

Climate Change and Intergenerational Justice: Perspective from South Africa

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ABSTRACT South Africa depends heavily on climatic resources and environmental assets; thus it is vulnerable to global climate change. At present, there is massive exploitation and utilisation of various resources in unsustainable paths. This might compromise the ability of future generations to meet their own developmental needs and values. This research paper contributes to the discussion surrounding South Africa as part of the African continent which is prone to the negative impact of climate change as a result of its carbon footprints. The article argues that government's efforts to foster intergenerational justice is compromised because of the need to grow the economy by using climatic resources and environmental assets. This notwithstanding, to some extent, the government has taken some pragmatic steps through implementation of policies, strategies and measures that address climate change. Numerous role players, stake holders and the judiciary are being proactive in the promotion of intergenerational justice and fight against climate change in order to bequest clean and healthy environment to future generations.

INTRODUCTION

Prior to, during and after the apartheid era, South Africa continues to engage in an extremely energy-intensive economy based primarily on coal and rapid exhaustion of other natural resources which has led to relatively high emissions and unimaginable harm to the ecosystem. Simultaneously, the country faces a host of daunting developmental challenges which have been exacerbated by the legacy of apartheid (Winkler and Marquand 2009). During the apartheid era, security, secrecy and control characterised most of the policies of the regime (Davidson 2006). The regime therefore concentrated significantly on production of electricity and liquid fuels because these were crucial to the energy security, economic development and political interests (Goldblatt and Davies 2002). The only way to meet these economic and developmental needs was through massive exploitation and utilisation of the natural resources in an unsustainable manner, thus compromising the ability of future generations of South Africans to meet their own economic and developmental

needs and values (DME 1998). Although, the apartheid regime acted contrary to the notion of sustainable development, the current democratic government in South Africa has an ample opportunity to correct this by ensuring that the notion of sustainable development becomes the watch word in any developmental policy and decision (Chabane and Roberts 2006). To some extent, the current dispensation, while trying to grow the economy by utilizing climatic resources; is also making frantic effort to integrate sustainable development, but at a very low pace. The implication of this is that South Africa would be prone to or affected by the various climatic catastrophes and environmental hazards that have already been predicted should they manifest. Notably, this has started happening in the country. Invariably, not only the present generations would be affected, future generations are likely to inherit the problem. Against this backdrop, it is incumbent on the decision-makers to incorporate enduring sustainable development measures, strategies, policies and laws into governance in order to bequest a clean and healthy environment to future generations.

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POST APARTHEID RESOURCE UTILISATION

South Africa, like any other developing economy relies heavily on the utilisation of its natural resources to the barest maximum for the pur-

pose of growing its economy and raising the standard and quality of life (Winkler and Marquand 2009). This development pattern is based on growth that is pro-poor, pro-jobs but undermines pro-nature in the chain or circle of developmental paradigms (Taylor 2009). The current free-for-all exploration and utilisation of natural resources, particularly energy from coal to grow the economy is having various negative impacts on the environment, hence, the country finds itself vulnerable to global climate warming, global climate change, environmental degradation and so forth mainly due to its energy intensive industrial and economic activities making it the highest emitter of greenhouse gases (GHGs) in Africa (Taylor 2009). Electricity generation and transmission in South Africa is mostly derived from the national power utility, Eskom. The utility generates over 90 per cent of electricity by using technology which is based largely on coal-fired power stations (EIA 2008). Production and consumption of coal in South Africa has grown steadily over the past two and a half decades, at an average annual rate of 2.7 per cent. In 2007, approximately 125 million tons of coal or 64 per cent was burned by Eskom in its power stations, with Sasol consuming another 47 million tons, with industries and small consumers accounting for the remainder (EIA 2008). From the foregoing scenarios, it is apparent that due to these activities, massive GHGs are being emitted into the atmosphere on a daily basis. To some extent, the government is in support of this because it reserves most of its time and energy for economic development and projects of all kinds. However, it acts only opportunistically and in a fragmented way on behalf of the environment (Decleris 2002).

Against the above backdrop, it is now obvious that the major obstacle that stands in the way of the future generations to meet their own needs is the current massive use, by the present generation, of conventional energy of all sorts that emits carbon dioxide and other dangerous substances to the atmosphere (DME 1998). Consequently, prompt action to ensure emissions reduction should be taken as a matter of urgency. Moreover, the Stern Report has warned that the cost of inaction today will far outweigh the cost of taking action in the near future (Stern 2006). Apart from section 24 of the South African Constitution (1996) which provides for environmental rights and sustainable development,

there is not in existence any major law duly enacted by the parliament on climate change specifically to retard the growth of emissions, but there here are various environmental laws regulating the management of pollution (NEMA 2003) and air (NEMAQ 2004). Furthermore, there are also various government policies, measures and strategies published to promote alternative sources and use of energy. These are merely ambitious in content and context because they are not enforceable. However, NGOs have been proactive in their fight against climate change and the promotion of climatic and intergenerational justice by instituting various green suits at the appropriate courts of law. In the same vein, recently, the judiciary has also been proactive concerning the issue of climate change and intergenerational justice in South Africa. It is highly commendable that some judges have started demonstrating significant insights into environmental matters as will be discussed later in this article (Kotzé and Feris 2009).

