

Explaining the Similarities and Differences between Climate Law and Environmental Law

Chidi Odozor and Kola O. Odeku

School of Law, Faculty of Management and Law, University of Limpopo, South Africa

KEYWORDS Climate Law. Environmental Law. Similarities and Differences. Conceptual Interpretation. Informed Participation

ABSTRACT The purpose of this paper is to explain the similarities and differences between Climate Law and Environmental Law in order to improve understanding of the concepts. Although these concepts cannot be studied separately, they are not completely the same. Thus finding conceptual connotations behind both concepts are *sine qua non* for unravelling the difficulties bedevilling enforcement and implementation of laws protecting the environment. Given that Climate Law and Environmental law have already met with serious opposition regarding its implementation in many developed countries of the world, it has become pertinent to explore deeper meanings into the laws that are meant to protect the environment and the atmosphere. Doing so requires an in-depth research into the contemporary understanding of the concepts of environmental law and climate law as opposed to the general perception that they mean one and the same thing at all times. Finally this paper suggests a balanced and conceptual approach to the interpretation of environmental law. It is hoped that this paper would provoke further critical debate in environmental law-making and a better informed public participation in the issues of climate change.

INTRODUCTION

The paper presents an analytical study on the similarities and differences between Climate Law and Environmental Law. Even though it is said to be very difficult to differentiate between these concepts when it comes to the issues regarding emissions and pollution, climate change differs from many classic environmental problems in a number of respects that are relevant to liability (Lord 2012). By this, many have tried to establish the difference from the perspective of liability for the particular problem in question. Both Climate Law and Environmental Law can be made locally and internationally. They are both basically aimed at regulating the impact of human activities on the planet to avert the danger of self-destruction due to mismanagement and abuse of the limited amount of available resources (Srivastav and Srivastav 2010). While other scholars warn that there is always a risk of oversimplification in the use of terms, this paper attempts to provide a thorough explanation of what constitutes climate law, what environmen-

tal law is, as well as the similarities and differences between the two laws. It also attempts to establish their respective scope of applications, interpretations and enforcements. More importantly, it aims to provide the reader with insightful explanations from researchers and scholars on the similarities and differences between climate law and environmental law. Keeping in mind that both the similarities and differences under discussion also influence the way in which human beings try to manage the climate change problem and environmental challenges on the planet.

Relying on the of jurisprudence of three different jurisdictions, namely; South Africa, India, and United Kingdom, the paper explores their environmental experiences and legislative responses in terms of Climate law and Environmental law, to establish and understand their perspectives and make a comparative analysis before arriving at a conclusion. Probably, such events and experiences will motivate governments and states' institutions to liaise with communities to want to learn from their current suffering so that future harm can be avoided (Haines 2011) through legislative interventions.

The paper emphasises that establishing clear similarities and differences between the Climate law and Environmental law is key to achieving proper regulatory responses to global climate change and environmental problems.

Address for correspondence:

Kola O. Odeku,
School of Law, Faculty of Management and Law,
University of Limpopo, South Africa
Telephone: +27152682718,
Fax: +27152672904,
E-mail: kooacademics@gmail.com

Problem Statement

The issues of climate law (CL), environmental law (EL), the rapidly expanding scope of environmental law concepts, and the prospects of non-implementation brings home to us the possibility of uncertainties with regard to comprehensive application of laws relating to our environment. As a consequence, a complex legal regime has evolved to frame environmental governance. There are not many researches regarding the differences and similarities that possibly exist between the Laws governing the CL and EL. Admittedly this has contributed to uncertainties with regard to the scope and nature of environmental legislations. This is because such laws are still on the path of development, hence the need for more researches in order to accomplish a more comprehensive application of laws governing our environment. Even with so many environmental legislations and frameworks coming from almost every state and government, both nationally and internationally, yet correct interpretation and implementation continues to elude humanity, thus leaving our climate for the worst. The paper expresses concern over the regulatory uncertainties regarding climate change. Lack of understanding of these similarities and differences can indeed be problematic to the solution game. While some exploit these distinguishing features to oppose the idea of global warming (Gore 2006), others still question the justiciability of climate laws as opposed to existing environmental laws (Aminzadeh 2006).

In countries like South Africa, India and the United Kingdom, there seems to be varying interpretations of the subject of Climate law against well-known Environmental laws. This finding indicates a problem of consensus on the similarities as well as the differences that exist between EL and CL. Apparently, in some areas of law; governments are guilty of hastily confusing CL and EL. However, the main focus of this paper is to establish whether those similarities and differences actually exist or not, and not on the problems associated with interpretations and scope of application.

Some of the research questions which this paper wishes to answer includes;

- 1.1 What similarities and differences exist between Climate Law and Environmental law?
- 1.2 Of what significance are those similarities and differences?

