

The Role of Ethics in Sustaining the Environment

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Abstract

There is a growing concern worldwide of the necessity to protect and preserve the environment. The worth of human and non-human life is affected by environmental degradation and resource depletion. For business to be sustainable, there must be a shift in priorities and values from the prevailing growth, profit-making, consumer-driven philosophy to one that values nature, promotes conservation, minimises waste, reduces consumption, and protects the environment. The present generation needs to hand over to their immediate successors a world that is not in worse condition. It will be unjust to leave nothing for future generations. Every individual has a moral and a legal right to a decent, liveable environment. A liveable environment is essential to the fulfilment of human capacities. It should be understood that not only human beings suffer because of the harm done to the environment but non-humans also bear the burdens of human interference with nature. Thus, it is everyone's moral duty to protect both human and non-human part of the ecosystem for their own sake, not just as the means for human beings to achieve their own selfish ends. Welfare of non-humans is also intrinsically valuable. They have moral rights to be treated with respect. This principle extends to non-animate things, such as rivers, lakes, oceans, mountains, plants and minerals. The entire biotic community has a right to have its integrity, stability and beauty preserved. There are many causes of environmental problems and mistaken notions that necessitate environmental ethics. The research methodology utilised in this paper was positivism paradigm and survey approach as an instrumental tool. For data collection a questionnaire was used. Findings have been discussed after data had been collected and conclusions were drawn after data analysis.

Introduction

Locally and globally, there is a serious threat to the survival of the planet earth. It is clear that there is no market price for the replacement of some resources, such as rivers, oceans, rain forests, and the air we breathe. Of concern also is the worth of human and non-human life affected by environmental degradation and by resource depletion. Environmental ethics is the part of environmental philosophy, which considers extending the traditional boundaries of ethics from only including humans to including non-humans. According to Kassiola (2003:6), environmental ethics is the discipline that studies the moral relationship of human beings to the environment and its non-human contents. There are many ethical decisions human beings make with respect to the environment. It has become evident that some human activities are harmful to the earth. While the impact of industry on the environment is, in many ways, obvious, individual choices that contribute to environmental degradation are not always obvious. A healthy environment needs consumers to make choices about what they purchase and how they dispose of waste. "The United Nations Environmental Programme (UNEP) is an international institution that coordinates United Nations environmental activities, assisting countries in implementing environmental sound policies and practices" (Costanza, 2007:181). Its

activities cover issues regarding the atmosphere, marine and terrestrial ecosystems, environmental governance and green economy. Sen (2001:125) holds that UNEP has helped in the formulation of guidelines and treaties on issues such as the international trade in potentially harmful chemicals, transboundary air pollution, and contamination of international waterways.

The purpose of this paper is not to convince people to be concerned about the environment but to reveal how environmental ethics focuses on the moral foundation of environmental responsibility and how this responsibility extends. Moral reasoning is not a substitute for science, but it complements scientific knowledge about the earth. Scientific knowledge does not provide reasons for environmental protection. Science and economics provides data, information, and knowledge. Benson (2001:206) asserts that environmental ethics builds up on scientific understanding by bringing human values, moral principles as well as improved decision-making into conservation with science.

Background

In writing this paper, various sources of information were consulted, such as the Earth Charter, South African Constitution, Millennium Development Goals document, World Commission, National Environmental Management Act, Agenda 21, etc. The Earth Charter's ethical vision proposes the protection of the environment. Earth Charter Initiative (2009:26) emphasizes a need for people to join together to bring forth a sustainable global society founded on respect for nature. "The Charter seeks to inspire in all peoples a sense of global interdependence and shared responsibility for the well-being of the human family, the greater community of life, and future generations" (Earth Charter Initiative, 2008:47). Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. "The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air" (Boylan, 2001:93). The global environment, with its finite resources, is a common concern for all people. The protection of Earth's vitality, diversity, and beauty is a sacred trust. Human beings are part of an evolving universe. Earth has a unique community of life. "The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution" (Brown, 2005:37).

