

**GLOBAL WARMING DISCOURSE AND THE
ECONOMIC DILEMMA OF SUSTAINABILITY:
THE POTENTIAL CONTRIBUTION OF AFRICAN ETHICS.**

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ABSTRACT

This paper focuses on the possible input of African Ethics into the global warming and climate change discourse in light of the economic dilemma of sustainability. The paper argues that African Ethics through its concept of *Ubuntu* can make a worthy contribution to the issues surrounding sustainable development, ecological debt and international climate change talks. In a world where the lives of the affluent nations impact drastically on our climate and necessitate calamitous climate disasters and cause the poor to suffer, why is it that the international community has not reached any noteworthy climate change solutions? The same poor countries are also burdened by payment of huge debts and poor climate change adaptation and development. Can African ethics make some contribution to these challenging issues brought by global warming and climate change? The dissertation seeks to tackle these questions by employing a qualitative methodology informed by Gadamer's philosophical hermeneutics and using the research design of Boff's ecological holism and Murove's relational paradigm. However, in order for African ethics to make such a viable contribution the paper seeks to reveal the philosophical and economic substrata sustaining the incessant degradation of the ecology. This opens us the entry point for African ethics through *Ubuntu* to engage with other voices in the search for solutions to the global warming and climate change crises.

DEDICATION

To my parents Kay David Mwale and Rosemary Sowela

My brothers Christopher, Sam, Aaron, Sunday, Stanley,

My sisters, Chioniso, Muchaneta and Muchafunga

Maiguru Liz, Aunt Pauline

To Sister Ingrid, Fr. John Moore SJ, Fr. Stephen Buckland SJ who made me love

Environmental Ethics

It is not vision that renders belief but belief that opens or closes our eyes.

Thank you all for believing!

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ABBREVIATIONS AND ACRONYMNS

COP	Conference of Parties
DC	Developed Countries
EUETS	European Union Emission Trading Scheme
GNP	Gross National Product
IMF	International Monetary Fund
IPCC	International Panel on Climate Change
UKZN	University of KwaZulu Natal
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNCSD	United Nations Conference for Sustainable Development
UNEP	United Nations Environmental Programme
UNFCC	United Nations Framework Convention on Climate Change
WCED	World Council on Environment and Development.
WMO	World Meteorological Organisation

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CHAPTER 1: Introduction to the Study

1.1 Background to the Study

Of the many crises that have seized the attention and trepidation of our generation none equals the environmental and developmental crisis manifested by the phenomena of global warming and climate change. Indeed many international conferences have taken place, many books published, many protocols signed with the aim of halting and curtailing the calamitous effects of global warming. There is a general consensus amongst scientists that global warming is aggravated by the rise of greenhouse gases in the atmosphere (Deane-Drummond 2008:4). The Inter-Governmental Panel on Climate Change (IPCC), in its first climate change assessment report, highlighted its apprehension over the continued anthropogenic climate changes due to emissions of carbon dioxide and other gases (IPCC 1990)¹. The exigency and ethical nature of the ecological crisis seems to affect all of humanity since most of our actions are capable of having and contributing to the negative environmental effects on a global scale (Simmons 1993: 118). No one is exempted from such a moral obligation yet not all of us have contributed to the ecological crisis in the same way.

As the future of humanity and our world is threatened and various stakeholders, theologians, scientists, policy-makers, philosophers, economists, politicians and the general public search for an answer to global warming, there is a realization of the need for co-operation since this is not a sole problem of any particular nation or continent but of all humanity (Hurrell 2007: 220). Nevertheless, the World Commission on Environment and Development (WCED) in its seminal report *Our Common Future*, boldly stated that the 'Earth is one but the world is not' (WCED 1987:27). Inasmuch as we all depend on one biosphere for our livelihood, there are imbalances in our demand and consumption of the world resources and energy and the consequent emissions of the greenhouse gas emissions which all accelerate global warming. It is such imbalances that demand and deserve an ethical response.

¹ The first assessment report from the International Panel on Climate Change (IPCC) emphasized that anthropogenic global warming needed to be addressed since it was contributing to climate change. The report can be accessed online at http://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_chapter_01.pdf.

Specifically, African countries and other developing countries seem to bear the brunt of the negative effects of global warming and climate change despite the fact that they emit the least greenhouse emissions compared to developed countries, especially the G8 countries (Kelbessa 2007:2). Should countries that contribute more carbon emissions reduce their emissions despite the fact that most those emissions come from the combustion of fossil fuels like oil and coal, the engines of economic development (Palmer 1997: 59)? Should the countries that are responsible for most of these greenhouse gases compensate those which do not emit much carbon into the atmosphere? Likewise, should those countries that emit a lot of carbon due to their lifestyles and consumption patterns help the poor countries cope with the dire effects of climate change such as floods and droughts?

Equally daunting for Africa and other developing countries is the fact that any prospects for development have now to be measured against their 'sustainability' and environmental impacts, which is a great drawback considering the lack of proper technology. This was also implied in *Our Common Future* in the statement: 'today's environmental challenges arise both from the lack of development and from the unintended consequences of some forms of economic growth' (WCED 1987:29). Should Environmental ethics for developing countries focus on ways that promote sustainable development at the detriment of the poor majority who not only suffer most the consequences of climate change, due to lack of development, but are also said to contribute to the deterioration of the environment through deforestation (Ekins 1992:139; WCED 1987 : 28)? Therefore, it becomes problematic to speak of sustainability from an equal footing for the poor and the affluent when the former can hardly eke out a living in the current unequal economic conditions, which serve the interests of the latter. What can the poor really aim to sustain when they do not have anything? How can we talk of sustainable development without maintaining the status quo of the affluent nations and sustainable poverty for the poorer nations?

This becomes thought-provoking when one looks at how the invention of carbon taxing is not achieving much in terms of curtailing global warming. Larry Lohmann² is very vocal in

² Lohmann argues that carbon trading does not actually cut down global emissions but allows firms to trade in carbon and make profits from it. This is one example why there is skepticism concerning market solutions to the problem of global

arguing that the invention of carbon markets is a futile neoliberal solution to global warming' (Lohmann 2009:26). Lohmann further argues and demonstrates that "some of the theorists and practitioners responsible for the new derivative markets have also helped create the carbon markets' (Lohmann 2009:26). If Lohmann is right then carbon taxing is merely an extension of the current neo-liberal economic practices that are the prime cause of global warming through the zealous and noxious dependence on fossil-fuel energy. How can the solution to such an imperative and calamitous issue like global warming come from the same economic principles that mothered and nurtured the problem in the first place? It is quite clear that there are a lot of interests involved in the current discourse and it is even clearer that the interests of the poor, the disappearing species and the environment *per se*, have not gained top priority as yet.

African ethics has a lot to contribute to the current discourse on global warming and climate change. If indeed, Africa is marginalized and suffers a lot of repercussions stemming from anthropogenic climate changes like floods, droughts and storms, then African ethicists from their particular contexts can contribute to the debates on carbon trading, sustainable development and poverty. While it is true that climatic disasters can happen anywhere, Africa suffers more due to lack of coping mechanisms. African ethics can also offer holistic ethics of relatedness and the economic ethic of subsistence that challenge the philosophical assumptions of individualism and competitive market systems that fuel habits of unbridled growth and consumption as well as lack of respect for fellow humans and nature (Murove 2009: 1; Prozesky 2009: 301; Ramose 2009: 313). However, to be able to find an entry point for African Ethics in the current global warming discourse is not only riveting but challenging since African Ethics has been looked down upon in the past. The time has come, though, for the wisdom of sub-Saharan Africa through *Ubuntu* to be heard.

1.2. Literature Review

There is great wisdom in the Nigerian proverb which says that, 'The fly that has no one to advise it, follows the corpse into the grave'. It is imperative to seek advice and knowledge of

warming cf. <http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/40poisonmarkets.pdf>

what others have done and covered before embarking on a research or project. This is the task of a literature review as Bernard warns that, ‘without proper and thorough literature review one can waste a lot of time going over already covered ground and having their one’s work ignored’(Bernard 2000:87). Kumar echoes the same idea when he highlights that the purpose of the literature review is to consolidate the knowledge base and find the gaps existing in the body of knowledge (Kumar 2005:30). Bearing these points in mind, this literature review seeks to pore over selected and relevant literature on global warming from a specifically African perspective.

Basically literature on global warming from an African perspective can be understood from two main categories namely: *ad fontes* ethics and restorative/compensatory ethics. These two categories are not absolutely exclusive but do highlight the general dominant motifs inherent in either category. Equally important and central to the dissertation is the literature on sustainable development and international conferences on climate change. Despite their global appeal these documentations summarize the general concerns of the international community on curbing global warming and climate change. One cannot also ignore literature on carbon taxing and trading as this is generally seen as the main official approach to curtailing climate change worldwide together with sustainable development.

1.2.1 *Ad fontes* or *Ubuntu* Ethicists

I have decided to call these ethicists *ad fontes* which means in Latin ‘to emphasis being on the fact that all the ethicists that fall in this category reiterate the need for ‘returning to the sources’ i.e. African traditional ethical values with the objective of deriving ways of dealing with our ecological problems. Thus philosophers like Bujo (1992:32; 1997:208; 2009: 281), Mayson (2010: 70) and Ramose (2009: 309) all emphasize the primacy of *Ubuntu* as a solution to the ecological crisis and global warming. Murove (2002: 580; 2009:315) extends the concept of *Ubuntu* to include all animals and ‘all that exists’ through his concept of *ukama*.

Most of these *ad fontes* ethicist attribute the current ecological crisis manifested by global warming to the misuse of technology (Wiredu 1994:34; Bujo 2009:288) and, also in line with the WCED report, on the unpunctuated drive for economic profits with less regard for

environmental repercussions (Mayson 2010: 68; Murove 2002: 579). What is also very important for these ethicists is their emphasis on the need for dialogue with the Western countries and philosophies. This comes out in Bujo when he writes that, ‘dialogue with Western rationality which has tended to minimize or ignore African position is urgently recommended’ (Bujo 2009:296). Mayson also emphasizes that, ‘The West is a crucial part of the answer because it a crucial part of the problem’(2010:71) Thus, the return to the sources, ‘*ad fontes*’ is not aimed at exclusivity but is a search for ethical principles that can help propose a solution to global warming and climate change.

1.2.2 Restorative/Compensatory Ethicists

These ethicists base their ideas on the primary literature sources like the Intergovernmental Panel on Climate Change (IPCC) which has produced four reports to date in 1990, 1995, 2001 and 2007 on impacts of climate change as well other scientific bases to advocate for compensation for the climatic changes affecting Africa from the European countries. Andrew Simms and Patrick Bond have outstanding literature in this category. According to Simms, ‘if a global commons like the atmosphere, to which we all have an equal claim is being overused and corrupted by one group of people, they accrue an ecological debt to the wider community who also depend in the commons’ (Simms 2005:91). Bond highlights that, ‘Africans have the right to queue for long–overdue ecological and economic compensation given the direct role played by Northern Hemisphere in the continent’s environmental damage’ (Bond 2010:7). Goeminne and Paredis ³ highlight the characteristics and history of the concept of ecological debt pointing out that ‘Ecological debt draws attention to how the present situation has grown out of the–often violent and unjust–past. It points at the collective responsibility of industrialized countries for past and ongoing violations of the right to a clean and safe environment in other countries, in particular in the South’ (Goeminne and Paredis 2008:4). Bujo’s work fits in this category with his demand for reparation for the atrocities done to the Africans and Third World

³ Goeminne and Paredis’ draft paper traces the development and characteristics of the concept of ecological debt.

<http://www.inter-disciplinary.net/ptb/ejgc/ejgc7/Ecodebt%20EJGC%20Oxford%20GoeminneParedis%20version%20250608.pdf>

Countries by the developed countries (2009:408). This literature gives a snippet into how the dynamics of relationships between the developed and developing countries are being turned upside down through the intrepid demand for ecological debt.

1.2.3 Carbon Trading

According to Larry Lohmann, in his essay, *When Markets are Poison: Learning about Climate Policy from the Financial Crisis*, the invention of carbon trading during the Kyoto Protocol in 1997 does not address the pertinent issue of carbon emissions but only succeeds in making the climate a commodity for trade (Lohmann 2009:31). Rather than focusing on cutting down the fossil fuelled carbon emissions, companies and organizations which fall under the Kyoto process can manipulate the 'cap and trade' system by buying more carbon permits or credits from those that emit less (Northcott 2007: 135). Equally critical of the whole process of the current carbon trading which operates under the European Union's is George Monbiot who laments that at the onset of carbon trading in 2005, the greatest European polluters were given the most permits free of charge, thus paying the polluter to pollute more (Monbiot 2006:46). Generally, carbon trading was presented as a solution towards dissuading pollution but a critical analysis reveals that carbon trading, with its neo-liberal foundation perpetuates global warming. Heidi Bachram puts in pithily that, 'Instead of reducing in the rich countries, a carbon dump is created in the poor countries and thus rich countries can continue in their unequal overconsumption of the world's resources'(Bond et al 2009:112). One wonders why carbon trading still maintains its influence as the solution to global warming and climate change in light of these discrepancies.

1.3. Intended Contribution

On one hand the *Ad fontes* or *Ubuntu* ethicists present new alternatives to the current system that has nurtured the crisis manifested by global warming. However, there has not been a substantial and constructive criticism of these concepts in their relation to the reality of global warming especially in the light of information coming from primary sources like the scientific findings of the IPCC. This has been largely due to the lack of that dialogue that most of the *ad fontes* ethicists call for. The dialogue has not yet happened. There is no reason why it cannot happen now.

On the other hand, the compensation/restorative ethicists do not sufficiently carry the argument to its necessary end of mitigating global warming. They focus mainly on addressing the injustices of ecological debt but do not aim at proposing ways in which we can mitigate carbon emissions that cause global warming. Even if richer nations compensate poorer nations but still continue with their lifestyles, which unfortunately the poorer nations seek to emulate, global warming would not be mitigated. If also the official approach to curb global warming is through the dubious and manipulated carbon taxes, then there is need to expose and critique the systems that perpetuate such carbon taxes. Thus, what is needed is an integrated and critical approach that takes in the suggestions of the *ad fontes* ethicists, bearing in mind the scientific findings and the claims of the restorative/compensatory ethicists. This could be done through a hermeneutical and dialogical methodology that seeks the roots of our present crisis manifested in global warming and what ought to be done to address the past, present and future effects of global warming and climate change beyond the ineffective neo-liberal ‘solution’ of carbon trading.

1.4 Research Problems and Objectives:

In order to focus on this study specific objectives and questions guide and inspire the research. The research objectives of this dissertation are:

- To establish the underlying philosophical and economic roots of global warming.
- To justify the inclusion of African perspectives and voices to the current discourse on global warming.
- To assess the viability of sustainable development in the light of global warming.
- To give a critical ethical appraisal based on African ethics of relatedness and ecology.
- To explore and propose ethical solutions to the current global warming and climate change debacle.-

1.4.1 Key Questions to be asked

The main question underlying this dissertation is:

- a) How attainable is the contribution of African Ethics through *ubuntu*, *ukama* and the demand for ecological compensation to the discussion on global warming?

To better understand the above question, the questions below are pertinent in shedding more light.

- b) What are the socio-economic and political systems that presently foster global warming? Can there be alternatives to these systems?
- c) How are African perspectives on global warming important to the discussion on global warming?
- d) What ought to be done to curb global warming in itself and also to deal with the effects of global warming and climate change especially on the poor and marginalized presently and in the future?

1.5 Principal Theories

The principal theories upon which this research project will be constructed rests on the work of the Brazilian philosopher-theologian Leonardo Boff and Munyaradzi Felix Murove. Boff emphasized an ecological holistic approach which integrates the plight of the environment with that of marginalized and poor humans. In one of his celebrated books with the telling title: *Cry of the Earth: Cry of the Poor*, he juxtaposes the degradation of the environment with the plight of the poor and argues that both predicaments are caused by the same neo-liberal economic system (Boff 1997:1). Both Murove and Boff's paradigms will constantly re-orient this project due to their bias towards ecological holistic concern and the primacy of relatedness.

1.5.1 Boff's ecological holistic paradigm

In one of his latest book that he co-authored with Mark Hathaway, Boff elucidates the link between poverty and ecology when he laments that, 'The combined dynamics of poverty and accelerating ecological degradation are creating a powerful vortex of despair and destruction from which it is becoming increasingly difficult to escape' (Hathaway and Boff 2009:2) Boff's ecological holistic paradigm arises from the dissatisfaction with the scientifically dominated concept of development and progress which basically regarded the earth as infinite with boundless resources and ignored the 'cry of the poor' (Boff 1996:1). According to the new paradigm, science and technology are not seen as working against nature but with and on behalf of nature. As we have seen such a framework is invaluable in addressing some of the concerns of the restorative/compensatory ethicists who view global warming as an issue of environmental and social justice.

Boff's ecological holism has many characteristics but I will highlight the three main ones of interdependence/relative autonomy, cosmic common good/particular common good and the one of creativity/destructiveness (Boff 1996:32-33). Through interdependence and relative autonomy, all beings are seen as inter-connected even though they all have their own intrinsic value (Boff 1996:32). The paradigm is not radically anthropocentric because, according to the second feature of balancing between cosmic and interests are considered but those of the whole cosmic community (Boff 1996:333). The third feature of creativity and destructiveness allows us to look at ourselves as potentially ethical beings with the capacity to act on behalf of the interests of the poor and the threatened species (Boff 1996:33). Rather than mere lamentations or description of our situation, we can normatively contribute to the current discourse on global warming.

Boff's ecological holism has three main advantages. The first advantage has to do with its holistic approach which would incorporate the adverse effects of global warming not only on non-human species but also on humans, especially the poor who are most vulnerable to climate changes and imbalanced economic processes. These poor would mostly include the poor from Africa, whom the research question intends to address. The second advantage of

Boff's ecological holism is that due to its view of ecology as multidisciplinary it then allows the dialogue and inclusion with other approaches in environmental ethics like eco-feminism as long as they speak on behalf of 'poor and oppressed'. Such a framework makes the methodology of dialogue quite possible since it is not bent on one perspective but invite many voices as possible which seek liberation from the oppressive system that subjugates the earth together with the vulnerable poor and marginalized. The third advantage concerns the ethical implications of Boff's ecological holism. Due to the above-mentioned feature of creativity/destructiveness, humans are seen as occupying a special role of interfering with the rhythm of creation (Boff 1996:33). This ecological holism framework emphasizes the ethical dimension because at the end of the day all the dialogue and searching would be futile if we do not attempt to answer the question 'what ought we to do?'

1.5.2 Murove's relational paradigm

In his essay, *Well-fed Animals and Starving Babies: Environmental and Developmental Challenges from Process and African Perspectives*, Martin Prozesky asks a very important question of whether *Ubuntu* is anthropocentric (Prozesky 2009:302). While the concept of *Ubuntu* can be open to be interpreted as anthropocentric, Murove introduces an extension of *Ubuntu* which he termed '*Ukama*' to emphasize that 'a person can only be a person in, with and through not just other people but also in, with and through the natural environment' (Murove 2009:302). It is from such ontology that Murove develops his relational paradigm which is centered on the ethics of relatedness and interrelatedness (2002: 575). This resonates well with Boff's paradigm above.

Murove's paradigm becomes invaluable from its African point of view which is the similar point of view from which the project addresses the crisis of global warming. Equally important is Murove's view of African ethics as able to challenge the neo-liberal capitalist relationships based on interest and profit (Murove 2002:575). If indeed the current global warming crisis is a product of the neo-liberal economic practices and exaltation of unpunctuated growth then Murove's paradigm offers an alternative worldview. Murove writes that 'distrusting contemporary Western Ethics which has failed to halt Western

pollution in technologically advanced countries, Africa yet possesses in its own traditional culture the roots of an ethical paradigm to solve the current environmental crisis' (Murove 2009:315). This is a bold assertion that we shall critically assess in the course of this dissertation.

