

An outline and critical assessment of the role of planning laws in the regulatory framework of climate change adaptation in South Africa and Nigeria

Olubunmi Ayodele Afinowi, LL.B (OAU Ile-Ife), LL.M (UNILAG)

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Supervisors:

Professor Jan Glazewski, Department of Public Law, Faculty of Law, UCT

Associate Professor Gina Ziervogel, Department of Environmental and Geographical Science, UCT

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Abstract

Climate change affects the natural and built environment, including all forms of development. The risks of climate change include severe alterations to the normal functioning of communities, including adverse effects on humans, infrastructure, land use, the built and natural environment. Due to these occurring and projected adverse effects, there is the need to develop resilience within communities, especially in areas of particular vulnerability. The point of departure of this research is that planning laws have a role to play in the adapting to, and building of resilience against, climate change. As such the work argues for an integration of climate change considerations into planning, environmental and related laws. The relevant laws will be examined to consider the extent to which they are suited to aid the adaptation process. The research entails a comparative approach through the analysis of planning laws in Nigeria and South Africa. It also involves qualitative empirical research into the effectiveness of planning laws as a means of adaptation to climate change. Planning law in Nigeria is very procedural and is limited to physical planning and ordering of the built environment. South Africa, on the other hand, has integrated sustainable development considerations into her planning legislation and it now encompasses spatial planning, integrated development plans, land use management and others. In both countries, however, there seems to be no express integration of climate change into planning laws, especially at the national level of government. The research also examines the legal aspects of climate change adaptation strategies in both countries. It found that in Nigeria in particular, there is no provision for inter-governmental cooperation to facilitate physical planning or climate adaptation action. In the case of South Africa, there is a well-structured intergovernmental collaboration regarding planning and land use management, which gives some consideration to climate change adaptation. However, the structure for cooperation is still being developed as seen in the draft National Adaptation Strategy and the proposed Climate Change Act. There is a need to re-evaluate the relevant laws in both countries, with special consideration to the role of planning in adaptation to the adverse impacts of climate change on the natural and built environment.

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Dedication

To my husband, Ifewumi, who believes in me and supports me against all the odds.

To my Parents who continually spur me on to excellence and on whose shoulders I stood to see the World; especially you mum, you watched me from infancy to adulthood, and selflessly cared for my family while I went in pursuit of excellence.

To my children who patiently bore the inconvenience of mum's absence for three years, may the wind always be in your sails.

Declaration

I, **Olubunmi Ayodele Afinowi**, hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university. I authorise the University to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

Signature: ...

Signed by candidate

Date: ...06/07/2018.....

List of Abbreviations

ACHPR - African Commission on Human and Peoples Rights

CAF - Cancun Adaptation Framework

CBA - Community-based Adaptation

CC - Constitutional Court

CCA - Climate change action

CCAG - Climate change adaptation governance

CCTCCP - City of Cape Town Climate Change Policy of 2017

CDP - Comprehensive Development Plan

CFRN - 1999 Constitution of the Federal Republic of Nigeria.

CMP - Coastal Management Programme

COP - Conference of Parties

COP 21 HR Report - Report of the Office of the High Commission for Human Rights (OHCHR) to the 21st Conference of Parties (COP 21)

CPS - Coastal Planning Schemes

CT - Cape Town

DFA - Development Facilitation Act

DRM - Disaster Risk Management

DRMA - Disaster Risk Management Act

EBA - Ecosystem-based Adaptation

FAO - United Nations Food and Agriculture Organization

GAN - Global Adaptation Network

GHG - Greenhouse Gases

HBS - Heinrich Boll Stiftung

ICLEI - International Council for Local Environmental Initiatives

ICMA - Integrated Coastal Management Act 2008

IDP - Integrated Development Plan

IPCC - Intergovernmental Panel on Climate Change

IPCC AR5 - Intergovernmental Panel on Climate Change Fifth Assessment Report

JPOI - Johannesburg Plan of Implementation

LAS-CCAS - Report on Lagos State Climate Change Adaptation Strategy 2012

LASPPA - Lagos State Planning Permit Authority

LCDA - Local Community Development Areas

LSDP - Lagos State Development Plan 2012-2025

LUA - Land Use Act of 1978

LUPO - Land Use Planning Ordinance

MPBL - City of Cape Town Municipal Planning Bye-Law

MPRDA - Mineral and Petroleum Resources Development Act

NASPA-CCN - National Adaptation Strategy and Plan of Action on Climate Change for Nigeria

NAPS - National Adaptation Plans

NCCRP - National Climate Change Response Policy White Paper of 2011

NESREA - National Environmental Standards and Regulations Enforcement Agency

NPDP - National Physical Development Plans

ODP - Operative Development Plan

OECD - Organization for Economic Co-operation and Development

OHCHR - Office of the High Commission for Human Rights

RBO - Resilience Building Options

SC - Supreme Court

SCA - Supreme Court of Appeal

SDF - Spatial Development Framework

SDGs - Sustainable Development Goals

SPLUMA - Spatial and Land Use Management Act 2013

UNEP - United Nations Environment Programme

UNFCCC - United Nations Framework Convention on Climate Change

UNHCR Report - Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights

UN-Habitat - United Nations Human Settlements Programme

URA - Urban Renewal Agency

URPA - Urban and Regional Planning Act of 1992

WCCCRS - Western Cape Climate Change Response Strategy 2014

WCLUPA - Western Cape Land Use Planning Act

List of Cases

Arch Bishop Olubunmi Okogie v The Attorney General of Lagos State (1981) 2NCLR 337.

Attorney General of Ondo State v Attorney General of the Federation (2002) 9 NWLR (Pt. 772)

City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal and Others [2010] ZACC 11

City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal [2009] ZASCA 106

Earthlife Africa Johannesburg and Another v Minister of Energy and Others [2017] ZAWCHC

Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others [2017] ZAGPPHC

Gabčíkovo-Nagymaros Project, *Hungary v Slovakia* (Separate Opinion of Vice-President Weeramantry) ICJ GL No 92, [1997] ICJ Rep 7, [1997] ICJ Rep 88

Habitat Council and Another v Provincial Minister of Local Government, Environmental Affairs and Development Planning in the Western Cape and Others [2013] ZAWCHC 112

Maccsand (Pty) Ltd v City of Cape Town 2012 (4) SA 181 (CC) 'PER / PELJ 2012(15)5 at 546.

Macssand (Pty) Ltd and another v City of Cape Town and Others [2011] ZASCA 141

Minister of Local Government, Environmental Affairs and Development Planning, Western Cape v The Habitat Council and others [2014] ZACC 9

This thesis is based on laws and policies in operation or available for consideration as at December 2017.

CHAPTER 1: INTRODUCTION

1.1 Background to Study

Climate change refers to the changes in atmospheric conditions as a result of trapped greenhouse gases (GHG) that have over a given period increased the temperature of the earth and led to global warming and other impacts of climate change.¹ Specifically, the Intergovernmental Panel on Climate Change (IPCC) defines climate change as the

change in the state of the climate that can be identified...by changes in the...variability of its properties, and that persists for an extended period, typically decades or longer...whether due to natural variability or as a result of human activity.²

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as

a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.³

From the above definitions and as seen in the IPCC Reports, there are significant impacts of climate change which are leading to major environmental, economic and social challenges. Such challenges include flooding, water shortage, increased threat of displacement (especially for coastal communities), and the disruption of coastal economic ventures, as well as the destruction and degradation of already inadequate infrastructure.

The inevitable consequences of climate change on natural habitats and human settlements,⁴ as well as the worsening of pre-existing vulnerabilities,⁵ make it pertinent for land use and spatial planning laws to be geared towards proactive adaptation. This is particularly so as regards adaptation responses such as resettlement of communities, the preservation of the ecosystem and ecosystem services, the reinforcement of existing infrastructure and public services, as well as, advocacy and public participation.

¹ IPCC, 2014: Summary for policymakers in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* CB Field VR Barros DJ Dokken et al (eds); see also, Preamble to the United Nations Framework Convention on Climate Change (UNFCCC) available at http://unfccc.int/key_documents/the_convention/items/2853.php (accessed 05/10/2015).

² Ibid at 5.

³ Art 1 (2) of the 1992 UNFCCC.

⁴ See, IPCC, 2014: Summary for Policy Makers, op cit. note 1.

⁵ TM Gremellion 'Setting the foundation: climate change adaptation at the local level' (2011) 41 *Envtl.* 1224.

Adaptation through proactive strategies backed by the law provide an opportunity to avoid or reduce the impacts of climate change highlighted above.⁶

The highlighted adverse effects have profound implications on the planning process and legislation in both South Africa and Nigeria. The effects, particularly on human settlements make it pertinent for there to be a synergy and interplay between the climate change adaptation regime and other legal regimes such as that regulating physical planning. In addition, effective adaptation requires a cohesive and inclusive governance structure comprising of state actors at all levels of government and non-state actors. The thesis analyses the structures of cooperative government in both Nigeria and South Africa, and examines various works done on nodal and multi-level governance in order to arrive at a structure for climate change adaptation governance.

The thesis analyses the legal framework on physical and spatial planning in both Nigeria and South Africa. It also considers government inter-relationship on physical planning and land use management in line with the realities of climate change. In this regard, it is noted that the governance structure in South Africa and Nigeria are quite similar in nomenclature but different in their interrelations. South Africa has a national, *provincial* and local government system which can be described as quasi-federal,⁷ while Nigeria has the federal, *state* and local government and operates a federal system. The local government system in Nigeria has however been relegated to obscurity as local governments depend on states for their validity. Thus, the discussion on climate change strategies and planning legislation for South Africa is at the national, provincial and local government level, while the analysis on Nigeria is at the federal and state level only.

This research focuses on South Africa in the southern part of Africa and Nigeria in western Africa for reasons elaborated on in 1.4 below. The adverse effects of climate change on human and natural systems in both countries include the scarcity of water,⁸ damage to existing infrastructure and settlements,⁹ leading to extensive migration from highly

⁶ J Frohlich and J Knieling 'Conceptualising climate change governance' in J Knieling and WL Filho (eds) *Climate Change Governance* (2013) p 12.

⁷ A du Plessis and LJ Kotze 'The heat is on: Local government and climate governance in South Africa' 58 (1) *Journal of African Law* 145 – 174 at 147.

⁸ IPCC 2014 Summary for Policy Makers op cit note 4 at 4.

⁹ Ibid at 6.

vulnerable areas to places less prone to adverse effects.¹⁰ Adverse effects also include an increase in health problems¹¹ amongst the more vulnerable members of the society including children, the aged, homeless, and persons with special needs. According to the IPCC, by the year 2020, a large part of Africa, including Nigeria and South Africa will experience some form of water stress.¹² The melting of ice-glaciers and warming of the oceans will keep leading to a sea level rise, resulting in inundations of coastlines.¹³

1.1.1 International cooperation on climate change adaptation

Both Nigeria and South Africa are member states of the UNFCCC.¹⁴ The UNFCCC provides the necessary guiding principles on all climate change action and requires all state parties to the Convention to act on climate change in line with national peculiarities and specific developmental issues.

The Convention encourages state parties to take necessary action and make publications of such actions on the mitigation of climate change. Such actions include the development of strategies and technologies to reduce the emission of greenhouse gases and promote the establishment and preservation of sinks to reduce the amount of greenhouse gases in the atmosphere.¹⁵

In recent years, there have been global efforts to adapt to the adverse effects of climate change.¹⁶ The UNFCCC, though majorly focused on mitigation, makes specific provision for

¹⁰ I Niang et al IO Niang and others Africa In VR Barros *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects* Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change 1224-5.

¹¹ Ibid.

¹² Ibid at 1210.

¹³ Ibid at 1210-1; Flooding as a result of sea level rise is projected to affect millions of people by the year 2080. Already Nigeria is beginning to witness flooding as a result of unprecedented rainfall reported incidents include flooding of 25th, 28th and 29th of June 2013 in Southern Nigeria, September 2012 rains causing floods in Plateau, Kebbi, Cross River, Akwa Ibom and Bayelsa States, see <http://floodlist.com/tag/nigeria>, (accessed 17/06/2015); <http://www.theguardian.com/global-development/2013/aug/28/nigeria-floods-disaster> (accessed 17/06/2015); <http://www.vanguardngr.com/2012/10/rage-of-nature-flood-ravages-communities-across-nigeria/>; <http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=79398> (accessed 17/06/2015).

¹⁴ South Africa signed the Convention on the 15th of June 1993, ratified it on the 29th of August 1997 and it entered into force for South Africa on the 27th of November 1997. Nigeria signed the Convention on the 13th of June 1992, ratified it on the 29th of August 1994 and it came into force in Nigeria on the 27th of August 1994. (Note: In line with its Article 23(2), the United Nations Framework Convention on Climate Change (UNFCCC) enters into force in individual states 90 days after the deposit of the document of ratification. After the deposit of the 50th document of ratification, it enters into force for all State that had previously ratified it. Thereafter, the date of entry into force for individual states is subject to the individual date of ratification).

¹⁵ Art 4 (1) (a) – (d) UNFCCC.

¹⁶ IPCC 2014 Summary for Policy Makers op cit note 4 at 8.

adaptation, concerning cooperation amongst member nations in preparing for adaptation to the adverse effects of climate change.¹⁷ This is especially in the area of coastal management, protection and rehabilitation of areas affected by droughts and floods, water resources, and agriculture.¹⁸

Regarding adaptation, the Convention requires member states to take specific steps to prepare for adaptation to the impacts of climate change. For instance, integrated plans are required for areas of vulnerability such as coastal zones, water resources, agriculture, as well as drought and flood-prone areas.¹⁹ There is also a requirement for state members to integrate climate change considerations in the formulation and implementation of policies regarding social, economic and environmental matters. The aim of all such action being to minimise the impacts of climate change on the economy, public health and the quality of the environment.

There is also a call on states to create awareness, spread the knowledge on climate change and to encourage full participation in the process of combating climate change and its impacts.²⁰ This lends credence to the argument in Chapter 4 for all-inclusive governance as a means of adequately addressing the issue of climate change. Specifically, regarding public awareness and participation in climate change action, State members are mandated to promote inter-governance cooperation across all levels, and make information on climate change readily accessible to members of the public and encourage public participation by knowledge and technology exchange, training and other forms of inclusive action.²¹

The necessity of adaptation to climate change has also been reiterated at several Conferences of Parties arising from the UNFCCC. At the third Conference of Parties (COP 3) the Kyoto Protocol was adopted.²² Although the instrument focuses majorly on carbon emission trading and other mitigation mechanisms, it also sets out to help developing countries adapt to climate change. The Protocol established the Adaptation Fund through which developing countries can benefit from a funds transfer from the proceeds of carbon trading to aid their

¹⁷ Art 4 of the UNFCCC.

¹⁸ Art 4(1) (e) *ibid*.

¹⁹ *Ibid*.

²⁰ Art 4(1) (i) *ibid*.

²¹ Art 6 *ibid*.

²² Adopted in Kyoto, Japan on the 11th of December 1997.

adaptation processes.²³ The Protocol also encourages member states to ‘facilitate adaptation to climate change’ and implement programmes in various sectors within their countries, including spatial planning, to aid adaptation.²⁴

Other COPs have also paid attention to adaptation to climate change; these include the Nairobi COP 12, which led to the Nairobi Work Programme; COP 13, the outcome of which is the Bali Action Plan; the Durban COP 17; the Doha COP 18 and the Warsaw COP18. A joint agreement at these Conferences was the need to promote an action plan on adaptation to climate change and the need for individual countries to have national action plans on adaptation. These COPs also urge developed countries to promote the adaptation process in developing countries through the transfer of funds and technology and the provision of technical knowledge and assistance to aid the adaptation process.²⁵

The Cancun COP16 stands out as being the most proactive regarding adaptation. This COP came up with the Cancun Adaptation Framework (CAF) aimed at garnering international cooperation for the adaptation process in developing countries.²⁶ It also established the Adaptation Committee which is aimed at giving technical guidance to developing countries in their adaptation process to boost a knowledge-driven adaptation.²⁷

The Paris Agreement which is the outcome of the COP23 further emphasised the necessity for climate change adaptation, more so within the broader context of sustainable development and the common but differentiated responsibility to safeguard the environment.²⁸ The Paris Agreement also recognises the necessity of action across all levels of governance to ensure adaptation to climate change,²⁹ and in this regard, it iterates the need for state parties to adhere to the CAF.