According to Owens (2005:49), the dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a

massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably, and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. According to Riedy (2005:162), an unprecedented rise in the human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous, but not inevitable.

Overview of the literature

This paper introduces environmental ethics to people without a background in ethics. It will help them recognise and use moral language to describe how they value the earth. Environmental ethics has an application in any other fields as human society grapples with pollution, resource degradation, the threat of extinction, and global climate disruption.

Environmental ethics challenges

Challenges of human-centredness

The Christian church has been accused of justifying the destruction of nature by viewing nature as the humans' possession. The Theological natural ethics believes in these biblical words to justify human-centredness "and bring the earth under your control." "The scriptures from the bible have also been used to justify exploitation of animals and resources through believing in Christian mastership" (Maksimov & Maksimova, 2012:8). According to applied theology, the universe was created by God, and humankind is accountable to God for the use of the resources entrusted to humankind. According Ova' (2011:5), anthropocentric theory places humans at the centre of the universe, meaning that the human race is the primary concern. It has been customary to only consider species in terms of their utility for humans. Judeo-Christian theologies believe that God created a good Earth, with myriad creatures, and subjected them to human dominion. Environmental quality is needed for quality of human life. Thus, ethics need to be applied to the environment. Many of the concerns regarding the environment appear to be concerns because of the way they affect human beings. Sarkar (2012:178) contends that population affects human health, resource depletion threatens human standards of living, climate change puts people's homes at risk, reduction of biodiversity leads to the loss of potential medicines, and the eradication of wilderness means the loss of awe and beauty. Anthropocentric ethics believes that human beings are obligated to respect the environment for the sake of human well-being and prosperity.

Challenges of preserving the environment for future generations

Present generations have to bear a burden for the sake of future generations. They must determine how much of the environment they can use or destroy to advance their welfare. According to Light (2009:53), human beings have the capability of undoing the

world order in a way that can lead to the ecosystem's destruction. It is only fair that they hand over to their successors a world that is not in a worse condition than the one they received from their predecessors. It will be unjust for them to leave nothing for future generations. "New ways of thinking need to be developed to practice self-restraint in the interest of those still to come" (Spash, 2008:267).

Right to a liveable environment

Every individual has a moral and a legal right to a decent liveable environment. This goes with the belief that human life and survival depend on liveable environment. "A liveable environment is essential to the fulfilment of human capacities" (Stern, 2007:3). If this is so, the question is, how do people account for the most appalling conditions under which people worldwide have put the environment, conditions that are a serious threat to the total ecosystem?

Challenges of instrumental value

According to instrumental values theories, it is only human beings who have intrinsic value, whereas everything else has a value if it serves human interests. Hattingh (2012:1) holds that this human-centred approach can be useful to the protection of natural areas from consumptive use, while non-consumptive activities meant for enjoying recreational, aesthetic, or spiritual value are allowed. It can result to the position of perceiving nature as a resource that should be developed for human consumption. Some people may see a need for ecological optimal development so as to ensure that future generations can also satisfy their needs.

Anthropocentric theories assign intrinsic value to human beings only rather than to any non-human things, such that the protection or promotion of human well-being at the expense of non-human things is always justified. According to Warner and DeCosse (2012:3), the earth and its creatures have intrinsic value because they exist, not because they meet human needs. Nature as a whole should be respected for the value that it has in its own right, irrespective of any use that humans can make of it. O'Neill, Light and Holland (2012:2) maintain that species and ecosystems have the value that cannot be reduced to economic value.

Extending moral standing

Anthropocentrism refers to an ethical framework that grants "moral standing" solely to human beings. Anthropocentric ethics claims that only human beings are morally considerable in their own right. Thus, ethics should be extended beyond humanity. According to Gewirth (2001:209), moral standing also needs to be extended to non-human entities such as rivers, species and ecosystems. This moral extension has not yet been extended to the non-human natural world. The moral standing needs to be granted to future generations as well, because many environmental problems, such as climate

change and resource depletion, will affect future humans much more than they affect present humans. "Several philosophers support that moral standing should be extended to include animals" (DesJardins, 2001:163).