- 1.3 To what extent shall we ascribe these differentiations to the regulation uncertainties?

METHODOLOGY

The method used in this research is qualitative analysis of body of literature. The use of library facilities and books also enhanced information gathering and formation of style of writing. The online library facilities were accessed through desktop computer (PC), with much reliance on the desks and study rooms.

Aims and Objectives of Study

- ♦ To ascertain the similarities and differences between environmental law and climate law.
- ♦ To establish the significance of the similarities and differences between climate law and environmental law.
- ♦ To find out how such differences or similarities affect regulation.

Literature Review

Defining Climate Law and Environmental Law

Climate Law and Environmental Law are two distinct concepts, but they are not completely separate (Dupuy 1990). Wallace (2009) rightly noted that, “*climate change is the major, overriding environmental issue of our time...*” The first notable point from this submission is the link it establishes between Climate Law and Environmental Law, in the sense that climate change becomes an issue of environment (Ikeme 2003). Climate law refers to the body of laws, negotiations, treaties, and international agreements including various regulations across the globe aimed at combating climate change (Yamin and Depledge 2004). In other words, climate law comprises of laws, as well as policies, plans, voluntary codes and associated methods of governance focused on addressing climate change by means of mitigation (action to reduce greenhouse gas (GHG) emissions), and adaptation (measures to minimize the adverse impact of climate change) (Richardson 2012). Environmental law generally covers all federal statutes, regulations, and common-law principles regulating human interaction with his immediate environment with respect to its impact on living

species (Lazarus 2008). Environmental law is basically aimed at controlling the levels of Air Pollution, Water Pollution, Hazardous waste, the wilderness and endangered wildlife, which seek to protect the natural environment which may be affected, impacted or endangered by human activities (Houck 1996). Some environmental laws regulate the quantity and nature of human activities such as regulating levels of pollution or requiring permits for potentially harmful activities on man's immediate environment (Steinzor 1998). According to Sands and Peel (2012), Environmental law comprises of substantive, procedural and institutional rules of law (or international law) that have as their primary objective the protection of the environment. In other words, laws that refer to the environment always tend to adopt broad definitions to the inclusion of the climate (Sands and Peel 2012). For example, article 1 (3) of the 1992 Climate Change Convention defines the environment as "the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions. In similar terms also, article 3(2) of the 1991 Antarctic environment protocol was meant to protect the climate and weather patterns. The significance of this will be discussed in this paper.

Understanding Climate Law

Climate law is primarily understood as legislation on climate and energy (Peeters 2012). The emerging jurisprudence thereon is that climate law seeks to tackle the problems of climate change through the processes of mitigation and adaptation both as possible regulatory solutions to climate change (Kuik et al. 1994). According to Stern (2007), since climate change is a direct threat to long-term sustainable development process, the challenge now is to limit the damage, both by mitigation and adaptation. Climate change is clearly a global problem that demands global action (Peeters 2012). According to Grossman (2003), "the universe of ideas seems limited to topics like international negotiations, carbon dioxide emission trading regimes, carbon taxes, government-industry technological partnerships, and voluntary emission-reduction programs." For example, the European Union (EU) has in recent years shown great potential for achieving national and sub-national responses to climate change (Peeters 2012). Climate legislation has consequently developed within the

EU as well as academic attention focusing on efforts to secure mitigation (Peeters 2012). Therefore, one might rightly construe Climate law to mean the law of mitigation and adaptation to the changing climatic conditions (Odeku and Meyer 2010). Furthermore, Climate Law often refers to certain climate policies such as Mitigation and Adaptation (Stern 2007). A typical example of climate law is the so called 'Effort Sharing Decision (ESD), a secondary law in the EU by means of which the EU in effect seeks unilaterally to build further on commitments made at the Khoto Protocol for an 8% reduction of greenhouse gas (GHG) emissions between 1990 to 2012 (Peeters 2012). This piece of climate legislation (ESD) is imposed on each of the 27 member states and exemplifies the EU's central concern with mitigation more than adaptation. But when we talk of environmental law, we refer to environmental policies such as the "polluter pays" principle, (also known as EPR; extended producer responsibility) and the so called precautionary principle amongst so many other environmental policies and legislations (Lindhqvist 2000). The polluter pays principle is also usually considered side by side with the 'precautionary principle (Sunstein 2005). According to the precautionary principle or precautionary approach, if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action (Perry 2005). In some instances, climate law is simply described as 'tricky' probably because of its involvement of human rights at the national level (ICHRP 2008).