In addition, there is also a need for proper oversight from the government, role players and stakeholders (Christine et al. 2007). More importantly, it is suggested that all the existing measures, policies and strategies already in place regarding climate change should be presented to the parliament for consideration and possibility of being passed into law in order to be enforceable (Mckinnon 2009). South Africa should emulate country like the United Kingdom (UK) which recently passed a bill on climate change into an Act of UK. The passage of the law marked a significant step on the UK's path to a low carbon future (Meyer 2008). In agreeing to reduce its carbon emissions by 80 per cent by 2050, compared to 1990 levels, the UK is the first government in the world to introduce legally binding long-term targets on climate change (Neale and Gilbert 2008).

It is pertinent to mention that climate change and global warming cannot be viewed in isolation to sustainable development. There should be an amalgamation of climate change and sustainable development (Winkler 2006). Notwithstanding the shortcomings on the part of the government, to some extent, with regard to emissions reduction, the government is not sitting on the fence. It has started to take some measures and attempted to synergise economic growth with sustainable development (Hrynshyn 2009). Towards this end, South Africa is

making some remarkable efforts to ensure that it changes its development paths from energy intensive to low carbon economy that will foster sustainable development and intergenerational justice (Winkler 2006). Furthermore, relevant departments of the government are complementing this effort. This shows that there is a political will to reduce GHG emissions in the country (DME 1998). More essentially, the South African government, in collaboration with the stakeholders, role players and the business community, are now proactive and taking drastic measures and actions to reduce the threat of large scale adverse impacts of environmental change by strengthening various strategies already in place and formulating other strategies as the situation unfolds (DME 1996). Similarly, the country is now ready to enforce all the relevant laws on environment, without fear or favour, in view of the danger and negative impacts that global warming and climate change pose to both present and future generations (Taylor 2009). Interestingly, some positive steps have begun with Eskom which plans to reduce the coal components of its generating capacity to 70 per cent within 20 years (Odeku and Meyer 2010). Efforts that are currently being taken present a unique opportunity to find solution to the problem of climate change and intergenerational justice (Schemmel 2003). Consequently, there are both legal and moral responsibilities to prevent the looming catastrophe so that future generations inherit a global environment at least no worse than the one we received from our predecessors (Weston 2009).

SUSTAINABLE DEVELOPMENT: PERSPECTIVES OF DEVELOPING COUNTRIES

Sustainable development, is a concept which emphasises a 'holistic approach' to development and considers the need for environmental protection at the time of making a development decision, and does not privilege development needs over the need for environmental protection (Ebeku 2003). The concept entails amongst others; national policies, development plans green activists and judicial decisions that look beyond the welfare of the present generation, by ensuring the utilisation of land, water, forest, wildlife, minerals and air resources for the interests of present and future generations (Okorodudu-Fubara 1998).

Suffice it to mention that prior to the emergence of the idea of sustainable development, the term 'development' was conceived and perceived narrowly as what poor nations (developing countries) should do in order to become richer (Ebeku 2003) regardless of the environmental impacts and implications to both present and future generations (Ebeku 2003). Essentially, it was seen as a strategy by the developed countries to perpetuate dominance over developing countries or delay their development (Ebeku 2003). Due to this, developing countries tend to view the concept of sustainable development with great suspicion and circumspection. In view of this and of the fact that the developed countries had used their natural resources for economic growth and prosperity, (Okereke and Schroeder 2009) developing African countries considered it appropriate to emulate developed countries by aggressively pursuing various economic and developmental activities by exploring, exploiting and utilizing their natural resources (Meyer and Odeku 2009).

In South Africa, shortly after the abolition of Apartheid, the new democratic government's policy focus was on the previously disadvantaged citizens and communities to have access to energy, that is, modern fuels and electricity (Meyer and Odeku 2009) to improve and increase industrial production and output, enhance economic growth (Davidson and Winkler 2003) and development, (Janse van Vuuren 2008) as opposed to measures, strategies and policies that would reduce carbon dioxide emissions and halt climate change (Danish 2007). There is ample consensus that sustainable development involves an integration of environmental protection and economic growth (Schrijver 2004). Economic growth can still be attained through alternative energy sources as opposed to fossil fuels. Due to the global nature of climate change and the unpredictability of its likely impacts, the cooperation of all countries is required to successfully address it.

It is important to mention that the concept of sustainable development, environment and other related environmental issues such as global warming and climate change are inseparable. The impact of global warming is predicted to be long-term, widespread, and severe. A developing country like South Africa is now suffering from the worst effects of climate change because it has the least resilience and capacity to adapt.