Inclusive ethics

Ethics and biology have been related over recent centuries. According to Serres (1995:18), if spontaneous natural lives are of value in themselves, and if humans encounter and jeopardise such value, it would seem that humans ought not to destroy values in nature, not at least without overriding justification producing greater value. Maybe some of plants and animals are bad kinds because they are poisonous, but they deserve to live. Benson (2001:133) asserts that the counter-risk is a fallacy of mislocated value, in which value seems to be lying in the satisfaction of human needs. The problem being that nature has been perceived as a moral blank space, as value-free in and of itself. Ethics is about respecting others for what they are in themselves, apart from serving human interests. According to Brennan and Lo (2002:157), environmental ethics takes into consideration all other living organisms. This does not deny trade-offs and degrees of significance and value. Humans have to make a way through the world, and this involves defending themselves against poison and acknowledging values present in plants and animals, for food and shelter. Humans should do so not only as the biological agents but as moral agents. "People are responsible to respect the vitalities of the fauna and flora around them" (Warren, 2000:125). A full ethical landscape is inclusive of every living organism.

Conflicting ethical positions

It is recommended that there should be a strong personal ethical commitment that can help guide behaviour when there are no supporting laws. According to Sandler (2007:117), even when people have strong personal ethical commitments, they might find that some of their commitments conflict. For example, a mayor may have an ethical commitment of preserving the land around the city, but at the same time have an ethical commitment of creating job opportunities associated with the establishment of a new factory on the outskirts of town. This is an ethical dilemma in which it is hard to strike a balance between multiple ethical values. "Ethical issues dealing with the environment are complex because sometimes it appears that what is good for people conflicts with what is good for the environment." (Attfield, 2001:17). At times, saving the environment can result in the loss of some logging jobs. When realising that there is the real conflict, it is important to also note that it does not mean that when the environment wins, people lose. In many cases, it usually turns out that what is good for the environment is also good for people. A good example is that forest preservation may lead to loss of jobs; however, a healthier forest might lead to new jobs in recreation, fisheries, and tourism. Agar

(2001:12) asserts that searching for genuine “win-win” situations has become a priority in environmental decision making.

Sentient

Some philosophers support the view that moral standing should be extended to include animals as well. According to Peter Singer, the criterion for moral standing is being sentient, meaning the capacity to feel either pleasure or pain. “While for Regan moral standing should be acknowledged in all subject-of-a-life, which is those beings with beliefs, desires, perception, memory, emotions, a sense of future, and the ability to initiate action” (Clarke & King, 2004:127). Singer thinks an entity possesses the relevant type of consciousness; thus, it should be given equal consideration when formulating moral obligations. Melanie (2007:13) contends that the point is not that every sentient being should be treated equally, but that it should be considered equally. This implies that the differences between individuals and their different interests should be considered. For example, it would not be wrong to deny pigs the vote, as pigs have no interest in democracy; it would be wrong to let pigs suffer as they are willing to avoid pain. People need to consider the interests of sentient beings equally, as they have an obligation to bring interests-satisfaction.

Human population growth challenge

Worldwide, the population is growing at rates that cannot be sustained by available resources, which threatens the productive potential of the ecosystems. Measures need to be taken to limit population growth rates. The population size is not an issue; the issue is how the number of people relates to the available resources. The World Commission demands that governments should develop long-term population policies, as sustainable development can be achieved if population size and growth are in harmony with the changing productive potential of the ecosystem. According to Stenmark (2002:141), the critical issues are the balance between a population’s size and available resources and the rate of population growth in relation to the capacity of the economy to provide the basic needs of the population, not just today but for generations. He further states that our responsibility toward other populations and future human generations requires a stabilisation policy to ensure that the size of the population stabilises at a level compatible with the productive capacity of the supporting ecosystems. “The challenge is to keep pace with demand, while retaining the essential ecological integrity of production systems” (Sarkar, 2012:180). Rolston asserts that conserving the Earth is very essential than having more people and it is even more important than the needs and welfare of existing people. Yet, according to Arne Naess, the flourishing of human life and cultures is compatible with a substantial decrease in the human population. The flourishing of nonhuman life requires