The concepts of mitigation and adaptation as mentioned earlier are primarily an energy issue (Swart and Raes 2007). This suggests that it rightly fits more into the Climate law policy. Precisely, the climate law seeks to slow down the climate change processes affecting the planet by focusing more on statistics of temperature, humidity, atmospheric pressure, wind and precipitation provided by climate scientists (Lamb 2013). Climate reforms laws often result from International Climate negotiations which makes efforts to mitigate global warming such as the recently concluded Rio+20 conference on sustainable development (Schipper and Pelling 2006). Although, some critics dismissed such climate reform efforts as mere debates and cli-

mates negotiations that may never achieve any significant results in mitigating global warming (Victor 2004). Critics rely on the grounds that the former two Rio conventions, on biological diversity and combating desertification also proved largely disappointing (Cicin-Sain 1996). However, it's not a utopic venture. Such criticisms have given birth to existing climate laws which are a good start towards solving the climate change problem. Of course, it is never enough to admit that a problem exist, it must be identified and defined before its solutions can be effectively implemented and solved (Jonassen 2004).

One big challenge which sets Climate law apart happens to be its controversial nature on economic risks it poses to world leading economies, as well as challenges for developing economies if its policies are anything to go by (Economy 2010). Since 2001, risk and cost benefit analysis have been key factors driving public policy on the Climate question (Hetch 2009). Regulatory reform manuals attest to the fact that the first challenge of any reform is to define the problem, the risk and harm anticipated (Hetch 2009). Whether or not it relates to climate change or simply environmental matters of domestic nature, the orientation is still instrumental to reforms. According to Haines (2011), that forms the essential element of regulation.

Climate law unlike well-known Environmental laws is still viewed by some experts with high level of suspicion (Farber 2007). Critics of climate policies are of the view that regulating emissions that affect climate change was recognized as potentially very valuable but not as an immediate priority in light of the cost and questions about the potential risks (Hetch 2009). According to Hetch (2009), "*We are uncertain about the effect of natural fluctuations on global warming, and we do not know how much the climate could or will change in the future.*"

Even though academic literature on climate law and climate change is vast, it still contains a significant gap (Richardson 2012). The fact that climate law is still considered new in most developing countries, impacts negatively on the proper implementation of existing environmental laws in those countries (Ciccozzi 2003). Too little attention has been devoted to current and future issues concerning climate law in developing countries (Richardson 2012). As a result, there not many published works on the topic of cli-

mate law by legal scholars from developing countries (Richardson 2012). Climate Law includes various domestic laws and regional (legal) responses to climate change and of course, all legal strategies in global climate change negotiations (Richardson 2009). For example, Richardson (2012) observes that "most climate law and research issues concentrate mainly on activities of nations who are members of the Organisation for Economic Corporation and Development countries (OECD) and international corporations." The binding limitations "which took effect from 2005 on the amount of CO₂ and related greenhouse gases GHGs that member countries of OECD, the former Soviet Union and Eastern Europe (collectively known as Annex 1 Parties under the UNFCCC) may emit, is a typical example of Climate Law" (Richardson 2009). The target of this law was that "they reduce their emissions on average by 5.2 percent below 1990 levels in the first commitment period of 2008-2012" (Richardson 2012).

Climate Law in South Africa

The existence of Climate law in South Africa is revealed through the two key policies that focus explicitly on climate change mitigation. They include the National Climate Change Strategy (NCCS) in 2004, and more recently, the Long Term Mitigation Scenario (LTMS) in 2007.

Odeku and Meyer (2010), while providing analysis of the South African experience of climate law, described the experience as both unique and complex. This in actual sense is suggestive of a more unique and complex legal approach to the situation. It has degenerated into a multi-scalar environmental and social problem which inevitably affects various sectors of the global economy (Osbaahr 2008). Novins and Haughey (2009) captured the situation as using legal tools to help indigenous populations deal with climate impacts for which they are not responsible.

South African government has had its own share of climate headache over the years. There has been unprecedented amount of pressure on the Government to develop Climate law policies to combat climate change. This is mainly due to its ranking as the highest emitter of carbon dioxide on the African continent resulting from Eskom power generation activities using coal, which negatively impact on the atmosphere thus

contributing to global warming and climate change (Meyer and Odeku 2009). It is against this backdrop that “steps are now being taken to strengthen mitigation and adaptation in order to evolve long-term frameworks to promote the reduction of greenhouse gas emissions needed to address global climate change” (Meyer and Odeku 2009). In response, “the South African government has come up with stringent policies on climate change and has also put in place legal and institutional frameworks to ensure implementation and compliance” (Meyer and Odeku 2009). “These policy interventions are now having remarkable positive impacts on greenhouse gas emissions reduction” (Meyer and Odeku 2009). It is pertinent to mention that on the adjudication side, there has not been any reported constitutional case on climate law in South Africa.

