of this is that the holistic understanding of reality presumed in an "Earth Jurisprudence" complements the insights of the ecological models. The central point is that humanity is only part of the creation. Other entities are as equally worthy as humans. To this effect, the suggestion put forward is that for sustainability to be real, an all-encompassing environmental ethic has to be adopted; an ethic that will promote harmonious interaction between and across entities. However, to achieve this goal, it has been pointed out that it will take efforts from different sectors at different levels for a holistic ethic to be achieved and promoted. Special mention has been made of religious communities because they are attuned to orientations that go beyond narrow formulations of life and values.

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