Thus, the two theories of Boff and Murove do complement each other in their resistance of the neo-liberal economic and social relations which subjugate the poor (Boff 1996:1, Murove 2002: 575). These are the same economic practices that make many attempts at curtailing global warming to be futile. Only a paradigm which addresses the root issues of ontology, common good, economic subsistence can tackle the current neo-liberal system. Whereas Boff's paradigm helps to situate this project within the general field of environmental ethics, Murove's paradigm further enhances the project by starting from an African relational paradigm and pointing out the real economic and political malefactors.

1.6 Research Methodology and Methods

Taking into consideration the title of this project which aims at a philosophical assessment of the contribution of African Ethics to the discussion on global warming and climate change, the recommendation of the *ad fontes* ethicists, the nature of the research questions and the ethical features of the Boff's ecological framework, it suffices to employ a qualitative methodology to this project. As highlighted above, most of the *ad fontes* ethicists suggests that a dialogue with western philosophy be done in which African values also contribute in shaping an alternative worldview to counter the culpable western materialistic-dualism (Bujo 2009:296; Mayson 2010:71). The ecological holism of Boff, as noted above, has an ethical dimension that seeks to alleviate the adverse effects on the environment and the poor and the marginalized. As such, it becomes apparent that a qualitative and dialogical methodology which seeks to address the research questions, bearing in mind the philosophical nature of the problem would be indispensable for this project.

1.6.1 Qualitative Methodology

Whereas quantitative research aims at producing findings that can be generalized and objective), qualitative research from an interpretive perspective emphasize understanding in context and views ‘the researcher as primary instrument by which information is collected and analysed’ (Blanche et al 2006:273). This is very important for a study that entails philosophical analysis and the dealing with many texts: both literal texts and metaphorical texts which include conversations, events and interactions (Prasad 2005:39). I intend, thus, to interrogate philosophically many texts that focus on the issue of global warming, its nature, causes, philosophical roots, implications for Africa and African ethics.

1.6.2 Philosophical Hermeneutics

There are about five methodologies under qualitative interpretive traditions which include symbolic interactions, dramaturgy, ethnomethodology, ethnography and hermeneutics (Prasad 2005:14). All of them, being qualitative methodologies, have a bias towards subjective meaning; however, for this research, I shall utilize a philosophical hermeneutical approach as proposed by Hans-Georg Gadamer. This is largely because, unlike the other methods like symbolic interactionism and ethnography, hermeneutics focuses on the interrogation and interpretation of texts (Prasad 2005: 38). Thus, I will not merely present texts but interact with them and interrogate them in the goal of unearthing meaning.

Basically the hermeneutical tradition stems from an understanding of the Greek word *hermeneutikos* which means ‘the process of explaining obscure more obvious’ (Prasad 2005: 31). Gadamer’s philosophical hermeneutics is unique in its emphasis on unearthing assumptions by accepting that we all have our prejudgments or ‘prejudices’ that we bring to the process of understanding texts (Gadamer 1975: 238). We cannot be totally free of bias but we can use bias to enrich our understanding.

Unlike in quantitative research, subjectivity in qualitative and hermeneutical research is not considered as an obstacle to truth but a necessary means to empathically understand social and personal realities (Blanche et al 2006:277). Since I shall be dealing with the analysis of

many texts, it is important to bear in mind Gadamer's caveat that, 'The most important thing is to be aware of one's own bias, so that the text may assert its own truth-meanings' against one's own fore-meanings' (Gadamer 1975:238). By adopting the philosophical-hermeneutical approach of Gadamer I intend to unearth certain assumptions inherent in our understanding of our current ecological crisis manifested by global warming and how these assumptions affect how we act ethically to address global warming and climate change. This ties in well with Gadamer's hermeneutical project of not only letting, 'those prejudices that are of a particular and limited nature die away, but causing those that bring genuine understanding to emerge clearly as such' (Gadamer 1975:266). This is an interesting and challenging process.

According to Prasad, Gadamer's goal was to bring the interpreter as close as possible to the text to achieve a 'fusion of horizons' (Prasad 2005:33). It is to this effect that the question: At what juncture does African ethics make their contribution to the discussion on global warming shall be attempted through a historical analysis of the roots of ecological degradation. The present contribution of African ethics cannot be fully understood and appreciated in isolation from the crisis in western ethics. All this shall be done from an African context in the light of global warming, and following the theoretical framework of Boff and Murove, philosophically analyzing its effects on both nature and humans, especially the poor and marginalized of our societies.

1.7 Outline of Dissertation

With the above mentioned proposal in mind, the following chapters will be structured to attempt to meet these objectives. In the next Chapter, *International efforts towards the curbing of global warming and climate change*, we aim at analyzing why little has been achieved despite the numerous international conferences on global warming and climate change. *Chapter 3: Sustainable development or sustaining crises* addresses the crux of the dissertation which covers the dilemma of economic sustainability concerning global warming mitigation and adaptation. *Chapter 4: Ecological debt and sustainability* continues probing the question of sustainability but from the perspective of the restorative ethicists whose fiery demand for ecological reparation cannot be ignored. *Chapter 5: Is*

Ubuntu in the Bundu: The Efficacy of Ubuntu in the Global Warming and Climate Change Discourse introduces the concept of *Ubuntu* and attempts to assess its feasibility in the discussion thus far and recommendations for better engaging *Ubuntu* in the global warming discourse. Lastly *Chapter 6: Conclusion: Pushing the boundaries*, aims at evaluation of the objectives and tying up the loose ends that have been generated in the previous chapters as well as suggesting how the whole process can mutually benefit african ethics and the discourse on global warming.

CHAPTER 2: International efforts towards the curbing of global warming and climate change.

2.0 Introduction

The current ecological crisis manifested through the phenomena of global warming and climate change is a complex ethical issue. It has become apparent that no single nation, region, firm, organization or creed can singlehandedly tackle this problem. Once greenhouse gases are emitted into the atmosphere their effects do not respect any national, regional or continental borders. Even though the exigent call for action is directed at those responsible for the bulk of the emissions, the general call is aimed at everyone since this is a global problem. After so many years of research and international negotiations on curbing global warming and climate change why is there so little achieved?

In this chapter, I intend to trace the general history of global warming before critically analyzing some of the international efforts that have taken place under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) and the Conference of Parties (COP) meetings. Lastly, I will tackle the question of why these international efforts have not been very successful in mapping out solutions to halting further catastrophic global warming and protecting the vulnerable poor against the effects of climate change. I argue throughout the chapter that there is need to move beyond the ethical blind spots and the diplomatic rhetoric of the international negotiations and address the real problem behind the crisis if we are to practically address, head-on, the crisis of global warming and climate change.

2.1 The Emergence of Global Warming

The phenomenon of global warming did not just already concern about the emission of carbon dioxide due to the extensive use of fossil fuels (Northcott 2007:22). This is also around the period of severe industrialization⁴ marked by increased production which not

⁴ Massive reliance on coal energy meant more pollution and with the rapid urbanization and the movement of people from agrarian life styles to the industries, the combustion of coal escalated and so did carbon emissions.

only changed the history and economics of Europe and the world but the natural environment as well. In 1827, the initial global warming hypothesis was postulated by Jean Fourier through his description of the greenhouse effect which makes it possible for the earth to retain solar energy and make life possible at an average temperature of 15 degrees celsius instead of a calamitous -18 degrees celsius (Northcott 2007:22). Thus, this form of global warming is vital for life on earth but if uncontrolled and exacerbated it becomes detrimental to sustaining life on the planet.

It was due to Fourier's above greenhouse effect hypothesis that in 1896 the Swedish chemist Arrhenius was able to further postulate that the combustion of fossil fuels could enhance the concentration of carbon dioxide in the atmosphere and lead to global warming (Leroux 2005:20; Bernard 1993:5; Northcott 2007:23). Arrhenius went on to further predict that if the concentration of carbon dioxide doubled then there would be global warming by about 5 degrees celsius (Bernard 1993:5). Such predictions might not have been accurate but their logic was clear that the presence of carbon emissions in the atmosphere was having an influence on global mean temperatures.

As one would expect, within such a period of industrialization, Arrhenius' theory was not warmly accepted. The scientific community of the period generally thought that the oceans would act as massive carbon sinks and absorb the emitted carbon dioxide, thus reducing the possibility of global warming (Northcott 2007:23). Without much evidence of anthropogenic global warming, Arrhenius' theory did little to dissuade the industrial processes of his time and life continued as usual with increased fossil fuel based economic practices. In fact, according to Leroux, Arrhenius himself welcomed such a prospect of a warmer climate dreading the advent of another ice age (Leroux 2005:20). Even though the theory of global warming was understood at this period, its link with anthropogenic activities was not so clear and it was generally attributed to non-human processes. Anthropogenic global warming remained unproven and was not taken seriously for many years while its effects worsened like a concealed carcinogenic tumour.

2.2 Anthropogenic Global Warming

It was only in 1960 that Charles Keeling, with better instruments, showed that carbon dioxide concentrations in the atmosphere were on the rise (Northcott 2007:23). For the next decade, there were debates between scientists and policy makers on the science of global warming. However, it was only in November 1988 that the United Nations Environmental Programme (UNEP)⁵ in conjunction with the World Meteorological Organization (WMO)⁶ formed the Intergovernmental Panel on Climate Change (IPCC).

2.3 The Formation of the IPCC

The Intergovernmental Panel on Climate Change with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts⁷. Since its establishment in 1988, the IPCC with its thousands of scientists and experts has currently produced four reports in 1990, 1995, 2001 and 2007. All these reports affirm anthropogenic global warming and the next report is scheduled for 2014. Many writers and ethicists find the formation of the IPCC and its reports useful in providing them with the necessary scientific information that would have been otherwise shrouded in ignorance, common sense or unfounded excessive debates. When one engages complex issues like global warming and climate change it is wiser to gather pertinent scientific facts beyond the mere common sense debates often wrought with over-sensationalism.

Despite the fact that the IPCC has been accused⁸ of actually propagating ‘greenhouse

⁵ The United Nations Environmental Programme, UNEP, was formed in 1972 as a branch within the United Nations that deals with the sustainable use of the global environment (<http://www.geodeticjourney.com>).

⁶ The World Meteorological Organization, WMO, is a specialized agency of the United Nations responsible for weather, climate, water and geophysical sciences. It was formed in 1951.

⁷ Intergovernmental Panel on Climate Change 2011. Available from (<http://www.ipcc.ch/organization.shtml>). Accessed 20 October 2011.

⁸ Some scholars including Marcel Leroux (2005:463) are sceptical about the science and credibility surrounding global warming. Leroux blames the IPCC for producing unfounded scientific data on global warming which the media then exaggerates. Leroux insists that irresponsibility should be laid against the ‘self appointed’ climatologists, ‘whose busy photocopiers churn out the IPCC hymn sheets, and who

panic' instead of merely analyzing the state of global warming and climate change; it remains the leading scientific research forum on global warming and climate change (Leroux 2005: 34). The fruits of the IPCC reports have been conglomerated into the international forums on climate change and one would naturally expect that with the warnings coming from the IPCC some progress would have happened in our search for a solution to the ecological crisis. International efforts at addressing climate change and global warming are the products of the formation of the UNFCCC. The world could not continue on snubbing the scientific concerns of an impending doom that anthropogenic global warming was causing.

2.4 The Establishment of the UNFCCC

The scientific results of the research by the IPCC were not going to render any practical changes without an international forum to discuss the implications and necessary actions to be undertaken by the global community faced with global warming and climate change. This was made possible by the establishment of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The framework emphasized that developed countries had to reduce their carbon emissions in congruence with the scientific input, especially from the IPCC.

2.4.1 The Objective of the UNFCCC

The Convention's objective is succinctly put as achieving 'in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' (UNFCCC: Article 2). Therefore, it is not an exaggeration to highlight that the need for international co-operation in addressing the ecological crisis has been on the international agenda for two decades. The first Conference of Parties (COP) meeting also took place in 1994 in the Bahamas and every consequent year has seen heads of state and the global community coming together to address the problem of climate change and global

contribute to the outpourings of the popular science publications' (Leroux, Marcel 2005. *Global Warming: Myth or Reality? The Erring Ways of Climatology*. Chichester: Praxis Publishing.

warming.

From its inception, the UNFCCC created a criterion by which its success can be evaluated. This is the objective of stabilizing the greenhouse gases. Equally important in the Convention is the first principle which states that ‘...the developed country Parties should take lead in combating climate change and the adverse effects thereof’ (UNFCCC principle 1). I will constantly recall this principle in our discussion, especially on the COP meetings that followed because there is a sticking point inherent within this principle. One could argue that this principle spells out the problem affecting any viable solutions to our global warming and climate change discourse. However, before we unpack this problem we need to look at the protocol which came with aim of infusing a legally binding dimension to international talks on climate change. The UNFCCC, as a mere convention could not feasibly muster the will of the international community to modulate their greenhouse gas emissions without some form of a binding agreement. This need necessitated the birth of the Kyoto Protocol.

2.5 The Kyoto Protocol

This famous international agreement was initially signed in Kyoto, Japan in 1997 during COP 3, but only came to full force, eight years later, in 2005. The UNFCCC on its own accord merely encouraged countries to reduce their carbon emissions but the Kyoto Protocol actually committed thirty seven industrialized countries and the European Union, under what is known as Annex 1,⁹ to reduce their emissions. One cannot talk of the international efforts to curb global warming without mentioning the Kyoto Protocol. The Protocol has been the subject of both praises and reproaches from various circles. Some of these will become clearer in the course of this chapter but it would suffice to briefly highlight some of the critiques.

⁹ The Annex 1 countries to the Kyoto Protocol are the developed countries that historically contributed the bulk of greenhouse gas emissions and are thus bound by specific emission reduction targets. A list of these countries can be accessed at http://unfccc.int/parties_and_observers/parties/annex_i/items/2774.php

2.5.1 The Mechanisms of the Kyoto Protocol

Bearing in mind that the UNFCCC was established with the aim of stabilizing carbon emissions, the Kyoto Protocol was geared at providing the legally binding procedures and targets to achieve this. Thus, synonymous with the Protocol itself are three mechanisms which were set to help achieve the goal of stabilizing carbon emissions. These three market-based mechanisms are the international emissions trading, the clean development mechanism and the joint implementation scheme. At this point I will briefly and critically analyze only one of these mechanisms namely the international emissions trading due to the controversy surrounding its failure to actually help reduce carbon emissions from the chief polluters.

2.5.2 International Emissions Trading

Article 17 of the Kyoto Protocol encourages the parties to ‘participate in emissions trading for the purposes of fulfilling their commitments...’ (Article 17). This provision within the Protocol remains controversial especially when one looks at the ultimate motivation for such emission trading. The result has been basically that countries that do not use all their carbon permits are free to trade them with those that have spent all their carbon permits. Tickell laments such a scenario when he writes that, ‘the mechanisms have created a dynamic and for some highly profitable business sector, with a substantial trade with an assortment of instruments related to reductions in greenhouse gas emissions currently worth over \$10 billion per year and rising’ (Tickell 2008:35). The irony in this is that whilst carbon trading has created a lucratively financially rewarding market for the already affluent, carbon emissions have continued to rise with the dire situation of the poor becoming more and more desperate.

Another discrepancy associated with the international emissions trading has to do with how the carbon permits were initially allocated. Using a process called ‘grandfathering’, the permits were allocated with first preference given to the greatest polluters (Tickell 2008:49, Northcott 2007:135). This process was totally unjust and the burden fell on the unsuspecting poor. Tickell’s analysis of how the poor suffered as a result of this draconian process is very

insightful:

This both reduced the incentive for technological innovation, and handed electricity generators as much as 30 billion euros per year in surplus profits as they traded their surplus allowances, and passed the price of their allowances on to electricity consumers, although they were received at no cost (Tickell 2008:49).

One wonders whether the drive towards the Kyoto Protocol mechanisms and carbon trading has to do with real carbon emissions reduction or mere self-aggrandizing motives fulfilled in the name of carbon reduction. As usual, it is those that are not responsible for such malicious emissions and trading that have to bear the costs whilst the culprits hide behind the veil of market economics. In fact these culprits were rewarded; or rather they rewarded themselves for being the largest polluters by allowing themselves to do so even further, whilst at the same time shifting their responsibilities to the unsuspecting consumers. Only a malicious or an ethically defunct system can allow such injustice. It is from this point that we shall look at some of the COP meetings in the recent years to see how the real objective of stabilizing carbon emissions has been downplayed by diplomatic chicanery whilst market based mechanisms propelled the Kyoto Protocol, with many people oblivious to this fact.

2.6 COP 15

Of all the recent Conference of Parties (COP) meetings, COP 15 stands out as revealing the rift that had begun to manifest itself in the corridors of power pertaining to climate change talks. Attended by 110 heads of State in Copenhagen, Denmark in 2009, COP 15 made all the headlines for its failure to deliver any legally binding commitments from the chief carbon emitters. The resultant ‘toothless’ document that supervened from this futile gathering, the Copenhagen Accord, was neither endorsed nor adopted but merely noted by the United Nations due to its failure to attain a consensus. During the sessions some representatives walked out in protest to the way negotiations did not cater for the needs of developing nations and seemed to protect the interests of the rich nations¹⁰.

¹⁰ The leader of the G77, A group of 77 developing nations, Mr Lumumba Di-Aping walked out in defiance to the way in which the conference was not respecting the concerns of Africa and merely ‘condemning Africa to death’ http://www.china.org.cn/environment/Copenhagen/2009-12/12/content_19054074.htm

The Copenhagen Accord itself is full of the optimistic language typical of COP literature about the resolve to curb global warming. Whilst acknowledging the need to meet the objective of the UNFCCC of stabilizing greenhouse gas emissions, the Accord states as its first proposal:

We underline that climate change is one of the greatest challenges of our time. We emphasize our strong political will to urgently combat change in accordance with the principle of common but differentiated responsibilities and respective capabilities... We recognize the critical impacts of climate change and the potential impacts of response measures on countries particularly vulnerable to its adverse effects and stress the need to establish a comprehensive adaptation programme including international support (Copenhagen Accord Proposal 1).

When one reads the proposal above about the ‘political will’ and ‘critical impacts of climate change’ one cannot help but appreciate the concern that the Accord manifests, at least on paper! However, as stated above, the Accord was not endorsed by the United Nations due to lack of consensus and also because it lacked the most important ingredient in international talks; the legal power, the ability to commit and impose legal consequences if such an agreement is not honoured. COP 15 showed that there were unresolved issues in terms of historic emissions that needed attention. Nevertheless, the world remained hopeful.

2.7 COP 16

From November 29 to December 10 2010, the COP 16 took place in Cancun, Mexico. Against the backdrop of mounting pressure and evidence from the science on global warming and climate change, COP 16 was in many ways much better than COP 15 but then if COP 15 was a failure then the comparison is not very assuring! However, there are certain clauses within the decisions of COP 16 that show a paradigm shift from the Copenhagen Accord of the previous year.

COP 16 affirms that mitigation efforts are necessary which include ‘developed country Parties showing leadership by undertaking ambitious emission reductions and providing

technology, capacity building and financial resources to developing country Parties....’
(2a). Underlined in this decision is the reminder that developed countries must take the initiative not only in seriously addressing global warming mitigation but also in assisting developing countries with adaptation and mitigation. The question of who should take the initiative is very important and is often contested by the chief carbon emitters.