Climate Law in India

The Indian long stand on the climate change issue is limited to adaptation, as Climate law policy (Singh 2007). According to a report by Indian prime Minister, ‘*Mitigation if any had to be supported by international finance and enabled by transfer of technology from developed countries as laid out in the Bali Action Plan*’ (Singh 2007). Developing countries such as India, under the regime of climate change are faced with the trade-off of maintaining economic growth to foster their own development and still have to reduce their emissions growth and eventually cut their emissions (Singh 2007). The experience is not yet as advanced as what is obtainable in more developed countries, such as UK and South Africa. The Minister further maintains that the central aspect of technology transfer is the building of local capacity so that local people, farmers, firms and governments can design and make technologies which can be diffused into the domestic economy (Singh 2007). This is probably as a result of financing the risk implications of climate law policies.

Report shows that the problem of financing actually revolves around the technology transfer issues. A prudent and proper incentive structure for technology transfer will also ensure financing as well from the private players. However, the developing countries should follow the model of participatory financing arrangement.

Climate Law in the United Kingdom (UK)

By the end of the year 2000, the British government has already launched what it termed, ‘the United Kingdom Climate Change programme’ in fulfilment of its commitment to the development of climate laws. As of 2008, the UK was rated ninth^{9th} amongst the highest emitters of Carbon and about 1.8% of the world’s total emissions generated through fossil fuels evolves from UK (Corfee-Morlot et al. 2009). The UK climate law and policy were largely influenced by political will (Lipp 2007), to which Owens (2012) articulates that; “*The analysis suggests that influence might be best thought of in terms of a continuum of different effects, that advisory bodies can simultaneously perform multiple roles, and that relations between expertise and policy are necessarily both complex and contingent. Finally, some thoughts are offered on the Commission’s demise and on the tensions that have to be negotiated in considering the future of expert advice.*” This statistics show how important the climate policy issue is viewed in the UK. Since after the Kyoto protocol in 1997, “the British government has come under pressure to reach its target of reducing carbon-dioxide emissions by 23% – 25% since 2008” (Owens 2012). In fact in many developed countries’ legal systems such as Europe, the application of climate law principles and policy implementations such as the ‘precautionary principle’ has already been made a statutory requirement under Climate law (Sands and Peel 2012).

The Similarities Between Climate Law and Environmental Law

Generally, all legal jurisprudence is interconnected with each other (Weinrib 1993). But in the application of law, especially environment laws, there is always the question scope of application and territorial affiliations to its principles. Climate change amongst other challenges (for example; Acid rain, ozone depletion, loss of biodiversity and depletion of fresh water resources) is widely recognized as one of the environmental challenges facing the planet (Sands and Peel 2012). This goes to show that similarities exist between Climate law and Environmental Law. In fact at times, depending on the cir-

cumstances, no differences can be found at all. One of the priorities identified in the process of environmental conservation and protection has been protecting the atmosphere by combating climate change (Sands and Peel 2012) and this can only be achieved through climate laws. Similarly, when disaster strikes, there is no question of climate law or environmental law for remedy; both are always involved because the urgent situation naturally calls for a combination of legal strategies as well as adaptive lifestyle responses including the possibility of relocation (McInerney-Lankford et al. 2011). Furthermore, climate change statutes (CL) which aim at ensuring that greenhouse gas emissions are reduced and regulated will make it almost needless to utilize environmental law statutes which are meant to protect endangered species (Salzman and Ruhl 2000).

The above statement is true when we consider the application of Climate Law in the circumstance where Environmental law also apply. One good example is the so called "Climate" or "Environmental" migrants (Green and Ruddock 2009). Declaration of International Law Principles on Internally Displaced Persons seems to apply to people displaced by natural disasters of all sorts. It is therefore very unlikely that this declaration will be classified in law as 'Climate' or 'Environmental' under the circumstances. In this sense, Climate law is seen and applied as Environmental Law and vice-versa. Moreover, Climatic disorders always leave behind, devastating effects on the environment (Tschakert et al. 2013). The situation where displaced persons can be assisted by both laws relating to the environment as one and the same thing is where climate law meets environmental law. Mayer (2011) refers to this as statelessness law. In some legal systems as in the law of the European Union, the application of the precautionary principle has already been made a statutory requirement under environmental law (Sands and Peel 2012). A good example may be outlawing development at certain areas such as the particularly vulnerable coasts in order to avoid huge negative impacts and asset-protection costs in the future (Ikeme 2003). Environmental protection laws in many countries seek to ensure that people are held accountable for damage they cause (Green and Ruddock 2009). Analysis of risks are often accompanied by an assessment of what Green and Ruddock (2009) describe as "actuari-

al risk" that is the physical, environmental and financial impact that is highlighted by the event and calculated as likely to occur in the future.