The Need for a Change in Attitude

The time is now ripe to take appropriate steps in the right direction and engage in cleaner production in order to secure both present and future generations' rights to a healthy and clean environment (Vlavianos-Arvanitis 1998). This is because climate change is an intergenerational problem and that the well-being of future generations depends on actions that are taken today (Weiss 2009). There is a need to reinvigorate efforts to conserve the diversity of the natural resource base so that future generations can use it to satisfy their own needs and values (Weiss 2009). It has been observed that without substantial and multifaceted, action on the part of every person, the biosphere may be unable to sustain human life (Weiss 2009). At the least, coming generations will suffer deprivation and hardship unless current patterns of exploration and exploitation of natural resources, production, consumption and waste management are substantially altered by employing and deploying various technologies that will reduce and retard the growth of emissions (Shelton and Kiss 2005). There is a need to reiterate that, in South Africa, sustainable development needs to become the watchword of all public agencies and officials and the responsibility of every person (Shelton and Kiss 2005). In this paper, intergenerational justice (Weston 2009) is perceived broadly including other related concepts such as sustainable development, inter- and intragenerational equity, intergenerational rights, duties and obligations. Although each concept may have its literary meaning with regard to use and application to the discussion on global climate change and future generations, they all attempt to provide solutions to impacts of climate change on the environment and atmosphere (Alexander 2008). Furthermore, motivated by the conviction that the law cannot be timid in the face of threats to life, each of these concepts are probed to uncover the legal theory or theories upon which intergenerational justice already is or may be convincingly founded and applied to South Africa. This is based on the hypothesis that South Africa can choose to leave an impoverished legacy to future generations and to increase the inequalities among people today, or try to address the poverty issues today and to leave the earth at least in no worse condition than we received it.

THE SIGNIFICANCE OF THE CONCEPTS: ISSUES IN PERSPECTIVES

Sustainable Development

The concept underpins the need to act equitably and sustainably by the present generation in order not to compromise the existence of the future generations. This assertion is supported by the 1972 United Nations Stockholm Conference on the Human Environment where it was generally agreed by the international community that "the present generations have a responsibility to protect and improve the environment for both present and future generations" (Narum 1993). Since then, the concept has been widely recognized officially by developed and developing countries and they have enshrined it in their national and international policies on development and the environment (Heijden and Jesse 2008). The international community has continued to call for the strict adherence to the concept and has been working with the various governments, role players and stake holders in order to implement this commitment to future generations in the context of environmentally sustainable development. (Weston 2009). The concept continues to receive the support of the international community. This is why it featured in many international environmental conventions, multilateral development policies, national environmental strategies and legislation (Segger and Khalfan 2005).

The concept promotes responsible economic growth that utilizes the resources in a sustainable manner and conserves the environment (Bosselmann 2008). *"This goal is supported by a range of policy principles, such as the 'polluter pays' principle, the precautionary principle, and the principles of inter and intra-generational equity"* (Antharvedi 2007). In practical terms, sustainable development should be continuum that brings about positive impact on the environment notwithstanding economic activities (Bosselmann 2008).

The concern is that *"there is abundant evidence that the world is continuing to live as though there is no tomorrow. This is evident in the amount of GHGs in the atmosphere caused by human activities"* (Watts 2012). The rate of resource exploitation and utilization is causing a

huge strain on “the natural functions of the earth that the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted” (MEAB 2005). “*Despite the fact that such bleak findings are echoed by many other international studies, such as the United Nations Environment Programme’s 2007 Global Environmental Outlook report, there have not been any remarkable change in attitude and the atmospheric temperature has continued to increase on a yearly basis*” (UNEP 2007). Although the principles of sustainable development have filtered down from international treaties and principles, the only way to retard the growth in atmospheric temperature caused by GHG emissions is to ensure that at the national and local levels, stringent measures are put in place and implemented (UNEP 2007). “*This approach reflects the principle of subsidiarity and a trend towards decentralisation, where decisions are best made at the lowest level of governance able to adequately deal with the problem*” (Millar et al. 2009). It is against this backdrop that South Africa clearly enshrined the concepts and principles of sustainable development and environmental ecological rights in section 24 of the Constitution of the Republic of South Africa (1996). Section 24 is far more comprehensive and currently provides the constitutional foundation for all environmental governance efforts in South Africa. The section falls within the purview of the Bill of Rights therefore classified as a justiciable fundamental right (Glazewski 2004). The implication of this is that the principle of sustainable development is constitutionally enforceable in South Africa (Barnett and Scott 2007). By explicitly providing for environmental rights presupposes that they are enforceable at the appropriate court up to the highest possible constitutional level (Louis and Kotzé 2008). This has opened a wide scope of opportunity to seek remedies for the violation of environmental and atmospheric rights (Currie and De Waal 2005). In the same vein, section 7 of the Constitution reinforces the significance of the constitutionally protected environmental right by providing that this Bill of Rights is a cornerstone of democracy. Towards this end, in South Africa, environmental right is an integral part of the democratic system. It is synonymous to the values of human dignity, equality and freedom which are fundamental to the country’s democratic system. It enshrines the rights of all

people in the country and affirms the democratic values of human dignity, equality and freedom. In the case of BP Southern African (Pty) Ltd versus MEC for Agriculture, Conservation and Land Affairs (2004) the court held that:

“the balancing of environmental interests with justifiable social and economic development is to be conceptualized well beyond the present living generation. This must be correct since s 24 requires the environment to be for the benefit of ‘present and future generations.’”

Intergenerational and Intragenerational Equity

Global climate change induced partly by human activities raises serious issues of justice between the present generation and future generations, and between communities within future generations (Jacqueline 2008). By using the planet’s resources to benefit the present generations, invariably, the costs may be passed to future generations in the form of climate change and the need to adapt to such change (Dean 2011). Climate change is an inherently intergenerational problem with extremely serious implications for equity between the present generations and future generations and among communities in the present and the future (Weiss 2009).