The Cancun Adaptation Framework and the Paris Agreement emphasise on the involvement of all stakeholders in climate change adaptation in line with the guidelines set in the

²³ Art 12(8) of the Kyoto Protocol available at http://unfccc.int/kyoto_protocol/items/2830.php (accessed 09/10/2015).

²⁴ Art 10(b) Kyoto Protocol *ibid*.

²⁵ See Key Steps to Adaptation on the UNFCCC website available at <http://unfccc.int/adaptation/workstreams/items/6995.php> (accessed 09/10/2015).

²⁶ Art 13, Section II of the Cancun Agreements Decision 1/CP.16, available at <http://unfccc.int/adaptation/items/5852.php> (accessed 09/10/2015).

²⁷ Art 20 *ibid*.

²⁸ Art 2, 6 and 7(1) of the 2015 Paris Agreement available at www.unfccc.int/paris_agreement/items/9485.php.

²⁹ Art 7(2) and (7) of the *ibid*.

UNFCCC. Such action must be country-specific, gender-sensitive, participatory, transparent and take into consideration the vulnerable members of the society and vulnerable parts of the ecosystem. Also, as part of the drive for all-encompassing climate action, cognisance must be taken of traditional and indigenous knowledge.³⁰

In addition to the above, the Cancun Adaptation Framework (CAF) encourages adaptation action by member states through a thorough consideration of all ‘matters relating to adaptation’. The use of the phrase ‘matters relating to adaptation’ presupposes that the impacts of climate change permeate all aspects of human life. Thus, action will be required across all sectors of government. The CAF requires state members to take adaptation action by drawing up national adaptation plans and establishing a program to consider ways of addressing losses and damages caused or aggravated by the adverse effects of climate change. In line with article 6 of the UNFCCC, the CAF encourages state members to establish and strengthen institutions for adapting to climate change.

From the above discussion, it is evident that the international community has dedicated a lot of resources and attention to adaptation, in terms of multilateral agreements, covenants, finance, research and technology. The same however cannot be said of adaptation at the national levels, especially in many developing countries where the challenges of climate change are aggravated by economic and developmental deficits.

1.1.2 South Africa

South Africa lies in the most southward tip of Africa. Its 3,000 km coastline stretches from the Atlantic on the west and the South Indian Ocean on the east.³¹ The country is semi-arid, with low levels of precipitation and the tendency to experience water shortage, considering that its annual rainfall is about half of the global average.³²

Land and water form an important basis for economic and social development in South Africa. The legal framework regulating the use of these two entities is of importance as the

³⁰ Art 7 (2) and (5) of the 2015 Paris Agreement op cit note 28 and paragraph 12 of the Cancun Adaptation Framework op cit note 26

³¹ <http://www.nationsencyclopedia.com/geography/Slovenia-to-Zimbabwe-Cumulative-Index/South-Africa.html> (accessed 17/06/2015).

³² National Climate Change Response Green Paper in General Notice 1083/ 33801/4 , 25 November 2010 available at https://www.environment.gov.za/sites/default/files/legislations/national_climatechnage_response.pdf (accessed 10/06/2015).

impacts of climate change will affect the use of both land and water resources and services linked to them.

1.1.2.1 Constitutional Provisions

Physical planning in South Africa is styled spatial planning³³ and is a shared responsibility between the three spheres of government, that is, the national, the provincial and the municipal governments. These spheres of government according to the Constitution are “...distinctive, interdependent and interrelated” and they together have a duty to “secure the well-being of the people” without interfering with the jurisdiction of other spheres of governments.³⁴ The Constitution thus provides for the level of competence of each sphere of government regarding physical planning.³⁵ Areas of national and provincial competence include housing, environment, nature conservation, pollution control, population development, regional planning and development, and urban and rural development.³⁶ The exclusive jurisdiction of the provincial government as it relates to spatial planning is provincial planning and provincial roads and traffic.³⁷

The Constitution spells out the planning jurisdiction of the local government, subject to section 155 (6) (a) and (7) as follows: building regulations, municipal planning, storm-water management system in built-up areas, water and sanitation services.³⁸ Also, the provinces and the local governments have shared jurisdiction over matters pertaining to provincial planning, billboards and public advertisement, local amenities, municipal parks and recreation, public places, refuse removal, refuse dumps and solid waste disposal.³⁹

1.1.2.2 Planning Legislation

At the national level, planning is currently regulated by the Spatial Planning and Land Use Management Act, 2013 (SPLUMA) which repealed and replaced the previous Development Facilitation Act of 1995. The SPLUMA is the flagship legislation concerning spatial planning

³³ See the Preamble and s 5 the Spatial Planning and Land Use Management Act 16 of 2013; See also J Van Wyk, Planning Law 1-15.

³⁴ S 41(1) (b), (f) and (g) of the Constitution of the Republic of South Africa Act 108 of 1996.

³⁵ The national legislature is provided for in s 44, the legislature of the provinces in s 104 and the local governments’ legislative powers is highlighted in s 156 of the Constitution.

³⁶ Schedule 4 part A of the South African Constitution op cit note 34.

³⁷ Schedule 5 part A *ibid*.

³⁸ Schedule 4 part B *ibid*.

³⁹ Schedule 5 part A *ibid*.

and land use management and any law inconsistent with its provisions is of no effect.⁴⁰ The SPLUMA, in line with the National Environmental Management Act,⁴¹ recognises the need for the protection of the environment and seeks to achieve the objectives set out in the Constitution, that is, the safeguarding of the environment,⁴² the protection of property rights⁴³ and the right of access to adequate housing⁴⁴ and water.⁴⁵ The provisions of the SPLUMA are in line with the requirements laid out in the Constitution on the roles of national legislation, to maintain set national standards and to establish minimum standards for the rendering of services.⁴⁶

At the provincial and municipality spheres, each province and municipality has laws and regulations on spatial planning and land use management.⁴⁷ However, a major challenge with the legal framework of planning in South Africa, as with many other countries, is that there is much focus on development control while little attention is paid to the application of planning regulations to real environmental and developmental challenges.⁴⁸ This argument is based on the fact that planning laws must be concerned with issues such as community well-being, reduction of risks and hazards, sustainability of public infrastructure and disaster prevention and management. This role of planning legislation becomes more pertinent given the adverse effects of climate change. If the planning laws are to address these issues, there is a need to pay attention to their application to real-life situations as is argued in this thesis.⁴⁹

The long coastline in South Africa, with associated inundations and erosion makes it necessary for the research to consider coastal planning and management. Planning in relation to coastal areas is regulated by the Integrated Coastal Management Act (ICMA).⁵⁰ The Act stipulates that the coast and the various zones that fall within national jurisdiction are national

⁴⁰ S 2 of the SPLUMA op cit note 33.

⁴¹ Act 107 of 1998.

⁴² S 24 of the SPLUMA op cit note 33.

⁴³ S 25 *ibid*.

⁴⁴ S 26, *ibid*.

⁴⁵ S 27 (1) (b), *ibid*.

⁴⁶ S 44 (2)(c) & (d) of the South African Constitution op cit note 34.

⁴⁷ The provincial law on spatial planning in the Western Cape Province is the Western Cape Land Use Planning Act 3 of 2014.

⁴⁸ J de Visser S Berrisford A May et al “Report on a Roundtable on Law Reform in Planning” Department of Rural Development and Land Reform 2012 available at http://sacitiesnetwork.co.za/wp-content/uploads/2014/07/roundtable_law_reform_in_planning-_report.pdf (accessed 06/10/2015).

⁴⁹ This is discussed in Chapters 6 and 7.

⁵⁰ The National Environmental Management: Integrated Coastal Management Act 24 of 2008.

assets, though the provinces and municipalities have a role to play as well.⁵¹ The concept of land use planning is extended to the coasts by the ICMA⁵² and the tools used to achieve this include the Coastal Management Programme (CMP)⁵³ and the Coastal Planning Schemes (CPS).⁵⁴

1.1.3 Nigeria

Nigeria is situated in the western part of Africa and is bordered on the north by Niger Republic, bounded in the east by Cameroon and Chad, and Benin Republic to the west.⁵⁵ The southern part of Nigeria is bordered by the Atlantic Ocean, with a coastline of 853 kilometres (approximately 530 miles). The Nigerian coastline borders about eight Nigerian states, most of which have a vibrant economy dependent on water.⁵⁶

1.1.3.1 Constitutional Provisions

The Constitution of Nigeria does not expressly assign planning legislation to any level of government; planning responsibilities are not included in the exclusive legislative list of the National Assembly or within the competency of the federal executive.⁵⁷ The only specific constitutional provisions on planning responsibilities are in relation to the local governments. The role of the local government regarding planning can however only be given effect by the State governments.⁵⁸

The powers of the local government include the construction and maintenance of open spaces and public facilities, the provision of public conveniences, the disposal of all forms of waste and refuse and the regulation of outdoor advertising and urban furniture.⁵⁹ All other planning powers, including zoning and subdivision of land are vested in the State governments by

⁵¹ See chap 5 of the ICM Act *ibid*.

⁵² See chaps 3 and 7 of the ICM Act *ibid*.

⁵³ See ss 44 to 50 of the ICM Act *ibid*.

⁵⁴ See ss 56-57 of the ICM Act *ibid*.

⁵⁵ <http://www.nesrea.org/images/NIGERIA'S%20AGENDA%2021.pdf>, (accessed 31/07/2015).

⁵⁶ See S Orupabo *Coastline Migration in Nigeria* available at http://www.hydro-international.com/issues/articles/id291-Coastline_Migration_in_Nigeria.html, (accessed 31/07/2015).

⁵⁷ See part 1 of the Second Schedule to the Constitution of the Federal Republic of Nigeria (CFRN), 1999.

⁵⁸ S 7 of the 1999 Constitution.

⁵⁹ See Schedule 4, para 1(e), (f), (h) & (k) of the Nigerian Constitution.

sections 4 and 5 of the Constitution which empower the State Houses of Assembly to make laws for the good governance of the state,⁶⁰ and the state executive to implement such laws.⁶¹

1.1.3.2 Planning and Land Use Legislation

Land use and physical planning in Nigeria is regulated by the Land Use Act of 1978 (LUA) and the Urban and Regional Planning Laws of the various states. The LUA is a land tenure statute and, has little to do with land use and planning. Before the year 2003, there was a unified urban and regional planning law for the entire country.⁶² This was however challenged successfully in court by the Lagos State government. The Supreme Court, the apex court in Nigeria, held that legislating and implementing of planning laws is within the purview of states, and not a duty of the federal government.⁶³ Thus the federal role in physical planning which provided for a uniform system of planning in Nigeria was declared invalid. Planning powers are shared between the State government and the local governments.

Nigeria has no specific legislation on coastal zone planning and management as is the case in South Africa; instead, various laws refer the coastlines and coastal areas of the country. However, the National Environmental Standards and Regulations Enforcement Agency (NESREA) passed a Regulation in 2010 which deals specifically with the coastal environment.⁶⁴ The seas, coasts and interstate inland waterways fall within the jurisdiction of the federal government.⁶⁵ Due to the absence of a specific law on coastal management, it is difficult to ascertain the roles played by other tiers of government regarding planning in the coastal area of Nigeria.

1.2 Statement of the Problem

The impacts of climate change, when considered together with other stress factors such as poverty, over-population, urbanisation and urban sprawl, limited availability of infrastructure,

⁶⁰ S 4(7) *ibid.*

⁶¹ S 5 (2) *ibid.*

⁶² The Urban and Regional Planning Act of 1992 (URPA).

⁶³ *Attorney General of Lagos State v Attorney General of the Federation and 35 others* (2003) 12 NWLR (pt. 833).

⁶⁴ National Environmental (**Coastal and Marine Area Protection**) Regulations, 2010.

⁶⁵ See part 1 of the Second Schedule to the Nigerian Constitution *op cit* note 57.

as well as other developmental and economic challenges faced by the African continent,⁶⁶ pose a significant challenge.⁶⁷

Vulnerability⁶⁸ to climate change, whether due to natural factors or other ‘stress factors’, puts communities at risks of adverse effects. These risks have been summed up as the

likelihood ... of severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects...⁶⁹

The risks South Africa faces⁷⁰ have, and are likely to aggravate already existing infrastructural and ecological challenges such as fires, floods, water shortage, urban sprawl, overpopulation, waste disposal, and so on.⁷¹ In the same vein, the change in climatic conditions in Nigeria⁷² will aggravate both developmental and environmental challenges.

It thus becomes necessary that steps should be taken to safeguard infrastructure, public services and the social and economic well-being of members of the society. The UNFCCC, the Paris Agreement and outcomes of other COPs discussed above make it obligatory for countries to develop appropriate plans for adaptation, especially regarding coastal zone management and the safeguard of people’s livelihoods and public infrastructure.⁷³ Countries

⁶⁶ IPCC 2007: *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the International Panel on Climate Change*, ML Parry et al (eds) 440; see also IR Feldman & JH Kahan ‘Preparing for the day after tomorrow: frameworks for climate change adaptation’ (2007) 8 *Sustainable Dev. L. & Pol’y* 61; TE Downing L Ringius M Hulme et al ‘Adapting to climate change in Africa’ (1997) 2.1 *Mitigation and Adaptation Strategies for Global Change* 19-44; South African National Climate Change Response White Paper GenN 757/34695/3, 19/10/2011, 8.

⁶⁷ M Boko I Niang A Nyong et al “2007: Africa” in IPCC 2007 *ibid* at 435.

⁶⁸ The IPCC 2007 defines Vulnerability as “the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes.” *Ibid* at 6; Vulnerability to the adverse effects of climate change is grouped into three categories: “a. the built environment, which consists of man-made infrastructure such as buildings, transportation...b. the natural environment, which consists of naturally occurring resources such as wetlands, flora and fauna; and c. the social environment, which focus on areas that impact human life such as the economy and public health.” See, E Sussman “Case study: climate change adaptation planning guidance for local governments in the United States.” *Sustainable Development Law & Policy* 9.2 (2009) 11, see also City of Keene, New Hampshire, *Adapting to Climate Change: Planning a Climate Resilient Community* (2007).

⁶⁹ CB Field (ed) *Managing the risks of extreme events and disasters to advance climate change adaptation: special report of the intergovernmental panel on climate change* (2012) 32.

⁷⁰ South African National Climate Change Response White Paper *op cit* note 66.

⁷¹ The Government of the Republic of South Africa National Climate Change Response Green Paper *op cit* note 32 at 25 -7.

⁷² The National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (Naspa-CCN), November 2011 available at www.nigeriaclimatechange.org (accessed 26/08/2017) 7-9.