COP 16’s decisions on the action to be taken why the developed countries must take the initiative in stating that:

Acknowledging that the largest share of historical global emissions of greenhouse gases originated in developed countries and that, owing to historical responsibility, developed country Parties must take the lead in combating climate change and the adverse effects thereof...(COP16:IIIA)

The above citation is very important to the global warming and climate change discourse because it tackles the discussion on why the United States, despite being the world’s second largest carbon emitter has not ratified the Kyoto Protocol. Donald Brown¹¹ sees the refusal by the United States and other countries including Canada, Russia and Japan as a promotion of national interests at the expense of international obligations. Should the criterion for initiative mitigations be based on merely historical grounds and ignore the current levels of emissions in which China comes out as the largest emitter with India also coming in as the third largest emitter after the United States? Iron the Annex 1 countries of the Kyoto Protocol. Should we then support the position of the United States of not taking any serious action on global warming until China and India also commit themselves? If we say that India and China should be legally bound then on what grounds should we exonerate South Africa which is the 12th world’s largest carbon emitter? These questions are right at the hub of the economical dilemmas posed by global warming and climate change. Further discussions on these issues shall be duly addressed in the following chapter, as of now we move on to the much talked recent climate change gathering in South Africa.

¹¹ Donald Brown, writes extensively on climate ethics and in his article ‘Going Deeper on What Happened in Durban: An Ethical Critique of Durban Outcome’, he challenges the position of the United States of America to wait for India and China to act first before it takes responsibility. <http://rockblogs.psu.edu/climate/2011/12/going-deeper-on-what-happened-in-durban-an-ethical-critique-of-durban-outcomes.html>

2.8 COP 17

COP 17 made all the headlines before its commencement in Durban from the 28th November to 11th December 2011. The first one to be held in Africa, COP 17 had many scholars and analysts hoping for the headway in the impasse that had shrouded international climate change talks. The former Secretary to the United Nations, Kofi Annan, was optimistic and despite acknowledging that climate change was a serious threat to Africa stated that, ‘We are witnessing an abject failure of leadership which, unless urgently repaired, will leave a terrible legacy for future generations’ (Annan 2011:8). Annan goes further to speculate on what COP 17 should achieve to address the myopia of world leaders when he writes that, ‘The Durban conference is a crucial test of the ability of our leaders to look beyond narrow and short-term interests’ (Annan 2011:8). Thus, the world looked to South Africa again, this time not for the prestigious World Cup tournament which it had successfully hosted a year and half earlier, but for a breakthrough in the gridlock that had clogged real action on climate change.

Rodin shares similar concerns and succinctly writes that; ‘After billions of dollars in commitments and years of negotiations –and despite the fact that we have the science to predict disasters, significant funds available and the knowledge to put resilience measures in place – millions of Africans continue to suffer unnecessarily’ (Rodin 2011:9). Thus, the venue for COP 17 had a strong sentimental appeal to the whole plight of the African people as well as the vulnerable and poor who are victims of climate change as a result of global warming largely triggered by the affluent developed countries.

Most people might have assumed that having decisions in favour of the inhabitants of the continent. Unlike the previous COP meetings in Copenhagen and Cancun, the 17th edition was unique in the expectations that hovered over it as Rodin writes that, ‘We stand at a fragile point in history. We are not sitting in conference rooms in Copenhagen or Cancun anymore. We look out of our window and Africa is right here –a continent whose climate predicament can be ignored no longer’ (Rodin 2011:9) If indeed these were the expectations

leading to COP 17, then one can understand the many disappointments during and after the COP 17 discussions. The advantages of ‘home turf’ certainly could not outweigh the lack of political will to come up with a ground breaking solution in significantly reducing carbon emissions.

2.8.1 The Actual COP17 Talks

The Conference was scheduled to end by the 9th of December 2011 but went on to the early morning of the 11th of December after an extensive all-night discussion on some of the key issues, amongst them the future of the Kyoto Protocol which expires at the end of 2012. Outside the conference venue in the streets were numerous marches and protests from the public as people demanded that a serious deal be sealed at the conference. Some of the protesters wielded placards with clear messages like one which was directed to the President of South Africa which said; ‘ZUMA STAND BY THE POOR AND NOT THEUSA!’¹²

The general feeling from the public was that any deal that would be reached within the conference had to take into cognizance the plight of the poor and not only the interest of the richer nations who are the chief carbon emitters. Eventually, when the conference came to an end there were mixed feelings on whether it had been a success or not.

In its press release statement, The United Nations Climate Change Secretariat was adamant that:

Countries meeting in Durban, South Africa, have delivered a breakthrough on the future of the international community’s response to climate change, whilst recognizing the urgent need to raise their collective level of ambition to reduce greenhouse gas emissions to keep the average global temperature rise below two degrees Celsius¹³.

¹² On Thursday 7th December some protesters were manhandled when they carried placards demanding an audience with the President of South Africa. They demanded that COP 17 address the needs of the poor and come up with a resolution geared at stopping the suffering of the poor. Unfortunately, this was interpreted as a direct attack on the presidency and members of the ruling party, the African National Congress (ANC) took matters into their hands and physical assaulted the protesters. The police arrested some of the protesters. [<http://www.iol.co.za/scitech/science/environment/protesters-abused-manhandled-at-cop17-1.1195416?pageNumber=1#.T87-UbAthGQ>]

¹³ In this press release, to appease the crowd of reporters and the public, the United Nations Climate Change

Those who view COP 17 as having achieved something highlight about five achievements coming from the Conference which include the launching of the Green Climate Fund and the establishment of an Ad-hoc Working Group on the Durban Platform for Enhanced Action. It is interesting to contrast the above cited statement with the erudite critique by Jessica Boyle that, ‘The negotiations in Durban made painfully clear that many entrenched divisions remain among key actors on critical issues, and that current mitigation commitments are insufficient to address climate change and keep warming below two degrees Celsius’ (Boyle 2011:1) Whose voice, between the two contrasting accounts represents what really transpired in Durban during COP 17? Our analysis and interpretation shall be based on the two ‘achievements’ of COP 17 namely: the extension of the Kyoto Protocol and the launching of the Green Climate Fund, against the background of the reduction of the carbon emissions and in the light of the vulnerability of the poor.

2.8.2 The Establishment of the Green Climate Fund

The establishment of the Green climate Fund at COP 17 was the fruit of the initial proposal which started in Copenhagen’s COP 15. Thus, at COP 17 in its statement, the conference decided ‘to designate the Green Climate Fund as an operating entity of the Financial Mechanism of the Convention...to support projects, programmes, policies and other activities in developing country Parties’ (COP.17:3).The establishment of this fund is geared towards assisting towards adaptation of developing countries which lack the capacity to do so. This is a noble initiative and its importance cannot be exaggerated. However, there are a few things that need ironing out together with this initiative.

Firstly, while it is a welcome idea to help developing countries with adaptation, focus must not be taken away from mitigation measures as well. COP 16, in Cancun Mexico, highlighted this point when they stated that, ‘adaptation must be addressed with the same priority as mitigation’ (COP 16:2b). The creation of the Green Climate Fund must not

Secretariat together with the COP presidency paints a picture of a successful meeting. It is true that there were indeed some achievements from COP 17 and the fact that the talks had to go on overtime demonstrates the strong resolve that was there to at least come with something rather than nothing from the talks. However, major issues like the agreement on a legally binding agreement were merely procrastinated to a further date http://unfccc.int/files/press/press_releases_advisories/application/pdf/pr20111112cop17final.pdf.

impede the efforts towards concrete, resolute and ambitious carbon emissions reductions. If countries continue to emit greenhouse gases within the current trajectory no amount of adaptation or funding will suffice for the countries already suffering from climate change related disasters like floods, droughts, water and food shortages as well as climate disaster displacements. In fact no amount of money can restore the disappearing fauna and flora of the earth as a result of climate change. What is urgently needed is a shift of paradigm in our way of life not a mere coping strategy. No funding or aid, no matter how large can instill or substitute for the values of care and concern of one another and our planet. We need more ethics not just more funds, hand-outs or aid.

The Green Climate Fund ought not to be abused as a license to continue polluting, as long as there is a fund to help the poor to adapt to the effects of climate change. The greatest fear would be that if market-based mechanisms adopt this fund then it will not be surprising if on the long run, the consumers are also made to fund this Green Climate Fund through diverted bills and taxation which are passed on the poor consumers from the resuscitated Kyoto Protocol mechanisms!

Secondly, as the Fund stands, there is speculation as to where the money will come from. Wilson writes that, 'the fund is empty and disagreements continue over whether the \$100 billion promised in Copenhagen and reiterated in Cancun, will come primarily from private or public sector funds' (Wilson 2012:2). Wilson mentions one suggestion that came from the civil society:

Civil society groups have proposed a 'Robin Hood' tax on financial transactions to to slow down speculation, a fuel tax on aviation and shipping and subsidy shift away from fossil fuels, which would go some way to filling the coffers, while contributing to mitigation and stabilizing the economy. But these have not been embraced by the COP (Wilson 2012:2).

This is the reason why in this case mitigation should be emphasized because by the time the technicalities of the fund are finalized more emissions of carbon would have taken place and our adaptation demands would have escalated concomitantly. The establishment of the Green Climate Fund is a good initiative which addresses the need for Annex 1 countries to take the lead in helping the developing countries to adapt to climate change in resonance

with the second principle of the UNFCCC. However, equally important is the need for ambitious mitigating measures and fairer ways of financing the fund as soon as possible to avert a scenario where adaptation efforts are rendered ineffective due to passive and tardy mitigation efforts.

2.8.3 Kyoto Protocol 2

When COP 17 resuscitated the life span of the Kyoto Protocol beyond its first period in 2012 to another term which is expected to culminate in another legally binding agreement in 2015 to be fully endorsed in 2020, there were mixed reactions to this. We have already seen how the Kyoto Protocol has its merits and demerits based on its market-based mechanisms and the lack of strict reduction targets. However, if COP 17 had proceeded without another legally binding agreement ensuing from the conference then we would have had a scenario without any targets whatsoever. This would have dealt a severe blow to international efforts on combating climate change. Nevertheless, the second commitment period is based on voluntary ‘pledge and translate’¹⁴ exercise which further weakens an already weaker Kyoto Protocol (Boyle 2011:2). Besides these loopholes, the refusal of the United States to ratify the Kyoto Protocol jeopardizes the whole effort from the international community to curb global warming. Such free-riding is detrimental to international co-operation.

2.9 The Stance of the U.S.A.

Extending the life span of the Kyoto Protocol means also dragging its weaknesses into the second commitment period. Chief amongst these weaknesses, besides the ‘pledge and translate’ exercise, has to be the reluctance of the United States of America to ratify the initial Kyoto Protocol of 2005. The stance of the United States of America has been that of

¹⁴ The second Kyoto Protocol commitment period, unlike the first one in which emission reduction targets were collectively decided based on overall mitigation targets, is characterized by a pledge and translate process in which bound Annex 1 countries will set their own targets. The first Kyoto Protocol was criticized as being less ambitious and to loosen the targets will actually make it even weaker than before. Nevertheless, before COP 17 there was speculation that Kyoto Protocol will not see another period beyond 2012. This would have eradicated any legally binding agreement whatsoever. It is in this light that negotiating a second, albeit, weaker commitment period for the Kyoto Protocol, was seen as triumph.

demanding that India and China, who are not legally bound under the Annex 1 countries of the Kyoto Protocol, also ratify the Kyoto Protocol before it does so. The problem is that these three emitters have almost half the percentage of global emissions amongst them and yet none of them has ratified the Kyoto Protocol. As if to add salt to the wound, during COP 17 Canada also pulled out of the Kyoto Protocol joining the Japan, Russia and their neighbours the United States. How then can serious legally binding mitigation talks be done when the largest emitters are avoiding taking the necessary action?

Donald Brown sees the refusal by the United States and other major carbon emitting countries as a manifestation of how national interests have underrated international obligations¹⁵. The United States could be playing a political game of stalling responsibility but some of its concerns, that India and China also take legal commitments, do need to be addressed as well. This is the issue at the heart of this chapter about the relation between development and the mitigation of climate change. This shall be tackled at length in the next chapter. Brown does suggest though that:

Unless, the international community can convince or cajole nations to make commitments consistent with their ethical obligations, then international climate negotiations are likely to continue to be plagued by the failure to tackle the most difficult climate change issues (Brown 2012:).

One observes that international climate talks are not inspired by the plight of the poor and our planet alone but are also vested with national and economic interests spurred by competitiveness amongst the world's economic powers, the United States of America, China and India. If one of these powers ratifies the Kyoto Protocol without the other two, then it would seem that they would be disadvantaging themselves economically. It is like a scene in a dusty Western movie where two cowboys long for a ceasefire but neither is willing to put down his gun because he suspects that the other will kill him! The only

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<http://rockblogs.psu.edu/climate/2011/12/going-deeper-on-what-happened-in-durban-an-ethical-critique-of-durban-outcomes.html>

difference, unlike in the movie where both cowboys will die, is that in our real situation it is the poor and the planet who continue to suffer whilst the tenaciously gun-slinging nations hold on to their smoking guns.

Some scholars have tried to understand the stance taken by the United States of America not to ratify the Kyoto Protocol based on the nature of the country's political composition and structures. Thus, Von Moltke and Rahman argue that the stance of the United States of America on the Kyoto Protocol is made possible due to its separation of powers between federal and state powers (Von Moltke and Rahman 1996:331). The duo writes that this position is understandable because, 'in the view of US policy makers, greenhouse gas emissions are dependent variables arising from a number of independently adopted economic and environmental policies so it makes little sense to adjust these for climate change purposes alone...' (Von Moltke and Rahman 1996:332). Whilst this analysis of the United States is helpful, it does not justify why millions should continue to suffer due to climate disasters when Capitol Hill and the White House continue to fiddle with myopic domestic concerns.

There is a pressing need for the chief greenhouse gas emitters, China, the United States and India to rise beyond their domestic and national preoccupations and actively and collectively lead the mitigation and adaptation efforts of the international community in a legally binding and accountable process. One only hopes that come 2015, these three nations will arrive at this decision for the sake of the common good and in solidarity with the billions of the suffering poor and our planet. This is an ethical obligation to avert further global rise of temperatures and climate disasters associated with such climate change.

2.10 The Impasse in International Climate Change Talks

It would be an exaggeration to say that international efforts aimed at addressing global warming and climate change have been an abject failure. The formation of the UNFCCC with its objective of stabilizing carbon emissions and the consequent ratification of a legally binding Kyoto Protocol were both ingenious initiatives aimed at concretely addressing the problem of global warming and climate change within an international forum. Such a

realization that the world needed to come together and search for solutions to the impending climate doom was a necessary practical and initial step. It is now more than 20 years since the formation of the UNFCCC but it seems that we are on a losing catch-up game with runaway climate change. There are some factors that can be attributed to our inadequacy to act on climate change in a collective and international manner.

2.10.1 Cutting the Rhetoric

An African proverb has it that, ‘talking does not fill the basket in the farm’. No amount of talk will ensure that we meet our mitigation targets of below 2 degrees Celsius without the real action towards reducing our carbon emissions. When one reads through the documentation from the COP meetings, one encounters a lot of rhetoric and technical jargon which in many ways seems to divert our much needed attention from the real pertinent issues on the ground that need to be addressed. Most of the issues in these documentations are issues carried on from previous and initial meetings which do not always have any bearing on reducing carbon emissions. The elaborate objective of the United Nations Framework Convention for Climate Change (UNFCCC), of ensuring the stabilization of carbon emissions, should always be the ultimate goal of subsequent COP meetings. It is true that new challenges will come over the years but these should not deter the international climate change talks from tackling the mitigation of climate change and global warming.

As we have seen COP 15, 16 and 17 all reiterated the need for the reduction of carbon emissions but none really addresses the crux of the matter in terms of why we are not reducing our carbon emissions. If this question is boldly addressed then we will not be far from the solution and the measures we need to avert further catastrophic climate change. Creation of adaptation measures is on one hand a temporary measure aimed at massaging the currently vocal and suffering developing nations. On the other hand, such a fund is an insult since it is furtively justifying carbon emissions as long as the developing nations are aided by the developed to cope with such a crisis. What make it even worse is that the so called fund rests on paper without any real benefactors.¹⁶ This is not to denounce the

¹⁶ Patrick Bond in his *Politics of Climate Justice : Paralysis Above, Movement Below* (2012:112-113),

adaptation measures from international talks but to point out that a big picture is necessary if we are to really achieve anything in our mitigation and adaptation of climate change.

2.10.2 Addressing the Real Issues

Hans Georg Gadamer's philosophical hermeneutics emphasizes the need to unearth our biases because we can never totally get rid of them and these affect the way we engage with one another (Gadamer 1975:238). In this light and in order to fully grasp the cloak and dagger politics impeding the international talks one has to be vigilant in searching for subtle interests and biases that allow such stalling of decisive decision making at these COP meetings. Evidence from the scientific community has been there for almost two decades for all to see the rate of climate change and the consequences of this change on poor vulnerable peoples of the world. Why then is there no comprehensive action taken by the chief carbon emitters?

In order to attempt to answer this question we will revert to how the phenomenon of global warming was first postulated. Even though global warming as a theory was first postulated during the period of industrialization, it was not welcome news because it would have required a reduced combustion of coal which was becoming the most reliant source of energy. This would have upset the then booming economic and social fabric of European and American societies. The question of interests determines how calls for reduction in the carbon emissions have been welcomed or subtly rejected. Thus, if we are going to have a breakthrough in our international efforts towards the mitigation of climate change we need to address the conditions that continue to nourish our carbon emissions.

argues that it is not clear how the money for the Green Climate fund is going to be raised since the primary source, the carbon markets were struggling to raise that money. It would seem that the problem is not only mitigation but adaptation since poorer and vulnerable countries are not being assisted to deal with the effects of climate change.

2.10.3 A Lesson form the Kyoto Protocol

The cue from the Kyoto Protocol mechanisms is very pertinent to this discussion. When the protocol was ratified in 2005 the aim was to provide a legally binding agreement to assist the international community on combating climate change but within the protocol itself were loopholes which were seized by the chief emitting firms for their benefit. The market-based mechanisms of the Kyoto Protocol undermine the main goal of reducing carbon emissions. As long as international negotiations continue in the shadow or the blind spot created by the neo-liberal economic system, we will never really achieve significant carbon emission reduction.

Boff is certain that the plight of the poor and the earth is a result of the neo-liberal economic system which encourages competitiveness and over-consumption of resources (Boff 1996:1). The practical way of interpreting any international effort to curbing global warming and climate change rests on whether the plight of the poor and of the earth has been addressed and whether we are courageous enough to name the real problem and seek alternatives to it. Otherwise we shall convene year in and year out at more COP meetings with hardly any viable solution reached because the costs of reducing carbon emissions touch at the heart of our neo-liberal economic system, our over-consumption and anthropocentric attitudes towards the planet and the poor.

If one becomes aware of how subtle economic interests rule these international talks then one can be justified in being suspicious of the proposals that come from these COP meetings. The excuse by the United States of America not to ratify any legally binding agreement before China and India have done so is somewhat a camouflage of its subtle yet deadly economic interests. How can we then talk of sustainable development when it is quite clear that the relation between development and climate change mitigation is devious? How do we come to a resolution when it is also clear that the Annex 1 countries, legally bound by the Kyoto Protocol, are the countries that are historically responsible for the greenhouse emissions yet China and India, not bound by the Kyoto Protocol, are amongst the top three chief greenhouse gases emitters in the world? These questions lead us to the next chapter which focuses on the gist of this chapter; the economical dilemma of sustainability in the light of the global warming and climate change discourse.

2.11 Conclusion

If the formation of UNFCCC was aimed at internationally addressing the problems posed by climate change and global warming, then its goal is yet to be achieved. The different COP meetings, especially starting from COP 15 to COP 17 have highlighted some of the thorny issues surrounding the mitigation of climate change. In this chapter I have traced the emergence of global warming and the initial reaction. I have also traced the formation of the UNFCCC as a convention geared at encouraging the stabilizing of greenhouse gases emissions responsible for global warming and climate change.