An example of environmental law includes legislations such as the national environmental management act (NEMA), or better still, the South African Constitutional rights to a healthy environment. These and so many other locally legislated environmental laws within and outside South Africa make up what is commonly known as environmental law.

Significance of the Distinction

Climate Law Imperatives

Perhaps a key distinguishing characteristic of climate law from environmental law vested in the mitigation and adaptation processes is that they are exclusive of the economic impacts of effort sharing across the nations and business corporations (Oberthür and Ott 1999). This explains the fear expressed by climate change opposition that mitigation laws aimed at reduction of GHG emissions might inevitably impact on industrial productivity and affect economic growth negatively (Stern 2007). In November 2011, the 17th United Nations Climate Change Conference of the Parties (COP 17) was held in Durban, South Africa to discuss new workable plans aimed at saving the environment. Similar to the Kyoto protocol, the main target was to come up with binding agreements between nations in the form of treaties to reduce the industrial carbon emissions and to reverse its devastating effects on the climate. Only by such international conferences is it possible to realize what is commonly referred to climate law. In order words, the laws that govern the impact human activities on the climate (Parry 2012). Without this, we will all end up as victims of corporations that put profit ahead natural human rights.

Consequently, environmental law which is aimed at maintaining just and sustainable use of natural energy and mineral resources, imposes new responsibilities on the present generation to ensure that future generations' development target is not jeopardized (sustainable development).

The importance of this distinction however lies in the relationship between the provisions established under the climate change directives on the one hand, and environmental protection

challenges as well as solutions. This distinction is therefore necessary to enrich legislative initiatives by national governments and international organisations aimed at combating climate change and protecting the environment. More stringent measures are needed by governments to utilize treaties and conventions on climate change in developing climate laws in order to save the planet (Parry 2012). The biggest problem and debate with climate law is the question on *locus standi* to sue in the case of violation. In 2003, however, the Bush Administration Environmental Protection Agency (EPA) concluded that the Agency has no authority to regulate carbon dioxide or other GHGs. Several states are challenging the EPA's refusal to regulate GHGs. If this suit is successful, there would be a stronger basis for concluding that there is standing in climate change cases (Mank 2005).

Climate Law and Sustainable Development

Climate Law must be implemented if the environmental law of principle of sustainable development is to be desirable (Agyeman and Evans 2004). For example, the New York Climate protection Act 55 of 2007, aims to reduce the city's GHG emissions by 30% of 2006 level by 2017. The idea of sustainable development was formulated by the Brundtland Commission in 1987 until it was pushed to the periphery of the international agenda by the global economic downturn of the 1970's and then the onset of the second cold war (Mank 2005). It was this development that linked environmental law with climate law in the sense that humans can be concerned more with the issue of environmental degradation and practice sustainability culture (Mank 2005).

According to Gostin (2012), the framework convention approach adopted by states is becoming an essential strategy of powerful transnational social movements to safeguard health and the environment. A series of international environmental treaties serve as models for global health governance, culminating in the 1997 Kyoto Protocol to the UN Framework Convention on Climate Change (Mank 2005). Although the United States failed to ratify, and highly polluting transitional states such as China and India are largely exempted, the Kyoto Protocol represents a nascent attempt at global co-operative governance to reduce global cli-

mate change (Mank 2005). Although admittedly, this approach has been painstakingly difficult, as the stalled climate change negotiations make clear, the idea is a good one aimed at global governance for global health (Mank 2005).

Regulation Poverty

Regulation poverty simply refers to the helplessness associated with the environmental performance in terms of achieving compliance through enforcements (Fryxell and Carlos 2003). It is impossible to implement a policy or law that you do not understand (Patton and Sawicki 1993). Many developing nations cannot see the significance of climate laws. They worry only about environmental laws relating to refuse dumping and endangered species (Bodansky 1991). In broad terms, the more complex the environmental problem, the more obvious become the limitations (and the inefficiencies) of direct regulation in addressing it (Neil 2009). But the differences between environmental law and climate law can be noted from the problems which one seeks to apply the law in order to solve. Indeed, not all environmental problems can be described as global, nor are all responses environmental threats global (Wiener 1999). Many environmental threats are highly localized in both their origins and consequences with little or no stretching of social movements as is evident with current trends about endless climate change conferences and protocols. In fact many forms of pollution, like photochemical smogs and the release of toxic heavy metals have a small radius of action (Urry 2011). This explains why environmental law, rather than climate law, should regulate and manage such problems.

The consequences of any actions even in the specific and small locals can as well impact either negatively or positively, as the case may be, on the volatile nature of the planet (Buckley 2004). Also important to note is that Environmental laws are purely procedural statutes (Nelson). This borders on the question of *locus standi* in the law courts. This means that only courts would apply a more relaxed approach to standing, allowing at least some plaintiffs to raise global warming issues under any environmental statutes.