Different principles of equity are recognised under the Rio Declaration but of utmost importance are the principles of inter- and intra-generational equity. Inter-generational equity is defined as meaning that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations (Weiss 2009). Whereas, intra-generational equity involves consideration of equity within the present generation, such as use of natural resources by one nation state (or sector or classes within a nation state) meaning to take account of the needs of other nation states or sectors or classes within a nation state (Weiss 2009). In other words, people within the present generation have equal rights to benefit from the exploitation of resources and enjoyment of a clean and healthy environment (Millar et al. 2009). This requires that patterns of environmental deterioration be halted, and in some cases reversed (Collins 2007).

Whereas, the notion of sustainable development was initially seen as a principle of environmental protection, it has now been accepted as an integral component of the right to development (De Visser 2005) as evidenced by Principle 3 of the Rio Declaration on Sustainable Development adopted by the United Nations (2002) to the effect that the right to development should be done in such a way that it meets the developmental and environmental needs of present and future generations.

Despite the foregoing and explicit elaboration of the need for present generations to act equitably and responsibly with regard to exploitation and utilisation of resources, in the contrary, in South Africa, there are persistent and continuous massive exploitation and utilisation of climatic resources.

Obligation to the Future Generations

South Africa owes it to the future generations to ensure that it bequeaths a healthy environment to them. *“This is premised on forceful, emotional and effective arguments available to both the government and the governed and it is the cornerstone of all modern policies aimed at sustainable development and intergenerational justice”* (Holtz 1998). What connects these various responsibilities and rights is a view about individual interests that both argued that individuals are motivated by intergenerational concerns, and that a polity which appropriately recognizes these interests must support and accept intergenerational responsibilities (Thompson 2010). The idea of ‘business as usual’ is no more in vogue. It is now being replaced gradually with ‘business that is sustainable’ in all aspects. In so doing, it may prevent the manifestation of the catastrophes that had been predicted.

More importantly, the concerns about ethics between generations are now everywhere (Gosseries and Meyer 2009). Despite their facelessness and namelessness from all indications it can be seen that the shadowy forms in the spatial distance belong to human beings. With this in mind, “a duty is imposed on the present generations not to throw bombs or destructive missiles in their direction” (Feinberg 1980). Similarly, *“the identity and interests of future persons may be vague, but the realization that future persons have interests that are affected by*

present action is enough to remind the living that we have a duty to minimize harm to those who are yet to live.” (Weston 2009). *“If we have only obligations to future generations, we may act from a sense of noblesse oblige toward them. If, on the other hand, future generations have rights, people living today must consider their interests, examined from their perspective, in the actions we take today”* (Weiss 2009). Though the concept of sustainable development is new and still under development, the social problems that must be solved by sustainable development cannot afford to wait (Holtz 1998). Holtz observed that:

“Global climate warming and change, whose main manifestation is the global environmental crisis, are taking place rapidly and approaching “thresholds” of irreversibility and unless rapidly and decisively addressed within the next decade possibly or sooner, much serious potentially cataclysmic ecological and socioeconomic harm are believed likely to occur within 100 years or less” (Weston B 2009).

So, sustainable development, which is the proper global strategy for its control, must not only forestall it but also direct it in order for the future generations to meet their own developmental values and needs (Decleris 2002).

THE ROLE OF THE COURTS IN PROMOTING INTERGENERATIONAL JUSTICE

The rapid cultivation of an enlightened self-interest that accepts the world’s unequal development as a universally shared problem threatening environmental sustainability as well as social well-being, hence demanding of immediate, universally shared responsibility (Weston 2009) and more importantly, the achievement of ecologically sustainable development depends on the commitment and involvement of all arms of government; the legislature, executive and in particular, the judiciary as well as other relevant stakeholders in South Africa (Preston 2006). Happily, the legal profession has begun to mobilize along these lines with accelerating speed in South Africa (Preston 2006). The South African constitution, environmental laws and other related laws clearly prohibit unsustainable use of the country’s natural resources and the environment (Soveroski 2007). However, the usefulness of these laws depends on the extent to which they are actually observed, implemented

and enforced by the people conferred with the responsibility to carry out these tasks (Wennerås and Hardach 2009). Thus, the legal profession, particularly the judiciary in South Africa has assumed the responsibility by being proactive in protecting the environment and the atmosphere from the surge of global climate change. Also, by abiding by the prime duty conferred upon them directly by the constitution to protect the environment, to contribute to the quality of justice and the quality of life of their fellow-human being living today and in the future (Decleris 2002).

This observation is buttressed by Hockman J, a deputy High Court judge in England, "*that the threat of climate change means it is more important than ever for the law to protect the environment.*" (Hockman 2009). The implication of this is that the laws can be invoked at every point in time against any entity which seeks to embark on any activity that is harmful to the environment. Although this protection is designed to benefit the present generation, arguably, the future generations automatically also become beneficiaries.

South Africa is currently undergoing a significant legal and political shift in its approach to climate change and the reduction of GHG emissions. Courts, commentators and legislators in South Africa have now recognized that environmental degradation constitutes a violation of human rights. The human rights model is effective in addressing the environmental interests of existing human beings and the environmental rights of future generations. Due to its active role in international climate summits and talks, the South African government has been making frantic efforts to embrace a sustainable development agenda that will slow and retard carbon footprints in order to ensure that both present and future generations meet their environmental needs (Hewitt 2004). But it must be mentioned that South Africa has failed with regard to embracing the correlative doctrine of intergenerational justice by implementing and enforcing a pragmatic legal framework against the culprits in the country (Collins 2009). Rather, it is the whistleblowers that have been proactive by exposing various activities of unsustainable utilisation of resources and at times, take the matters to the courts for adjudication (Wood 2011).