such a decrease. Ova' (2004: 5) maintains that a population that is more than four billion persons and shows no signs of decline is, at present, a global disaster for the biotic community. There is a need for a limitation-of-population policy to ensure that the size of the population is reduced to a level that is compatible with a respect for other living things and/or the integrity of species and ecosystems. There are options available to limit population growth. Stenmark (2002:143) advocates that there could be payments for periods of non-pregnancy and non-birth (a kind of no-claims bonus); tax benefits for families with fewer than two children; sterilisation bonuses; withdrawal of maternity benefits after a second child; larger pensions for people with fewer than two children; free, easily available family planning; more funds for research into means of contraception, especially for men; banning of surrogate motherhood and in vitro fertilization; and the promotion of equal opportunities for women in all areas of life.

Respect for life

“Biocentric ethics calls for respect toward all living things, not only the wide life and farm animals, but the butterflies and the sequoia trees” (Rolston, 2003:521). Aspects of the biological world such as lower animals, insects, microbes and plants have to be taken into consideration. A plant is a spontaneous life system, self-maintaining, with a controlling genetic programme (though with no brain). A plant is neither a subject nor is it an inanimate object, like stone. Plants are unified entities of the botanical kind, but not of the zoological kind. According to Pojman (2001:185), plants are modular organisms, with a meristem that can produce new vegetative modules, additional stem nodes and leaves, when there is available space and resources and new reproductive modules, fruits and seeds. Plants do not have ends-in-view and they do not have goals. Botzler & Armstrong (1998:18) hold that plants grow, reproduce, repair their wounds, and resist death, maintaining a botanical identity. Some people may say plants do not care. Plants do care, but using botanical standards, the only form of caring available to them. The plant life is defended—an intrinsic value. “If a tree lacks sunshine and soil nutrients, people arrange for these, the tree goes to work and recovers its health” (Johnson, 1991:113). These organisms do take account of themselves, so we must also take account of them.

Moral concern of species lifelines

Classical ethicists find species to be useful natural resources and obscure objects of direct moral concern. Species can be endangered, but cannot care. “Around 98% of the species that have inhabited Earth are extinct” (Blangy & Mehta, 2006:235). Ethicists feel that one should not necessarily destroy endangered species—virtuous persons are not vandals. Some environmental ethics believe that one needs to respect these life lines. Rolston (2003:523) asserts that biological identity does not need to be solely attached to the

individual centred or modular organism, an animal or a plant. Biological identity should be attached genetically over generations. The individual inherits it and thus exemplifies it and passes it on. Clarke and King (2004:127) contend that the appropriate survival unit is the location of persistent valuing, where defence of life goes on in regeneration, as individual members of a species are given over to survival of their kind. "Plants and animals don't just defend their own lives; they defend their kinds" (Goodstein, 2002:545). Shutting down the life stream on Earth is the most destructive event possible. The terrible thing that humans are doing is to stop the vitality of life. Every extinction is an incremental decay in this stopping of life. According to Rolston (2003:523), life on Earth is the combination of different species, when humans destroy species, the problem lies with those who wish to extinguish a species and care for life on Earth. People should not kill individuals without justification; people need to not extinguish species lines without justification. According to Stenmark (2002:143), other living things are assumed to have such a high moral significance that a self-limitation of the human population is taken to be morally mandatory.