Most importantly, I have analysed the major decisions reached by COP 15 in Copenhagen to the recent COP 17. I argue that the adaptation of developing countries to climate change solidified by the creation of the Green Climate Fund should not function at the expense of the mitigation efforts or as a substitute to our need for values for concern and care for one another and our planet. Instead of throwing money to the poor, we need to look at how we have made that money in the first place. If we have made many people poor and homeless, destroyed our environment in our selfish and myopic pursuits, then no amount of tents or hand-outs for the victims can justify this unethical behaviour.

In the last part of this Chapter I have argued that as long as the economic issues perpetuating our ecological crisis are not confronted and addressed, any COP meetings that follow will be futile. However, this task is not as easy as it seems and will need an assiduous process of unpacking concepts like sustainable development as well as the relationship between climate change mitigation and development. This is a task I will undertake in the next chapter, guided by Boff's emphasis on the symbiotic plight of the poor and the earth.

CHAPTER 3: Sustainable Development or Sustaining Crises?

3.0 Introduction

The first attempt at coming up with a paradigm that juxtaposes and links development with environmental degradation started forty years ago in 1972, at the United Nations Conference on the Human Environment in Stockholm, Sweden. It was not surprising, eleven years later when the United Nations created the World Commission on Environment and Development (WCED) which was tasked under its chairman, the Norwegian Prime Minister Gro Harlem Brundtland, to map out a 'global agenda for change' (Drexhage and Murphy 2010:7). The report that the WCED produced four years later in 1987 not only gave the classic definition of the concept of sustainable development as 'development that meets the needs of the present generations without compromising the ability of the future generations to meet their own needs' (WCED 1987:43), but also redefined environmental crises from a developmental perspective.

Such a novel reformulation of the environmental degradation opened up discussion which culminated in the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil. Henceforth, subsequent conferences on environment and development as well as international negotiations on climate change have adopted and proposed the concept of sustainable development as a blueprint paragon for mitigating carbon emissions responsible for climate change and global warming. From 1992 to the present, carbon emissions have not gone down despite positive approbation of sustainable development as a solution to curbing global warming. If indeed it is true that we are in an ecological crisis as manifested through global warming and climate change then how can sustaining a crises through maintaining the same economic models under the auspices of sustainable development be expected to usher in change towards global warming mitigation?

In this Chapter, we will analyze how despite general sanguinity on the feasibility of sustainable development, real mitigation remains a far distant goal. The chapter seeks to probe whether sustainable development can really take into consideration the plight of the poor and of the earth or if it is mere rhetoric that actually sustains our current global

warming and climate change crises. In order to do this and in light of the last chapter, we will begin by looking at a brief history of the concept and term of sustainable development. Thereafter, we will occupy ourselves with the definitions of the concept of sustainable development, careful to expose and critique any ambiguity inherent in the term. Lastly, we will argue that any talk of sustainable development which does not take sustainable consumption into account, will not survive the test of time. Thus, we shall analyze the issue of consumption and in the process, discuss certain ethical blind spots that the current discourse on sustainable development as a paradigm not only of development but of combating climate change needs to address.

3.1. Why Sustainable Development?

It is a stark reality that our world is divided on the premises of development. We have the developed countries as opposed to the developing countries. These premises are largely at the core of the discussion on the curbing of global warming and climate change. The underlying proposition is that developed countries have acquired their present wealth and development through extensive carbon based economies responsible for a great deal of anthropogenic global warming. Now that anthropogenic global warming has been exposed and calls for mitigating carbon emissions have been made, developing countries cannot attain the current development already attained by the developed countries. If this is not enough, even the developed countries like the United States of America and Canada continue to freely engage in high carbon extensive economic processes. This would seem that developing countries are left with no option but to also engage in resource-intensive economic practices if they are to catch up. The situation is worsened by the broken promises of the developed countries to aid the developing countries in coming with less resource-intensive technology. Despite the challenges and dilemmas around the relationship between development and environmental problems, sustainable development occupies a pivotal role in climate change discourse.

3.1.1 COP 16 and COP 17

During COP 16 in Cancun Mexico in 2010, the issues surrounding sustainable development were addressed in minute detail. Due to the verbose document, one needs to read between the lines to grasp the implied concern for sustainable development. The Conference acknowledges that:

Addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyle, while ensuring a just transition of the workforce that creates decent work and quality jobs (COP16:10).

Despite the dubious message contained in this citation in which sustainable development is juxtaposed with high growth, it is interesting to note that the concept of sustainable development has been imbedded into the outcomes of international talks on climate change. The same is true for COP 17 in Durban in 2011 on the launch of the Green Climate Fund in which the guiding principle states that:

In the context of sustainable development, the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support for developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change (COP 17:58).

We have already seen the different responses to the establishment of the Green Climate Fund; however in this context it is important to note that one of the concerns is for developing countries to limit their greenhouse gas emissions. Can a climate fund really help developing countries, especially from Africa to meet their development goals? Would this not be a mechanism of sustaining the status quo between the wealth and development gap of the developed and developing countries? If it is clear and undisputed that developed countries contributed a larger share in our current global warming catastrophe which led to their economic development and industrialization, should

they not be the ones to cut and trim on their developmental paradigm to a viable pathway of development? The amorphous concept of sustainable development opens up discussion of these concerns. Before we delve into these questions we need to trace the development of this concept of sustainable development.

3.2 Historical Overview of Sustainable Development

According to Drexhage and Murphy, ‘The UN Conference on the Human Environment, held in Stockholm in 1972, was the first major international gathering to discuss sustainability at the global scale’ (Drexhage and Murphy 2010:7). Amongst the various outcomes from this conference was the commissioning in 1983 of the WCED to unearth the relation between economic development and environmental degradation (Drexhage and Murphy 2010:7). Four years later in 1987, the commission under the leadership of the Norwegian Prime Minister Gro Harlem Brundtland, produced a landmark report *Our Common Future*, also known as the Brundtland Report. The commission comprised of representatives from both developing and developed countries and the ensuing report reflects a balanced and challenging outlook and recommendations on the relationship between development and the environment. Besides coining the classic definition of sustainable development as ‘development that meets the needs of current generations without compromising the ability of future generations to meet their own needs’ (WCED 1987:45), the report ushered in novel ways of tackling the tension between development and the environment. We have to take into account that this was before the crises of anthropogenic global warming had been become so palpable to the general public.

3.2.1 Our Common Future

The title of the report, *Our Common Future*, highlights the notion of community and interdependence in sharing one common future and one common planet. The report elucidates and laments that, ‘The Earth is one but the world is not. We all depend on one biosphere for sustaining our lives. Yet each community, each country, strives for survival and prosperity with little regard for its impact on others’ (WCED 1987:27). Thus way back in 1987, the need to form a community of common purpose and values beyond national or

regional interest was already seen as indispensable to curb environmental degradation. It was already evident that development set on narrow myopic national interests would have dire effects not only on other nations' desire for development but on the natural environment. The report indicated that the global crisis was one; 'There are not separate crises; an environmental crisis, a development crisis, an energy crisis. They are all one' (WCED 1987:5). Closely linked to this point was the identification of poverty as the problem for sustainable development.

The report emphasizes that poverty affects efforts at sustainable development and at addressing environmental degradation. According to the report, 'Those who are poor and hungry will often destroy their immediate environment in order to survive; They will cut down forests; their livestock will overgraze grasslands; they will overuse marginal land; and in growing numbers they will crowd into congested cities' (WCED 1987:28). If we interpret this citation within our context of the effects of climate change which include flooding and droughts, one could see how the poor people not only contribute to environmental degradation but are also victims themselves. It is like people in painful shackles trying to break free but whose efforts only make the shackles tighter than before. Central to such an understanding of poverty in *Our Common Future* is the lucid point that, 'Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality' (WCED 1987:3). It is pertinent to take note that the vision of sustainable development can never be met without candidly addressing the problem of poverty. If indeed sustainable development is a solution and paradigm for curbing climate change, it cannot ignore the plight of the poor and of the earth.

3.2.2 The Earth Summit and Rio Declaration

A year after the Brundtland Report was published; the IPCC was formed in 1988 as noted in chapter 2, to provide a scientific assessment of climate change. In 1990, the IPCC produced its first assessment report and affirmed that, 'Since the industrial revolution the atmospheric concentrations of several greenhouse gases, i.e. carbon dioxide (CO₂) methane (CH₄),

chlorofluorocarbons (CFCs), nitrous oxide (N₂O), and tropospheric ozone (O₃), have been increasing primarily due to human activities' (Watson et al 1990:5). All these factors were influential in the consequent Earth Summit or the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. The Summit marked 20 years since the Stockholm Conference and mapped a global plan in its Rio Declaration which is known as Agenda 21 (Drexhage and Murphy 2010:8). The Rio Declaration produced 27 principles on sustainable development and we shall highlight few of these.

Principle 1 of the Rio Declaration reveals the anthropocentric slant of sustainable development when it asserts that, 'Human beings are at the centre of concerns of sustainable development. They are entitled to a healthy and productive life in harmony with nature' (UNCED1992). Even though this principle can be interpreted as radically anthropocentric it is also open to be interpreted in our context as calling for the recognition for the plight of the poor in addressing sustainable development. Equally important is principle 3 which states that, 'the right to development must be fulfilled as to equitably meet developmental and environmental needs of present and future generations' (UNCED 1992). How this can be equitably done still remains a bone of contention amongst developing and developed countries, especially in light of global warming and climate change caused by extensive fossil fuelled economic growth.

Concerning action towards attaining sustainable development, principle 7 of the Rio Declaration sheds some light in avowing that;

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to environmental degradation, States have common but differentiated responsibilities. The developing countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command (UNCED 1992).

The cooperation that the principle avows has not been really happened in the twenty years following the Conference. While it is spelt out that states have 'common but differentiated

contributions' to make towards curbing environmental degradation with developed countries taking the initiative, in reality this proposal has not been wholly honoured. The fact that Agenda 21 from the UNCED IN 1992 serves a mere working plan with no legally binding constraints on any country does not help the cause for effective sustainable development (Rao 2000:5). Thus, the relationship and tension between sustainable development and the ecology is at the centre of this chapter. Having looked briefly at the historical development of sustainable development it suffices now to analyze critically the definitions of sustainable development and how these affect the efforts at curbing global warming and climate change.

3.3 Understanding Sustainable Development

The term 'sustainable development' has survived for more than four decades and it is not surprising that the term has also become ambiguous and tenebrous. Pearce alludes to this fact and comments that 'the phrase "sustainable development" has staying power because most people want to believe in it' (Pearce 1995:287). Kirkby et agree with this point as well by observing that, 'The rapid acceptance of the ideal of sustainable development is not surprising since it is interpretable in so many different ways' (Kirkby et al 1995:2). Despite the fact that the term sustainable development invokes different interpretations, its classic definition was popularized by the Brundtland commission in *Our Common Future*. According to *Our Common Future*, sustainable development is 'development that meets the needs of the present generations without comprising the ability of future generations to meet their own needs' (WCED 1987:43). Over the years the definition has been scrutinized by many scholars but for our purposes we shall seek to interpret and critique the definition on the grounds of whether the plight of the poor and the ecosystem are taken into cognizance or assumed within such a definition.

3.3.1 Irreconcilable Terminology

While there is general optimism about sustainable development, Conradie highlights that the two terms 'sustainability' and 'development' are not compatible (Conradie 2008:37). According to Conradie, 'The noun "development" cannot simply be qualified with the

adjective “sustainable” (Conradie 2008:37). According to *The Oxford Advanced Learner’s Dictionary*, the verb ‘sustain’ has connotations of maintaining or upholding some reality or process (2005:1507). Thus, when we generally refer to something as sustainable we allude to the fact that it can be maintained within expected means without necessarily becoming less. However, if we look at the meaning of the noun ‘development’ one gets the notion of growth as *The Oxford Advanced Learner’s Dictionary* states that development refers to ‘the gradual growth of something so that it becomes more advanced, stronger etc...’(2005:400). Even though Conradie points out the incompatibility of these two terms, one can sympathize with the coining of ‘sustainable development’ as we have seen in our above historical review of how people grappled with coming up with a model of development that could address environmental concerns. It is perhaps the abstruse nature of the term which has resulted in the concept being less effective or manipulated.

3.3.2 Sustainable Development or Sustainable Crises?

The notion of sustainable development was coined just before we were totally aware of the catastrophic effects of carbon emissions and the resultant global warming and climate change. It is quite clear that we are in a crisis of global warming and climate change caused by anthropogenic emissions of carbon due to our extensive burning of fossil fuels. According to *Our Common Future*, development is at the center in that, ‘environmental challenges arise both from the lack of development and from unintended consequences of some forms of economic growth’ (WCED 1987:29). The understanding of sustainable development in which development is put at par with respecting the needs of future generations does not honour this call in reality since, as Boff and Hathaway write, ‘development always takes priority over sustainability’ (Hathaway and Boff 2009:40). If we are in our current global warming and climate change crisis due to excessive use of fossil fuels, which are the engines of our current economic growth, how can we continue to talk of sustainable development? Is not sustainable development merely sustaining our climate change and global warming crisis?

According to Conradie, the concept of sustainable development has become a value which ‘serves as an important corrective against expansionists notions of economic growth that

disregard the environmental impact of such economic activities’ (Conradie 2008:36). Drexhage and Murphy also cite the international influence of the concept of sustainable development when they write that, ‘Since the Brundtland report and the Rio Summit, sustainable development has transitioned from being an interesting yet at times contested ideal , to a concept that enjoys widespread endorsement by international institutions, governments, business, and civil society’ (Drexhage and Murphy 2010:9). On a similar note, Pearce (1995:287) alludes to the prominence of sustainable development amounting almost to a semi-religious concept. Pearce writes that sustainable development:

survives because it appears to build bridges between the demands of environmentalists and developers. It sounds comforting –human wellbeing and economic security forever, nor brought to heed by ecological collapse or social distress. It is an article of faith, and in that sense almost a religious idea, similar to justice, equality and freedom (Pearce 1995:287).

3.3.3 Interpreting Sustainable Development

There is a considerable amount of optimism that sustainable development can help to curb the climate change and global warming problems of our time. Since its initial popularization in the Brundtland Report, the concept of sustainable development has featured in literally all international COP meetings and the ensuing documentation. However, one needs to be wary of a gullible and uncritical acceptance of the concept of sustainable development in our present ecological crisis. When one critically traces the development of sustainable development over the years, it becomes apparent that the term no longer carries the precise goals and vision it had twenty years ago, and even before. In order to fully understand this we need to carry ourselves back in history and attempt to unearth the situation that led to the birth of the concept of sustainable development. This process is very important for our qualitative hermeneutical methodology to seek interpretation of a concept by attempting to understand the context or milieu that necessitated the birth of the concept

3.3.4 Limitations of the Economic Growth Model of Development

One of the vital insights that the Brundtland Report clarified through its commission was the realization that the old model of development characterized by unlimited growth was not viable (WCED 1987:8). While the report was published in 1987, the model of development gauged by economic growth still stubbornly perseveres to this day. According to Toolan, this model which he calls the social paradigm of free market industrial societies is characterized by devaluation of the intrinsic value of nature to the status of resources with the sole instrumental value of producing goods (Toolan 2001:62). This model creates a vicious circle of production in which, according to Conradie, ‘the classic question as to how to provide justly for everyone in the face of basic scarcity receives a simple answer on the paradigm: by producing more and more’ (Conradie 2008:34). However, the phenomena of global warming and climate change have shown that not only does the model of unfettered economic growth cause destruction to the natural environment but it also exacerbates carbon emissions through the unbridled use of fossil fuels for energy.

According to Kotz and McDonough, ‘neoliberal ideology is marked by glorification of individual choice, markets and private property; a view of the state as inherently an enemy of individual freedom and economic efficiency; and an extreme individualist conception of society’ (Kotz and McDonough 2010:94). This underlying ideology propelled and still powers current models of development in which economic growth is the unquestionable determinant and index for ascertaining development. What the Brundtland Report managed to expose was how this model of development was contributing to environmental degradation and was thus unsustainable.

Despite this insight, the concept of sustainable development has been watered down and issues concerning development models have been swallowed by rhetoric. Drexhage and Murphy rightly point out that, ‘Efforts to implement sustainable development have taken place in an environment of mainstream economic planning and market-based investment, in a manner that will not disrupt overall growth’ (Drexhage and Murphy 2010:13). This could lead to years of discussion but without real implementation or mitigation of carbon emissions, since the root problems are not being honestly and boldly tackled.

Murove succinctly writes that, 'In neo-liberal capitalism, relationships are motivated by interest or profit. The free market is seen as a sufficient mechanism to guarantee the well-being of society' (Murove 2003:574). Within the neo-liberal paradigm, profit takes a pivotal role as progress is measured in terms of economic growth. Not only are the poor, the first victims of such a system but the planet suffers as resources are exhausted, the atmosphere is polluted and species become extinct due either to climate change or the invasion of humanity. Wielenga laments this reality when he writes that, 'today's global economy with its never ending drive for capital accumulation as the motor of unlimited growth has for the first time created ecological problems on a global scale which are threatening to engulf the planet and humanity as a whole, and the poor first of all' (Wielenga 1995:97). Ramose points out that the making of profit is not intrinsically evil but rather if this is done in way that maintains the inequalities between the rich and poor in a dehumanizing way then it becomes unethical (Ramose 2003:638). In order to understand this we shall analyze how the model of development based on economic growth is unsustainable and detrimental to the vulnerable poor and our ecosystem.

3.3.5 The Market and Growth

According to Boff, we are in an ecological crisis because of our belief in the myth of progress which defines development as economic growth and that growth is limitless (Boff 1997:65). The theory which governs this process is known as the neoclassical economic theory. Besides being characterized by the sheer relentless quest for maximization of profits, the neoclassical economic theory hails the market system as capable of bringing in the wellbeing of the society (Hussein 2004:5). In dealing with the natural environment, the economy is assumed to rely on the environment in three ways; extraction of non-renewable and renewable resources, disposal of wastes and the use of environmental amenities such as game watching and hiking (Hussein 2004:3). Within such an anthropocentric view, the natural world has no intrinsic value and is only as valuable as it satisfies the consumer preferences, who in most cases are the privileged few from affluent nations. The consequences of such a model are bemoaned by Hossay when he writes that, 'We have surrendered our fate to the market; and the market completely ignores the physical realities

that threaten our existence. Our rate of consumption and waste is simply unsustainable' (Hossay 2006:119). This was the same cry that the Brundtland Report made.

The problem with seeing development only in economic terms, oblivious to the ecological and social realities, is that any attempts at finding the solutions to our current problems posed by climate change and global warming would also be biased in thinking that more economic development can help us in this task. In 2006, a 700 page report commonly known as the *Stern Report* was published in which global warming and climate change were presented as examples of 'market failure'. This came as a shock to many economists who had always believed in the 'invisible hand' of capitalism and capitalism able to address any shortcomings in the economic process. The report clearly states that, 'climate change is a result of the externality associated with greenhouse gas emissions – it entails costs that are not paid for by those who create the emissions' (Stern 2008:25). Whereas some of those responsible for the carbon emissions were busy downplaying the scientific credibility of global warming, the report does not waste time in pithily stating that:

Those who produce greenhouse-gas emissions are bringing about climate change, thereby imposing costs on the world and on future generations, but they do not face directly, neither via markets nor in other ways, the full consequences of the cost of their actions....human induced climate change is an externality, one that is not "corrected" through any institution or market, unless policy intervenes (Stern 2008:27).

It is due to this externality that those who produce the greatest bulk of greenhouse gas emissions can get away with it since the effects are felt largely by those who do not emit even a small percentage of their greenhouse gas emissions. According to this interpretation it becomes apparent that the model of environment that is buttressed by economic growth and fortified by the market forces, to the detriment of our natural environment, is certainly unsustainable.