⁷³ Art 4(1) (e) UNFCCC.

are also required to take steps to reduce the effects of climate change on the quality of the environment.⁷⁴ The impacts of climate change will also necessitate the adoption of existing legal frameworks across sectors to increase resilience and reduce vulnerabilities. In this regard, planning laws have a role to play in enhancing the capacity of communities to be able to cope with the imminent challenges of climate change.⁷⁵

Many developing countries, including South Africa and Nigeria, have been unable to tackle developmental and environmental problems successfully despite the existence of requisite legal frameworks. The adverse effects of climate change further escalate these challenges.⁷⁶ This research thus considers an appraisal of existing planning legislation in South Africa and Nigeria in order to understand the inherent strengths and weaknesses and identify means of strengthening these legislation as a means of ensuring readiness to tackle climate change in areas of adaptation deficit.

1.3 Relevance of the Study

The work entails an analysis of spatial planning laws in the light of the various risks, and adverse climate change impacts to which South Africa and Nigeria are or will be exposed. Such an understanding will help in identifying the needed measures of adaptation with the existing legal framework regulating land use and planning.

This research focuses mainly on adaptation as a necessary response to climate change. Mitigation has received more attention than adaptation with respect to legislation, policy-making and even international cooperation.⁷⁷ It is argued in some quarters that adaptation is a continuous process in nature,⁷⁸ hence justifying more attention being paid to mitigation.

⁷⁴ Art 4(1) (f) *ibid*.

⁷⁵ See Schedules 4 and 5 of the South African Constitution *op cit* note 34; for Nigeria, see Part 2 of the first Schedule and the fourth Schedule of the Nigerian Constitution *op cit* note 57. See also the case of *A.G. Lagos v. A.G. Federation* *op cit* note 63 at 159-60, where it was decided that urban and regional planning fall with the competence of the state governments and not the federal government.

⁷⁶ KH Hirokawa, and JD Rosenbloom 'Land use planning in a climate change context' in J Verschuuren, (ed) *Research Handbook on Climate Adaptation Law*, (2013) 5 also available at <http://ssrn.com/abstract=2168925>, (accessed 6/10/2015).

⁷⁷ J Verschuuren (ed.) *Research Handbook on Climate Change Adaptation Law* *ibid* at 2.

⁷⁸ ELF Schipper 'Conceptual history of adaptation in the UNFCCC process' (2006) 15.1 *Review of European Community & International Environmental Law* 83; O Karassin 'Mind the gap: Knowledge and need in regulating adaptation to climate change' (2009) 22 *Geo. Int'l Envtl L Rev* 383.

The UNFCCC, however, stipulates that adaptation is of utmost importance as a governmental obligation to the citizens of a country.⁷⁹ In the light of this, the mainstreaming of climate change adaptation into existing legislation on physical planning, for instance, provides an avenue for the government to fulfil the obligation to ensure and carry out adaptation action. It also provides an avenue for the citizenry to hold the government responsible for their actions or inactions in that regard,⁸⁰ as well as to sensitise all stakeholders on their collective and several responsibilities in safeguarding the community against the onslaught of climate change impacts.

It is necessary for adaptation to climate change to be in tandem with laws regulating the environment and development. On the role of planning law, it is noted that “[p]lanning is...concerned with people and the regulation of their environment.”⁸¹ Glazewski has also pointed out that planning laws, though not originally fashioned to cater for environmental challenges, can be modified to meet even the challenges posed by climate change.⁸² Further, the IPCC has identified urban management and land use control as issues arising in the adaptation to climate change.⁸³

Given the above, the research aims to consider how planning laws can be used to reduce the impacts of climate change in terms reducing physical and social vulnerability, coastal land management, urban sprawl, and promoting future planning that integrates climate considerations.

The research involves a comparative study of the legal regime of planning in Nigeria and South Africa. South Africa is, however, more advanced technologically and economically, and this advancement reflects in the planning regulations and the extent of climate change considerations. The gaps in Nigerian planning laws will be identified, and the lessons that can be learnt from South Africa highlighted, as well as the improvements that can be made by both jurisdictions in line with the need to adapt to climate change.

⁷⁹ Art 4(1) (e) and (f).

⁸⁰ ELF Schipper ‘Climate change adaptation and development: Exploring the linkages’ (2007) 107 *Tyndall Centre for Climate Change Research Working Paper* 6.

⁸¹ J Van Wyk, *Planning Law* op cit note 33 at 12.

⁸² J Glazewski ‘Towards a climate-resilient and low-carbon City of Cape Town’ in A Cartwright et al *Climate Change at the City Scale: Impacts, Mitigation and Adaptation in Cape Town* (2012) 165.

⁸³ I Niang et al op cit note 10 at 1238.

1.4 Justification for comparative work between South Africa and Nigeria

The major justification for the comparative research between both countries is the common Anglo-American planning law heritage. The impacts of climate change vary in South Africa and Nigeria, depending on the geography and physical characteristics of individual communities.⁸⁴ There is, however, a common thread, which is the fact that they are both developing countries, both are coastal states in Africa, and they both comprise of communities and groups that are particularly vulnerable to climate change. The study will specifically consider Lagos⁸⁵ in Nigeria and the City of Cape Town, Western Cape, South Africa. Both cities comprise of coastal communities and are metropolitan. Also, Lagos and the Western Cape are most proactive with respect to planning legislation in Nigeria and South Africa respectively. It is also important to note that the impacts in both cities trigger various aspects of physical planning legislation that will be discussed in Chapters 5 and 6.

The research shall consider the jurisprudence or normative basis of the planning laws of both countries, beginning with points of convergence based on the shared Anglo-American and colonial planning heritage. According to Brooks, a proper understanding of the jurisprudence of planning requires the appreciation of the theories *about* planning, and the theories *of* planning,⁸⁶ the former being the “conceptual analysis of the law regulating planning” and the latter “exploration of the relationship of the law of planning to justice”.⁸⁷ Given the similar background, the research will thus consider the planning laws and the principles that drive these laws in the protection of people’s rights and the delivery of justice to all in both countries.

The points of divergence will also be considered. The SPLUMA, for instance, states clearly the principles which are to guide the planning process in South Africa.⁸⁸ However, the planning laws in Nigeria do not contain any explicitly laid out principles. The planning law in

⁸⁴ See OECD (2009), *Integrating Climate Change Adaptation into Development Co-operation: Policy Guidance*, OECD Publishing, Paris <http://dx.doi.org/10.1787/9789264054950-en>, (accessed 06/10/2015) 38.

⁸⁵ Lagos State is one of the 36 states in Nigeria as against the City of Cape Town which is a municipality. However, it has come to be referred to as the City of Lagos due to its metropolitan nature and the extensive rate of urbanization. Local governments however still exist for the purposes of administration and the City is governed as a state. See <https://lagosstate.gov.ng/about-lagos/> (accessed 14/12/2017).

⁸⁶ RO Brooks 'Jurisprudence of planning: Notes on the outline of law required to support and control planners, A' (1978) 24 *Cath. Law* 3-4.

⁸⁷ RO Brooks *ibid* at 4.

⁸⁸ Ss 7 & 8(2) (a), (b) and (c) of the SPLUMA *op cit* note 33.

Lagos State for instance merely makes general reference to urban development, urban regeneration and building control as its set objectives.⁸⁹

The comparative research will include the empirical study, which aims to ascertain the modalities of implementing the laws and whether the highlighted normative bases of the legislation are adhered to at the implementation stage in both countries. The jurisprudence of planning legislation in both countries integrates the socio-economic, geographical and cultural identity of the people, and the jurisprudential similarities will be considered in making recommendations on lessons one country can learn from the other.

1.5 Research Questions

The risks associated with climate change are of such a nature that adequate response will require an integrated and cooperative response from all parties and sectors concerned. The response will also require capacity building for grass root governments to deal with the risks that are likely to arise,⁹⁰ especially in spatial and physical planning.

The broad question this research intends to address is: To what extent has climate change adaptation been incorporated into the legal framework for physical and spatial planning in Nigeria and South Africa?

This question is further broken down into four questions:

- a. What role can planning laws play in the adaptation to climate change?
- b. What are the respective roles of the three tiers of government in climate change adaptation through spatial planning laws?
- c. What roles can be played by non-government stakeholders?
- d. What lessons can Nigeria and South Africa learn from each other, and what can both countries learn from other jurisdictions?

⁸⁹ See the Preamble and s 2 of the Lagos State Urban and Regional Planning and Development Law (URPDL), 2010.

⁹⁰ IPCC, 2014: Summary for Policy Makers op cit note 4 at 18.

1.6 Research Methodology

The methods employed include desktop research by way of doctrinal legal scholarship, and data collection and analysis by way of qualitative empirical legal scholarship.⁹¹ The doctrinal research method will be applied to analyse the primary and secondary sources of planning laws in both countries, that is, legislation, case laws, rules and principles; and texts, articles, commentaries and existing literature respectively. The doctrinal research will also entail a comparative analysis of planning laws in both countries, to identify areas of similarities and divergence for the purpose of making recommendations.

The research also presents a historical and theoretical overview; this aspect of the research will consider factors that have influenced the planning system in both countries.⁹² These factors are considered to understand the underlying framework of planning law in both countries and to suggest new and forward-looking approaches to planning laws in the light of climate change adaptation.

The research will also be reform-oriented⁹³ as it will intensively appraise the adequacy or otherwise of the planning legislation in both countries to tackle the impacts of climate change as they affect the coastal cities of Cape Town and Lagos. Where the research finds the law inadequate, recommendations will be made to address the gaps in the law or its implementation.

The empirical aspect of this research is incorporated in Chapters 5, 6 and 7. The fieldwork is premised on the research questions above, and the interview questions are designed to get interviewees' opinions on the questions upon which this research is based. The empirical research will seek to answer the questions raised and to show the extent to which these considerations have been integrated into the planning, land use and development laws in both South Africa and Nigeria. Consequently, the fundamental aim of the research is to interrogate planning laws of both countries at the national, state, provincial, and local government levels in the light of climate change adaptation.

⁹¹ M McConville & WHE Chui (eds) *Research Methods for Law* (2007) 5.

⁹² For instance, the research will analyse the modernistic form of planning, that is, the old British systems of planning inherited by South Africa and Nigeria.

⁹³ T Huchinson & D Nigel 'Defining and describing what we do: Doctrinal legal research' (2012) 17 *Deakin L Rev* 101.

The empirical research is mainly descriptive and qualitative.⁹⁴ The aim is to look at planning laws in a broader context of social and environmental validity, to ascertain the efficiency and practicability of these laws. The methodology adopted is the use of semi-structured interviews with open-ended questions which allowed the interviewees to give their opinions and experiences on the issue of physical planning in Lagos and Cape Town.

The interviewees were drawn based on a purposeful sampling of a target group. This was informed by their work experience in the field of physical planning, environmental planning and climate change action. The interviewees include town planners, researchers and policymakers in urban and regional planning, environmental planning, climate change adaptation and environmental impact assessment. These interviewees were interviewed in their personal capacities. Thus their views do not represent the positions of the government or organisations with which they work. The fieldwork aimed to:

- find out the challenges experienced in the implementation of planning laws and how practicable these laws are;
- find out the amount of knowledge available and action being carried out on climate change adaptation by the government regarding physical planning; and
- determine how climate change can best be incorporated into the planning process to ensure effectiveness.

In total, fifteen interviewees were interviewed in Lagos, Nigeria and nine in Cape Town.⁹⁵ The findings of the empirical research are incorporated alongside the case law and legislation analysis in Chapters 5, 6 and 7. The disparity in number of interviewees is evidence of some of the challenges encountered in the field in terms of getting experts to participate in the research. It should be noted that the research here aims to go beyond the conventional doctrinal legal research to consider empirical research as a viable way of carrying out legal research, especially in relation to social, economic and environmental issues that affect every

⁹⁴ W Du Plessis 'A self help guide: Research methodology and dissertation writing' http://www.puk.ac.za/opencms/export/PUK/html/fakulteite/regte/pdf/Du_Plessis_Research_Methodology_FIN_AL.pdf (accessed 06/10/2015).

⁹⁵ The case studies used in this research are Lagos in Nigeria and Cape Town in South Africa. As noted earlier in this chapter, the choice of research case studies is based on the fact that Cape Town and Lagos are both metropolitan coastal cities and both are at risk of specific adverse effects of climate change. The legislative and administrative terrains differ though. While Lagos State is at the second tier of government in Nigeria, the City of Cape Town is at the local government sphere of government. In the course of the thesis it will be seen that the local government administration in Lagos State is not effective, especially in terms of physical planning and land use management.

facet of life and all groups of people, and require public participation for sustainable outcomes as is the case with climate change and planning.

The interviews were audio recorded and then transcribed. The transcribed data were analysed using the NVivo data analysis software and the results of the analysis then incorporated in relevant chapters.⁹⁶ In analysing the data, the interviewees' responses were thematically coded.⁹⁷ The themes are based on the interview questions and the general scope of the research.

The research will adopt the comparative research methodology to compare the legal framework of spatial planning in South Africa and Nigeria. The outcome of the comparison will be used to determine the level to which each country has integrated adaptation into their laws, or how suited their planning laws are to engineer public and private awareness and preparedness for the impacts of climate change.

1.7 Research Framework

1.7.1 Legal framework

For South Africa, the analysis of the legal framework is based on the principles of cooperative governance and the Bill of Rights both contained in the Constitution,⁹⁸ the Spatial Planning and Land Use Management Act (SPLUMA)⁹⁹ which is the flagship legislation on planning. Other legislation considered are the National Environmental Management Act¹⁰⁰ which regulates environmental management and governance within the Republic, the Integrated Coastal Management Act¹⁰¹ which sets the standards and principles for the management of coastal zones in South Africa, the Western Cape Land Use Planning

⁹⁶ NVivo is a data analysis software used to analyse data for qualitative research. In this research, it has been used to organize data gathered from the empirical study into various themes relevant to the subject matter of this and other chapters of the thesis.

⁹⁷ Specifically, interviewees' responses are to questions which inquire into the gaps between the letter of physical planning laws and its practical application; the challenges encountered in the implementation of the laws; the ability of planning laws to adequately ensure socio economic wellbeing; the role of each level of government in the planning process and the necessity for intergovernmental relationship to achieve effective physical planning; the extent to which the implementation of planning laws in both south Africa and Nigeria entails climate change adaptation; and the necessity or otherwise for legislation on climate change.

⁹⁸ Constitution of South Africa op cit note 34.

⁹⁹ Op cit note 33.

¹⁰⁰ Op cit note 41.

¹⁰¹ Op cit note 50.

Act,¹⁰² and the City of Cape Town Municipal Planning Bye-Laws.¹⁰³ Other relevant legislation and cases laws will also be considered. The Department of Environmental Affairs is working on a Climate Change Act, but the draft of the legislation was not available at the time of concluding this thesis.

In Nigeria, the legal framework will be based on the Constitution,¹⁰⁴ and the Urban and Regional Planning and Development Law in Lagos State. The Urban and Regional Planning Act of 1992 will also be considered on the basis that it was a national law applicable in the entire country before the decision of the Supreme Court in *Attorney General of Lagos v Attorney General of the Federation and 35 others*.¹⁰⁵ Nigeria has a Climate Change Bill before the National Assembly. The Bill aims to guide the mainstreaming of climate change into legislation and policies across sectors. The Bill, alongside other climate change action strategies, is discussed in Chapter 5.

1.7.2 Theoretical framework

The theoretical framework of the research will include a conceptual analysis of land use, physical and spatial planning. It will also entail an analysis of the concept ‘adaptation’ as an evolutionary concept in relation to humans and their community. This will then be linked to adaptation to climate change specifically regarding international and national governance responses and action. Also considered is disaster risk management as an integral part of both physical or spatial planning and climate change adaptation.

1.7.2.1 Adaptation

The IPCC defines adaptation as the ability of a system to adjust to “...*actual or expected climate change and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities...*”¹⁰⁶ The definition adopts a dual approach to adaptation: first it highlights the ability to adjust and avoid harm; secondly, it mentions the ability to exploit beneficial opportunities of the changes in climate.