However, in the South African *Bengweyama* case (2010) the constitutional court gave the interpretation of the object of the National Envi-

ronmental Management Act (NEMA) as ‘*to give effect to environmental rights protected in section 24 of the Constitution.*’ In deciding whether a plaintiff has standing under any environmental legislation to sue concerning global warming, a crucial issue would be whether the legislation itself has the authority to regulate the matter under the Act. Because a Plaintiff standing, will depend in part on whether it is a matter under Climate Law, or strictly environmental law case.

OBSERVATIONS

Given the extent to which Climate change is attributed to environmental pollutions, it has become extremely difficult to separate Climate law from environmental law (Sands and Peel 2012). Even the analysis made in this research cannot be held to be conclusive for lack of judicial opinion on the matter. Therefore, finding the similarities and differences between environmental law and climate law remains a big challenge. However, through this research, we found that it is possible to achieve a clear-cut differentiation of the two systems of laws. This we have achieved by carefully analysing the context, nature and scope of application of a particular legislation or policy to determine its categorization. This also remains a challenge not only for scholars but for governments around the world. It is perceived that the solution to this problem can be tested by nature and content of legal strategy used by the government to achieve this result. This challenge is currently being addressed by the government of South Africa by embarking on implementation of stringent policies, strategies and measures that would curtail activities that are promoting greenhouse gas emissions (Odeku and Meyer 2010).

This paper also found that the type of responses given to environmental calamities can be strongly suggestive of what legal remedy is applicable. According to a report from the Intergovernmental Panel on Climate Change, policy focus of most of the governments of the world and other stakeholders have now shifted from ‘*What is the likelihood of climate change?*’ to ‘*What are the most appropriate responses to climate change in case the predicted impacts manifest?*’ (Houghton 1996).

This research also led to the discovery of the key words ‘mitigation’ and ‘adaptation’ as

main policy principles in the formulation of climate policies. Mitigation is used in the sense of reducing greenhouse emissions. South Africa has initiated a number of actions that will reduce the pace of carbon emissions. According to Odeku and Meyer (2010), “these include policies to restructure the energy sector, stimulate economic development, increase access to affordable energy services, manage energy-related environmental impacts and secure energy supply through diversification, as articulated in the government’s 1998 Energy White Paper.”

CONCLUSION

Significant similarities and differences abound between the concepts of climate law and environmental law. This is evident in their historical origins, structures and scope of applications and interpretations. Therefore, whether or not a court would adjudicate on a Plaintiff’s claim, would depend on the nature and source of the problem. This paper has briefly introduced authoritative analysis of literature showing the significant relationships between Climate law and Environmental Law practices. This leads to a conclusion that law governing environmental management practices are not necessarily the same laws that regulate climate change, although essentially, they also share common characteristics or similarities. The paper therefore concludes that it may not be in all cases that these similarities and differences can be separated; it would however be in the interest of justice that each law is defined on its proper pedestal.

RECOMMENDATIONS

Whilst a range of critical literature continues to emerge following the proliferation of legal responses to the climate change, the establishment of similarities and differences between climate law and environmental law has become imperative. It is obvious that the administrative effects of any law is largely dependent on the compliance prospects, but this in relation to climate and environmental governance again depends on the ability to catch up with its inherent distinguishing features. In the same vein, the regulation of climate law requires a proper understanding of its distinguishing features from common environmental laws. Therefore, governments, environmental law and policy makers need

to understand what differences and similarities exist between the two legal instruments. This has become as important as finding answers to the compliance problem that continues to mar climate governance and environmental regulations.

The paper therefore recommends that a more in depth research on what separates Climate law from Environmental Law, as well as further study on their similarities. It offers agenda for scrutinising the existing environmental legislations in order to explore their benefits in terms recognising what lies beyond the legislation and what can be done to achieve Climate justice under Climate Law or Environmental Law.