Wildlife and wilderness preservation

Another issue concerns how much of nature should be left wild and unexplored. If the population grows, it means those areas of nature that are currently not used by human beings must be changed into agricultural landscapes to satisfy human needs. Stenmark (2002:144) maintains that the objective is to preserve the wildlife as a representative of sample of Earth's ecosystems, which is an indispensable prerequisite for sustainable development and for future generations. According to Rolston, there is no need for further cultural development that sacrifices nature for a culture that enlarges the sphere of culture at the price of diminishing the sphere of nature. The wilderness preservation policy is meant to ensure that the remaining areas of wilderness stay wild and non-exploited. According to Arndt and Lewis (2000:386), the justification of wilderness preservation policy is that species and natural ecosystems make many important contributions to human welfare and they contain genetic material. Any further exploitation of the wilderness would upset an already unbalanced situation. Thus, the intergenerational anthropocentric wilderness policy is that we must ensure that 12% of the landscape remains wild for future generations to use, whereas the weak ecocentric wilderness policy is that we must ensure that 12% of the landscape remains wild for plants and animals to use. Miller (2002:126) states that it is likely that strong ecocentric ethics would imply that humans should live with minimum rather than maximum impact on other species and on the Earth in general. According to Callicott, the land ethics requires shrinkage of the domestic sphere. It is possible to restore a prairie that has been not too badly overgrazed. "Revegetating after strip mining cannot be called rehabilitation as there

is nothing left to rehabilitate” (Erasmus, Van Jaarsveld, Chown, Kshatriya & Wessels, 2002:680). But a prairie that has been not too badly overgrazed can be rehabilitated. Overgrazing allows many introduced weeds to outcompete the native plants. All one can do is to pull the weeds and let nature do the rest. Overgrazing lets some native plants outcompete others, those that reproduced in the shade of the taller grasses. Nature can heal itself, so shrinkage of the domestic spheres seems to be possible. According to Bookchin and Foreman (2001:67), a wildlife restoration policy that demands the rehabilitation of those areas of the land that can still be restored to pristine nature is required. People need to leave alone these occupied areas for the sake of the wildlife, so that they can once more live there and the land can heal itself. Nature can take care of most of the rehabilitation work without human intervention.

Theoretical framework

Environmental philosophers have developed some theoretical approaches to help in seeing the ethical responsibilities regarding the environment. People have realised that they need to be environmentally responsible. There are two main schools of thought that are being discussed in this paper, anthropocentrism and nonanthropocentrism, and they come in different forms. According to Kochi and Ordan (2008:19), anthropocentrism is of the view that people’s behaviour toward nature should be evaluated on the basis of how it affects human beings, while nonanthropocentrism believes that people’s behaviour toward nature should be evaluated on the basis of how it affects other living beings or ecosystems. The anthropocentrists take humans into consideration because they have an intrinsic value or moral standing. Anthropocentrism places humans at the centre of the universe. Everything that exists exists for its utility to humans, which is referred to as specism. Afeissa (2008:12) contends that the assumption is that human beings are morally significant and have the moral standing. The environment is essential to human well-being and human survival, thus people have an indirect duty toward the environment. People also need to ensure that the Earth remains hospitable for supporting human life

“Nonanthropocentrists believe that other living things or natural objects also have intrinsic value or moral standing” (Mautner, 2005:172). Anthropocentrism is divided into traditional anthropocentrism and intergenerational anthropocentrism. According to Mautner (2000:7), the traditional view is that people’s behaviour toward nature should be evaluated on how it affects living human beings, while the intergenerational view is that people’s behaviour toward nature should be evaluated on the basis of how they affect both present and future human generations. Nonanthropocentrism has two versions, biocentrism and ecocentrism. According to Stenmark (2002:137), biocentrism is

the view that people's behaviour toward nature should be evaluated on the basis of how they affect living beings. This is a life-centred environmental ethics. This theory advocates that all forms of life have an inherent value and right to exist. Rolston (2003:524) maintains that some believe that people have greater responsibility to protect animal species than plant species and also to protect mammals than invertebrates. Biocentric egalitarians believe that all living organisms have an equal right to exist.

Stenmark (2002:138) says that ecocentrism asserts that people's behaviour toward nature should be evaluated on how they affect species and ecosystems and not merely living things. It is a belief that the environment deserves direct moral consideration that is not derived from human or animal interests. Ecocentrism believes that the environment has a moral worth. Applied theology is closely related to human-centred approach. The Christians see the universe as something created by God, where people are responsible to use the resources entrusted to them. This view justifies human destruction of nature by picturing nature as the possession of humans. The words in the bible bring the Earth under human control. Jewish-Christian tradition justifies the exploitation of animals and resources, which is Christian stewardship.