¹⁰² Op cit note 47.

¹⁰³ The City of Cape Town Municipal Planning Bye-Law Provincial Gazette 7414 of 29 June 2015.

¹⁰⁴ Op cit note 57.

¹⁰⁵ Op cit note 63.

¹⁰⁶ IPCC 2014 Summary for Policy Makers op cit note 4 at 5.

Adaptation to climate change has been slow to gain support, due to the financial implications such as economic expediency, both from the perspective of transfer of funds between developed and developing countries¹⁰⁷ and inaction at the national and subnational levels. It is also argued that in many areas in Africa, the predictions on the extent of climate change impacts are still uncertain. Some decision makers argue that adaptation should be until there is the availability of technology and scientific advancement, and that the impacts will happen gradually, giving an allowance for societal adaptation.¹⁰⁸

The importance of climate change adaptation has been underscored by the fact that the impacts of climate change will go beyond mere changes in weather,¹⁰⁹ and will involve economic adjustments and losses for many societies, particularly the more vulnerable ones, the loss of infrastructure and reduction in the availability of essential natural resources.¹¹⁰ Collaborative adaptation action thus becomes necessary due to the magnitude and seriousness of the impacts and changes that will be experienced both locally and globally.¹¹¹

There is a consensus that a significant justification for adaptation is to reduce the vulnerability of communities to the impacts of climate change.¹¹² Given this fact, climate change adaptation must take into consideration the need to promote justice and equity, and the protection of life and property.¹¹³ Adaptation cannot be divorced from development, as socio-economic development helps to reduce the level of vulnerability of communities. Thus,

¹⁰⁷ MB Gerrard & K Fischer Kuh. *The Law Adaptation to Climate Change: United States and International Aspects* (2012) 3-4 603-4; C Wold D Hunter & M Powers *Climate Change and the Law* (2009) 95-6; WN Adger NW Arnell & EL Tompkins 'Successful adaptation to climate change across scales' (2005) 15.2 *Global Environmental Change* 77-9; J Paavola & WN Adger. 'Fair adaptation to climate change' (2006) 56.4 *Ecological Economics* 595.

¹⁰⁸ TE Downing op cit note 66 at 20-1.

¹⁰⁹ WN Adger I Lorenzoni & KL O'Brien *Adapting to climate change: Thresholds, values, governance.* (2009) 1.

¹¹⁰ JA Carmin D Dodman, and E Chu 'Urban climate adaptation and leadership: from conceptual understanding to practical action' (2013) 26 *OECD Regional and Development Working Papers* 10; NH Stern *Stern Review: The Economics of Climate Change* (2006) 403.

¹¹¹ WN Adger I Lorenzoni & KL O'Brien op cit note 109 at 1-2.

¹¹² NH Stern op cit note 110 at 405; IR Noble S Huq, YA Anokhin et al 2014: Adaptation needs and options in CB Field VR Barros DJ Dokken et al *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* 839; EL Tompkins WN Adger E Boyd et al 'Observed adaptation to climate change: UK evidence of transition to a well-adapting society' (2010) 20.4 *Global Environmental Change* 628; WN Adger I Lorenzoni & KL O'Brien op cit note 109 at 10.

¹¹³ WN Adger I Lorenzoni & KL O'Brien op cit note 109 at 9.

the first step towards adaptation to climate change is the enhancement of social, economic and environmental development.¹¹⁴

The IPCC 2014 creates a link between adaptation and physical planning by highlighting possible adaptation options which include structural or physical adaptation. This implies adaptation in the built environment, the fortifying of public services such as water availability and waste disposal, and the conservation of the biodiversity and ecosystem. Adaptation must also extend to social aspects of the society such as integration into education and public awareness, as well as behavioural adjustments in members of the society. Finally, for the adaptation process to be successful, it must be facilitated by and integrated into the government institutions such as laws, regulations and government policies.¹¹⁵

1.7.2.2 Physical and Spatial Planning

Spatial planning or physical planning play an important role in the wellbeing of any city or community as they revolve around activities carried out on or in relation to land.¹¹⁶ Spatial planning as a form of land use management integrates the principles of sustainable development and is thus concerned with the efficient use of land in a way most productive and beneficial to all parties concerned – both the present and the future generation.¹¹⁷ A primary characteristic of spatial planning is that it is futuristic and puts public interest and environmental justice into consideration.¹¹⁸ Another major objective of planning is the modification of past inappropriate uses of land in the light of present-day realities; these may be wrong uses of land itself or use that excludes a class of people.¹¹⁹ The physical or spatial

¹¹⁴ A Hurlimann, J Barnett, R Fincher et al 'Urban planning and sustainable adaptation to sea-level rise' (2014) 126 *Landscape and Urban Planning* 85; NH Stern op cit note 90 at 404& 430; G. Ziervogel M New E Archer van Garderen et al. 'Climate change impacts and adaptation in South Africa' (2014) 5.5 *WIREs: Climate Change* 615.

¹¹⁵ IPCC 2014 Adaptation needs and options op cit note 112 at 845.

¹¹⁶ J VanWyk Planning Law op cit note 33 at 10; BJ Davidse M Othengrafen & S Deppisch 'Spatial planning practices of adapting to climate change' (2015) *European Journal of Spatial Development* available at [http://www.nordregio.se/Global/EJSD/Refereed articles/refereed57.pdf](http://www.nordregio.se/Global/EJSD/Refereed%20articles/refereed57.pdf) (accessed 10/06/2015)

¹¹⁷ K Van Assche R Beunen M Duineveld et al 'Co-evolutions of planning and design: Risks and benefits of design perspectives in planning systems' (2013) 12.2 *Planning Theory* 173; D Stead 'Spatial planning: key instrument for development and effective governance with special reference to countries in transition' (2008) United Nations Economic Commission for Europe Publication 1,3&9; J Glazewski *Environmental Law in South Africa* 202; P Healey 'Territory, integration and spatial planning' in M Tewdwr-Jones P Allmendinger (eds) *Territory, Identity and Spatial Planning: Spatial Governance in a Fragmented Nation* (2006) 71.

¹¹⁸ See, S Fainstein 'Spatial justice and planning' (2009) 01 *Spatial justice*; A Koresawa & J Konvitz 'Towards a new role for spatial planning' in OECD, *Towards a New Role for Spatial Planning* (2001) 11.

¹¹⁹ J Glazewski *Environmental Law in South Africa*, op cit note 117 at 198.

planning system in every society seeks to regulate and guide physical development within a community and considers efficient land use across other related sectors such as transportation, agriculture, environment and waste disposal.¹²⁰

The UNECE highlights, as part of the objectives of planning, the promotion of a meaningful framework that can respond to “the needs of local communities”, the improvement of “urban environmental performance” and the facilitation of social security.¹²¹ Planning is also identified as an adaptation tool in two specific ways. The first is *avoidance*; development plans are fashioned to avoid places where the effects of climate change will be most devastating or to limit the uses of such places.¹²² The second goal proposed is *minimisation*, this does not have climate change as the basis of planning. However, it incorporates ways of reducing vulnerability to adverse effects.¹²³ This might include the revision of building codes or the building of diversions for flood paths in areas that are prone to flooding.

The planning system in Nigeria is still based on urban and regional planning, while South Africa engages in spatial planning. This thesis uses the term ‘planning’ or ‘physical planning’ interchangeably, except in instances where reference is made to a specific form of planning.

1.7.2.3 Planning and Disaster Risk Management

Disasters have been defined as being a calamitous occurrence which results in human, material, economic and environmental losses beyond which the affected community can bear, such disasters being either of human or natural origins.¹²⁴ They are also described as disruptions in the functioning of a society resulting in the already mentioned losses, to the extent that the society is unable to function using its resources alone.¹²⁵ Both the International Federation of Red Cross/Red Crescent Societies and the United Nations Office for Disaster Risk Reduction agree that disasters occur as a result of the combination of hazards, vulnerability, and lack of capacity to cope with or reduce risks.¹²⁶ The link between

¹²⁰ A Koresawa & J Konvitz op cit note 118 at 84.

¹²¹ D Stead op cit note 117 at 9.

¹²² BJ Davidse M Othengrafen & S Deppisch op cit note 116 at 5.

¹²³ Ibid at 6.

¹²⁴ ‘What is a disaster’ <https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/>, (accessed 06/08/2015).

¹²⁵ United Nations Office Disaster Risk Reduction ‘Terminology’ <http://www.unisdr.org/we/inform/terminology>, (accessed 06/08/2015).

¹²⁶ See comments on <https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/> and <http://www.unisdr.org/we/inform/terminology>, (accessed 06/08/2015).

vulnerabilities and risks is also highlighted by Chen, who points out that vulnerability is a combination of natural and social effects resulting in risk susceptibility.¹²⁷ Thus, while climate change may pose risks to the natural and human environments, these risks are only aggravated by the social choices made by individual societies through their laws and government policies. This point he succinctly states thus: “...*environmental calamities inflict loss only to the extent that human institutions place people and property in the path of destruction.*”¹²⁸

Studies by the IPCC and other research groups on the likely impacts of climate change have given many societies a perception of the risks and hazards to which they are exposed. This knowledge presents an opportunity for states to establish a proper regime of disaster risk management, mainly through proper physical planning and adaptation measures. This could be through legislation, administrative directives, strategies, policies or state action to lessen the adverse effects of hazards and the possibility of disasters occurring due to climate change. In other words, disaster risk management through physical planning is a viable tool for reducing vulnerability and promoting adaptation.

For there to be a viable disaster risk reduction/management regarding climate change, the relevant planning legal framework must put it into consideration as a primary facilitator. For instance, planning laws can help in ensuring that settlements are moved away from climate risk-prone areas or that development permits are not granted subject to specific climate change risk considerations. It will also guide the tide of development in coastal zones or areas prone to desert encroachment.¹²⁹

1.8 Structure of the Dissertation/Organisation of the Study

This thesis is broken down into eight chapters.

This Chapter is an introduction to the research work itself and gives an overview of why climate change adaptation is an important consideration in the context of planning law

¹²⁷ J Chen ‘Modern disaster theory: Evaluating disaster law as a portfolio or legal rules’ (2011) 25 *Emory Int’l L. Rev.* 25 (2011) 1123 & 1129.

¹²⁸ *Ibid* at 1129.

¹²⁹ IFRC&UNDP ‘Effective law and regulation for disaster risk reduction: A multi-country report’ <http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/effective-law---regulation-for-disaster-risk-reduction.html> 45-67 (accessed 06/08/2015).

especially in South Africa and Nigeria. It also gives an overview of the legal regime of planning as a means of adapting to the impacts of climate change.

Chapter 2 addresses the theoretical bases of planning law. It considers the history and evolution of planning law in both South Africa and Nigeria, given the Anglo-American background of both countries. It also looks at the forms of planning regulations and the tools such as zoning, spatial planning, land use control, planning obligations, planning schemes, as well as how these have been applied in the planning of cities. It will also examine sustainable development as an index of a functional legal regime of planning and international best practices in planning law.

Chapter 3 examines the concept of adaptation to climate change generally and specifically within the context of climate change action in South Africa and Nigeria. It provides a basis for the discussion on climate change governance in Chapters 4 and 7.

Chapter 4 examines the concept of governance in relation to climate change adaptation and land use.

Chapter 5 reviews planning law in Nigeria. Indigenous planning and the inherited planning system will be considered. Planning in Nigeria will be considered in two phases: colonial planning regulations and post-colonial regulations. The chapter will highlight the peculiarities of Nigerian planning laws as contained in the 1999 Constitution of the Federal Republic of Nigeria as well as the landmark case of *Attorney General of Lagos Attorney General of the Federation and 35 others*.

Chapter 6 analyses planning law in South Africa, the history and the form of planning legislation as they exist today. The planning laws of South Africa will also be considered in two phases – pre-1994 and post-1994. The powers of the Municipalities, Provinces and the National government in relation to planning will be considered. There is also a review of several judicial decisions that have shaped physical planning governance in South Africa.

Chapter 5 explores the extent to which climate change considerations, especially, adaptation have been adopted in South Africa and Nigeria. It also considers the extent to which both countries consider incorporating climate change adaptation into existing legislation or plan for a climate change legislation in the future.

Chapter 8 concludes the thesis by looking at the lacunae in the planning laws and climate change adaptation strategy of both countries; looking at lessons that Nigeria can learn from South Africa and the lesson both countries can learn from international best practices.

CHAPTER 2: THEORETICAL BASES OF PLANNING LAW IN NIGERIA AND SOUTH AFRICA

2.1 Introduction

This chapter addresses the theoretical bases of planning law. It also considers the history and evolution of planning law in both South Africa and Nigeria, given the Anglo-American background of planning law in both countries.¹ The chapter argues that planning in principle, though not backed by legislation, is not alien to most traditional societies. In the light of the argument proffered, the chapter examines land use in indigenous African societies and land rights restrictions at English common law. These land use and restrictions represent attempts by the society to adapt to social, cultural and even environmental changes. The advent of the planning process and legislation constitute adjustments to the changes within the society.

The chapter also considers the various justifications and underpinnings of planning law in general. In this regard, the normative bases of planning legislation are considered, and attention is paid to the concepts of public interest and societal “well-being”, a phrase which is included in South Africa’s environmental right. The chapter also examines theories of planning propounded by various schools of thought on how planning should be carried out. In this regard, advocacy and public participation are central themes. These together with the concept of public interest are highlighted as providing viable justifications for the inclusion of climate change considerations in planning legislation.

The chapter highlights the forms of planning regulations and the tools such as zoning, spatial planning, land use control, integrated development planning and planning schemes, and how these have been applied in the planning process in Nigeria and South Africa. The discussion in this chapter provides the background for answering the research questions highlighted in section 1.5 of Chapter 1.

¹ It is worthy of note that while the South African planning system has an Anglo-American background, the legal system as a whole is based on Roman-Dutch common law.

2.2 History and Evolution of Planning Law

Spatial planning, urban and regional planning and physical planning span several fields of knowledge.² There have been inputs of economics, psychology, and other social sciences, as well as significant contributions from the pure and applied sciences and arts.³ In the same way, planning, like other fields of human endeavour, is linked to law.⁴ Frieden iterates the role of other disciplines in planning by noting that these will aid an equitable distribution of the commonwealth⁵ of the city amongst its inhabitants,⁶ while taking into consideration competing interests.⁷ Mainly, the law serves as a means of ensuring that planning process within any nation or state is adhered to by all stakeholders, government and citizens alike.⁸ Although planning though has not always been the subject matter of legislation,⁹ the relationship between law and planning is essential for planning to realise its aim fully. It has been argued that planning and law play the role of reducing social conflict and providing favourable conditions for the advancement of public interest through social and economic strategies aimed at development.¹⁰

According to Nolon, planning laws are a reflection of a society's aspirations, its political and geographical peculiarities and history.¹¹ Thus, planning laws play various roles including establishing standards, providing frameworks and ensuring compliance towards the achievement of societal goals on land use and development.¹² Whatever the justification or basis of planning

² DJ Pavlich 'Zoning law and administration in the United States of America and the Republic of South Africa' (1978) 95 *S. African L.J.* 102, 116 at 103.

³ TA Reiner *Place of the Ideal Community in Urban Planning* University of Pennsylvania Press, (1963) p 27 also available online <http://heinonline.org/HOL/License>, JR Nolon, 'Comparative land use law: Patterns of sustainability' (2005) 37 *Urb. Law.* 807, 852 at 818 -9.

⁴ ER Alexander *Approaches to Planning: Introducing Current Planning Theories, Concepts, and Issues* 2nd Ed, pp 2-3.