At the 2002 Global Judges Symposium held in Johannesburg, South Africa, the world's judiciary spoke decisively on the need for institutions of government, including the judiciary, to do their part to ensure the long-term sustainability of human activity (Goree 2002). In this regard, it was determined that a programme of action was needed to prepare the judiciary and other governmental and nongovernmental actors to perform their vital functions in the furtherance of environmental protection and stewardship (Shelton and Kiss 2005). It should be mentioned that the specific character of environmental problems will necessarily differ from one country to another and that environmental legislation and case law will thus also differ from jurisdiction to jurisdiction (Cullet 1995). More importantly, because of cultural variation and differences in socio-economic conditions, judges will, at times, bring different perspectives to the particular environmental problem before them. While this is so, judges may nonetheless find valuable instruction on how related matters have been addressed and managed in other jurisdictions (Shelton and Kiss 2005). There is ample theory to establish that future generations can have legal as well as moral rights to protection from climate change damage and that the ecological rights of future generations define the ecological duties of present generations (Hubacek and Mauerhofer 2008). What remains is the all-important imperative to build upon this theory an ecological legacy, national and international, from which children, grandchildren, great-grandchildren, and other future generations can benefit and of which the living, can be proud (Weston 2009).

Litigation as a Tool to Address Climate Change and Intergenerational Justice

Scientific evidence has shown that human use of fossil fuels has caused global warming and, though there seems to be a political will to address the problem, this has not translated to any major success because of the various political maneuverings and bureaucracy within the political and government circles. Hence, the obvious way of achieving intergenerational justice is through legal means (Kidd 2008). This is because there are certainly legal mechanisms, both existing and currently mooted, that can assist in the pursuit of intergenerational justice (Kidd 2008). Pursuant to this, environmental and

climate lawyers have begun exploring litigation strategies to uphold intergenerational justice (Weston 2009). The feasibility of such strategies in South Africa is hereby evaluated by focusing on various attempts being made to address and redress climatic problems. It is pertinent to point out that though most of the actions brought to courts and elsewhere have not been fully resolved, and it is more than likely that the judgments may not always be favourable to the plaintiffs. As will be discussed below, steps in the right direction have started in order to involve yet another forum for addressing the climate change problem in South Africa (Gupta 2007).

Section 24 of the Constitution is the cornerstone of environmental rights and intergenerational justice (Du Plessis 2009). It explicitly provides for environmental rights and sustainable development. In addition, it also provides for various responsibilities, duties and rights of a general procedural nature, including, inter alia, the right of access to information, the right to administrative justice and legal standing provisions, which, cumulatively, could be used to further strengthen and enforce the substantive environmental right (Du Plessis 2009). It is against this backdrop that the public interest litigants, environmental activists, are now taking advantage of these environmental rights to seek redress against harms done to the environment, whether by individuals or corporate organizations, and more importantly, for the failure of government to comply with procedural entitlements related to the enforcement of substantive environmental entitlements.

It is pertinent to mention that it has been observed in the case of *Minister of Public Works and Others versus Kyalami Ridge Environmental Association and Others* (2001) that some judges have not yet grappled with the jurisprudence on climate change, environment and sustainable development. The concept was well articulated and embraced in the judicial sphere (Glazewski 2005) in the case of *BP Southern Africa (Pty) Ltd* (2004), where the applicant, BP Southern Africa ('BP'), sought an order on review setting aside the decision of the Gauteng Provincial Department of Agriculture, Conservation, Environment and Land. The Department had refused to authorise an environmental assessment application under section 22 of the Environment Conservation Act, 73 of 1998, regarding the

development of a new filling station on one of its properties. In handing down judgment, the Court made the following pertinent comments on the notion of sustainable development and the environmental right:

"The concept of 'sustainable development' is the fundamental building block around which environmental legal norms have been fashioned, both in South Africa, and is reflected in s 24(b)(iii) of the Constitution. ...Pure economic principles will no longer determine, in an unbridled fashion, whether a development is acceptable. Development, which may be regarded as economically and financially sound, will, in future, be balanced by its environmental impact, taking coherent cognisance of the principle of intergenerational equity and sustainable use of resources in order to arrive at an integrated management of the environment sustainable development and socio-economic concerns. By elevating the environment to a fundamental justiciable human right, South Africa has irreversibly embarked on a road, which will lead to the goal of attaining a protected environment by an integrated approach, which takes into consideration, inter alia, socio-economic concerns and principles."

Similarly, in the case of *Director: Mineral Development* (1999), the right to healthy and clean environments within the administrative processes which was hitherto not the case. These decisions and other decisions present significant potentials of some judges who are proactive in upholding intergenerational justices.

RECENT TRENDS IN PROMOTION OF INTERGENERATIONAL JUSTICE

These days, it may be difficult to closely monitor the cleanliness of the atmosphere, waters and soils, but efforts must be geared to curb those who pollute them (Decleris 2002). There is need to understand the simple systemic rule which requires the present generations to 'think globally and act locally' in ensuring that our activities do not harm the environment. Every responsible citizen in this modern age is expected to cultivate the habit of promoting this attitude as it stresses the interdependence of the many factors that stem from man's intervention in the environment (Decleris 2002).