3.3.6. Development beyond GNP

According to Hathaway and Boff, the weakness with viewing development in economic terms is that development is measured in terms of the GNP, the Gross National Product. Hossay sheds light concerning GNP by writing that, 'GNP measures the total value of all

economic transactions in a country; and the rules of neoclassical economic ideology say that continued expansion of GNP is necessary to ensure a healthy economy' (Hossay 2006:121). As nations embark in competitive regimes on the GNP index it means that less or mitigated concern is given to the effects on the environment and the poor who suffer from both unjust economic transactions and climate changes. Even though the argument within the neoclassic and neoliberal economic model of development says that continuing with the trajectory of economic development would ensure demands for clean environment and lessen pollution (Hussein 2004:230), the fate of poor present and future generations as well as disappearing fauna and flora would have been already decided and irremediable. To base hopes on the neoliberal economic model of development is suicidal as the recent financial crisis has shown. Nussbaum et al highlight such skepticism when they write that:

The economic crisis which started in late 2008 revealed the underbelly of unbridled market economics. The engine of market economics driven by the globalized western economics has brought many benefits but it has also brought the world to the precipice of an unsustainable future. Market capitalism in an increasingly interconnected world works only when it is counterbalanced by the forces that make a society sustainable and humane. When reason excludes relationships, it becomes blind (Nussbaum et al 2010:7).

What becomes clearer is that the concept of sustainable development as emanating from the Brundtland Report sought to address a certain understanding of development which ignored the plight of the environment in its trajectory towards economic progress. Driven by neoliberal ideologies of unbridled and unfettered quest for profits, such a model of development is also responsible for our high use of fossil fuel in transportation and industries. Whilst the Brundtland report recommended bringing development to account for environmental concerns some questions remain unanswered to this day. Can sustainable development really help curb or mitigate climate change if it upholds the economic growth model of environment? What is the underlying priority in sustainable development; economy, development or our biosphere? These are some of the questions at the centre of the dilemma of sustainability.

3.4 Rio+20 Summit

From the 20th -22nd June 2012, Rio de Janeiro hosted the United Nations Conference on Sustainable Development, twenty years after its first similar conference in the same city. Thus, the conference was also known as Rio+20 summit. During this conference the three pillars of sustainability were further endorsed in the opening statement of its report entitled *The Future We Want*. The statement highlights the renewal of commitment towards ‘sustainable development and to ensuring the promotion of an economically, socially and environmentally sustainable future for our planet and for present and future generations’ (UNCSD 2012:1). Positioning themselves within the tradition of *Our Common Future*, the delegates at the conference stressed the need for poverty eradication as necessary for sustainable development (UNCSD 2012:4). However, the conference also pinpoints two vital elements of the sustainability debate: the political will towards sustainable development and narrowing the development gap.

3.4.1. Political Will towards Sustainable Development

It is one thing to agree to take action on sustainable development or mitigation of climate change and another to actually implement such a resolution. The Brundtland report understood this well way back in 1987 and cautioned that, ‘sustainable development must rest on political will’ (WCED1987:9). Pearce highlights the need for political will for the implementation of sustainable development when he comments that, ‘the transition to sustainable development will be an intensely political process because it will create a new set of gainers and losers in society’ (Pearce 1995:288). Thus, when one juxtaposes the documentation from the last twenty years on the mitigation of global warming and the need for sustainable development alongside real action taken towards these goals the comparison is superfluous. It is not surprising, therefore, that the Rio+20 summit vehemently states that; ‘we are determined to reinvigorate political will and to raise the level of commitment by the international community to move the sustainable development ahead’ (UNCSD 2012:18). This point leads us to the second thorny issue concerning sustainable development and the mitigation of global warming and climate change.

3.4.2. Narrowing the Development Gap

It is no secret that the gap between the so called developed and developing countries came as a result of a form of high industrialization characterized by the use of fossil fuels which resulted in the extensive greenhouse gas emissions responsible for our global warming and climate change crises. This is why according to the Kyoto Protocol of 1997, 37 industrialized countries and the European Union under the Annex 1 countries were legally required to reduce their carbon emissions. These are the countries that evidently had benefited and still benefit from their historical emissions of carbon. COP 16 (2010) in Cancun, Mexico, also highlighted that developed countries ought to show leadership by taking ambitious carbon reductions and financial resources to developing countries (COP16:2a). It is in this light that Rio+20 echoes this concern by stating that, ‘we also recognize the need to accelerate the progress in closing development gaps between developed and developing countries, and to seize and create opportunities to achieve sustainable development through economic growth and diversification, social development and environmental protection’ (UNCSD 2012:19). This process is easier said than done and together with the lack of political will from some of the developed countries encapsulates the gist of the economic dilemma of sustainability.

3.5. Dilemma of Sustainability

We have already reiterated how our current climate change and global warming crises are a result of environmental degradation caused by developmental patterns that do not consider the impacts of extensive use of fossil fuels and the consequent greenhouse gas emissions on our ecosystem. According to the Brundtland Report, ‘Much of the improvement in the past has been based on the use of increasing amount of raw materials, energy, chemicals, and synthetics and on the creation of pollution that is not adequately accounted for in figuring the costs of production processes’(WCED1987:28). We have also seen how the GNP does not account for the impacts of global warming and climate change on our ecosystem and the vulnerable poor. How then can we tackle the issue of sustainability in a way that addresses the plight of our natural ecosystem and the poor and vulnerable?

Daly writes clearly that capitalism is not entirely to blame for the model of growth based on economic progress. He writes that, 'Economic growth is currently the major goal of both capitalist and socialist countries and, of course, of Third World countries' (Daly 1995:333). This insight draws us closer to the dilemma of sustainability. Having established that developing countries acquired their present economically superior statuses due to a flawed and dangerous paradigm of rapid economic growth oblivious to ecological consequences; can developing countries be allowed to also follow a similar development path out of their poverty? If they are not allowed and yet the developed countries do not extensively cut their carbon emissions, is this not a way of maintaining the status quo of developed countries as superior and developing countries as inferior in the name of sustainable development? Would this not just sustain the present global warming and climate change crises or even intensify it?

3.5.1. The Priorities of Sustainable Development

Boff is adamant in maintaining that the concept of sustainable development is an oxymoron (1997:67). According to Boff, 'The expression "sustainable development" masks the modern paradigm operative in both capitalism and socialism, even of the green sort, always with its all-devouring logic' (Boff 1997:67). Kirkby et al interpret the paradigm of sustainable development in a similar light and write that sustainable development has become 'anti-developmental' and is used 'to pursue a status quo development framework that was essentially against the South. The North turned "green" and the South was turned away' (Kirkby et al 1995:10). The belief in Boff's statement above is that sustainable development is mere rhetoric concealing the continued propagation of a development model which does not really address the concerns of our ecological system and the poor in the light of global warming and climate change. At the same time the accusation by Kirkby et al above as well, suggests a political manipulation of sustainable development in which the development gap between the developed and developing countries is maintained, and even widened, at all costs. These points lead us to probe the priorities of sustainable development.

Rolston manages to unearth how the question of priorities can shed light into our understanding of the dilemma surrounding sustainable development. He begins by noting that on one hand proponents of sustainable development hold that the concept is adequately flexible and allows ‘peoples and nations the freedom and responsibility of self-development’ (Rolston 2010:567). On the other hand, as Rolston highlights, that critics of sustainable development view the term as merely ‘an umbrella concept that requires little but superficial agreement, bringing a constant illusion of consensus, glossing over deeper problems with a rhetorically engaging word’ (Rolston 2010:567). Having divided the views into two poles, Rolston then identifies the assumptions behind the prioritization of either the economy or the environment in sustainable development.

3.5.2. Prioritizing the Economy

We can interpret the prioritization of the economy in two ways. The first is what was happening until the Brundtland Report in which it was taken for granted that developmental issues did not have direct moral responsibility towards the environment. This is the kind of development criticized by the Brundtland Report (WCED 1987:28). The message was clearer. The current paradigm of development was unsustainable and there was a need for change. However, the solution that came from such realization maintained the fundamental view of economic growth. Within this second way of prioritizing of the economy, ‘the underlying conviction is that the trajectory of the industrial, technological, commercial world is generally right –only the developers, in their enthusiasms, have hitherto failed to recognize environment constraints’ (Rolston 2010:567). This is the paradigm of sustainable development that Boff criticizes that, ‘it never gets away from its economic origins, namely rising productivity, accumulation, and technological innovation’ (Boff 1997:66). This seems to be the developmental paradigm that both the developed and developing countries actually practice despite the talk about climate change mitigation.

3.5.2.1 Ethical Implications

According to Rolston, such a stance in which the economy has the priority of sustainable development validates any action as long as ‘the continuing development of the economy is not jeopardized thereby’ (Rolston2010:567). This view is so subtle and can be easily

mistaken as move genuinely inspired by environmental concern. It evokes an image of the developed countries battling with the developing countries for the same kind of economic development. Faced with the ethical need to cut greenhouse gas emissions as to stop global warming and climate change, developed countries delay mitigation and make empty promises about assisting developing countries with adaptation. Developing countries also demand that they embark on economic development and eradicate poverty. The paradox with this paradigm, which Daly refers to as '*growthmania*', is that economic growth is seen as a solution to poverty (Daly 1995:33) and yet there is no absolute guarantee that in the long run the poor will really benefit from such growth driven by the insatiable quest for profit.

The Brundtland Report has evidence of this view when commenting about sustainable development it says that, 'Far from requiring the cessation of economic growth, it recognizes that the problems of poverty and underdevelopment cannot be solved unless we have a new era of growth in which developing countries play a large role and reap large benefits' (WCED 1987:40). At what costs to the ecosystem can developing countries reap these 'large benefits'? No amount of funding for adaptation can compensate Mother Nature for endangered species and the poor people suffering the effects of climate change in flooded or drought stricken regions of the world where food and water security is not guaranteed.

3.5.3 Prioritizing the Environment

Taking environmental concern as the priority in sustainable development attempts to readdress the imbalanced approaches to development that led to our global warming and climate change crises. Those who genuinely prioritize the environment in sustainable development even proceed to bemoan the fact that the definition of sustainable development is anthropocentric and focuses 'on the satisfaction of human needs, rather than, for example on the protection of the environment in general' (Kirkby et al 1995:2). The argument is that we cannot continue to prioritize the economy at the expense of the environment since, as our current ecological crises have shown, 'The economy grows in physical scale, but the

ecosystem does not' (Daly 1995:331). This stance accentuates the exigency for the mitigation of global warming and climate change more than mere adaptation.

3.5.3.1. Ethical Implications

According to Rolston, prioritizing the environment in sustainable development ensures that, 'the economy must be kept within an environmental orbit. One ought to conserve nature, the ground matrix of life. Development is desired, but even more, society must learn to live within the carrying capacity of its landscapes' (Rolston 2010:567). This is a genuine concern; however if generalized it can actually cover up serious inconsistencies that need to be addressed. Sen, a renowned economist and scholar of development asserts that, 'Development requires the removal of major sources of unfreedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or inactivity of repressive states' (Sen 1999:3). Grubb et al capture the fear that developing countries had in the discourse on global warming, climate change and sustainable development. The consternation was 'that environmental issues would intrude in the form of new constraints on their development, and new conditions on aid received from rich countries: the intrusion of Northern concerns on the Southern priorities of development and poverty alleviation' (Grubb et al 1995:26). The concern remains that sustainable development maintains the development gap between the developed and developing countries by restricting the economic development of latter countries in the name of environmental concern. If this is true, then the poor will continue to suffer as they will be no hope for their dire situation and global warming will not really be mitigated since the chief perpetrators, the developed countries, the affluent nations, would not have radically changed their lifestyles.

3.6 An Integrated Approach

According to Drexhage and Murphy, 'The international discussions on sustainable development are permeated by lack of trust between developed and developing countries. This is underpinned by developed countries not meeting their financial and technology transfer commitments to developing countries' (Drexhage and Murphy 2010:18). On one

hand, when the economy is prioritized over environmental concern in sustainable development, any call towards curbing carbon emissions is easily diverted towards adaptation. However, as the above quote by Drexhage and Murphy spells out, developed countries have not lived up to their commitments to help the developing countries adapt to climate change and meet their development needs. On the other hand, when the environment is prioritized over economic development the call shifts towards mitigation of carbon emissions in ways that disadvantage developing countries, as the demands of the United States of America for China and India to cut their emissions have shown in Chapter 2. In both cases, the ultimate ethical goal of reducing global warming and climate change is not met. COP 16 in Cancun Mexico reiterated that we do not have the leisure of choosing between adaptation to climate change and mitigation of carbon emission as priorities because, ‘adaptation must be addressed with the same priority as mitigation’ (COP16:2b). It is for this reason that a paradigm of sustainable development that would eventually lead to both mitigation and adaptation to climate change, at the same time embracing economic development and environmental concern, is imperative.

COP 16 further reaffirmed that, ‘social and economic development and poverty eradication are the first and overriding priorities of developing country parties, and that the share of global emissions originating in developing countries will grow to meet their social and development needs’ (16:35b). On one hand it would be unfair for developed countries who bask in the glory of development attained through extensive fossil fuel usage to stop the underdeveloped countries from following a similar path. On the other hand developing countries cannot merely focus on economic development without considering the realities of global warming and climate change. How can developing countries engage in sustainable economic development in ways that do not augment global warming and climate change?

3.6.1. Ethical Implications

Inasmuch as we cannot deny the fact that our world can be polarized in terms of the North and South, developed and developing, we have learnt that our interdependence cuts across these distinctions. This view is envisaged in the wisdom of African Ethics in the concept of *Ubuntu* as Murove expounds that:

The African concept of Ubuntu is based on the idea that human beings are originally beings in relationships. The dominant understanding here is that as human beings we depend on other human beings for our flourishing. It is on the basis of the existential reality of our dependence and interdependence with each other that we recognize each other as mutually belonging. Our humanness is thus dovetailed with the assertion that being human is our existential precondition to our bondedness with others (Murove 2011:123).

This wisdom and bedrock of African Ethics of relatedness is not and cannot be exclusive to African peoples only as Nussbaum et al write that, we hope that Africa's own song of humanity will sound more loudly, not only in her continent, but in the village of the world' (Nussbaum et al 2010:xxxvi). As such the solution proposed by Hussein to the question of how developing countries can engage in sustainable development can be better understood. This requires that the developed countries realize that they are related in a deeply fundamental way with developing countries and allow developing countries to meet their developmental needs. Hussein writes:

By cutting back sharply on their emissions of pollutants such as CFCs and CO₂, the advanced industrial countries would make it possible for the developing countries to increase their relatively low levels of emissions to further their economic development, without seriously aggravating the atmospheric problems such emissions trigger (Hussein 2004:137).

When one considers the statistics revealing that, for example, Africa emits about one sixteenth of CO₂ annually emitted by the United States and that, 'just one British power station Drax B in Yorkshire, emits more CO₂ into the atmosphere than the combined carbon emissions of Kenya, Malawi, Mozambique, Tanzania, Uganda and Zambia (Northcott 2007:49), then the moral obligation is certainly on developed countries to cut their emissions so that other countries can also be allowed their right to development. In a similar vein, developing countries emitting a lot of carbon like India, China and even South Africa would also consider ways of cutting down their emissions, sensitive to other developing countries who want to pursue their development as well. However, if developed countries especially those that do not honour the Kyoto Protocol like the United States of America,

Canada, Japan and Russia, continue to relentlessly emit more carbon together with developing countries than our ecosystem and the vulnerable poor will suffer the immediate effects of climate change-related disasters.. Future generations will also bear the brunt of present selfish interests. However, for this integrated approach of sustainability to bear the desired and exigent results, two pertinent and mutually related issues need to be tackled. These are issues concerning consumption and the plight of future generations.

3.7 Sustainable Consumption

The issue of consumption narrows in the whole ethical discourse from the national and regional level of developed and developing countries to personal ethical obligation. We cannot feasibly and effectively discuss sustainable development without addressing our patterns of consumption. The notion of sustainable consumption was first introduced in international forums, according to Jackson (2006:3), at the Rio Earth Summit where it was argued that, ‘the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries’. The relationship between consumption and greenhouse gas emissions is reciprocally linked to unfair distribution of wealth as well the destruction the ecosystem as Boff and Hathaway point out that:

On the one hand, those living at the highest end of income scale inflict the majority of ecological damage through high consumption and through the generation of large amounts of waste and pollution. On the other hand, those living in extreme poverty also contribute to the damage of ecosystems as they are pushed further and further to the margins (Hathaway and Boff 2009:30).

What places consumption at the heart of the ethics of sustainability and the global warming and climate change discourse is the reality not only of dwindling natural resources that are needed to support such consumption but the way in which such consumption is not equally distributed across the world.

3.7.1 The Ethics of Consumption

Generally the term ‘consumption’ carries certain negative connotations but in reality consumption is a human imperative for livelihood (Conradie 2008:44). It is not the act itself

that needs to be addressed but the attitudes, inequalities and patterns of consumption that demand an ethical response. Dauvergne writes that, ‘...the North, with about 15 percent of the global population, accounts for about three quarters of global consumption expenditure....The United States alone, with a mere 5 per cent of the global population, consumes 30 per cent of the world’s resources’ (Dauvergne 2008:384).It is this imbalance in consumption which demands that development takes an economic and income orientated approach in industrialized countries. It becomes an ethical imperative for the citizens of the industrialized countries to reduce their consumption in a way that allows the underfeeding masses from the Third World countries to consume the necessary food and goods. However caution needs to be taken since this notion can lead to confusion. Miller’s citation below shows how such an idea can be ambiguously interpreted.

According to Miller ‘We live in a time when most human suffering is the result of the lack of goods. What most humanity desperately needs is more consumption, more pharmaceuticals. More housing, more transport, more books, more computers’ (Miller 2006:234). What Miller does not succinctly elaborate is for whom we must produce and consume more of all the above mentioned goods. There is a neo-classic economic undertone inherent in such belief that more economic production and consumption will reduce poverty for all. However the neo-liberal system with its marketing strategies makes this impossible.

The advertising world, with its drive for profit, aims at selling their products by hook or crook. Thus, behind the facade of consumption is the lie that ‘you are what you consume’ (Elgrin 2006:154). While it is true that human identity goes beyond any accumulated externals it is not easy in our consumerist culture to escape from the bombardments of the media. Conradie shifts the consumerist culture from the North and posits the challenge such a culture brings:

The cultural orientation of consumption is not restricted to the consumer class. It has spread rapidly from North America to Europe and the Far East and is now a dominant cultural force in almost every country. The lifestyle of the consumer class, together with the power of the media and a bombardment of advertisements, have ensured that consumerism now describes the hopes and aspirations of the poor and the lower middle class everywhere in the world (Conradie 2008:47).

This is the effect of globalization which occasionally mars the distinctions of developed and developing countries as ideological boundaries are brought down and similar ‘demands’ and identities are created through advertisements. The ethics of consumption has to deal, thus, with the question of how to ensure that the world’s affluent do consume their fair share of goods in ways that do not exacerbate the already under-consumption of the poor and damage our natural ecosystems thereby contributing to global warming and climate change.

3.8 Subsistent Development

If indeed the term sustainable development is an oxymoron (Boff 1997:67), irreconcilable terminology (Conradie 2008:37) and a slow process taking generations (Pearce 1995:288) then maybe it is time we engaged an alternative model of development. Hathaway and Boff elucidate the necessity of an alternative model of development built on subsistence. The duo write that, ‘One key problem is that Western-style development, by relying on distorted indicators like GDP, fails to value traditional subsistence economics—economics oriented toward production for immediate, local consumption’ (Hathaway and Boff 2009:36). Murove also argues that, ‘traditional African economic behaviour, with its emphasis on subsistence instead of endless acquisition and accumulation can be a panacea to the current capitalist induced over-accumulation and environmental crisis’ (Murove 2012:4). Central to this belief is that globalization and the forms of development based on neo-classical theories of unbridled growth ‘exacerbates the ecological inequality within and between countries and marginalizes women, indigenous peoples and the poor....destroying historical patterns of trust, cooperation, and knowledge so essential to ecological and social balance’ (Dauvergne 2008:373). A paradigm of development based on subsistence is thus meant to counter over-consumption and over-accumulation.