⁵ P Ryan 'Freedom of property - An urban planning perspective' (1988) 11 *U.N.S.W.L.J.* 48, 65 at 48 presents the argument that a definite area and the resources within such an area are jointly the subject matter of planning. In view of the multiplicity of interests in the resources within such a community, both the community and the resources are referred to as 'a common'.

⁶ BJ Frieden 'Legal role in urban development' (1965) 12 *UCLA L. Rev.* 856, 879 (1965) 856 -7.

⁷ BJ Frieden *ibid.* at 878.

⁸ P Booth 'Planning and the rule of law' (2016) Vol 17 No 3 *Planning Theory & Practice* 344-360 at 344.

⁹ P Ryan *op cit* note 5 at 49-51.

¹⁰ BJ Frieden *op cit* note 6 at 879.

¹¹ JR Nolon *op cit* note 3 at 811.

¹² JR Nolon *ibid.*

laws, it is noted that these justifications aim at addressing specific or emerging problems relating to land use and development.¹³

It is argued that planning has no precise definition,¹⁴ but is a means of anticipating and achieving changes in the environment in line with social and economic developments, taking into cognisance ‘the needs both of the present and of the foreseeable future.’¹⁵ Physical planning can also be viewed as an instrument of “determining appropriate present and future action”¹⁶ regarding the use and management of land which is the subject matter of physical planning.

2.3 Theories and philosophies underlying planning laws

According to McAuslan, the justifications of planning law can be categorised into three priorities: the protection of private interests in property, the advancement of public interest, and the promotion of public participation in the planning process.¹⁷ The first justification of planning law regarding private property is settled as it is a constitutionally guaranteed right. The subject matter of this thesis tends more towards the public participation and public interest ideologies of planning law. Attention would be given to public interest because this research views public interest as a precursor to public participation in planning.

Public interest is a major theory that has informed planning legislation from its inception.¹⁸ Faludi notes that the planner exhibits a ‘devotion to public interest’ in embarking on the planning process.¹⁹ The point is also argued that the planning process is a way of achieving ‘utopian solutions’²⁰ to challenges of environmental reconstruction.²¹ Besides public interest, there are

¹³ JR Nolon *ibid* at 811-2.

¹⁴ DJ Pavlich *op cit* note 2 at 108.

¹⁵ DJ Pavlich *ibid*.

¹⁶ P Davidoff and TA Reiner, ‘A choice theory of planning’ in A Faludi (ed), *A Reader in Planning Theory* Pergamon Press 1978 p 11-2.

¹⁷ P McAuslan *Ideologies of Planning* Pergamon Press 1980 p 2-5.

¹⁸ P McAuslan *Bringing the Law Back In: Essays in Land, Law and Development* Gower Publishing 2003 p. 86.

¹⁹ A Faludi ‘The idea of planning’ in A Faludi (ed) *A Reader in Planning Theory*, *op cit* note 16 p 43.

²⁰ R Glass ‘The evaluation of planning: some sociological considerations’ in A Faludi (ed) *A Reader in Planning Theory* *ibid* p 55. Reiner, in his Monograph on the ideal community also alludes to the fact that utopian principles have influenced the field of planning. This he argues includes motivations for planning to achieve public housing and public spaces, efficient and equitable distribution of resources, public participation in planning and community-centered planning measures. TA Reiner *op cit* note 3 p 18- 20.

²¹ A Faludi, *op cit* note 16 p 17.

other principles which have been found to influence or characterise planning theories over time. These, according to Friedmann are *social reform, social mobilization, policy analysis and social learning*.²² These principles provide an argument for the inclusion of climate change considerations in planning legislation.

2.3.1 Traditions upon which planning theories are based

For instance, the social reform tradition of planning speaks to its role in guiding development and the rule of law in the light of changes within the society. It highlights the role and authority of the government in facilitating the planning process. The social reform tradition highlights the link between planning, governance and public interest.²³ Milton alludes to the reform perception when he notes that planning laws challenged the perception that rights in land were absolute and the landowner was free to do as he pleased with his land.²⁴ He notes that planning laws rather than fortifying the rights of the landowner, places on him duties and obligations, the justification of which is the recognition of the welfare of other members of the society.²⁵

The *policy analysis* tradition of planning focuses on collaboration in the planning process by highlighting the administration of policies by the state and large organisations. This tradition seeks alternative ways to best implement the planning process. A significant argument for the rationality of this group is that

It is better to arrive at decisions through an imperfect (but perfectible) science than through a process of unmediated politics that is subject to personal whim, fickle passion and special interest.²⁶

The *social learning* planning tradition is hinged on the premise that learning and improvement in the planning process can only come through practicality, and that knowledge can only be gathered through experience. Planning from the social learning view must involve a continuous

²² J Friedmann, 'Two centuries of planning theory: An overview' in S J Mandelbaum, L Mazza and RW Burchell *Explorations in Planning Theory* Transaction Publishers Rutgers 1996 pp 10-29.

²³ J Friedmann, *Ibid* p 21.

²⁴ JRL Milton 'Planning and property' (1985) *Acta Juridica* 267, 288 at 275.

²⁵ JRL Milton 'Planning and property' *op cit* note 24 at 275, DL Callies 'Land use controls: Of enterprise zones, takings, plans and growth controls' (1982) 14 *Urb. Law*. 781, 846 at 785.

²⁶ J Friedmann 'Two centuries of planning theory: An overview' *op cit* note 22 p 23.

process of practical undertakings of action and change.²⁷ Regarding climate change adaptation, this planning tradition implies drawing lessons from the shortcomings of the planning processes and improving on them to address climate change impacts.

The *social mobilization* tradition stems from a form of solidarity of social or class exclusion from decision making. Most of the planners in this group have a philosophical background in Marxism, utopianism, socialism and communitarianism. Hence it is arguably based on a tradition of revolution against capitalism and the bourgeoisie.²⁸ The tradition is majorly concerned with ways in which those disadvantaged by the planning process can attain self-realisation or freedom from oppression. Also, how equality can be attained and maintained, as well as considerations of the indices of a good society, especially regarding the guarantee of the rights of the weak and vulnerable through an inclusive planning system.

2.3.2 Planning as a major factor for societal well being

The above-discussed traditions have their origin in other disciplines such as economics, sociology and politics, and were not directly related to the planning process or profession, which was for a long time perceived as belonging to the realm of science. These traditions have however found expression in the planning process due to the importance of land and land use to social cohesion and wellbeing.²⁹ Land is a significant factor of production and a necessity for development and economic growth thus the physical and land use planning regulation entail socio-economic and political considerations.

Also, the planning process goes to the essence of the society, as it brings to the fore issues of class stratification, social justice, social interest and many other ethical considerations. This argument is in line with the position held by Pavlich who notes that in addition to limiting the kinds of uses to which land can be relegated, planning provides a means for the realisation of socio-cultural and socio-economic values of the society.³⁰ The futility of divorcing planning

²⁷ Ibid.

²⁸ Ibid p 27.

²⁹ P Ryan op cit note 5 at 54-5.

³⁰ DJ Pavlich, op cit note 2 at 104.

from the society is succinctly expressed by Bengs, who argues that ‘the ideal planning system cannot be disconnected from the ideal society’.³¹

2.3.3 Public interest and planning law

According to Reid, in addition to other objectives, planning law is designed to regulate the use of land in public interest.³² In iterating the role of planning laws in protecting public interest, Reid notes that planning laws consider ‘concerns of public safety and public services’,³³ especially public safety in relation to hazards created or aggravated by humans,³⁴ as is the case with climate change impacts. While public interest is acknowledged as being a limitation of private interest for which statutory compensation is usually provided,³⁵ there are instances when private use of land is limited without compensation. Bayles argues that private interest in land could be limited without compensation given sufficiently strong public interest, especially the ‘fragility of the natural environment’ and other concerns affecting the society.³⁶ As will be seen in subsequent chapters, climate change presents such a challenge to the public interest as to justify further limitation or restriction of private interests.

Philosophical underpinnings of the concept of public interest arise from the fact that everything that is not held in private hands is in the public domain and is, therefore, the subject of common interest.³⁷ Habermas posits that public or common interest arose in things that were communally held, which he referred to as the ‘public welfare’, ‘commonwealth’ or ‘the public wealth’.³⁸

³¹ C Bengs ‘Planning theory for the naïve?’ (2005) *European Journal of Spatial Development* 5 available at <http://www.nordregio.se/EJSD/-ISSN> accessed 15/11/2017.

³² SM Reid ‘The scope of planning law in England: Decision criteria in development control’ (1978) 10 *Urb. Law.* 623, 700 at 646.

³³ SM Reid *ibid* at 667.

³⁴ SM Reid *ibid* at 668.

³⁵ Especially in the public acquisition of private property for over-riding public interest or use, which is constitutionally guaranteed in most countries. See s 25 of the South African Constitution and s 43 of the Nigerian Constitution.

³⁶ JW Bayles and DP Polden ‘Protecting the urban heritage: Lessons learned from the United Kingdom and the United States experience’ (1988) 28 *Washburn L.J.* 51, 85 at 68-9.

³⁷ ER Alexander ‘The public interest in planning: From legitimation to Substantive plan evaluation’ Vol 1(3) 2002 *Planning Theory* 226–249 at 227 gives a discussion of the traditional basis of the concept of public interest in Roman Law and Greek Philosophy, also M Tait ‘Planning and the public interest: Still a relevant concept for planners?’ (2016) Vol. 15(4) *Planning Theory* 335–343.

³⁸ J Habermas *The Structural Transformation of the Public Sphere: An inquiry into a Category of Bourgeois Society* MIT Press, 1991. p 6.

According to him, that which was in the public sphere was common to the society; he argues that this implies a form of mutual dependence and public significance for the sake of survival.³⁹ While Habermas viewed public interest as arising from a common interest in the subject matter of public or state ownership, Bentham saw public interest as the summation of the interests of individual members of the society.⁴⁰ Thus for him, a thing or action was in public interest only if it served to promote the interest of the public and not merely because it was a commonwealth or public property.⁴¹ Primarily, Bentham's position is that for a thing to serve public interest, it must serve individual interests, or reduce individual miseries or sufferings.⁴²

Other views of public interest as highlighted by Alexander include its perception as that which promotes 'social stability and order', such as the requirement of a central governing authority such as a state or government.⁴³ He also notes the perception of public interest as being hinged on social justice – the redistribution of resources to address issues of societal inequalities.⁴⁴ Alexander also highlights the deontological perspective which is to the effect that public interest entails a moral interrogation or whether or not individual rights and the rights of 'affected groups' are upheld.⁴⁵

There is no doubt about the fact that planning laws have a role to play in the safeguarding of public interest. The question, however, is how to ensure there is a public interest content in planning laws. Alexander, while acknowledging that public interest is about ensuring public welfare, argues for a generalised standard of ascertaining public interest, or the integration of a universally accepted norm.⁴⁶ Nagy argues in favour of a collaborative and advocacy approach which ensures public participation in the planning process as a sure way of ensuring a public

³⁹ J Habermas *ibid* p18.

⁴⁰ J Bentham *An Introduction to the Principle of Morals and Legislation* Blackwell Publishing Ltd 1972, Chapter 1 para 1.5.

⁴¹ J Bentham *ibid* para1.7.

⁴² J Bentham *ibid* para 1.6.

⁴³ ER Alexander 'The public interest in planning' *op cit* note 37 at 230.

⁴⁴ *Ibid* at 231.

⁴⁵ *Ibid* at 232.

⁴⁶ *Ibid* at 238.

interest content.⁴⁷ For McAuslan, public interest in planning entails the extension of the scope of planning laws beyond the physical environment to include economic and social considerations.⁴⁸

Winkler and Duminy argue that planning entails ethical values which are based on normative ethical theories.⁴⁹ Particularly, it is essential for the planning process to consider issues surrounding human rights and civil liberties of the inhabitants of the society to make viable planning choices.⁵⁰ The planners 'dilemma' of choice implies that there must be some theoretical bases justifying one choice over another. According to Taylor,⁵¹ planning involves a philosophical enquiry based first on ethical judgements and secondly, on the knowledge upon which planning is based. The first deals with the moral justification of choosing amongst several causes of action available to the planner or what has been described as 'value-based judgement'⁵² or 'ethical judgement'⁵³ and the second deals with choosing how to gather or acquire knowledge in the planning process.

The planner's 'ethical judgement' is argued to precede other forms of knowledge in the planning process.⁵⁴ A more definite position is held by Friedmann⁵⁵ and Steiner and Harper⁵⁶ who argue that value-based philosophy or ethical theories must form the foundation of planning theories and practice. First is the concept of utilitarianism, that is, the need to bring about the greatest good for the greatest number of people. This is followed by Rawls' equalitarian principle of social justice, which is to the effect that all social goods, including liberties privileges are to be

⁴⁷ JA Nagy 'Planning and the public interest: A critical review' (2015) Vol XI *Romanian Review of Regional Studies* at 118-119.

⁴⁸ P McAuslan *Ideologies of Planning* op cit note 17 p 208.

⁴⁹ T Winkler and J Duminy 'Planning to change the world? Questioning the normative ethics of planning theories' (2016) Vol 15(2) *Planning Theory* 111-129 at 113.

⁵⁰ P McAuslan 'Planning law's contribution to the problems of an urban society' 37 (1974) *Mod. L. Rev.* 134, 153 at 152, T Winkler and J Duminy *ibid* at 114.

⁵¹ N Taylor 'Planning theory and the philosophy of planning' (1980) *17Urban Studies Journal* 159-172 at 162.

⁵² T Winkler and J Duminy op cit note 49 at 112.

⁵³ N Taylor op cit note 51 at 162 -5.

⁵⁴ N Taylor *ibid*.

⁵⁵ J Friedmann 'The uses of planning theory: A bibliographic essay' (2008) 28 *Journal of Planning Education and Research* 247-257 at 249.

⁵⁶ SM Stein and TL Harper 'Rawls's "Justice as Fairness": A moral basis for contemporary planning theory' (2005) 4 (2) *Planning Theory* 147-172 at 148-9.

distributed equally amongst members of the society unless an unequal distribution benefits the least privileged members of the society.⁵⁷

Normative standards and ethical judgments in planning are based on principles and independent theories and propositions already in existence.⁵⁸ Taylor posits that planning theories are a hybrid of philosophical judgments and sociological theories.⁵⁹

In addition to the normative theories, the planning process is guided by ‘theories of planning’ which are procedural theories. The normative theories deal with what planners *ought* to do, or with what the planning system should be concerned.⁶⁰ The procedural theories that is theories of planning deal with ways in which to best give effect to the planning system or process.⁶¹ To put the theories of planning in proper perspective, the purposes of planning must be highlighted. According to Davidoff and Reiner,⁶² the optimal objectives of planning fall under three classifications. First, the efficient use of resources, secondly, the control of the distribution of the scarce resource which is the subject of the planning system. Thirdly, the process of planning provides information to aid the ‘changing or widening of choice’. Here, information is made available to the public to aid their choice making, as well as to restrict the making of such choices. Such information includes obligations, costs, benefits and burdens that may flow with land or that may be tied to development or re-development of land.

2.4 Theories of planning

Planning theories and models are the conceptual framework upon which planning laws are premised. Planning theories must primarily take into cognisance the peculiarity and needs of society as well as the relationship between the people and the environment. The theories of planning involve an analysis of the planning process, the desired outcome and the eventual

⁵⁷ N Taylor op cit note 51 at 164.

⁵⁸ R Thompson ‘Re-defining Planning: The Roles of Theory and Practice’ (2000) 1*Planning Theory & Practice* 126-13 at 130.

⁵⁹ N Taylor op cit note 51 at 162.

⁶⁰ A Faludi op cit note 16 p4.