One of the most difficult challenges in combating any environmental problem is how

to generate enough public support for action to overcome the opposition of those with a vested interest in continuing environmentally harmful activities (Shellenberger and Nordhaus 2005). This has been a particular problem in the context of climate change and global warming (Sinden 2008), as oil companies, coal plant fired companies and others with vested interests in the continuing use of fossil fuels have waged extensive campaigns to convince the public that climate change is an illusion or, at least, a problem without serious consequences (Sinden 2008). But the reality on the ground is now apparent. In South Africa, there have been reports of massive concentrations of particulates in the atmosphere mostly in areas around coal power stations and these are affecting the environment and the health of the people in these areas.

If these activities continue unabated, the health of both the present and future generations would definitely be compromised and affected. But should this activity be allowed to continue because of the need for economic or developmental growths? The fact that we have partial knowledge of our future climate is in itself a new challenge (Sinden 2008). The need for serious dialogue and interaction between climate scientists and stakeholders to overcome barriers of language, interpretation and overall 'thinking' is argued to be a possible way forward in South Africa (Voge 2009).

CONCLUSION

In South Africa, despite the continued growth in knowledge of the risk and threat of climate change, the mechanisms in place to manage and mitigate risk at the level of businesses and government are inadequate. Paradoxically, current government policy has embraced intergenerational equity and justice, however, the country continues to provide significant incentives for investment in energy-intensive industries because they are still an important source of employment, investment and income for the country. Winkler has cautioned that "the risk of the current approach is that, while it may promote industrial development in the short run, it carries a high risk of 'locking in' the economy into energy intensive industries, when environmental, economic and social pressures may push South Africa in the opposite direction." It is suggested that with the 'right kind' of develop-

ment, South Africa can develop its way out of this climate change crisis. This can be done through the creation and use of other sources of energy, high levels of efficiency and equity in resource use, monitoring for adaptation, investment, reduction in the use of fossil fuels governance and income growth.

Given the enormity and immediacy of the climate change threat, rapid mobilization, intellectual and political daring are needed in order to ensure intergenerational ecological justice in South Africa. The government, the citizens, politicians, legislators and the judiciaries should work closely together because these are the institutions and entities that will be the first to assess the facts and are the necessary administrators of the problems of sustainable development.

RECOMMENDATIONS

Since manifestation of global warming and climate change in different dimensions are caused by human activities whereby the culture of business as usual is encouraged, for there to be a change in attitude, it requires human interventions. Consequently, it is the responsibility of all stake holders and role players to ensure that activities that are promoting climate change are retarded and with time stopped.

REFERENCES

- Alexander E 2008. Taking account of reality: Adopting contextual standards for developing countries in international investment law. *Virginia Journal of International Law Association Virginia Journal of International Law*, 48: 817-828.
- Antharvedi U 2007. Environment: Principle and Interpretation of the Judiciary. From <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1053181> (Retrieved May 12, 2010).
- Barnett C, Scott D 2007. The reach of citizenship locating the politics of industrial air pollution in Durban and beyond. *Urban Forum*, 18:289-309.
- Bosselmann K 2008. *The Principle of Sustainability: Transforming Law and Governance*. Aldershot/UK: Ashgate Publishers.
- Brundtland G 1987. Our Common Future: The World Commission on Environment and Development. From <http://www.re-set.it/documenti/1000/1800/1850/1856/brundtland_reportpdf.pdf> (Retrieved February 18, 2010).
- Chabane N, Roberts S 2006. The changing face and strategies of big business in South Africa: More than a decade of political democracy. *Industrial and Corporate Change*, 15(3): 549-577.