Daly highlights the paradox of the model of environment driven and measured by economic growth in which ‘Economic growth is held to be the cure for poverty, unemployment, debt repayment, inflation, balance of payment deficit, pollution, depletion, the population explosion, crime, divorce and drug addiction. In short, economic growth is both the panacea, the summum bonum.’ (1995:333). This can be juxtaposed to Murove’s elucidation

of the traditional African subsistent development in which:

The principle of sufficiency was thus premised on the economic practice of subsistence. This African traditional economic practice of subsistence inhibited the spirit of overaccumulation as it was deemed a vitiate against communal prosperity and harmony. Here the main presumption is that an authentic existence must be premised on harmony within the community and the natural world (Murove 2012:14).

The concept of subsistent development not only seeks to curb carbon emissions emitted due to massive transportation of goods but also empowers local communities to meet their necessary and basic needs. Hathaway and Boff argue that, 'Local, unprocessed foods grown without chemical inputs are almost always healthier than Western diets, clothing and housing produced with natural materials are often better suited to local climates and are almost always more affordable' (Hathaway and Boff 2009:36). Makondo also highlights the subsistent development of the Shona people of Zimbabwe who 'long before their exposure to science as presented by the colonizing system since 1890 had devised their control and balance systems commensurate to the things that were within their reach' (Makondo 2012:350). This is in sharp contrast to the neo-classical economic model of development where natural resources are exploited and plundered to the satisfaction and consumption of a smaller percentage in the industrialized countries whereas the local inhabitants of the developing countries often fail to consume these goods.

3.9 Conclusion

In this chapter we have seen that we cannot effectively discuss the mitigation of global warming and adaptation to climate change without addressing the issue of sustainable development. However, an historical view from the last twenty years reveals that the concept has not really achieved what it initially was meant to achieve. We have critiqued the neo-classical economic model of development with its bias towards unbridled growth and reliance on GDP as a measure of development. We managed to pinpoint two important issues in the international discussion on climate change and development namely the narrowing of the development gap and the political will of the developed countries in taking the initiative towards the curbing of global greenhouse emissions. Whilst we have attempted to highlight some of the issues concerning the narrowing of the gap of development through

reducing consumption patterns and subsistence development we did not tackle the issue of the political will of the developed countries. This is a vital issue and our analysis of the economical dilemma of sustainability would be incomplete if we do not discuss this exigent matter. This discussion shall lead us to the next chapter.

CHAPTER 4: Sustainability and the Ecological Debt

4.0 Introduction

In the last chapter we saw how it is necessary to highlight issues of sustainable development in the discussion of curbing global warming and climate change. We also saw how economical sustainability is a complex issue that touches many facets of the relationship between the developed and developing countries. Chief among these facets include the narrowing of the development gap as well as the political will of the developed countries to cut their carbon emission as well as assist developing countries with adaptation. As the world grapples with the devastating threat and realities of climate change and global warming, the link between development and ecology cannot be undermined. This is the link that sheds some light to a philosophical hermeneutic notion of prejudgment or biases that the different negotiators bring to the table for discussion. No discussion is done from a blank or objective background or predisposition; all participants come with their interests and from specific contexts, especially in matters relating to development. As we have done in the last chapter, we shall continue to unearth some of these issues that underlie the discussions on the search for solutions to curbing climate change and global warming. The belief is that as we continue to do so, we will begin to map out how African ethics can enter into this dialogue in a way that not only tackles the symptoms but the root problems underlying the current global warming, climate change discourse and economic sustainability.

In this brief chapter we will begin by tracing some of the logical foundations behind the notion of ecological debt from the United Nations Framework Convention on Climate Change (UNFCCC), and other COP meetings. In response to the question of whether claims of ecological debt are justified we shall analyze the notion of political will that developed countries have always promised but not fulfilled in mitigation of and adaptation to the effects of climate change. Before we delve into the concept of ecological debt we will begin by describing what a debt is in general and how it affects the relationship between developing and developed countries.

Thereafter, we will analyze in detail the concept of ecological debt, its history and characteristics as well as justification from some scholars. Lastly, through the African concept of magnanimity or '*mwoyo murefu*', 'as elaborated by Murove (2011:141), we shall attempt to relate the notion of ecological debt with African ethics. Is the demand and compensation for ecological reparation ethical? Can we really talk of sustainability without ecological reparation? These questions shall stimulate this chapter leading us to the definitive section of the contribution of African ethics in the current global warming and climate change discourse.

4.1 A Promise Unfulfilled

When the United Nations Framework Convention on Climate Change (UNFCCC) was formed in 1992 it had a clear set of principles and agenda. The exigency of curbing global warming and climate change was amongst its chief priorities. This was modeled around its first principle which states that; 'the developed country Parties should take the lead in combating climate change and the adverse effects thereof' (UNFCCC: principle 1). This principle was in line with two important convictions. The first was informed by scientific evidence which showed that past and current carbon emissions come from the industrialized countries (COP 16:35). However, despite all these calls and proclamations, the political will from the industrialized countries has been evidenced only in paper and not in practice.

The Brundtland Report highlighted the need for this assurance from developed countries by explicitly stating that 'meeting essential needs requires not only a new era of economic growth for nations in which the majority are poor, but an assurance that those poor get their fair share of the resources required to sustain that growth' (WCED 1987:8). Once again the assurance had been chicanery; unfulfilled promises as industrialized countries have continued on their economic development trajectory at the same time whilst creating unrealistic or fictional climate funds for the developing countries.

The refusal of the United States to ratify the Kyoto Protocol as well as the pulling out by Canada and the refusal by Japan to extend its commitments beyond Kyoto complicate the discourse on curbing global warming and climate change. All these three countries are amongst the world's large carbon emitters. These unethical realities of unfulfilled promises and lack of political will have contributed to the development of the concept of an ecological debt where developing countries have been demanding reparation from the developed countries for their carbon emissions.

4.2 The notion of debt

Before we delve into the notion of an ecological debt it suffices to try and understand what debt is in general. According to the *Oxford Advanced Learner's Dictionary*, debt understood in financial terms refers to 'the situation of owing money, especially when you cannot pay' (1997:376). The developing countries pay enormous debts owed mainly to the Bretton Woods institutions, the International Monetary Fund (IMF) and the World Bank. According to Millet and Toussaint, debt works to cripple the development of developing countries since all efforts are directed towards the settling of eternal debts (Millet and Toussaint 2004:16). According to Millet and Toussaint:

For the last twenty years, despite their innumerable natural and human resources, the Third World countries have been milked dry. The repayment of a debt which has swollen to colossal proportions prevents the populations from satisfying their most basic needs. The debt has become a subtle mechanism of domination and a new method of colonisation, hindering any sustainable development in the South (Millet and Toussaint 2004: ix).

The Brundtland Report was also skeptical and critical of the mechanisms of debt concerning the development of Africa by pointing out that the roots of Africa's problem 'extend also to a global economic system that takes more out of a poor continent than it puts in (WCED 1987:6). Bujo also remarks that the IMF is concerned solely with the reimbursement of any debts or owed loans especially through exports from the owing country (Bujo 2009:405). The poor are usually the victims of such debts settled through increased exports since,

‘Export prices are usually low, profits go to many intermediaries, and so the poor become poorer, working hard to repay national debts without the compensation of a living wage’ (Bujo2009:405). Those who really suffer are the poor women and children who struggle to provide for their families and this calls for the activities of the IMF, according to Bujo, to be guided by ethical criteria other than mere debt repayment (Bujo 2009:405). However, there are others who think that it is high time the developed countries also meet their ecological debt which they owe to developing countries.

4.3 Ecological Debt

Ecological debt is understood as ‘the debt accumulated by northern, industrial countries toward third world countries on account of resource plundering, environmental damages and the free occupation of environmental space to deposit wastes from the industrial countries (such as greenhouse gases)’ (Heinrich Boll Foundation 2002). According to Geominne and Paredis (2008:3), the notion of ecological debt has many definitions which basically highlight compensation for the pollution and damage caused as a result of the extraction of resources from developing countries to the industrialized countries. In the same light Simms (2005: viii) explains how the ecological debt works: ‘If you take more than your fair share of a finite natural resource you run up an ecological debt. If you have a lifestyle that pushes an ecosystem beyond its ability to renew itself, you run up an ecological debt’. He goes on to write that:

Global warming is probably the clearest example of an ecological debt. Parts of the world like Britain and the United States became very rich by burning a disproportionate amount of our finite inheritance of fossil fuels, an act which has triggered climate change. Other parts of the world like Bangladesh, the South Pacific Islands and sub Saharan Africa are set to suffer excessively from global warming (Simms 2005:viii).

Northcott justifies the demand for an ecological debt based on the discrepancy of the statistics on the average usage of carbon between the South and the North. According to Northcott, the ‘average use of carbon by poorer countries in the South is around 0.2 tonnes per head, compared to an average for Northern consumers of around 12 tonnes per head’ (Northcott 2007:85). He points out that developed countries have benefitted financially by

delaying action to curb emissions while developing countries have incurred costs due to that delay by the North (Northcott 2007:85). The rich and affluent basically exploit the poor people's ecological space to maintain their lavished lifestyles and continue to emit more carbon necessitating further global warming and climate change. As if this is not enough the poor and the ecosystem are the victims of settling debts owed to the developed countries. The demand for an ecological debt is thus a move towards toppling such a skewed system. It is an absolute paradigm shift.

4.3.1 The Birth of the Ecological Debt

The concept of ecological debt did not emerge *ex nihilo* but has strong roots in parallel forum meetings held during the famous 1992 UNCED conference in Rio de Janeiro (Goeminne and Paredis 2008:1). This parallel meeting produced a treaty known as Debt Treaty (DT) in which its first principle stated that, 'Considering that the foreign debt is the most recent mechanism of the exploitation of Southern peoples and the environment by the North, thus adding an extra burden to the historical, resource and cultural debt the treaty pledged to, 'work for the recognition and compensation of the planetary ecological debt of the North with respect to the South' (DT 1992: paragraph 16). Since then the concept has developed within the NGO community backed by the scientific notion of ecological footprint (Goeminne and Paredis 2008:2). The fact that the concept of ecological debt was born from a parallel forum points out to the mistrust in the official UNCED talks. This also sends the message that ecological debt is not what the leading negotiators of the UNCED would propose since this concept challenges their economic interests and demands that they share their wealth with developing nations.

4.3.2 Characteristics of the Ecological Debt

Goeminne and Paredis highlight three main characteristics of the ecological debt. These three characteristics are 'uniting of comparable experiences of Southern peoples; bringing a historical perspective to the sustainability debate; opening a new perspective on debtor-creditor relations in contemporary international politics' (Goeminne and Paredis

2008:3). According to the first characteristic, the common experiences of the developing countries concerning mine exploitations, the dumping of wastes and protest against shrimp farming all have the common premise that, ‘multinational companies (and often conspiring governments) leave a ravaged land behind, with all its consequences for the local population’ (Goeminne and Paredis 2008:3). The demand for ecological debt offers a forum through which the concerned peoples of Thailand, Nigeria, South Africa, Peru, Ecuador, Philippines and other developing countries, can voice their pleas for reparation and sustenance.

4.3.2.1 Historical sensitivity

We have seen how despite acknowledging historical responsibility, most developed countries have not allowed this to manifest in tangible action towards global warming and climate change mitigation and adaptation. Thus, setting the argument of ecological debt on historical grounds seems inevitable for developing countries. Goeminne and Paredis capture this point succinctly when they write that:

It is not a coincidence that developing countries try to push this perspective: historically developing countries are responsible for a minor part of global emissions, but it is becoming clear that they will suffer most from climate change impacts. Ecological debt draws attention to how the present situation has grown out of the –often violent and unjust –past. It points at the collective responsibility of industrialised countries for past and ongoing violations of the right to a clean and safe environment in other countries, in particular in the South. This historical perspective thus adds a particular ethical dimension to sustainable development, because it corresponds with a reality being faced by human beings in oppressed situations (Goeminne and Paredis 2008:4).

If developed countries have become rich and are rich due to their carbon-extensive development and use of ecological space then it will be unfair for them to block the development of Third World countries on the pretext of environmental conservation. The argument is that the developed countries should actually compensate the developing countries and allow them to meet their development needs. The situation is worsened by the fact that developing countries have to pay heavy debts to the North thereby exacerbating their ecological conditions and the livelihood of the poor.

However, as Bujo (2009:408) writes, we need to be historically sensitive to the conditions that led to current economic imbalances between the North and South. This sensitivity permits us to view the creditor-debtor relationship in a different way. He writes:

Whoever recalls the history of black Africa cannot avoid wondering whether reparation should not be made by former conquerors. The colonial conquerors, who exploited the colonized socio-economically, politically and culturally, through unjust economic structures, should be made aware of their obligation for reparation. If the First World prospered largely through exploitation of the Third, then it should be asked how long it might be possible for the First World to live with this knowledge without feeling some remorse (Bujo 2009:408).

Whether developed countries do actually feel remorse or not, is a debatable issue. However, global warming and climate change continue to affect our ecosystem, the poor and vulnerable in most tropical areas of the South. It is clear that exigent action is imperative of which ecological reparation could be a necessary part of it. However, how can one justify the need for ecological debt over and above many other debts? Since, there is talk of the cancellation of debts in general; shouldn't the ecological debt be equally cancelled?

4.4 Ecological Debt: Vengeance or Justice?

Shue in an enlightening article backs up the notion of justice with the need of taking into consideration factors affecting the background circumstances within which justice would be demanded (Shue 1992:397). According to Shue, 'justice requires that one not begin by slowing the economic development of the countries in which considerable numbers of people are already close to starvation just so that the affluent can retain more of their affluence than they could if they contributed more and the poor contributed less' (Shue 1992:397). Shue sees the poor developing countries' livelihood and development being sacrificed just to fuel the affluent lifestyles of the rich and laments that in the name of justice, 'poor nations must not be told to sell their blankets in order that the rich nations may keep their jewelry' (Shue 1992:397). Such logic would justify the unethical situation in which the ecological debt is demanded by rich affluent creditors from poor debtors.

However, should the situation be reversed and the developed countries pay their ecological debt to the developing countries, this raises the question of who really benefits from such payment of the debts. How will the poor and our ecosystem benefit from this debt? These questions will guide us as we employ Murove's concept of magnanimous spirit or *mwoyo murefu* as a way of ethically assessing the demand for ecological debt, from an African ethical perspective.

4.5 The Concept of *Mwoyo Murefu* and the ecological debt

The demand for an ecological debt is a very sensitive and complex issue. On one hand, one cannot brush away the fact that how such a debt would be financially calculated remains vague, however, on the other hand, one cannot be deaf and blind to the suffering and cries of the poor and the ecosystem due to unjust debt and economic conditions worsened by the effects of global warming and climate change. By employing Murove's notion of *mwoyo murefu* or magnanimous spirit, I intend to re-interpret the notion of the ecological debt from two possible frameworks namely: non-vengeance and justice.

4.5.1 *Mwoyo Murefu* and Non-Vengeance

Bearing in mind that this dissertation rests on concern for the effects of the ecological degradation on the poor and the ecosystem, we cannot deny the reality of suffering that shapes and informs our interpretations. The constant reference to Boff's book entitled *Cry of the Earth, Cry of the Poor*, is deliberate and hinges on using the sufferings of the poor and the ecosystem as interpretive lens for analyzing the global warming and climate change discourse and economic sustainability. It is from such a perspective that Murove's notion of *mwoyo murefu* as generosity and non-vengeance in suffering becomes valuable. Murove writes:

Going beyond the historical experiences of suffering and other life adversities is a typical example of a person with Ubuntu. Someone who has the ability to endure suffering is described by Shona people as *Ane Mwoyo Murefu* – which literally means a long heart, implying that s/he has a magnanimous spirit...because such a person does not take revenge when wronged... (Murove 2012:140).

From the above citation, one could argue then that, in our context of ecological debt, if such a debt is driven by the desire for revenge or retaliation against the developed countries for their unjust plundering of the Third World countries, then it is unethical. In any case whatever monetary compensation we could harness, we cannot ethically receive it on behalf of nature and its already extinct species and even the sacrificed poor. We can never exact revenge for ecological injustices on behalf of nature and even on behalf of past generations. In what case then can the notion of *mwoyo murefu* be interpreted in a way that legitimizes the demand for ecological debt?

4.5.2 *Mwoyo Murefu* and Justice

African ethics, based on *Ubuntu*, resonates with the relatedness of people within communities and their surrounding nature. Likewise, the notion of *mwoyo murefu*, being one of the attributes of *Ubuntu*, is centred on one's realization of this fact of relatedness with others. Murove writes that:

For someone to have *mwoyo murefu*, it requires that they are sensitized to relationality. If one sees one's wellbeing as intertwined with the wellbeing of others, it becomes unintelligible to perceive and conceive of an authentic individual existence devoid of these relationships (Murove 2012:141).

It is on this relatedness that one can interpret *mwoyo murefu* not only to mean a magnanimous spirit in enduring suffering and not seeking vengeance but also a magnanimous spirit in considering the plight of others and caring for them. Thus, the demand for ecological debt, far from being seen as revenge, can be seen as a way for calling the affluent people of the North and South to manifest a magnanimous spirit or *mwoyo murefu* towards the suffering people of the South and the ecosystem. Such a realization of our relatedness would help create an atmosphere of justice towards discourse on debt cancellation on poor countries and reparation for ecological destruction thus incurred by the more affluent countries.

However, it should be noted that the demand for ecological debt or *mwoyo murefu* is not the same as begging for hand-outs. Bujo captures this point well when he writes that,

‘Anamnestic solidarity does not mean to give to the poor from the superabundance of the rich. It also calls for what was unjustly confiscated to be reimbursed. Only if both the living and dead –the present and the past –are not forgotten will justice be realized in its holistic dimension’ (Bujo 2009:409). If the North becomes aware and acts positively on its relatedness to the South and vice versa, then with justice-based *mwoyo murefu* can we enter into dialogue and ethical praxis concerning ecological debt and its repercussions for the poor and the ecosystem.

4.6 Conclusion

We have tried to address the fiery demand for ecological debt that has recently characterized North-South discussions on sustainable development and ecological justice. It became apparent that the notion of debt that cripples most developing countries cannot be wholly justified when one considers the ecological debt that these developed countries owe the developing countries. Despite having pledged to cut their carbon emissions and also assist developing countries to adapt to climate change and meet their development needs, developed countries have not done much to fulfill this promise. The demand for ecological debt is thus a response to such unfulfilled promises. We attempted to interpret Murove’s notion of *mwoyo murefu* as a basis for the ethical demand for ecological debt. As in previous chapters we have subtly created gaps that African ethics can enter in the discourse on global warming and climate change. This leaves us with the only option to dedicate a chapter to further explore the potential contribution of African ethics to global warming and climate change discourse, bearing in mind the thorny issues we have dealt with in the last chapters.

CHAPTER 5: Is *Ubuntu* in the *Bundu*? The Efficacy of *Ubuntu* as an Epistemological and Ethical Paradigm in the Current Global Warming and Climate Change Discourse.