⁶¹ P Davidoff and TA Reiner ‘A choice of theory of planning’ op cit note 16 pp 14 – 17; also, N Taylor op cit note 51 at 160.

⁶² P Davidoff and TA Reiner Ibid.

outcome,⁶³ taking into cognisance individual societies. According to Archibugi, to arrive at the proper planning theory to be applied in a society, there must first be an analysis of the material conditions of life and secondly, a consideration of the capacity of the proposed planning system to fit with environmental constraints.⁶⁴ Thus, planning legislation and practice within a society is based on or informed by a blend of several theories of planning (procedural theories). Some of them will be considered.

2.4.1 The Rational Theory of Planning

This theory of planning considers planning as a purely empirical process.⁶⁵ This theory is greatly influenced by the work of Max Weber who saw rationalisation as a necessary action for modernity and the legitimation of legality.⁶⁶ To him, government administrative processes were aimed at organising human behaviour across space and time. He also viewed rationalisation as a practical means to achieving specific ends.⁶⁷

The theory conceptualises a planning policy to take care of existing land use and development issues as well as make long-term planning predictions. Planning was based on scientific reasoning and rational conclusions, and the proponents of this school believed that empirical investigation and findings were sufficient for the planner to come up with the planning process. Decision making in the planning process was based purely on efficiency and rationality; that is, the employment of resources in the most efficient manner.⁶⁸ To the supporters of this theory, intuitions or ethical values have no place in the planning process; these were thought to be more

⁶³ SS Fainstein 'New directions in planning theory' (2000) 35(4) *Urban Affairs Review* 451 -52.

⁶⁴ F Archibugi *Planning Theory: From Political Debate to the Methodological Reconstruction* Springer-Verlag Italia 2008 p.3.

⁶⁵ The general theory of Rationality dates as far back as the days of Greek philosophy. It became popular again in the 16th to 17th centuries at the time of the social revolution of Enlightenment. According to Spinoza, "Nature has no fixed goal and all final causes are but figments of the human imagination." In other words, Knowledge of Nature and Humanity are verifiable truths predicated on empirical evidence and quantifiable data. see J Luzzi, 'The rational planning model in forest planning: Planning in the light of ambivalence (2001) EPW Working Paper 3, RS Jutla 'The rational approach in environmental planning and design' (1993) 27*Design Methods: Theories Research, Education and Practice*, E Alexander 'After rationality: Towards a contingency theory for planning' in SJ Mandelbaum L Mazza and RW Burchell *Explorations in Planning Theory* op cit note 22 p 46.

⁶⁶[http://www.sagepub.com/sites/default/files/upmbinaries/6109_Allen_Chapter_5\[1\]__Authority_and_Rationality__Max_Weber.pdf](http://www.sagepub.com/sites/default/files/upmbinaries/6109_Allen_Chapter_5[1]__Authority_and_Rationality__Max_Weber.pdf),*Explorations in Classical Sociological Theory: Authority and rationality – Max Weber* p 151-2.

⁶⁷ Ibid, also P Allmendinger *Planning Theory* Springer 2017 p 67-8.

⁶⁸ P Davidoff and TA Reiner op cit note 16 p 14-5, J Friedmann 'Planning theory revisited' *European Planning Studies* 249-50.

appropriate in private activities.⁶⁹ The planning process was not considered as an end in itself but as a set of means to the attainment of an end.⁷⁰ According to this theory, the planning process is necessary as mediation between the assertions of individualism (that the individual's interest precedes that of the society) and social rationality (that the individual interests must bow to collective interests and communal satisfactions).⁷¹

The entire planning process according to this theory is summarised as follows:

- the reduction of the desired ends into data;
- a clear statement of various causes of action;
- comparative evaluation of the consequences of the various actions;
- consideration of alternatives to the cause of action and a final choice amongst alternatives based on the preferred consequences; and
- the implementation of the chosen alternative.⁷²

The theory bases the planning process on the expertise of the planner and gives no room for public participation.

A major fallback of this theory is that it disregards the peculiarities of societies and their environmental challenges in arriving at a specific nature of planning for particular areas.⁷³ Also, no room is given for the participation of other stakeholders within the society. The rational school focuses so much on the comprehensive plan which is the outcome of a logical and scientific process and pays little attention to the issue of implementation of the planning process and its application within the society.⁷⁴ Also, the theory is faulty in not acknowledging the necessity of ethics and norms in choosing various alternatives.

2.4.2 Synoptic-Rational Theory

This theory emphasises the specification of goals and targets of the planning process, the identification and evaluation of alternative policy options, and an evaluation of resources and

⁶⁹ J Luzzi op cit note 65 at 3.

⁷⁰ E Banfield 'Ends and means in planning' 9 (1959) *International Social Science Journal* 361.

⁷¹ J Friedmann 'Planning in the public domain: Discourse and praxis' 8(2) (1989) *Journal of Planning Education and Research* 128-130 at (1989)129.

⁷² E Banfield op cit note 70.

⁷³ N Taylor *Urban Planning Theory Since 1945* Sage 1998 pp111-12.

⁷⁴ N Taylor *Urban Planning Theory Since 1945* ibid.

constraints of the planning process in relation to the conceptual and mathematical estimations.⁷⁵ The theory departs from the pure rational theory by upturning the belief in the autonomous role of the planner. It posits that the planning process is a subject of public debates, despite this position, public participation was still limited to comments on the planning process, validation or legitimisation of the planning policies and no more.⁷⁶ A disadvantage of this theory is the fact that public interest was considered as being unitary, based on the perception of a ‘homogeneity of interests’.⁷⁷ Kiernan likens the synoptic theory of planning to a unitary public-interest model, and argues that the goals of planning are “essentially universally shared and transcend any special, sectoral interest”.⁷⁸ It was believed that the existence of a society implied a consensus of minds of all members of the society and objections to the goals of the planning process based on an individual interest was viewed as parochial. The unitary interest approach was however improved upon and led to the incremental approach to synoptic planning which recognised a ‘plurality of interests’ and proposed a decentralised system of planning to allow for the consideration of the divergent interests within the society.⁷⁹ It is worthy of note that the planning system in most developing countries, including Nigeria mirrors the synoptic-rational theory as public participation is limited and no cognisance is taken of environmental or social peculiarities in planning. This thesis shows that this form of planning is inefficient in tackling the challenges of climate change.

2.4.3 Communicative theory of planning

The communicative theory of planning proposes that planning processes and decisions must involve a democratic process involving the government and all stakeholders. This process, it is argued, safeguards the interest of a more significant number of people unlike the authoritarian or adversarial approach to planning which characterised the rational theories of planning.⁸⁰ The

⁷⁵ BM Hudson TD Galloway and J Kaufman ‘Comparison of current planning theories: Counterparts and contradictions’ (1979) 45(4) *Journal of the American Planning Association* 388.

⁷⁶ MB Lane ‘Public participation in planning: An intellectual history’ (2005) 36 *Australian Geographer* 283- 299 at 291.

⁷⁷ Ibid at 290.

⁷⁸ M J Kiernan ‘Ideology, politics and planning: Reflections on the theory and practice of urban planning’ 10 (1983) *Environment and Planning B: Planning and Design* 71 -83 at 72.

⁷⁹ MB Lane op cit note 76 at 291.

⁸⁰ Ibid at 297.

theory seeks to involve all stakeholders and focuses on solutions that satisfy multiple interests. Based on observation, it is purported to be the only theory that allows for collectively beneficial solutions to complex and controversial problems,⁸¹ and no group's interest is allowed to dominate that of others.⁸² The theory is based on the social values of solidarity, cohesion and inclusivity and the philosophy that individuals are not atomic or individual entities but rather political beings who, along with the rest of the populace, have through a democratic process vested authority in a central body, that is, the State.⁸³ There is a firm belief that the planning process should not consider spatial planning or physical planning alone; instead, the entire planning process should be a tool of social cohesion and the strategic social integration that in turn give rise to specialised societal planning patterns.⁸⁴ The theory, Healey argues, is motivated by a moral commitment to social justice, especially regarding articulation and implementation of policies relating to the allocation and regulation of resources.⁸⁵

The communicative theory does not see planning as a technical or scientific endeavour based on pre-founded knowledge; instead, knowledge is perceived as being created by the communication and inter-relationship of perceptions and experiences in the planning process. Planning is a governance activity that is determined by 'wider economic, social and environmental forces that structure interactions.'⁸⁶

2.4.4 Advocacy Planning Theory (Community-based planning)

The advocacy theory is a pluralist approach to planning premised on the proposition that decisions about the planning process in a society should not be made unitarily by the government. The leading proponents of this theory include Paul Davidoff and Marshall Kaplan.⁸⁷ Given that planning is aimed at serving public interest, the planning process should entail an

⁸¹ JE Innes and DE Booher 'Collaborative dialogue as a policy making strategy' (2000) *IURD Working Paper Series*, Institute of Urban and Regional Development 5 www.escholarship.org/uc/item/8523r5zt accessed 16/3/2016.

⁸² SS Fainstein op cit note 63 at 454.

⁸³ R Brand and F Gaffikin 'Collaborative planning in an uncollaborative world' (2007) 6 *Planning Theory* 282 -313 at 285.

⁸⁴ Ibid p 287.

⁸⁵ P Healey 'Collaborative planning in perspective' (2003) 2(2) *Planning Theory* 101 -123 at 104-5.

⁸⁶ Ibid at 104.

⁸⁷ DF Maziotti 'The underlying assumptions of advocacy planning: Pluralism and reform' in C Paris (ed) *Critical Readings in Planning Theory* pp 207.

interrogation of the conditions and interests of the various groups within the society.⁸⁸ It is argued that the bargaining process of planning should be between formal and informal groups pursuing a range of conflicting goals and interests on the public agenda with no group dominating the public arena.⁸⁹ This school of thought pays particular attention to the lower cadre and minority members of the society who are unable to represent themselves. This theory of planning, also known as Community-based planning, highlights the inadequacy of urban plans to cater for the peculiar needs of individual local neighbourhoods. This procedural theory of planning stipulates that a city's general plan would be more effective if it encompasses separately developed neighbourhood plans.⁹⁰ In other words, it is community-driven, rather than "top down." This implies that the role of the government in the planning process is merely to establish and enforce the rules of bargaining and to ratify the outcome of the bargaining process.⁹¹ The planner is an advocate of social justice;⁹² his role is to advocate for the adoption of suitable plans for specific communities and to help in the drawing up of such plans. Unlike the rational theory, the planner here is encouraged to articulate the values upon which the planning process is based.⁹³ The proponents of this school believe that public participation is a fundamental objective of the planning process and not just a factor. This is based on the core argument that there are groups who have no bargaining power in the political process, are not sufficiently organised and are disadvantaged in the planning process; these groups' interests should not go

⁸⁸ An interesting note to make here is Jeremy Bentham's interrogation of what amounts to public interest. According to him, public interest is an abstract which in reality is the mass of individual interests (this should be distinguished from the summation of interests which suggests a homogeneity of interests). Bentham argues that for legislation to truly serve public interest, it is necessary to take these heterogeneous interests into account, in his words, "the interest of everybody is sacred, or the interest of nobody" J Bentham Theory of Legislation p 144. It is acknowledged that it would be impossible for legislation to accommodate individual interests. There is however likely to be a homogeneity of interests in relations to specific subject matters of legislation, in this case, land use and physical planning; thus, such homogenous interests of communal interests should be taken into cognisance through the instrumentality of public participation in planning. See P Davidoff (1965) 'Advocacy and pluralism in planning' (1965) 31(4) *Journal of the American Institute of Planners* 331-338 at 332.

⁸⁹ R Klosterman, 'Arguments for and against planning' (1985) 56(1) *The Town Planning Review* at 11.

⁹⁰ PE Salkin and A Lavine 'Community benefits agreements and comprehensive planning: Balancing community empowerment and the police power' (2009) 18 *Journal of Law and Policy* at 160.

⁹¹ Ibid.

⁹² DF Maziotti p 210 op cit note 87, P Allmendinger op cit note 67.

⁹³ P Allmendinger Ibid at p153.

unheard or unarticulated.⁹⁴ This school of thought is strongly opposed to the notion of a unitary public interest.⁹⁵

2.4.5 Transitive Theory of Planning

The main proponent of this theory, John Friedmann, argues that it is inappropriate to plan for an uncertain and ill-defined public, he argues that it is impossible to arrive at what would be suitable for a group or community, regardless of the fact that they have some commonalities.⁹⁶ Rather the planning process must gather a real community into consideration and ‘a face-to-face contact with the people affected’ is encouraged.⁹⁷ In essence, action should be linked to knowledge to arrive at a good planning policy and rather than basing planning on technical knowledge alone; there should be an interpersonal dialogue with the public.⁹⁸ The result, it is argued, is an increase in development amongst members of the public and governmental institutions.⁹⁹ According to Friedmann, there is no such thing as ‘common good’ and ‘public interest’ is a requirement hard to fulfil, thus planning should be negotiable, flexible and accommodate what he refers to as ‘a struggle for self-empowerment and participation’.¹⁰⁰ The opinion is also canvassed that the planning process and regulation should be decentralised to be more efficient and the citizenry is allowed to direct and control the social processes that determine their welfare. The outcome will be that the planning system and policies of a community will differ from those of another community since each process is arrived at as a result of the active participation of members of that community.

The professional planner, according to this theory, thus becomes less of a planner and more of a medium to actualise the planning policies of the society.¹⁰¹ This theory lays much emphasis on public participation and empowerment and decentralisation of the planning process.¹⁰²

⁹⁴ DF Maziotti op cit note 87 p 209-10, MB Lane op cit note 76 at 294.

⁹⁵ P Davidoff op cit note 88 at 331-8.

⁹⁶ J Friedmann ‘Planning in the public domain: Discourse and praxis’ op cit note 71 at 128.

⁹⁷ BM Hudson TD Galloway and JL Kaufman op cit note 75 at page 389.

⁹⁸ MB Lane op cit note 76 at 293.

⁹⁹ BM Hudson TD Galloway and JL Kaufman op cit note 75 at page 389.

¹⁰⁰ J Friedman op cit note 71 at 130.

¹⁰¹ Ibid.

2.4.6 Environmental Justice

This theory is not a planning theory, rather it has its roots in environmental law. The thesis however discusses it in order to address public interest especially in relation to issues that border both environmental management and planning. This discourse becomes pertinent as a result of climate change impacts which are both environmental and developmental. This theory is based on the principle that people who are members of the society should have a ‘meaningful involvement’ in the activities affecting their environment. The hallmarks of the theory include the fact that people have an opportunity to have their rights enforced on issues and activities relating to their environment and well-being. Campbell notes that the planner has a duty to interface between conflicting interests relating to land use within a society. He speaks of a dichotomy between the environment, economic growth and social justice.¹⁰³ Issues surrounding social justice¹⁰⁴ have fuelled the debate on environmental justice in planning.

A first look at the above shows that the theory bears some similarities to the communicative and advocacy theories of planning in that it is community-based and ensures that members of the community, including the obscure minority, have their opinions aired about their natural and built environment.¹⁰⁵ The Environmental Justice movement, however, takes it a step further; it seeks the making of fair and equitable decisions in relation to the environment, so “that no group of people should bear a disproportionate share of negative environmental consequences resulting from industrial, governmental and commercial operations or policies.”¹⁰⁶ While environmental justice debates are usually around issues of environmental quality,¹⁰⁷ the proponents also address issues around the distributional inequities relating to ‘environmental amenities and dis-

¹⁰² Friedmann extensively discusses this in his book *Planning in the Public Domain: from Knowledge to Action* Princeton University Press 1987, BM Hudson and others op cit note 75 at 387-98, MB Lane op cit note 76 at 293.