REFERENCES

- Agyeman J, Evans B 2004. Just sustainability: The emerging discourse of environmental justice in Britain? *The Geographical Journal*, 170(2): 155-164.
- Aminzadeh SC 2006. Moral imperative: The human rights implications of climate change. *Hastings International and Comparative Law Review*, 30: 231-242.
- Bodansky D 1991. Law scientific uncertainty and the precautionary principle. *Environment: Science and Policy for Sustainable Development*, 33(7): 4-44.
- Buckley R 2004. *Impacts Positive and Negative: Links Between Ecotourism and Environment*. Oxfordshire, UK: CABI Publishing.
- Ciccozzi E, Checkenya R, Rodriguez AV 2003. Recent experiences and challenges in promoting cleaner production investments in developing countries. *Journal of Cleaner Production*, 11(6): 629-638.
- Cicin-Sain B 1996. Earth summit implementation: Progress since Rio. *Marine Policy*, 20(2): 123-143.
- Corfee-Morlot J, Kamal-Chaoui L, Donovan MG, Cochran L, Robert A, Pierre-Jonathan T 2009. Cities, Climate Change and Multilevel Governance. From <<http://www.oecd.org/env/workingpapers>> (Retrieved on July 17, 2013).
- Dodds F, Strauss M, Maurice F 2011. Only One Earth, The Long Road via Rio Sustainable Development. From <<http://www.routledge.com/books/details/9780415540254/>> (Retrieved on May 1, 2013).
- Dupuy P 1990. Soft law and the international law of the environment. *Michigan Journal International Law*, 12: 420-432.
- Economy E 2010. *The River Runs Black: The Environmental Challenge to China's Future*. USA: Cornell University Press.
- Farber DA 2007. Modelling climate change and its impacts: Law, policy, and science. *Texas Law Review*, 86: 1655-1664.
- Fryxell GE, Carlos W H L 2003. The influence of environmental knowledge and values on managerial behaviours on behalf of the environment: An empirical examination of managers in China. *Journal of Business Ethics*, 46(1): 45-69.
- Gore A 2006. *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*. New York, USA: Rodale Publishers.
- Gostin LO 2012. Global health justice: A perspective from the global south on a framework convention on global health. *South African Journal of Bioethics Law*, 5(1): 33-37.
- Green D, Ruddock K 2009. Could litigation help Torres Strait Slanders deal with climate impacts? *Sustainable Development Law and Policy*, 10(2): 23-31.
- Grossman DA 2003. Warming up to a not-so-radical idea: Tort-based climate change litigation. *Columbia Journal of Environmental Law*, 28(1): 7-19.
- Haines F 2011. *The Paradox of Regulation – What Regulation Can Achieve and What it Cannot*. Cheltenham, UK: Edward Elgar Publishing Ltd.
- Hecht AD 2009. Resolving the climate wars. *Sustainable Development Law and Policy*, 10(2): 4-16.
- Houck O A 1996. On the law of biodiversity and ecosystem management. *Minnesota Law Review*, 81: 869-872.
- Houghton JJ, Meiro-Filho LG, Callander BA, Harris N, Kattenberg A, Maskell K 1996. *The Science of Climate Change-Contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: The Press Syndicate of the University of Cambridge.
- International Council on Human Rights Policy (ICHRP) 2008. *Climate Change and Human Rights: A Rough Guide*. Verso, Switzerland: International Council on Human Rights Policy Publication.
- Ikeme J 2003. *Climate Change Adaptational Deficiencies in Developing Countries: The Case of Sub-Saharan Africa, Mitigation and Adaptation Strategies for Global Change*. Kluwer, Netherlands: Academic Publishers.
- Ikeme J 2003. Equity, environmental justice and sustainability: Incomplete approaches in climate change politics. *Global Environmental Change*, 3(3): 195-206.
- Jonassen DH 2004. Learning to Solve Problems: An Instructional Design Guide, From <<http://www.unc.edu/courses/2009spring/nurs/596/960/module3/patton2.pdf>> (Retrieved on August 4, 2013).
- Kuik OJ, Peters P, Schrijver N 1994. *Joint Implementation to Curb Climate Change: Legal and Economic Aspects*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Lamb HH 2013. *Climate: Present, Past and Future*. New York, USA: Routledge.
- Lazarus RJ 2008. *The Making of Environmental Law*. Chicago, USA: The University of Chicago Press.
- Lindhqvist T 2000. Extended Producer Responsibility in Cleaner Production Policy Principle to Promote Environmental Improvements of Product Systems. From <http://scholar.google.co.za/scholar?q=related:d6jZFMg9TtsJ:scholar.google.com/andhl=enandas_sdt=0,5> (Retrieved on September 5, 2013).
- Lipp J 2007. Lessons for effective renewable electricity policy from Denmark, Germany and the United Kingdom. *Energy Policy*, 35(11): 5481-5495.