- Christine I, Coleen K, Zarina V 2007. Patel Institutional dynamics and climate change adaptation in South Africa. *Mitigation Adaptation Strategies for Global Change*, 12: 1323-1339.
- Collins L 2007. Environmental rights for the future? Intergenerational equity in the EU. *Review of European Community and International Environmental Law*, 13: 321-331.
- Cullet P 1995. Definition of an environmental right in a human rights context. *Netherlands Quarterly of Human Rights*, 13: 25-40.
- Currie I, De Waal J 2005. *The Bill of Rights Handbook*. Cape Town, South Africa: Juta and Company.
- Danish K 2007. An overview of the international regime addressing climate change. *Sustainable Development Law and Policy*, 2(7): 10-16.
- Davidson O 2006. Energy for sustainable development-profile of South Africa. In: H Winkler (Ed.): *Energy policies for Sustainable Development in South Africa Options for the Future*. Energy and Development Research Centre, University of Cape Town, South Africa, pp. 1-2.
- De Visser J 2005. *Development Local Government: A Case Study of South Africa*. Oxford: Intersentia Antwerpen.
- Dean T 2011. Why Conservatives are Climate Change Sceptics. From <<http://www.abc.net.au/unleashed/45394.html>> (Retrieved June 17, 2011).
- Decleris M 2000. The law of sustainable development, general principles. *Environment and Sustainable Development*, (1)1: 7-13.
- DME 1996. Department of Environmental Affairs and Tourism, Green Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity. From <<http://www.info.gov.za/greenpapers/1996/conservation.htm>> (Retrieved January 21, 2010).
- DME 1998. Department of Minerals and Energy White Paper on Energy of The Republic of South Africa. From <<http://www.dme.gov.za/energy/documents.stm>>. (Retrieved October 2, 2008).
- DME 2004. Department of Environmental Affairs and Tourism, State of the Environment in South Africa. From <<http://soer.deat.gov.za/GlossaryAZ.aspx?m=18>> (Retrieved July 18, 2010).
- Du Plessis W 2009. Access to information. In: A Paterson, L Kotzé (Eds.): *Environmental Compliance and Enforcement in South Africa: Legal Perspectives*. Cape Town, South Africa: Juta Law Publishers, pp. 197-224.
- Ebeku K 2003. Judicial contribution to sustainable development in developing countries: An overview. *Journal of the Commonwealth Magistrates' and Judges' Association*, 1(1): 23-24.
- EIA 2008. Energy Information Administration Analysis Briefs, South Africa Energy Data, Statistics and Analysis-Oil, Gas, Electricity. From <http://www.eia.doe.gov/emeu/cabs/South_Africa/pdf.pdf> (Retrieved December 6, 2009).
- Feinberg J 1980. The rights of animals and unborn generations. In: Joel Feinberg (Ed.): *Rights, Justice and Bounds of Liberty: Essays in Social Philosophy*, Princeton: Princeton University Press, USA, pp. 159-182.
- Glazewski J 2005. *Environmental Law in South Africa*. Durban, South Africa: LexisNexis Butterworths
- Goldblatt M, Davies G 2002. Water, Energy and Sustainable Economic Development in South Africa Development South Africa. From <http://csiro.academia.edu/ErinBohensky/Papers/433161/Future_Ecosystem_Services_in_a_Southern_African_River_Basin_a_Scenario_Planning_Approach_to_Uncertainty> (Retrieved April 16, 2008).
- Goree K 2002. Linkages, A Multimedia Resource Bringing Policy Makers to the World Summit on Sustainable Development. From <[http://www.iisd.ca/wssd/infonews10\(A\).html](http://www.iisd.ca/wssd/infonews10(A).html)> (Retrieved December 29, 2010).
- Gosseries A 2009. Three models of intergenerational reciprocity: In: A Gosseries Axel, Meyer Lukas (Eds.). *Theories of Intergenerational Justice*. Oxford: Oxford University Press, P. 27.
- Gupta J 2007. Legal steps outside the climate convention: Litigation as a tool to address climate change. *Review of European Community and International Environmental Law*, 16(1):76-86.
- Heijden C and Jesse D 2008. Corporate Environmental Accountability as a Means for Intragenerational Equity: "Hidden" Environmental Impacts in the North-South Conflict', In: Christina Voigt, Hans Bugge (Eds.), *Sustainable Development in International and National Law*, Europa Law Publishing, Groningen, The Netherlands, pp. 348-375.
- Hewitt B 2004. Carbon pollution reductions. *Climate Change*, 64: 289-315.
- Hockman S 2009. The Need for an International Court for the Environment. From <<http://www.iaea.com/events/an-international-court-for-the-environment-an-idea-whose-time-has-come>> (Retrieved February 11, 2010).
- Holtz S 1998. Integrating environmental, social, and economic policies. In: J Schnurr, Hrynshyn J 2009. Climate Change and Apathy: History will Teach us Nothing. From <http://scienceblogs.com/islandofdoubt/2009/08/climate_change_apathy_it_all_c.php> (Retrieved June 8, 2010).
- Hubaceka K, Mauerhofer V 2008. Future generations: Economic, legal and institutional aspects. *Futures* 40: 413-423.
- Jacqueline P 2008. Climate change law: The emergence of a new legal discipline. *Melbourne University Law Review*, 32(3): 922-929.
- Janse van Vuuren R 2008. Alternative Energy for Africa: Enhancement of the UN Millennium Development Goals, ScienceScope. From <http://www.csir.co.za/nre/energy_futures/_notes/54-55.pdf> (Retrieved January 10, 2011).
- Kidd M 2008. *Environmental Law*. Juta and Co. Publishers, Cape Town, South Africa.
- Kotzé I, Feris L 2009. Trustees for the time being of the Biowatch Trust v. Registrar, genetic resources and others: Access to information, costs awards and the future of public interest environmental litigation in South Africa. *Review of European Community and International Environmental Law*, 18(3): 338-346.
- Louis T, Kotzé J 2007. The judiciary, the environmental right and the quest for sustainability in