¹⁰³ S Campbell ‘Green cities, growing cities, just cities?: Urban planning and the contradictions of sustainable development’ (1996) 62:3 *Journal of the American Planning Association*, 296-312 at 297.

¹⁰⁴ G Haughton ‘Environmental justice and the sustainable city’ (1999) 18(3) *Journal of Planning Education and Research* 18:233-243 at 233.

¹⁰⁵ SS Fainstein ‘Spatial justice and planning’ in SS Fainstein and J DeFilippis (ed.) *Readings in Planning Theory* 4th ed John Wiley and Sons 2015 p 261.

¹⁰⁶ PE Salkin and A Lavine, op cit note 90 at 6.

¹⁰⁷ R Holifield ‘Defining environmental justice and environmental racism’ (2001) 22(1) *Urban Geography* 78-90 at 81.

amenities'.¹⁰⁸ Further, the proponents of the theory point out that there must be an equitable distribution of public amenities and facilities,¹⁰⁹ locally unwanted land uses (LULU),¹¹⁰ and the equal fulfilment of environmental obligations by the government amongst all members of the society, regardless of their position in the social stratum.¹¹¹ In the same vein, Taylor and others iterate the need for environmental justice in adaptation to climate change in order to ensure so group of people are unfairly exposed to adverse impacts.¹¹² It is also argued that the planning procedures must incorporate the identity of the members of the community and their interests must reflect in the planning process. According to Arnold, "land use planning and regulation [ought to] foster choice, self-determination and self-definition...not paternalism that insists that there is a single correct environmental justice goal."¹¹³ This school of thought also argues that the link between environmental justice and planning is not a novel one, as some of the concerns of environmental justice include the lack of infrastructure, improper land use which negatively impacts the environment and untenable housing practices.¹¹⁴

2.5 Evolution of Planning in Nigeria and South Africa

While formal planning as we know it today is a recent discipline, land use or physical planning has existed in some form in every community throughout history. To trace the history of land use planning, a simple definition of planning is adopted: the systematic order in the use and regulation of development or other activities on land. A look at the history of ancient societies points to the fact that there existed a form of order in the use and allocation of land. Friedmann,

¹⁰⁸ H Pearsall and J Pierce Urban sustainability and environmental justice: evaluating the linkages in public planning/policy discourse (2010) 15(6) *Local Environment* 569-580 at 570.

¹⁰⁹ H Pearsall and J Pierce *ibid* at 571.

¹¹⁰ Land uses such as incinerators or the siting of industries, plants and machinery. The concept of LULU is discussed extensively in CA Arnold 'Planning Milagros: Environmental justice and land use regulation' (1998) 76 *Denv. U. L. Rev.* 1- 153, J Agyeman and B Evans "Just sustainability": the emerging discourse of environmental justice in Britain?' (2004) 170(2) *The Geographical Journal* 155-164 at 160.

¹¹¹ Paragraph 27 of The Habitat Agenda Goals and Principles, Commitments and the Global Plan of Action states that Equitable human settlements are those in which all people, without discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, have equal access to housing, infrastructure, health services, adequate food and water, education and open spaces. http://www.unhabitat.org/declarations/habitat_agenda.htm, (accessed) 11/16/2017.

¹¹² A Taylor and others 'Urban adaptation' in T Humby et al p 11-17.

¹¹³ CA Arnold *op cit* note 110 at 13.

¹¹⁴ C Eley 'Environmental Justice Through Planning' American Planning Association <https://www.planning.org/blog/blogpost/9101589/> accessed 13/11/2017.

in his explanation of Lewis Mumford's 'The City in History', points out that in the middle ages, cities were communal and the nucleus of such cities were things or places which the people held most dear. In the case of most ancient African communities were the marketplaces and other places of communal gathering, the palace of the traditional ruler and the places of worship or religious activity.¹¹⁵

2.5.1 Planning in indigenous African communities

Cities in Africa exhibited some order in their structure and use. Land was not subject to individual ownership, but was held by the traditional rulers and community leaders in trust for all members of the community;¹¹⁶ or the ownership of land was vested in the family, held in trust by the head of each extended family.¹¹⁷ Though communally held, land was allocated to individual members of the community,¹¹⁸ and this was usually for the specific purpose of building a new home or for farming. It is noted that individual access to land was determined by the use to which it would be put.¹¹⁹ Any other use of land was communal and followed set norms; also, there was free access to resources. The use of resources was however with high regard to the environment,¹²⁰ which was considered the dwelling place of ancestors and deities. For instance, in most traditional Nigerian communities, the marketplace is located in the centre of the

¹¹⁵ J Friedmann 'The city in history' (1962) 33(1) *The Town Planning Review* 73-80 at 75.

¹¹⁶ A Adelusi-Adeluyi and L Bigon 'City planning: Yoruba city planning' in H Selin *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, see also, WJ Du Plessis 'African indigenous land rights in a private ownership paradigm' (2011) 14*PER / PELJ* 49 and KA Ayeh 'Traditional planning elements of pre-colonial African towns' available at [http://dspace.nwu.ac.za/bitstream/handle/10394/5325/No_39\(1996\)_Amankwah-Ayeh_K.pdf?sequence=1](http://dspace.nwu.ac.za/bitstream/handle/10394/5325/No_39(1996)_Amankwah-Ayeh_K.pdf?sequence=1) accessed 7/3/2016.

¹¹⁷ This customary principle of land holding was finally recognized by the courts in the case of *Amodu Tijani v The Secretary, Southern Provinces* (1921) AC 399. In this case, extensive reference was made to the Chief justice Rayner Report on land tenure system in West Africa. Further shedding light on the ownership of land in Yoruba land prior to Westernization, Johnson iterates that the land was not seen as private property of the King, even though he was the custodian of all land. Rather the King held land as the representative of all Yoruba people and the head of each community as a representative of the King held the land in his division and land was to be used for the benefit of the members of the tribe and no one could make use of land without the permission of the King or community head, S Johnson *The History of the Yorubas* 1921 Cambridge University Press p 95. See also JEC Hayford *The Truth about the West African Land Question*, Psychology (1971) 2nd ed pp 15-21, TO Elias *Nigerian Land Law and Custom* 1953 Routledge and Kegan Paul Ltd pp 101-9, PC Lloyd *Yoruba Land Law* 1964 Oxford University Press London pp 64-65.

¹¹⁸ TW Bennett *Customary Law in South Africa* 2004 Juta and Company Ltd p 383, PC Lloyd *ibid* p 65, TO Elias *ibid* p 101.

¹¹⁹ PC Lloyd *op cit* note 116 pp 74-5.

¹²⁰ TW Bennett *op cit* note 117 p 385.

community, and not very far from the ruler's palace.¹²¹ All artisans and craftsmen are located within the market and can be found in homogeneous clusters. Other characteristics of such communities are designated farmland and open space usually referred to as the village square. These communities also had what is today referred to as green belts or buffer zones – vast portions of land deliberately left uncultivated, referred to as forbidden forests, and cultivation, entry or any form of activity within them was forbidden.¹²² Usually, the residential quarters formed an orbit around communal spaces and had thoroughfares for access in and out of the community; the farmlands were further out on the outskirts of the community.¹²³ Considering that land was communally held, it was not unusual for an already allocated parcel of land to be required for public use.¹²⁴ In such cases, the occupant of the land was relocated, and there was no form of monetary or pecuniary compensation, although such a person would enjoy communal support to re-build his homestead or whatever utility was on the expropriated land. Expropriation also served as a form of punishment for serious offences, and banishment from the community usually accompanied this.¹²⁵ These traditional communities maintained their forms of land-use governance until the advent of colonialism.

This argument on the capacity of ancient and indigenous societies to plan and adapt to their environment is buttressed by the separate opinion of the ICJ in *Gabcikovo-Nagymaros Project Hungary v Slovakia* (Separate Opinion of Vice-President Weeramantry) Justice Weeramantry, highlighted the fact that societies at that time took deliberate steps to protect the environment while at the same time developing their societies.¹²⁶ He noted that these ancient civilisations in different parts of the world possessed the capacity to embark on planned development which took cognisance of the need to protect the environment.¹²⁷ Inherent in these practices in traditional societies is some form of land-use management and planning which agreed with the

¹²¹ PC Lloyd op cit note 116 p 200.

¹²² These portions of land were usually put in the custody of the Fraternity of Hunters who set the rules and regulations and kept the King abreast of matters concerning the forests see, S Johnson *The History of the Yorubas* Cambridge University Press 1921 p 96.

¹²³ The Nigerian Institute of Town Planners: State of Planning Report at p 4 available at <http://nitpng.com/pdf%20docs/soplanning.pdf> accessed 3/3/2016.

¹²⁴ TW Bennett op cit note 117 pp 385-6.

¹²⁵ S Johnson op cit note 121 p 102, TW Bennett ibid 386.

¹²⁶ *Gabčikovo-Nagymaros Project*, [1997] ICJ Rep 88 at 98.

¹²⁷ Ibid at p 107.

beliefs and practices of the people within such societies. The planning practices in these ancient communities still reflect in the land use practices of some indigenous societies as ‘community-based planning’. The synergy between these traditional planning practices and climate change adaptation will aid actions such as community-based adaptation (this is discussed later in Chapters 7 and 8).

As earlier mentioned, ancient planning practices are not peculiar to Africa; they existed in all ancient cities world over.¹²⁸ In England and at common law, planning principles were originally unknown, but the order of land use, aesthetics and preservation of the environment was enforced through certain principles of common law.¹²⁹ Booth argues that common law traditions in Britain greatly influenced planning law, especially the principle of nuisance.¹³⁰ Milton notes that the English common-law is one of the oldest legal systems to regulate the use of land.¹³¹ He further points out that planning legislation was greatly influenced by common law, having been perceived as a form of regulation of rights in land as was the case with nuisance and easement laws.¹³² This system, based on the principles of common law was inherited in South Africa and Nigeria.¹³³

The common law principle of nuisance served to enforce a land user’s obligation to put his neighbours into consideration and to protect the rights of a land user to the preservation and safety of their person, property and land in relation to the way their neighbour used their land. The doctrine of restrictive covenants bound successive owners of land by the covenants relating to the use of land, that is, the restrictions on the use of the land.¹³⁴ The public trust doctrine, or the principle of *res communis*, ensured that areas designated as public spaces were kept in good repair by the authorities.

¹²⁸ See ME Smith, Michael E. ‘Form and meaning in the earliest cities: a new approach to ancient urban planning’ (2007) 6:1 *Journal of Planning History* 3-47 at 12-21, F. Haverfield *Ancient Town-Planning* Oxford University Press 1913 available at <http://www.efm.bris.ac.uk/het/haverfield/AncientTownplanning.pdf>, see also <http://www.museumofthecity.org/project/hippodamus-and-early-planned-cities/> accessed 7/3/2016.

¹²⁹ P McAuslan *The Ideologies of Planning Law* op cit note 17 p 3.

¹³⁰ P Booth op cit note 8 at 354.

¹³¹ JRL Milton op cit note 24 273.

¹³² Ibid.

¹³³ JRL Milton ibid 270.

¹³⁴ Pavlich alludes to the fact that common law elements of easements, nuisance and private covenants also form part of mechanisms through which land use control functions. DJ Pavlich op cit note 2 at p 103.

There was no form of modernised planning, yet there was a level of orderliness, mutual respect in land use and aesthetic values. The deduction from this, according to Friedmann, is that the primary concern of the inhabitants of these communities was not development control, but adaptation, as the planning process took care of basic needs and exploited opportunities as they arose, thus eventually giving rise to the physical form of many ancient cities.¹³⁵

2.5.2 Modernized planning in England

Modernized planning regulated by statute came about in England with the advent of industrialisation and the rate of urbanisation and disorderliness that came with it.¹³⁶ Worthy of mention is the Rebuilding Act of 1667 which was passed after the great fire of London. Though it did not regulate town planning, it stipulated the height of buildings within areas and the allowance to be left for public passage. An administrative body comprising of three surveyors was set up to ensure compliance with the Act. It is however noted that the Act only applied in London and that the administrative body set up was dissolved after the rebuilding of the city was completed.¹³⁷ Several other Codes regulated public health, buildings, passages and other acts of public nuisance, but they had very low levels of success.¹³⁸

The early physical planning laws in Britain and the United States of America were aimed at tackling the challenges of sanitation, degradation of buildings and indiscriminate developments.¹³⁹ The indiscriminate rate at which houses were being built without regard for ventilation, setbacks or sanitary conditions led the Crown to react with the promulgation of local Improvement Acts.¹⁴⁰ These local Improvement Acts which had been passed within specific

¹³⁵ J Friedmann 'The city in history' op cit note 5 at 78.

¹³⁶ Between the period of 1760 and 1830, England witnessed a high level of industrialization due to the spate of industrialization. Because many people were living in poverty, there was a high influx of people into the towns and land owners seized the opportunity to put up buildings indiscriminately. See L Benevolo 'The origins of modern town planning' *Contemporary City Review* available at <http://contemporarycity.org/wp-content/uploads/2014/03/Benevolo.pdf> accessed 8/3/2016, JRL Milton op cit note 24 267-8, SM Reid op cit note 32 at 625-6.

¹³⁷ P Booth 'From property rights to public control: The quest for public interest in the control of urban development' (2002) 73*The Town Planning Review* 164.

¹³⁸ Ibid pp 164-5.

¹³⁹ JRL Milton op cit note 24 at 268.

¹⁴⁰ HC Dowdall and SD Adshead 'The law of town planning' (1910) 1 *The Town Planning Review* 39. Planning regulation in the United States of America also came about as a result of dirty cities, over-crowded tenements and general haphazard development WR Grove Metropolitan Planning (1966) 21 *U. Miami L. Rev.* 60-98 at 62-3.

locations were consolidated in 1847 into one Act¹⁴¹ which regulated building activities, ensured sanitary measures were put in place and prevented encroachment on public spaces in England and Ireland.

The 1900s heralded a significant change in physical planning in England. Agitations grew for more development regulation than was hitherto provided by the Improvement Acts and other Public Health Acts. Such laws had provided for the widening of streets and construction of gutters, but no law had taken into cognisance the need for regulation of development or the provision of conducive housing for the populace.¹⁴² The clamour for an improvement of the housing conditions in England has been described as the meeting of minds of public health, architecture and engineering practitioners, and came about from everyday practical experiences.¹⁴³

There were moves by private individuals, including Ebenezer Howard – the founder of the Garden City Movement – to build new towns for the working class, which would be self-sufficient and adequately laid out comprising open spaces, residential areas and all needed amenities.¹⁴⁴ It was however also recognised that there was the need for a legal framework to regulate town planning in already existing towns and to properly lay out new towns. This led to the passing of the Housing, Town Planning, etc Act of 1909. It is interesting that at the second reading of this Bill in the parliament, John Burns¹⁴⁵ alluded to so many justifications which are still valid in present-day theoretical underpinnings of the planning process.

No one can go through the East End of London, or to places like Liverpool, Leeds, Manchester and Glasgow, and see the effect, both on the physique, morale, happiness, and comfort of men, women, and children, through lack of some such condition as this...but will come to one definite conclusion...that the House of Commons should not lose this opportunity of giving to communities...the opportunity of consciously shaping

¹⁴¹ Its long title stated as follows: “An Act for consolidating in one Act certain Provisions usually contained in Acts for paving, draining, cleansing, lighting, and improving Towns.”

¹⁴² P Booth ‘From property rights to public control’ op cit note 136 at 166.

¹⁴³ JB Cullinworth and V Nadin *Town and Country Planning in the UK* Psychology Press 2002 p 15.