5.0 Introduction

An article by Andrew Donaldson, which appeared in the *Witness* of July 11th, carried the elaborative: “Lets never mention Ubuntu again”. Despite the fact that Donaldson’s article focused on his pessimism on the efficacy of *Ubuntu* in the political realm, where politicians pounce on some mystical notion of *Ubuntu* and present it as a solution to all our problems, such pessimism has been mentioned in ethical circles as well. Any student interested in African ethics grapples with the question of whether the concept of *Ubuntu* can make a positive and influential contribution to our current ethical dilemmas. It is in this light that we shall tackle the question of the efficacy of *Ubuntu* as an epistemological and ethical paradigm in the current global warming and climate change discourse.

In this chapter, in light of the problems surrounding the complex issue of global warming and climate change, we will attempt to highlight areas where African ethics, through *Ubuntu*, can contribute to the discussion on global warming and climate change. In order to do this, we will argue that some branches of Western ethics cannot sufficiently address the problem of global warming from their epistemological and ethical foundation. The objective is to argue for a necessary entry point in which African ethics can enter into this discussion. The chapter will thus attempt to show the contribution of African ethics as well as suggestions to how this contribution can creatively engage with other voices in the global warming and climate change discourse. We shall begin by unpacking the concepts of *Ubuntu* and *bundu*¹⁷ before analyzing how the Western paradigm of ethics rests on rationalism and empiricism. Thereafter, we will critically look at how *Ubuntu* with its wealth of relatedness can tackle some of the problems of individualism inherent in the global warming and climate change discourse. Since there is no perfect paradigm of ethics; we will suggest ways in which *Ubuntu* can better engage the current discourse on global warming before concluding the chapter.

¹⁷ Bundu is a word derived from South African and Zimbabwean slang sees <http://www.thefreedictionary.com/bundu>. The term refers to a bush, forest or wild area, normally uninhabited.

5.1. *Ubuntu and Bundu*

Before delving into the discussion it suffices to unpack two of the major concepts used in this chapter. The use of the word ‘bundu’ is deliberate as it seeks to serve two vital roles for this chapter. Firstly, despite its alliteration to the word *Ubuntu*, *bundu* can be loosely defined as a largely uninhabited wild region far from towns’. One could interpret bundu as representing anything that is far from civilization, deep in the bush, in the sticks and obsolete. If one adopts such an interpretation of *bundu*, then the title of this chapter could be asking whether our notion of Ubuntu is buried deep in the sticks, obsolete and unfeasible to our present discussions on conserving nature. This understanding would seem to suggest that the concept of Ubuntu is antiquated for the global warming discourse any discussion on ethics.

Secondly, even though one accepts the definition of *bundu* to denote a remote, wild, natural region, alliterating *Ubuntu* with *bundu* could be interpreted as hinting that *Ubuntu* is very much related to the conservation of nature and the whole discussion on ecology as well as global warming and climate change. In this second interpretation, *Ubuntu* would be very valuable to the global warming discourse. If these concepts of *Ubuntu* and *bundu* seem hazy and ambiguous, it is precisely because both concepts are value laden. Therefore, the chapter will weave its way around these ambiguities with the hope of showing how African ethics through *Ubuntu* can contribute, as an epistemological and ethical paradigm, to a complex topic such as global warming and climate change. Can *Ubuntu* answer the question of what we ought to do in the face of global warming and climate change or is the problem just way too complex for *Ubuntu*?

5.1.1 The Problem

As already noted in the previous chapters, the international meetings held annually to search for a solution to our global warming and climate change crisis have not reaped the much-anticipated results. Having unanimously agreed that climate change poses the greatest threat to our ecosystem, proper action that sufficiently addresses issues of carbon emissions mitigations, development and economic growth and the adaptation plight of the

poor has not been forthcoming. If we trace the history of when carbon emission concentrations increased in the atmosphere, we realize that this happened during the period of industrialization. Northcott remarks that, 'In the first two hundred years annual global output of carbon dioxide, the most significant greenhouse gas and the most long lived, went from 1 to 20 billion tonnes' (Northcott 2007:25). It is not enough, thus, to gather each year and churn out volumes of documents if we do not search for the philosophies and assumptions behind current unsustainable economic and ethical practices. Together, with Wiredu, we can ask the bold question; 'What kind of environmental philosophy is responsible for a not so incautious use of the environment?' (Wiredu 1994:31). One who asks questions cannot avoid the answers.

5.2 Epistemology and Ethics

The rapid industrialization which took place in Europe cannot be totally excluded from the earlier development of philosophy and science within the same societies. The emergence of rationalism under Descartes' (1596-1650) *cogito ergo sum* dictum 'I think therefore I am' channeled not only a great period of mathematical and philosophical veracity against the prevailing skepticism but also clarified the 'detached ego of the modern West' (Toolan 2001:49). Thus, according to Descartes the individual thinker became the basis and foundation of epistemology and ethics. This recognition did not extend to non-humans and as Toolan cites from Descartes, 'nature was nothing but a machine, a clockwork that could be understood by analyzing its constituent parts' (Toolan 2001:49). This view was also shared within the realm of science by Francis Bacon who, according to Toolan, emphasized the complete mastery of nature in which 'everything in the world could be refashioned to human purposes through science' (Toolan 2001:49). It is within this environment of the exaltation of science and rationality at the expense of nature that industrialization thrived. Unfortunately, anthropogenic global warming was being silently propagated in the shadows of industrial progress and modernity.

5.2.1 Classic Western Paradigms of Ethics

Anybody studying normative ethics today would have certainly been introduced to the two main dominant Western ethical theories of deontology and consequentialism generally summarized as Kantian ethics and utilitarianism. Although virtue ethics fall under normative ethics, the combined influence of Immanuel Kant and John Stuart Mill carries the considerable weight in the field of ethical theories. Both Kant and Mill were highly influential philosophers during the period of rapid industrialization. The point is not to blame Kant and Mill for industrialization and global warming but to try to situate the development of industrialization alongside the development of ethical theories that today, in the light of the ecological crisis, need to be rethought. These two ethical paradigms of Kant and Mill are the offshoots of the two main respective epistemological paradigms of rationalism and empiricism.

5.2.2 Kantian Ethics and Rationalism

Immanuel Kant (1724-1804) was a brilliant lecturer and philosopher whose moral theory guided by the categorical imperative continues to influence ethical reflection to this day. Falling under deontological theories, Kant's theory thus concentrates 'on the nature of the action itself as well as its motive in order to determine whether it is right or wrong' (Stewart 2009:35). Kant emphasized acting not out of inclinations but out of duty governed by a universal maxim knowable to humans through reason (Rand 1909:542). According to Shutte, Kantian ethics concerned itself with 'the normative and overriding force of morality' centred on reason and law (Shutte 2008:22). According to Rand, Kant believes that, 'Duty, then consists in the obligation to act from pure reverence for the moral law. To this motive all others must give way, for it is the condition of a will which is good in itself, and which has a value with which nothing else is comparable' (Rand 1909:543). However, Kant's moral theory has certain limitations that make it problematic in addressing our current ecological crisis.

According to Keller, Kant's *Lecture on Ethics* brings out an anthropocentric bias when he writes that, 'so far as animals are concerned, we have no direct duties. Animals are not

self-conscious and are there merely as a means to an end. That end is man' (Keller 2011:82). If such was Kant's attitude towards other sentient beings one wonders how such a theory can help us when we talk of the phenomena of global warming and climate change, which affects the whole ecosystem. The central problem in Kant's moral theory is not merely its anthropocentric roots but also the irrevocable primacy of the individual moral agent who knows the categorical imperative *a priori*. It seems as if, according to Kant, as rational beings we do not need one another to know what is right and wrong. We create the universal law by virtue of following the categorical imperative and assuming that all rational beings will certainly do likewise. Ethics are not dependent on our relations but on our rationality, according to this paradigm. Such reasoning downplays a crucial and missing relational and communitarian epistemological and ethical aspect that will help us in our current mêlée against global warming and climate change.

5.2.3 Utilitarianism and Empiricism

Initially postulated by Jeremy Bentham (1748-1832) and later modified by John Stuart Mill (1806-1873), utilitarianism was described by the latter, according to Rand, as 'The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness' (Rand 1909:648). Tempting though, anthropocentric inclinations and does not offer much hope in the debate about present pleasures and present generations as compared to long term pleasures and future generations as highlighted in the third chapter.

Most of the effects of global warming are felt years after the perpetrators have gone and whilst present generations might benefit from the economic growth, the future generations will suffer the consequences. Equally problematic is the fact that the nations responsible for the bulk of carbon emissions impose negative consequences on poorer and less responsible nations. In such a scenario, whose happiness carries more weight? Who will speak on behalf of the disappearing fauna and flora of the earth? How can we address these problems ethically? Utilitarianism will certainly struggle to address these questions. By the same token, it would be foolhardy to expect either Utilitarianism alone or Kantian ethics to

sufficiently deal with complex issues such as global warming. There is need for broader dialogue beyond the Western classic paragons of ethics.

5.3 The need for dialogue

Whilst the international efforts at curbing global warming have not produced the much needed results, the objective of converging together for a collective solution to this global problem has to be applauded. Some scholars have also come to realize that not one ethical paradigm can tackle such complicated phenomena as global warming and climate change. Mayson writes that, ‘the West is a crucial part of the answer because it is a crucial part of the problem’ (Mayson 2010:71). In a similar vein, Bujo comments that, ‘the First World should become literate once again and relearn how to interpret nature’s symbols. Dialogue with non-western cultures should take place and countries should be warned not to demonstrate dominion over all creation in such a deadly manner’ (Bujo 2009:290). Nevertheless, we should not be disillusioned to think that African ethics is the messianic paradigm of ethics with the definitive answer to all ethical dilemmas. Murove further elaborates this point when he writes that, ‘...African ethics alone cannot be a panacea to the current problems that beset our global village. Rather the wisdom of all our ethical traditions has to be brought into dialogue’ (Murove 2011:18). This is equally true for the problem of global warming and climate change. However, caution needs to be taken for African ethics before engaging in any meaningful dialogue.

Nicolson laments the fact that although we live in a globalized world, there are still certain reservations when it comes to appreciating the contribution of African ethics. He writes that:

From an ethical point of view, Africa is regarded as an enigma. It invokes an ethical response from the world. Many people in richer countries are disturbed by pictures of starvation and put ethical pressure on their leaders to do something to help. However, they do not expect to learn any ethical lessons from Africa, except perhaps from the patient endurance of the poor (Nicolson 2008:3).

This fact coupled with the scathing and derogatory comments on the possibility of African

philosophy by modern western philosophers like Hegel, Levy Bruhl, Kant and Hume¹⁸ appears to make the whole project of African ethics futile. By denying Africans any serious epistemological basis, even moral knowledge was relegated to the realm of intuition and shrouded in mystery. Murove is emphatic on this point that, ‘a denial of the reality of the plurality of knowledge amounts to a commitment to epistemological imperialism’ (Murove 2011:203). However, the contribution of African ethics cannot be racially brushed away since the existence of African ethics is a legitimate reality like any other ethical foundations. To deny its existence and contribution, based on racial superiority, amounts to silencing the voices that are much needed in our current dialogue on global warming and climate change. This is the argument of the *ad fontes* African ethicists.

5.4 *Ad fontes* African ethicists

There is nothing *absolutely* wrong with rationalism or empiricism *per se*; however, our current ecological challenges require that other paradigms be included in the dialogue. If the current climate change disasters bear a huge impact on poorer countries especially from Africa, the time has come for the world to lend an ear to what Africa has to offer from its rich resources on ethical foundations and concepts. African ethicists, falling under this category which I coin *ad fontes* from the Latin ‘to the sources’, are convinced that we can return to the sources of African traditional ethical values, especially those elucidated in the concept of *Ubuntu*, and learn how to deal with our current ethical problems (Bujo 1992:32; 1997:208; 2009:28; Murove 2002:580; 2009:315; Ramose 2009:309). For these scholars, *Ubuntu* is not in the *bundu*.

5.4.1 *Ubuntu*

Donaldson’s skepticism, in the introduction above, towards the concept or rather the abuse of *Ubuntu* betrays in one way or the other either his own or the politicians’ lack of

¹⁸ These modern Western philosophers, relying on data supplied by the European anthropologists wrote negatively about Africans as incapable of philosophy and rational thought. This provided the foundation and justification of colonialism which was seen as necessary to civilize, Christianize and conquer the African people (Ramose 2005:28)

understanding of *Ubuntu*. Some people are intimidated by the myriad expressions of the value-laden concept of *Ubuntu* and merely confuse this refusal of *Ubuntu* to be mathematically formulated with lack of clarity. However, in spite of its inexhaustible meanings *Ubuntu* has common values that can be identified across its many interpretations. According to Ramose *Ubuntu* is the bedrock of African ontology and epistemology and the basis of African philosophy (2005:36). On this point, Ramose further explains what the concept of *Ubuntu* entails:

Ubuntu is actually two words in one. It consists of the prefix *ubu-* and the stem *ntu-*. *Ubu-* evokes the idea of be-ing in general. It is enfolded be-ing before it manifests itself in the concrete form or mode of existence of a particular entity....*Ubu-and.-ntu* are not two radically separate and irreconcilably opposed realities. On the contrary, they are mutually founding in the sense that they are two aspects of be-ing as oneness and an indivisible whole-ness. Accordingly, *ubu-ntu* is the fundamental ontological and epistemological category in the African thought of the Bantu-speaking people (Ramose 2005:36).

Mkhize agrees with Ramose on the meaning of *Ubuntu* and further adds that ‘the whole word, *ubu-ntu*, points to a being that is oriented towards becoming, it refers to an ongoing process that never attains finality’ (Mkhize 2008:41). Central to understanding *Ubuntu* is the aphorism; *Umuntu ngumuntu ngabantu* which can be translated to mean that ‘A person is a person through others’. This emphasizes the communal aspect of *Ubuntu* and the need for one to be in good relations with others. This communal aspect of *Ubuntu* is very important in that it highlights the relatedness within African Ethics; an aspect deeply needed in our current ethical problems posed by global warming and climate change in which individual ethics and interests will not rescue our planet from our current moral lassitude.

5.4.2 *Ubuntu*, Relatedness and Ecology

Despite their logical clarity, both Kantian ethics and utilitarianism did not emphasize much the aspect of relatedness. In a world where national interests have taken over collective interests to the point of halting any meaningful discussion on curtailing a catastrophe as serious as climate change, we certainly need to address our individualism. Thus, the largest carbon emitters can afford to give priority to their particular economic interests a world

countries already battling to deal with climate disasters in Africa and parts of Asia. How would such nations choose between the duties not to cause indirect harm to poorer countries due to their intensive use of fossil fuel and the duty to provide for their over demanding citizens' use of fuel and luxurious lifestyles? If we adopt the principle of utility, how would we weigh the happiness of affluent nations against that of many developing nations bearing the brunt of climate change and the happiness of future generations?

The problem is not that Kantian ethics and utilitarianism do not consider the environment but that they over-emphasize the individuality of the person so much that when faced with problems like global warming and climate change which not only affect other human beings, near and far, but the whole ecosystem we struggle to find any solace in their rationally and empirically pivoted epistemological foundations. Will reason and happiness alone help us in this ethical quagmire?

Global warming does not only expose man's disrespect for the natural environment but man's attitudes towards other people. The twin focus of this thesis, which highlights the impacts of global warming and climate change towards the poor and the ecosystem, seeks to bring out this dual concern for ethics. According to Boff, economic liberalism is responsible for the degradation of the environment and the suffering of the poor (Boff 1996:1). If, we adopt Kantian anthropocentric ethics wholesale, we would be focusing only on our direct duties to rational beings and ignoring the plight of the non-human environment.

5.4.3 *Ubuntu* beyond racism

There is a form of oppression, subtly implied within anthropocentrism, where not all nations and peoples benefit from the economic progress acquired at the expense of the earth's resources and emission of carbon into the atmosphere. This is evident in Kant's philosophy which, according to Ramose, exalted reason as a basis for philosophy but denied black Africans their contribution to ethics since they were believed to be irrational (Ramose 2005:28). Thus, to propose that *Ubuntu* is not in the *bundu* is synonymous with the project that Ramose calls, 'arguing explicitly for the liberation of African Philosophy from the yoke of dominance and enslavement under European (Western) epistemological paradigm' (Ramose 2005:33). African ethic, through *Ubuntu* and the notion postulated by Murove of

ukama (Murove 2009:302), emphasize the relatedness of humans to one another and to their environment.

5.4.4. *Ubuntu* as Dialogue

According to Shutte, African ethics, unlike Western paradigms of ethics, focuses much on dialogue and co-operation (2008:28). He elaborates that in African philosophy dialogue or conversation is seen as ‘the typical activity and, indeed, the ultimate purpose of a community as understood in traditional African activity that is achieved simply by the presence of people, rather than by them fulfilling any further function, as would be the case in some practical activity such as building a house’ (Shutte 2008:28). Likewise Mkhize underlines the social aspect of *Ubuntu* when he writes that African ethics are not abstract or individualistic but are existentialistic and based on social relations in the community (Mkhize 2008:42). If indeed, our current global warming and climate change debacle has been nurtured and fostered under the yoke of economic liberalism and its insatiable drive for profit and growth, a reality that Western paradigms of ethics battle to address, then Murove’s sentiments that what is needed is ‘an ethical paradigm that is able to address the concerns of globalization from a worldview based on relatedness and interrelatedness’ (Murove 2002:580), could be a valid entry point of African ethics and *Ubuntu* in the dialogue to curtail global warming and climate change.

5.4.5 *Umuntu ngumuntu ngabantu*

The Namibian *Ovambo* proverb; *Eno limwe kali tsakana hambo* (One tree is not enough to build a fence) highlights the communitarian wealth contained in the wisdom of *Ubuntu*. A similar saying from the *Kiha* in Tanzania elaborates that, *Umoja ni nguvu, utengano ni udhaifu* (Stewart 2005:67), which can be loosely translated as unity is strength and division is weakness. These proverbs and indeed many others from the Bantu-speaking people accentuate the call to relatedness and social cohesion as the aphorism says that *Umuntu ngumuntu ngabantu* i.e. a person is a person through other people.

Bujo explains that the above mentioned aphorism seeks to ‘articulate the conviction that each one becomes a human being only in a fellowship of life with others. This does not refer

exclusively to an ethnic group, although such groups are the initial basis for all further relations' (Bujo 2001:5). Coincidentally, Bujo seems to have been responding to the crucial question by Nicolson who asked whether *Ubuntu* could 'work beyond small communities and be applied when the community in question is a heterogeneous, large city, or nation, or global community, where many faiths coexist? (Nicolson 2008:8). If we see ourselves as related to one another in a profound way, it becomes difficult to embark on lifestyles and practices that endanger others and our environment. Our moral concern moves from the nucleus realm to a wider and embracing community of our so called 'global village'. Far from considering myopic interests of our immediate families, communities, country, race or species, we consider the harmony of the whole biosphere.

One becomes aware that their carbon footprints have serious and dire consequences for people in Bangladesh, in Mozambique and other places where lives are destroyed due to anthropogenic global warming responsible for floods and droughts. Likewise when leaders from affluent nations sit down at a Conference of Parties (COP) meeting, they would be aware that their myopic national economic self-interests exacerbate the plight of billions of people from developing nations and the future of our ecosystem. We would cease to exist in our own world where affluence and development separates the so called First from the Third World. Most of the people from affluent nations have only snippets of the reality of their actions on the suffering poor and the environment from televisions. Indeed some of them think that Africa and some parts of Asia and South America are big villages where people either smile in admiration at tourists or rob their cameras and wallets. However, as Nicolson (2008:9) puts it, *Ubuntu* is concerned with the welfare of all in the community. If we were to honestly adopt this way of thinking and relating, we would not only narrow the gap between the developed and developing nations but we would cut the unnecessary combustion of fossil fuels, bearing in mind that eventually climate disasters affect all of us, humans and non-humans alike, present and future generations.