- South Africa: A critical reflection. *Review of European Community and International Environmental Law*, 16(3): 298-311.
- Mckinnon M 2009. Global Human Forum, Human Impact of Climate Change. From <<http://www.ghf-geneva.org/Portals/0/pdfs/2009forumreport.pdf>> (Retrieved October 14, 2010).
- MEAB 2005. Millennium Environmental Assessment Board Living Beyond Our Means: Natural Assets and Human Well-Being Statement from the Board. From <<http://www.maweb.org/documents/document.429.aspx.pdf>> (Retrieved January 17, 2011).
- Meyer A 2008. The Campaign for Contraction and Convergence, Carbon Countdown, The Global Economic Institute. From <http://www.gci.org.uk/kite/Carbon_Countdown.pdf> (Retrieved April 16, 2010).
- Meyer E, Odeku K 2009. Climate change, energy, and sustainable development in South Africa: Developing the African continent at the crossroads. *Sustainable Development Law and Policy*, 10930: 49-50.
- Millar I, Baker E, McKenzie N 2009. The Environmental Law Framework for Sustainable Development-Principles of Sustainable Development in International, National and Local Laws. From <http://www.actpla.act.gov.au/___data/assets/pdf_file/0007/13894/Millar_presentation.pdf> (Retrieved December 16, 2010).
- Narum D 1993. International cooperation on global warming and the rights of future generations. *Policy Sciences*, 21(2): 21-40.
- Neale K, Gilbert A 2008. UK Climate Change Act: What it Means for Business. From <<http://www.climatechangecorp.com/content.asp?ContentID=5829UK>> (Retrieved August 19, 2010).
- NEMAQ 2004. National Environmental Management: Air Quality Control Act 39, Vol. 476, Cape Town, Republic of South Africa. From <<http://www.info.gov.za/view/DownloadFileAction?id=67978>> (Retrieved April 2, 2009).
- Odeku K, Meyer E 2010. Climate change surge: Implementing stringent mitigation and adaptation strategies in South Africa. *Journal of African Law*, 54: 159-183.
- Okereke C, Schroeder H 2009. How can justice, development and climate change mitigation be reconciled for developing countries in a post-Kyoto settlement? *Climate and Development*, 1: 10-15.
- Okorodudu-Fubara M 1998. *Law of Environmental Protection: Materials and Text*. Ibadan, Nigeria: Caltap Publication (Nigeria) Limited.
- Preston B 2005 The role of the judiciary in promoting sustainable development: The experience of Asia and the Pacific. *Asia Pacific Journal of Environmental Law*, 9(3): 109-211.
- S Holtz (Eds.): *The Cornerstone of Development*. Ottawa, Canada: International Development Research Centre, P. 283.
- Schemmel J 2003. Environmental Fiscal Reform for Sustainable Development and Poverty Reduction Workshop Proceedings and Country Case Studies *The World Bank Proceedings of International Workshops Reforming Forest Fiscal Systems to Promote Poverty Reduction*, and
- Schrijver N 2004. *International Law and Sustainable Development: Principles and Practice*. The Hague, Netherlands: Martinus Nijhoff Publishers.
- Segger M, Khalfan A 2004. *Sustainable Development Law: Principles, Practices, and Prospects*. New York: Oxford University Press.
- Shellenberger M, Nordhaus T 2005. The Death of Environmentalism: Global Warming Politics in a Post-Environmental World. From <<http://www.grist.org/article/doe-reprint>> (Retrieved on August 20, 2010).
- Shelton A, Kiss A 2005. *Judicial Handbook on Environmental Law*. Published by United Nations Environment Programme (UNEP), Nairobi, Kenya.
- Sinden A 2008. Climate change and human rights. *Journal of Land Resources and Environmental Law*, 27: 19-28.
- Soveroski E 2007. Environment rights versus environmental wrongs: Forum over substance? EU. *Review of European Community and International Environmental Law*, 16(3): 261-273.
- Stern N 2006. The Economy of Climate Change: Stern Review. From <<http://apo.org.au/?q=node/4420>> (Retrieved February 14, 2010).
- Sustainable Forest Management World Bank, Washington, D.C From <<http://www.oecd.org/dataoecd/15/42/36309072.pdf>> (Retrieved November 12, 2009).
- Taylor T 2009. Climate Change, Development and Energy Problems in South Africa: Another World, is Possible, Earthlife Africa Johannesburg. From <http://lnw.creamermedia.co.za/articles/attachments/19745_o_i_climate_change_south_africa.pdf> (Retrieved March 2, 2010).
- Thompson J 2010. Intergenerational justice rights and responsibilities in an intergenerational polity. *Journal of Agricultural and Environmental Ethics*, 10: 1-10.
- Vlavianos-Arvanitis A 1998. Cleaner production: Profit for future generations. *Journal of Cleaner Production*, 6: 381-385.
- Watts A 2012. A View of Climate "on the ground" from a Reporter Who Was There at the Beginning. From <<http://wattsupwiththat.com/2012/03/09/a-view-of-climate-on-the-ground-from-a-reporter-who-was-there-at-the-beginning>> (Retrieved March 9, 2012).
- Weiss E 2009. Climate change, intergenerational equity, and international law. *Vermont Journal of Environmental Law*, 27(3): 615-727.
- Wennerås P, Hardach F 2009. The enforcement of EC Environmental Law EU. *Review of European Community and International Environmental Law*, 16(3): 37-53.
- Weston B 2009. Climate change and intergenerational justice: Foundational reflections. *Vermont Journal of Environmental Law*, 9: 375-388.

- Winkler H 2006. *Energy Policy for Sustainable Development in South Africa, Options for the Future*. Energy Research Centre, University of Cape Town.
- Winkler H, Marquand A 2009. Changing development paths: From an energy-intensive to low-carbon economy in South Africa. *Climate and Development*, 1: 47–65.
- Wood M 2011. Climate crisis resources lawyers: The atmospheric trust doctrine. In: W Rodgers, M Robinson-Dorn (Eds.): *Climate Change Reader*. USA: Carolina Academic Press, pp 6-38.