Research methodology

In terms of research methodology, positivism has been described in detail. According to Saunders, Lewis, and Thornhill (2009:37), research paradigms incorporate the fundamental philosophical concepts and values about the nature of reality and the scientific pursuit of knowledge. There are two schools of thought about science and knowledge: positivism and phenomenology; mixed/combined has also been added in order to be able to use both paradigms. For this article, the positivist approach has been chosen. Babbie and Mouton (2011:217) maintain that the positivist paradigm involves the use of numerical measurement and statistical analyses of measurements to examine social phenomena. It has been chosen because it places great premium on objectivity and reliability and encourages replication. It has two research strategies, experimental design and surveys. For this study, the survey was used because it is as relevant as it is time and cost-effective. Cooper and Schindler (2006:243) assert that the survey is a strategy in which a sample is selected from a population and studied to make inferences about the population. Survey uses questionnaires and interviews in order to determine the opinions, attitudes, preferences and perceptions of persons of interest to the researcher. Due to time constraints, only questionnaires have been chosen for this study of environmental ethics. For this subject of environmental ethics, a sample has been carefully selected to ensure that it is representative of the larger DUT population and it has been tested regarding whether the findings are applicable and generalizable to the

larger population. The researcher has ensured that the questionnaires do not reveal bias in the way questions have been presented, and this ensures greater reliability and validity.

Data collection and data analysis

As it has been highlighted above, questionnaires have been used in this study as a data collection instrument because of their descriptive or exploratory purposes. In designing a questionnaire for this paper, socio-demographic items (profile of respondents) and content-related questions (to elicit data on the major purpose and content area of the topic) were the main focal point. A simple random sampling strategy was used for this study that affiliates under probability sampling method. It was chosen because each element of the population has an equal chance of being selected into the sample. With probability sampling method, bias and subjectivity are eliminated. Fifty (50) questionnaires were administered to DUT population and it was ensured that they were collected. To test validity and reliability, content validity and test-retest reliability analyses were performed. In order to analyse data, univariate data analysis was chosen, as it involves the analysis of a single variable. In this study, only one variable is under research, environmental ethics.

Discussion of findings

Looking at the table below, more than 60% of respondents agreed and strongly agreed with most items in the questionnaire.

Item 1 of the questionnaire holds that individuals and businesses need to protect and sustain the environment; 92% of participants agreed to this view. This means that they need to influence and to enhance, respect, revive, and restore the life-sustaining integrity of the landscape for all living things; 68% also agreed that humans and businesses pose a threat to the Earth in item 2. When respondents had to respond to item 3, which said the worth of human and non-human life is affected by environmental degradation and resource depletion, 70% of them agreed. This implies that depletion of resources should be minimised and the environment should not be degraded beyond reasonable recovery. Participants (93%) agreed to item 4, as it states that businesses should shift from growth-centred, profit-making and consumer-driven philosophy and must value and sustain nature. According to item 5, individuals and businesses must promote conservation, minimise waste, reduce pollution, and protect the environment; 94% agreed. It must be ensured that sustainable development does not endanger the natural systems that support life such as the atmosphere, water, soil, and other living beings.