- Logan C 2009. Is the endangered species act the right place to set U.S climate change policy? *Sustainable Development Law and Policy*, 9(2): 30-34.
- Lord R, Goldberg S, Rajamani L 2012. *Climate Change Liability: Transnational Law and Practice*. New York, USA: Cambridge University Press.
- Louka E 2007. *International Environmental Law*. Cambridge, UK.
- Mank BC 2005. Standing and global warming: Is injury to all injury to none. *Environmental Law*, 35: 1-7.
- Mayer B 2011. International legal challenges of climate-induced migration: Proposal for an international legal framework. *Colorado Journal of International Environmental Law and Policy*, 22: 357-364.
- McInerney-Lankford S, Darrow M, Rajamani L 2011. *World Bank Studies: Human Rights and Climate Change: A Review of the International Legal Dimensions*. Washington, USA: World Bank Publishers.
- Neil G 2009. Environmental law, regulation and governance: Shifting architectures. *Journal of Environmental Law*, 21(2): 145-154.
- Novins L, Haughey A 2009. *Sustainable Development Law and Policy: Climate Law Reporter*. 5th Edition. USA: Washington College of Law.
- Oberthür S, Ott HE 1999. *The Kyoto Protocol: International Climate Policy for the 21st Century*. Berlin, Germany: Springer Publishers.
- Odeku K, Meyer E 2010. Climate change: Strengthening mitigation and adaptation in South Africa. *Journal of African Law*, 54(2): 1-16.
- Osbahr H 2008. Building Resilience: Adaptation Mechanisms and Mainstreaming for the Poor Fighting Climate Change: Human Solidarity in a Divided World. From <http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/Osbahr_Henny.pdf> (Retrieved on June 11, 2013).
- Owens S 2012. Experts and the environment—The UK Royal Commission on Environmental Pollution 1970–2011, UK. *Journal of Environmental Law*, 24 (1): 1-22.
- Parry W 2012. How to Fix Inaction on Climate. From <<http://www.livescience.com/19097-environment-climate-international-community.html>> (Retrieved on January 22, 2014).
- Parsons A 2009. Human rights and climate change: Shifting the burden on the State. *Sustainable Development Law and Policy*, 9(2): 22-28.
- Patton CV, Sawicki DS 1993. Basic Methods of Policy Analysis and Planning. From <<http://www.unc.edu/courses/2009spring/nurs/596/960/module3/patton2.pdf>> (Retrieved on September 17, 2013).
- Peeters M 2012. *Climate Law in EU Member States: Towards National Legislation for Climate Protection*. Cheltenham, UK: Edward Elgar Publishing Ltd.
- Perry M 2005. Lifeform patents: The high and the low. *Journal of International Biotechnology Law*, 191: 20-27.
- Recuerda MA 2008. Dangerous interpretations of the precautionary principle and the foundational values of European Union Food Law: Risk versus risk. *Journal of Food Law and Policy*, 4: 1-8.
- Richardson J 2012. *Environmental Regulation in Cities and Other Localities (2012)*. Cheltenham, UK: Edward Elgar Publishing Ltd.
- Salzman J, Ruhl JB 2000. Currencies and the modification of environmental law. *Stanford Law Review*, 53(3): 607-694.
- Sands P 2014. *The Principles of International Environmental Law*. New York, USA: Cambridge University Press.
- Sands S, Peel J 2012. *Principles of International Environmental Law*. Cambridge, UK: Cambridge University Press.
- Schipper L, Pelling M 2006. Disaster risk, climate change and international development: Scope for, and challenges to, integration. *Disasters*, 30(1): 19–38.
- Singh M 2007. Climate change issues facing COP15: The Indian perspective. *India Law Journal*, (2): 4-11.
- Srivastav AK, Srivastav S 2010. *Ecological Meltdown: Impact of Unchecked Human Growth on the Earth's Natural Systems*. New Delhi, India: TERI Press.
- Stavropoulou M 2008. Drowned in Definitions? From <<http://fmreview.nonuniv.ox.ac.uk/FMRpdfs/FMR31/11-12.pdf>> (Retrieved on September 16, 2013).
- Steinzor RI 1998. Reinventing environmental regulation: The dangerous journey from command to self-control. *Harvard Environmental Law Review*, 22: 103-112.
- Stern NNH 2007. *The Economics of Climate Change: The Stern Review*. Cambridge, UK: Cambridge University Press.
- Sunstein CR 2005. *Laws of Fear: Beyond the Precautionary Principle*. Cambridge, UK: Cambridge University Press.
- Swart R, Raes F 2007. Integrating climate change actions into local development. *Climate Policy*, 7(4): 288-303.
- Tschakert P, Tutu R, Alcaro A 2013. Embodied experiences of environmental and climatic changes in landscapes of everyday life in Ghana. *Emotion, Space and Society*, 7: 13–25.
- Urry J 2011. *Climate Change and Society*. Cambridge, UK: Polity Press.
- Victor DG 2004. *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming*. New Jersey, USA: Princeton University Press.
- Wallace P 2009. An overview of the issue: Climate change in 2009. *Sustainable Development Law and Policy*, 10(2): 2-4.
- Weinrib EJ 1993. Jurisprudence of legal formalism. *Harvard Journal of Law and Public Policy*, 16: 583-593.
- Wiener JB 1999. Global environmental regulation: Instrument choice in legal context. *The Yale Law Journal*, 108(4): 677-800.
- Yamin F, Depledge J 2004. *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures*. Cambridge, UK: Press Syndicate of University of Cambridge.