5.5 Is *Ubuntu* Anthropocentric?

Prozesky, in an article *Well-fed Animals and Starving Babies: Environmental and Developmental Challenge from Process and African Perspectives*, asks a pertinent question

when he writes that, ‘Ubuntu may certainly be seen as an ethical advance on egoism but does it not seem anthropocentric with its destruction of wildlife and forests, albeit in the interests of whole communities not just for certain individuals’ (Prozesky 2009:302). While it may be easy to blame the grand narratives of neo-liberal economics and free market systems in propagating certain levels of selfishness and unfettered growth driven by excessive use of fossil energy responsible for global warming, we might also create certain blind spots if we advance ethical paradigms that are intrinsically anthropocentric. Prozesky’s above question is not easy to answer. Besides other human beings, how big is the community according to *Ubuntu*?

According to Bujo, *Ubuntu* is not anthropocentric since, ‘For Black Africans, the community consists of the clan fellowships in this dual dimension of the living and the dead, but it also embraces “those not yet born” and is indeed cosmic. This makes it unthinkable that the non-human world could lie outside the African community’ (Bujo 2001:65). Bujo does not give sufficient reasons as to why what he says above is really ‘unthinkable’ that the non-human world would be outside the notion of community in African thought. He further tries to elucidate this point by stating that Africans can only fully realize themselves in harmony or co-existence with the non-human reality (Bujo 2009:281). Juxtaposing Kantian ethics and *Ubuntu* seems to suggest that indeed *Ubuntu* is not anthropocentric for the former explicitly states that, ‘Animals are not self-conscious and are there merely as a means to an end. That end is man’ (Keller 2012:82). If this can be said of other sentient beings, one wonders how non-sentient realities within our ecosystem would be rated within such a moral scale. Due to our concern not only for other humans but the poor and the whole ecosystem, as suggested by Boff, we cannot absolutely and exclusively rely on anthropocentrism to guide us in this dialogue. If *Ubuntu* is not anthropocentric then what is it?

Mwaura writes succinctly that *Ubuntu*:

is a concept that encompasses being human, humane, relational and respectful of the dignity of human beings and other creatures, and awareness of the interconnectedness of humanity, the Earth and other life forces... This sacred view of nature results in Africans having a relationship that is biocentric rather than anthropocentric. In this worldview, one

remains healthy in a holistic sense only by living in harmony with the whole creation (Mwaura 2012:273).

Despite the aphorisms of *Ubuntu* which always starts from being human or ‘humanness’ which is the goal in community, this can be attained by caring, being respectful and considerate and co-existing in harmony with the environment. Such an understanding of *Ubuntu* relates very well with Ibanez’s call for holistic ethics which are non-anthropocentric and consider the effects of human actions not only on other humans within a local framework but the effects on the entire planet at a global scale (Ibanez 1994:256). If *Ubuntu* offers a relational paradigm of ethics then it is time that its voice is heard amongst others, not only in the *bundu*, but even in climate symposiums where international delegates search for ways of addressing global warming and climate change. However, there is serious work that needs to be done concurrently alongside this dialogue and this involves the metaphorical but honest process of ‘taking the *bundu* out of *Ubuntu*’.

5.6 Taking the *bundu* out of *Ubuntu*

There is a saying that one can take somebody from the village but to take the village out of that somebody is not easy. The *ad fontes* ethicists mentioned above are very positive that we can deduce a lot of ethical wealth from traditional African values for our current concerns (Bujo 1992:32; 1997:208; 2009:281; Mayson 2010:70; Ramose 2009:309). Faced with daunting ethical problems posed by global warming and climate change and many other grueling dilemmas, we can indeed applaud the efforts of these *Ubuntu* scholars. However, the process of applying *Ubuntu* to our ethical problems needs to be done with caution.

5.6.1 Creative Engagement with *Ubuntu*

In our bid to make a worthy and valuable contribution there is a danger of adopting an antithetical position from dominant ethical paradigms and presenting it as our unique philosophy. Kim explains this clearer in his observation that, ‘Cultures of each epoch and region strive to forge an optimal cultural synthesis. Each claims for itself superiority over all others. The basis of each claim would be that it transcends the limitations of its competitors and avoids their weaknesses while at the same time incorporating their strengths’ (Ibanez 1994:83). The main concern of this chapter is not about *Ubuntu* claiming to be superior but

rather on the process in which we return to the sources to find ways of addressing our calamitous ecological phenomena. This is a philosophical and hermeneutical process in which tradition interacts with present challenges.

Makang in his essay *Of the Good Use of Tradition: Keeping the Critical Perspective in African Philosophy* strives to highlight that good philosophy does not merely repeat traditions or attempts to squeeze current problems to adhere to traditional paradigms (Makang 1997:328). Basing his critique on Temples' *Bantu Philosophy*, Makang argues that Temples' work mystified tradition and attempted to freeze Bantu tradition to the past through the ontology of participation in which Africans were purportedly able to learn only intuitively and not in a scientific way like the Westerners (Makang 1997:326). Makang writes that 'those whom the Europeans called "savages"—that is, the people from the hinterland, the "bush people" (*les Broussard*) are for Temples the only authentic Bantu, for they are unspoiled by European modernity' (Makang 1997:327). The nostalgic belief that whatever is traditional directly solves our current problems without proper engagement with present reality cannot help us appropriate *Ubuntu* to our ecological crisis. Our understanding of *Ubuntu* has to engage with our current concerns and be challenged and enriched with our experiences as well.

5.6.2 The Wisdom of our Foreparents

Jakes shares similar insights with Makang above when he asserts that, 'stagnation is the danger of traditional thinking. The wisdom of our foreparents¹ could have been great for the times when we heard them. But a progressive continual reassessment will avoid the pitfalls of applying an antiquated ideology that causes us to expend effort but doesn't get desired results' (Jakes 2007:28). The same should apply for *Ubuntu*. If African philosopher and scholars become merely satisfied with repeating what our foreparents said without creatively engaging with newer ways of appropriating *Ubuntu*, we will suffer from ethical nourishment where we hear pleasant but inapplicable ideas on *Ubuntu*. If, however, many African philosophers can echo the words of Makang (1997:336) that, 'By appealing to the praxis of and wisdom our African foreparents, we do not mean to repeat them, but we mean

to make use of this praxis and wisdom as interpretative tools to enlighten the present generations of Africans', then we would be taking the *bundu* form *Ubuntu*.

Such an understanding of *Ubuntu* which Makang encourages tallies well with what Nussbaum et al refer to as regenerative *ubuntu*, which helps to create 'communal responsibility and mutual accountability as contrasted to degenerative *Ubuntu* which justifies 'unethical and unprincipled actions' (Nussbaum et al 2010:xxxiv). In this light, in response to Donaldson's article 'Let's Never Mention Ubuntu Again', one could qualify this plea and say rather 'Let's never mention *Ubuntu* again if all we hear is mere repetition of concepts that do not appeal to our present problems and mere justifications of blatant unethical behaviour'. *Ubuntu* is not in the *bundu* but we must take the *bundu* out of *Ubuntu* and creatively and in a critical way appropriate *Ubuntu* for our current ethical problems for the good of humanity, especially the poor and our ecosystem.

5.8 What about science?

If the *ad fontes* African ethicists are to enter into serious dialogue with the rest of the world they need to be aware of the scientific research and findings surrounding global warming and climate change so that they can propose practical and target-oriented solutions. When one engages a complex issue like global warming and climate change it is essential to gather pertinent scientific facts beyond the mere common sense guff often wrought with over-sensationalism. According to Schmidtz and Willot, it is necessary for one to do meticulous research before tackling environmental problems (Schmidtz and Willot 2006: xiii). Schmidtz and Willot do caution against doing environmental ethics as an 'armchair occupation' detached from the realities, debates and language of environmental problems and issues. They write pithily that, 'When we do environmental ethics, it is hard to avoid the thought that doing environmental ethics without gathering pertinent facts is unethical' (Schmidtz and Willot 2006:xiii) I concur with such an assertion because inasmuch as we are accustomed to talking of ethics as the study of 'what we ought to do' as contrasted to 'what is', I am adamant that until we have a firm grasp of 'what is' we cannot make practical and feasible normative claims of 'what ought to be'.

5.8.1 Science and Skepticism

The gathering of pertinent facts and the dialogue with science should not be merely a project in assimilating other peoples' researches uncritically. One needs to be wary of any tendencies towards epistemological domination and this is a delicate process as Sithole puts it that,

The continuation of the hegemony of knowledge produced in and for the Western World serves not only to project a powerful image of the Northern Hemisphere over the rest of the world, but also monopolizes science. In effect this position and its accompanying practices marginalise and in fact downgrade the role of indigenous knowledge in scientific contributions (Sithole 2012:1).

Not only would Western epistemologies, according to Sithole, try to assert their superiority over African indigenous knowledge systems but there is even consensus in the scientific realm no the certainty concerning the phenomena of global warming and climate change. In his book, *Global warming: Myth or reality? The Erring ways of climatology*, Marcel Leroux, laments the way climate science has been distorted in the global warming discourse. A stern critic of the IPCC, Leroux sees the IPCC reports as gifts for journalists who desire such information to create sensationalism and catchy headlines to make money (Leroux 2005:65). According to Leroux, we are not responsible for climate change. He argues that, 'We are only responsible for the pollution which our activities cause. But any effect we have upon the climate is on a local scale...the human race cannot possibly affect the climate on a global scale' (Leroux 2005:462). Adopting such a stance, would only lead to ethical paralysis when the situation of global warming and climate change demands immediate action. Not all that comes from science should be blindly accepted without due criticism and appropriation. On the same token we cannot ignore everything that science reveals concerning the phenomena of global warming and climate change else we remain trapped deep in the *bundu* with our one-sided epistemological and ethical biases.

5.9 Conclusion

In this Chapter I have tried to argue that *Ubuntu* is not in the *bundu*, if by *bundu* is meant anything that is antiquated and irrelevant for contemporary situations. The classic western

paradigms of Kantian ethics and Utilitarianism are also useful but it is what they lack which allows African ethics through the concept of *Ubuntu* in its relatedness, to enter into the global warming discourse. Far from being diffident or polemical, African ethics through *Ubuntu* can take heed of scientific contributions as well as other voices and cultures in this dialogue. This can be done positively by making sure that the values of relatedness and community as well as respect for all humanity, particularly the poor, and the ecosystem takes central priority. However, this process ought to apply creatively concepts of *Ubuntu* in ways that resonate with the actual situation of global warming instead of merely transporting uncritically the concept of *Ubuntu* to a contemporary problem. The question of whether *Ubuntu* is in the *bundu* or not, rests on the fruits of this project and what we have shown in this chapter is one way amongst many others in which African ethics through *Ubuntu* can make a small but much needed contribution to our global warming and climate change discourse.

CHAPTER 6: Conclusion: Pushing the Boundaries

6.0 Introduction.

In the previous chapters we have attempted to unearth some assumptions behind the global warming and climate change discourse in light of economic sustainability. What initially began as a search for ways in which African ethics can contribute to this discourse led us into many directions. We have gone back into history and seen how the international climate change talks began and some of the main characteristics of these talks. Likewise, we have seen how the concept of sustainable development is pregnant with meaning and thus open to many interpretations. As a result it became apparent that the issue of global warming and climate change, from an ethical perspective, can be related to discourses on development, economics and politics. It is this complexity that makes the issue of curbing carbon emissions an ethical dilemma. The question of what we ought to do in the face of global warming and climate change demands a much more informed response than merely switching off electricity or choosing to ride a bicycle instead of driving to work. Such a response, good intentioned as it is, does not answer the question of why some people are without electricity and employment. It is clear that the issues surrounding global warming and climate change are more complex yet we should not be daunted in our search for solutions.

In this brief chapter we shall strive at harmonizing the various insights and challenges achieved so far in light of a search for solutions to our global warming and climate change crises. We shall begin the chapter by assessing how the objectives of this dissertation have been met. Most importantly, we will then proceed to see how the methodology of African ethics has been challenged and enriched by the discourse and insights incurred. Lastly we shall then highlight possible areas for research and new directions that could not be dealt with adequately within the scope of this dissertation.

6.1 Assessing the Objectives

We began our dissertation by stating a number of objectives that motivated this research. Chief among these objectives was the desire to establish the philosophical and economic roots fuelling our current global warming. In chapter two we highlighted how the theory of global warming was first postulated by how also it was dismissed due to the industrialization of the period. In chapter five, we tried to link the rapid industrialization of the 18th century Europe with the emergence of science and rationalism and consequently the paradigms of Kantian ethics and Utilitarianism. Though not entirely conclusive, we thus attempted to meet the objective of establishing the underlying philosophical and economic roots of global warming. Global warming is a philosophically and economically driven phenomena and addressing it requires that we dig out these roots.

6.1.1 An Appraisal for African Ethics

The above objective of going to the root economic and philosophical roots of global warming was to pave way for the second objective of giving a critical appraisal of African ethics in relation to the global warming discourse. African ethics need not be apologetic but rather assertive in addressing this global problem. It has become apparent that no single paradigm of ethics can sufficiently handle the complex problem such as global warming. However, the exclusion of African Ethics needs to be addressed by entering into dialogue through exposing our Africa-rooted ethical wealth. Even though all chapters were written with the contribution of African ethics in mind, chapter five focused entirely on the contribution on *Ubuntu* and its relatedness to the discourse on global warming.

6.1.2 The Viability of Sustainable Development

The concept of sustainable development is like a grand password in climate change conferences and most business are embracing it through corporations. However, as we have remarked, in our assessment in chapter three onwards, not everything about sustainable development is sustainable! We highlighted how the term can be interpreted in a way that stifles the economic development of the developing countries yet not actually helping in curbing global greenhouse emissions. This is because the market mechanisms of carbon

trading do not aim at reducing global carbon emissions or improving the lives of the poor. Their main aim is profit and economic development at the expense of the ecosystem and the poor. We thus, suggested alternative models of development like subsistence development and we also highlighted the demand for ecological debt, through the concept of *mwoyo murefu*, as a way of historically and fairly addressing real sustainability in ways that seek to curb global emissions and move away from fossil fuelled economies. Thus, we also sought to address the objective of ascertaining the viability of sustainable development.

6.2 Pushing the boundaries of African Ethics

The words of Murove that ‘African ethics alone cannot be a panacea to the current problems that have beset our global village. Rather the wisdom of all our ethical traditions have to be brought into dialogue’ (Murove 2011:18), are quite humbling and enlightening at the same time. Most Africans were optimistic during COP17 in Durban because it was the first time ever that in history that climate change talks were taking place in African soil. Rodin captures the excitement and optimism that gripped the continent when she writes that, ‘We stand at a fragile point in history. We are not sitting in conference rooms in Copenhagen or Cancun anymore. We look out our window and Africa is right there – a continent whose climate predicament can be ignored no longer’ (Rodin 2012:9). Six month later when the Rio+20 summit took place in Rio de Janeiro, there was not much in the news to show any continuation from the COP17 talks. The fire had waned out. It is clear that more needs to be done to create awareness of the exigency of addressing global warming and climate change beyond our borders and immediate experience.

6.2.1 The poor of the earth

The research was centred on the effects of our mitigation and adaptation on the ecosystem and the poor. It seems like an absurd question to ask who constitutes these poor people from an African background. This is a bias or prejudice that according to Gadamer we need to realize and accept if we are to be faithful to the process of hermeneutics (1975:238). However, all biases create certain blind spots and in our probing we came across the fact

that sometimes addressing the 'poor' in general terms worsens the plight of women and children. Rakoczy captures this insight when she writes that:

The ecological destruction of the earth especially affects the women of the Two-Thirds world. Poor rural women must walk increasing distances to find clean water and firewood for their families and needs. Encroaching deserts mean drastic changes in climate and food production. Children are at risk for birth defects from all types of industrial pollution and pesticides (Rakoczy 2004:300).

Thus the question of who the poor are is actually genuine and needs to be addressed not only in Boff's paradigm but most importantly from our concept of *Ubuntu*. A more accommodating interpretation of *Ubuntu* based on our relatedness should address these unequal relations between men and women which makes the latter bear much of the brunt of global warming and climate change. The experience and stories of women and children need to be the stories of *Ubuntu* as well as we seek to address the disastrous effects of global warming and seek ways to curb this crisis.

6.2.2. Consumption and Ethics

The distinguishing of the world into developed and developing countries creates certain blind spots. While the division does represent the general understanding of the contribution to global warming this is not an absolute demarcation. Firstly, the experiences of the minority poor of the North are swallowed by the generalized consumption of the affluent from the North. Secondly, the rich of the South, who basically live like the affluent of the North, get away with their lavish lifestyles since they are in the midst of the majority poor of the South. This is the paradox of South Africa which is the world's twelfth largest greenhouse gas emitter. These factors make it difficult to address the ethics of consumption from a generalized and polarized notion of north and south and developed and developing countries. Conradie laments the elusive nature of consumerism when he writes,

The cultural orientation of consumerism is not restricted to the consumer class. It has spread rapidly from North America to Europe and the Far East and is now a dominant cultural force in almost every country. The lifestyles of the consumer class, together with the power of the bombardment of

advertisements, have ensured that consumerism now describes the hopes and aspirations of the poor and the lower middle class everywhere in the world (Conradie 2008:47).

With this in mind, African ethics with its consolidation of African cultural values of sharing and concern for others needs to start working from within its backyard, Africa, before engaging the world on the need for sustainable consumption.

6.3. What ought we to do?

The phenomena of global warming and climate change challenge the core of our lifestyles and economy. Since we have ascertained that the poor, women and children included, and our ecosystem are suffering due to the unbridled growth fuelled by an addiction to fossil energy and market mechanisms, it would be logical to look for solutions beyond the 'market solutions for market problems' slogan and belief. Despite the fact the problem of global warming and climate change is so vast and complex, understanding the root problems behind our current demise helps to shed light on our way towards a solution. As many different disciplines converge each year in different forum and conferences in search of a climactic solution to global warming and climate change, African ethics can contribute its wisdom to this global problem.

The price that we have to pay for our technological advances and economic development is not worthy the suffering that our ecosystem and the poor of the earth have to endure. It is unethical for a smaller minority to cause suffering for the majority of the earth who are already struggling to cope with their miserable conditions of poverty. Balancing between development and environmental concern is not easy but developed countries need to honour their commitments to take the initiative towards allowing developing countries opportunities to meet their developmental needs. There are many ways of doing this and compensation for the ecological debt could be one way of achieving this. We need to explore more subsistence development and its emphasis on local production for local needs beyond the economic growth oriented model of development. In order to do this, we need to move away from the western epistemological bias of objectivity and rationality and listen and engage local and especially African indigenous knowledge systems with their wisdom of experience.

Most importantly, when we realize that we are connected and related as members of one biosphere through *Ubuntu* then we can channel our actions towards the safeguarding this fundamental relation with one another, especially the neglected women and children and the poor and our ecosystem. We realize that our choices and actions affect others both living today and the future generations. This might sound far-fetched but our crises demand exigent action. Of the many crises that have seized the attention and trepidation of our generation none equals the environmental and developmental crisis manifested by the phenomena of global warming and climate change. Indeed many international conferences have taken place, many books published, many protocols signed all in the objective of halting and curtailing the calamitous effects of global warming.

However, the real solutions to these crises lie in the ethical choices we make and whether the affluent nations and individuals embrace the values of *Ubuntu* in curbing their consumption, reliance on fossil fuel and helping the poor to adapt to climate change disasters. This would be a contribution of African ethics to the global warming discourse and the economic dilemma of sustainability. It is only one muffled cry for the poor and the earth amidst the cacophonies of selfish interests, denial, indifference and political stagnation, under the blazing sun from the dry plains of the Sahara; over the flooded lands and the homeless climate refugees. This is part of the potential contribution of African ethics.

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