Figure 1

Item	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	39%	53%	8%	0%	0%
2	22%	46%	16%	12%	4%
3	18%	52%	27%	3%	0%
4	35%	58%	7%	0%	0%
5	48%	46%	6%	0%	0%
6	33%	51%	10%	4%	2%
7	46%	49%	3%	1%	1%
8	27%	44%	21%	7%	1%
9	31%	65%	4%	0%	0%
10	24%	48%	11%	10%	7%
11	23%	48%	19%	7%	3%
12	27%	51%	16%	5%	1%
13	19%	62%	13%	6%	0%
14	21%	57%	18%	4%	2%
15	36%	56%	8%	0%	0%
16	20%	43%	18%	12%	7%
17	32%	49%	13%	4%	2%
18	27%	46%	20%	5%	2%
19	42%	52%	6%	0%	0%
20	39%	44%	9%	6%	2%

In order to address the issue of preserving the environment for future generations, about 84% of respondents agreed to item 6 (of the questionnaire). This means that the environment needs to be used to meet the needs of the current generation without compromising the future generations' ability to meet their needs. Item 7 states that every individual has a moral and a legal right to a decent liveable environment; 95% agreed to that. Thus, development should integrate production with resource conservation and enhancement, and that links to the provision for all of a livelihood base and equitable access to resources. Then every human being, those who are here and those to come, has a right to life and a decent life, for that matter. According to item 8, both human beings and non-humans suffer because of harm done to the environment; 71% of respondents agreed. Humans need to be considerate when they use the environment. Item 9 maintains that non-humans have intrinsic value, and 96% of participants agreed to this. Item 10 asserts that non-humans have a moral right to be treated with respect, and 72% agreed. About 71% of respondents in item 11 agreed that animals should not be used for testing in the laboratories. In item 12, 78% of participants agreed that non-animate things (rivers, lakes, oceans, mountains, plants, and minerals) have intrinsic value and should be treated with respect. This means that non-humans should be treated and administered in a manner promoting the ecosystem's health.

According to item 13, the entire biotic community has a right to have its integrity, stability and beauty treated with respect; 81% agreed. So sustainable development calls for the conservation of plant and animal species. Item 14 states that free access with unrestricted use of any finite resource will ruin the resource through overexploitation; 78% agreed. The level of depletion and recycling should be encouraged to ensure that the resources don't get used up before acceptable substitutes are in place. According to item 15, protection systems must be in place to protect the free resources; 92% of participants agreed. It is evident that even the free resources need to be preserved and protected. Sixty three percent of participants agreed with item 16, that the cost of noncompliance to environmental policy should be imprisonment of individuals. Item 17 contends that the true cost of noncompliance to businesses is the negative image that is created about the organisation; 63% are of the same opinion. This means that there should be policies in place to protect the environment from individuals and businesses.

Item 18 states that proactive environmental initiatives fail because of the lack of commitment of the society; 73% agreed. Item 19 states that governments must pass legislation that will ensure the elimination of gross malpractice with regard to environmental matters; 94% of respondents agreed to this item. According to item 20, governments must monitor and ensure compliance with the legislation by both individuals and businesses; 83% of participants agreed. Another major concern is the population growth; the increasing number of people in the world puts strain on resources and affects the rise in living standards. Population size is a serious issue affecting the environment; in addition, the uneven distribution of resources is the worse one. Another issue is that of wildlife. The principles of wildlife protection should be integrated into land-use plans to promote the enhancing, protecting, and managing of landscapes that promote wildlife.

Conclusions drawn

The Earth and its creatures have moral status, meaning that they are worthy of human ethical concern. The Earth and its creatures have intrinsic value, which means that they have moral value simply because they exist, not only because they meet human needs. Drawing from the idea of an ecosystem, human beings should consider "wholes" that include other forms of life and the environment. Human beings should understand that they have to coexist with plants, animals, birds and other living creatures. Humans have a moral responsibility to preserve natural resources for the coming generations. It is necessary to educate young people and inculcate a sense of awareness in their minds regarding the importance of nature's protection and harmful effects of degradation and pollution of the atmosphere, environment and surroundings. People should avoid extinction of species of any sort, and deforestation should be brought to the minimum

supporting level. Conventional energy should be conserved to the maximum extent possible and use of alternative energy should be encouraged. Environmental ethics has a vital role to play in preserving the environment. A sustainable environment can be attained if demographics are in harmony with productive potential of the ecosystem.

Recommendations

- Humans need to include nature in their ethics and they also need to include themselves in nature so that they will be able to respect nature.
- An ethic for nature conservation requires environmental education and conservation awareness.
- Governments should pass laws to enforce environmental ethics.
- Strict measures need to be taken against offenders.
- The Code of ethics need to be drafted by institutions, public and private organisations, and businesses
- Strict inclusive environmental policy should be written and implemented.
- Whistle-blowing could also be the avenue to be followed if individuals and businesses fail to comply.

Conclusion

Many aspects of environmental ethics have been covered in this paper with the intention of conscientising people about the environment and the dangers of failing to protect the environment. Environmental challenges have been discussed in detail in literature review section. These challenges pose a serious threat to the environment; thus, they need to be dealt with in order to ensure that human beings live in harmony with the environment. It is crucial that when explaining a phenomenon that theories developed by philosophers are used to give a better explanation. Several theories have been used in this paper as well. Positivism was used as a relevant paradigm in this paper, since it is always objective and believes that there is a reality and that it is deductive in nature. Survey is a strategy which was chosen under this paradigm. To collect data, the questionnaire was used. For data analysis purposes, the univariate tool was chosen for this paper.

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Appendices

Appendix A-Consent letter

7 Park Mews
19 Pampally Way
Reservoir Hills
4091
20 October 2013

To Whom It May Concern!

Request to Complete the Questionnaire

I hereby request you to complete this questionnaire which will enable me to write an article for academic purposes. The topic for the article is: **The Role of Ethics in Sustaining the Environment.**

You are also requested to sign as symbol of granting your consent to complete the questionnaire.

Name & Surname

Signature

Date

Your cooperation will be highly appreciated.
Thanking you in advance for your cooperation

Yours Faithfully

Ms C.N. Ngwane

Appendix B

Item	Strongly agree	Agree	Unsure	Disagree	Strongly Disagree
1. Individuals and businesses need to protect and sustain the environment.	39%	53%	8%	0%	0%
2. Human and business pose threat to the survival of the planet earth.	22%	46%	16%	12%	4%
3. The worth of human and non-human life is affected by environmental degradation and resource depletion.	18%	52%	27%	3%	0%
4. For business to be sustainable they must shift from growth-centred, profit-making, consumer-driven philosophy but must value nature.	35%	58%	7%	0%	0%
5. Individuals and businesses must promote conservation, minimise waste, reduce pollution, and protect the environment.	48%	46%	6%	0%	0%
6. Present generations must hand over a world which is not in a worse condition to future generations.	33%	51%	10%	4%	2%
7. Every individual has a moral and a legal right to a decent liveable environment.	46%	49%	3%	1%	1%
8. Not only human beings suffer because of the harm done to the environment but non-humans also bear the burdens of human interference with nature.	27%	44%	21%	7%	1%
9. Non-humans have intrinsic value.	31%	65%	4%	0%	0%
10. Non-humans have moral rights to be treated with respect.	24%	48%	11%	10%	7%
11. Animals should not be used for testing in the laboratories.	23%	48%	19%	7%	3%
12. Non-animate things (rivers, lakes, oceans, mountains, plants, minerals, etc) have intrinsic value and should be treated with respect.	27%	51%	16%	5%	1%
13. The entire biotic community has a right to have its integrity, stability and beauty preserved.	19%	62%	13%	6%	0%
14. Free access with unrestricted use of any finite resource will ruin the resource through overexploitation.	21%	57%	18%	4%	2%
15. Protection system must be in place to protect the free resources.	36%	56%	8%	0%	0%
16. The cost of noncompliance to environmental policy should be imprisonment to individuals.	20%	43%	18%	12%	7%
17. The true cost of noncompliance to businesses is the negative image that is created about the organisation.	32%	49%	13%	4%	2%
18. Proactive environmental initiatives fail because of the lack of commitment the society.	27%	46%	20%	5%	2%
19. Government must pass a legislation which will ensure the elimination of gross malpractice with regard to environmental matter.	42%	52%	6%	0%	0%
20. Government must monitor and ensure compliance to the legislation by both individuals and businesses.	39%	44%	9%	6%	2%