¹⁴⁴ See ‘The birth of town planning’ available at <http://www.parliament.uk/about/living-heritage/transformingsociety/towncountry/towns/overview/townplanning/> accessed 8/3/2016, HC Dowdall and SD Adshead op cit note 138, M Simpson D Hardy and S Ward(eds) *British Planning History 1900-1952* available at <http://www.microform.co.uk/guides/G17527.pdf> accessed 8/3/2016.

¹⁴⁵ He was at the time the chairman of the Local Government Board in England in 1909.

their own development in a better way than has occurred in the past. It is not fair or just to our poor that in many cases you build, as you do [and] that they should be placed where the sun rarely reaches, but where the wind does always, or where ventilation is denied them. [T]hose natural and physical opportunities... could be profitably exploited for the whole community—to the benefit not only of the present generation, but particularly of children who are cursed, many of them, in their habitations and environment.

He equally pointed out that the Bill aimed to “...secure, the home healthy, the house beautiful, the town pleasant, the city dignified and the suburb salubrious.”¹⁴⁶

The 1909 Town Planning Act seemed not to have been as successful as was envisaged.¹⁴⁷ It was, however, a step towards the public control of development. This Act was followed by the 1919 and the 1932 Planning Acts. A significant characteristic of these laws is that they were restrictive¹⁴⁸ and considered to be more of a deterrent than an incentive to planned development, mainly because of the extensive administrative planning procedure involved.¹⁴⁹ The Town and Country Act of 1947 was passed at the end of the Second World War, and the war played a role in bringing about the law. The 1947 Act was mainly geared towards addressing the problems of urban sprawl. Development control was made applicable to all forms of developmental activities, and each area of the country was required under the new law to have a development plan¹⁵⁰ marking the beginning of the comprehensive planning system including future development plans in England.

The spirit behind the Town Planning Act of 1919 was majorly public interest and social welfare.¹⁵¹ However, this Act and successive planning Acts were unable to achieve this. The 1947 Act, however, with its provisions on comprehensive planning and the requirement of development plans and future plans, ensured that social welfare was safeguarded, and not just the

¹⁴⁶ JB Cullinworth and V Nadin op cit note 142 p16.

¹⁴⁷ P Booth ‘From property rights to public control’ op cit note 137 at 167, HC Dowdall and SD Adshead op cit note 140 at 44-6 and JB Cullingworth and V Nadin ibid p 16.

¹⁴⁸ JB Cullingworth and V Nadin ibid, P Booth ‘From regulation to discretion: The evolution of development control in the British planning system 1909-1947’ (1999) 14 *Planning Perspectives* 278.

¹⁴⁹ British Planning History 1900-1952 op cit not 142 p 2, P Booth ‘From regulation to discretion: The evolution of development control in the British planning system 1909-1947’ ibid.

¹⁵⁰ JB Cullingworth and V Nadin op cit note 143 p 21, See New Towns <http://www.parliament.uk/about/livingheritage/transformingsociety/towncountry/towns/overview/newtowns/> accessed 8/3/2016.

¹⁵¹ SM Reid op cit note 32 at 627-8.

interest of landowners. According to McAuslan, the passing of the 1947 Act made it possible to put public interest before private rights or interest in land; a principle, which he points out, remains fundamental in the approach to the development of land.¹⁵²

2.5.3 History of modernised planning in South Africa and Nigeria

By the 1900s England had become a colonial power in Africa, and both South Africa and Nigeria were under its colonial rule. The planning legislation along with the common law and other statutes applicable in England were also applied in the colonies.¹⁵³ According to Njoh, the colonial planners aimed at establishing Garden Cities in all colonies, and Africa, in particular, gave them an opportunity to explore the workability of newly acquired planning concepts, something they were unable to do in Europe due to the constraint of space.¹⁵⁴

A significant factor that characterised physical planning in Africa at that time was racial segregation,¹⁵⁵ and the need to assert control and supremacy over the native land inhabitants.¹⁵⁶ It is noted that racial segregation which took place at that time has ripple effects of blighted settlements in both Nigeria and South Africa. The town planning history of South Africa and Nigeria are quite similar, considering that they proceed from the same source – the British planning system; they will, however, be considered differently given the peculiarities of each country.

2.5.3.1 South Africa

Planning law was introduced in South Africa as early as the 1920s. There was the Native (Urban) Areas Act No 21 of 1923 which aimed at establishing settlements for Africans on the outskirts of towns inhabited by whites. The government provided housing and ensured that employers also provided housing for their employees. A separate authority was set up under this law to see to the

¹⁵² P McAuslan *Bringing the Law Back In* op cit note 18 p 86, also SM Reid op cit note 32 at 628.

¹⁵³ AJ Njoh 'Urban planning as a tool of power and social control in colonial Africa (2009) 24 (3) *Planning Perspectives* 301 – 317 at 305.

¹⁵⁴ AJ Njoh *ibid* at 310.

¹⁵⁵ P McAuslan *Bringing the Law Back In* op cit note 18 p 88-90, A Njoh op cit note 153 at 310.

¹⁵⁶ P McAuslan *ibid* p 115, A Njoh *ibid* at 302-8, African Planning Association (APA) and UNIHABITAT: 'The state of planning in Africa: An overview 2014' pp 10-11 available at <http://unhabitat.org/books/the-state-of-planning-in-africa-an-overview/> accessed 9/3/2016.

administration of these locations, including the collection of revenues and rents and the allocation of passes into white areas.¹⁵⁷ Zoning in the early 1900s was majorly between industrial and white residential areas; the workers and employees had to stay close to the industries, and their residences formed a fringe around the industrial areas.¹⁵⁸ Just as was the case with other African countries at that time, zoning was not based on the need to separate land use, but to emphasise class separation.

Specific legislation on town planning was introduced in South Africa in 1931 with the passing of the Townships and Town Planning Ordinance 11 of 1931.¹⁵⁹ Unlike other places where early planning took place, planning in South Africa at that time was centralised and regulated from the national, down to the local council level; that is, the *top-down* approach was adopted.¹⁶⁰ There were attempts to ensure sanitary and health conditions within the towns and areas; such moves are argued to have proceeded from a need to maintain a healthy workforce, rather than genuine concerns for the availability of infrastructure and housing.¹⁶¹

Planning laws in South Africa, until the passing of the Development Facilitation Act of 1995, were fashioned after the UK Town and Country Planning Act of 1947 with only minor amendments. Development in South Africa, especially in white residential areas, saw the development of new towns following the standards in Europe and the USA; however, planning and development within the locations and townships were regulated strictly by the government and experienced little or no improvements over the years.¹⁶²

¹⁵⁷ See Apartheid Legislation available at <http://www.sahistory.org.za/politics-and-society/apartheid-legislation-1850s-1970s> accessed 10/3/2016.

¹⁵⁸ L Brockett 'The history of planning South African new towns: Political influences and social principles adopted, available at [http://dspace.nwu.ac.za/bitstream/handle/10394/5351/No_40\(1996\)_Brockett_L.pdf?sequence=3](http://dspace.nwu.ac.za/bitstream/handle/10394/5351/No_40(1996)_Brockett_L.pdf?sequence=3) accessed 10/3/2016, P Hendler and T Wolfson 'The planning and the "Unplanning" of urban space 1913 to 2013: Privatised urban development and the role of municipal governments' Conference Paper: *'Land Divided: Land and South African Society in 2013, in Comparative Perspective'* 2013 p 3 and 5.

¹⁵⁹ JRL Milton op cit note 24 at 270.

¹⁶⁰ I Turok 'Urban Planning in the transition from apartheid: The legacy of social control' (1994)65 (4) *Town Planning Review* at 247.

¹⁶¹ JRL Milton op cit note 24 at 270, L Brockett op cit note 158 at 162.

¹⁶² See W Scholz P Robinson and T Dayaram 'Colonial planning concept and post-colonial realities: The influence of British planning culture in Tanzania, South Africa and Ghana in CN Silva *Urban Planning in Sub-Saharan Africa: Colonial and Post-Colonial Planning Cultures* pp 67-94.

The Development Facilitation Act (DFA) was passed in 1995, in line with the new government dispensation in South Africa. Its primary aim was to correct the inadequacies of the old planning laws that had been in operation before 1995, facilitate development and ensure the security of land tenure.¹⁶³ The DFA was repealed in 2013 by the passing of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA). Physical planning legislation in South Africa is constitutionally provided for and follows specific principles laid down in the SPLUMA, this is discussed in detail in Chapter 6.

2.5.3.2 Nigeria

The first hint of laws on land administration and planning in Nigeria was the promulgation of laws converting all land in northern Nigeria into public lands, belonging to the colonial government.¹⁶⁴ By this law, management and control of all lands within the North were vested in the governor of northern Nigeria.¹⁶⁵ A similar move to pass such a law in southern Nigeria proved unsuccessful, as the people insisted that it was against customs for anyone to ascribe ownership of land to themselves. Land was believed to belong to the community which comprised of the dead, the living and the unborn.¹⁶⁶ Land in Lagos and the southern parts of Nigeria was ceded to the colonial government in the 19th century; however, the existing rights of ownership were recognised, and land could only be acquired from the natives by the Public Lands Ordinance No. 8 of 1876.¹⁶⁷ Only the governor of a protectorate could grant to both indigenes and foreigners the rights of occupancy, or the right to carry out any form of development, whether construction or agriculture.¹⁶⁸

Physical planning laws in Nigeria were first introduced in the Lagos colony in 1863;¹⁶⁹ they aimed at achieving urban sanitation and development control.¹⁷⁰ They also made provision for

¹⁶³ See the long title to the Development and Facilitation Act no. 67 of 1995, see also P McAuslan *Bringing the Law Back In* op cit note 18 p 126-127.

¹⁶⁴ The Lands and Native Rights Ordinance was passed in northern Nigeria in 1910.

¹⁶⁵ PE Oshio 'The indigenous land tenure and nationalization of land in Nigeria' (1990) 10 *Boston College Third World Law Journal* 43 at 45.

¹⁶⁶ PE Oshio *ibid* at 46, see also JEC Hayford op cit note 117 p 84.

¹⁶⁷ JEC Hayford *ibid* p 15.

¹⁶⁸ WMN Geary *Nigeria under British Rule 1927* Routledge 2013 p 266.

¹⁶⁹ The 1863 Town Improvement Ordinance.

¹⁷⁰ Nigerian Institute of Town planners: The State of planning Report op cit note 123 p5.

the payment of compensation in the case of public acquisition of property and laid out the process for the acquisition of land. It is argued that this principle of eminent domain that was included in the laws served little or no purpose as it could not be compared with the operation of the same principle in the USA or Europe since the colonial government exercised government by a show of force and coercion.¹⁷¹ Under this law as well, local planning authorities were established to oversee the planning process within the colony. Subsequent planning Ordinances in Nigeria firmly established the separation of European and indigenous residential areas, and each area had its special planning standards.¹⁷² Another highlight of these laws are provisions on public health, sanitation, swamp reclamation and marketplace planning, as well as the development of residential areas for government employees.¹⁷³

The 1917 Township Ordinance was the first law that regulated land use planning in the whole of Nigeria. The law provided guidelines for the establishment and physical layout of other towns and provided for ‘spatial orderliness in land use patterns’ all over Nigeria,¹⁷⁴ further reinforced the segregation of residential areas and towns, as towns were classified as first, second and third-class towns.

A fundamental law in the development of modernised planning in Nigeria is the Nigerian Town and Country Planning Ordinance No. 4 of 1946. This law provided for comprehensive planning all over Nigeria, as well as the implementation of the planning process by town planning authorities. A significant drawback of this law was that, just like the laws before it, it found application mostly in upper-class towns and in areas occupied by Europeans and was not integrative or participatory in any way regarding indigenous participation.¹⁷⁵

Upon attainment of independence, the 1946 Ordinance was retained and became known as the Nigerian Town and Country Planning Law applicable in the south and the north. This law was only repealed in 1992 by the promulgation of the Urban and Regional Planning Decree of 1992,

¹⁷¹ AJ Njoh op cit note 153 at 310.

¹⁷² FK Omole and OB Akinbamijo ‘Land development and planning laws in Nigeria; The historical account’ (2012) 8 *Journal of Law, Policy and Globalisation* at 26.

¹⁷³ J Lamond *et al* ‘Urban land, planning and governance systems in Nigeria’ Research Report of the Urbanisation Research Nigeria (URN) 2015 at p 6.

¹⁷⁴ FK Omole and OB Akinbamijo op cit note 172.

¹⁷⁵ J Lamond *et al* op cit note 173.

which aimed at promoting a uniform planning system in the whole of Nigeria and adequately spelt out the role of each tier of government in the planning process. It also made provisions for stakeholder participation in the planning process.

In the present day, planning in Nigeria can be likened to that in the United States of America where planning is carried out by the states through residual un-delegated power. The Constitution empowers states to make laws for the peace, order and good governance in relation to all residual matters not within the competency of the National Assembly.¹⁷⁶ This is dealt with in more detail in Chapter 5.

2.6 Forms and Tools of Planning

The aims and objectives of planning laws and the entire planning process are achieved through certain practical tools or techniques. Some of the planning tools applicable in South Africa and Nigeria include the following:

*Spatial development framework*¹⁷⁷ guides all development activities and is the foremost planning instrument in South Africa. It entails future spatial planning and a spatial planning framework of all municipalities, provinces and the nation. It sets out in graphic and written details the existing and future development to be carried out within a specific area.¹⁷⁸ It is the core of all planning activities and includes integrated development plans of all municipalities.¹⁷⁹ It is a strategic planning instrument as it takes into consideration all factors that may affect the planning process and how such a process may be optimised; it also outlines the future spatial plan of an area. In addition to guiding development, wherever the planning authority can exercise its discretion, such discretion must be guided by the spatial development plan.¹⁸⁰

Environmental assessment is a requirement for all developmental activities proposed within an area in both Nigeria and South Africa. It involves an impacts assessment as well as

¹⁷⁶ S 4(1)(7) of the 1999 Constitution of the Federal Republic of Nigeria.

¹⁷⁷ Provided for in Chapter 4 of the Spatial and Land Use Management Act 2013 (SPLUMA).

¹⁷⁸ J Glazewski and L du Toit (eds) *Environmental Law in South Africa Issue 3* (2016) pp 9-18&19.

¹⁷⁹ J Forbes et al *An Introduction to Municipal Planning within South Africa* 2011 p8 available at [http://www.salga.org.za/app/webroot/assets/files/PLANNING%20BROCHURE\(1\).pdf](http://www.salga.org.za/app/webroot/assets/files/PLANNING%20BROCHURE(1).pdf) accessed 16/3/2016.

¹⁸⁰ S 12(2) (b) of the SPLUMA op cit note 177.

environmental profiling. Environmental profiling is an assessment of the way the economic activities within an area affect the environment regarding resources, the hazards posed by these activities and the possible alternatives to the planned activity or development.¹⁸¹ It usually entails a scientific process highlighting the environmental effects of projects on host communities, helping the affected stakeholders take necessary action and improve the quality of their decisions.¹⁸² The Court in South Africa has extended the application of ‘environmental impact assessment’ to include climate change considerations regarding both mitigating GHG emissions and promoting adaptation to climate change.¹⁸³ This was the decision of the Court in the case of *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others*¹⁸⁴ where it was noted that the legislative requirement for EIA ought to be interpreted in line with the Constitution and with relevant international instruments.¹⁸⁵ Moreover, in the case of climate change considerations, such interpretations are required to take cognisance of the UNFCCC and other relevant international instruments.¹⁸⁶

An aspect of environmental assessment is the Social Impact Assessment which factors in social considerations along with economic considerations of developmental activities.¹⁸⁷ In assessing likely social impacts, the process entails an assessment of the activities and projections of likely impacts, and where such projects or developments already exists, it seeks to monitor and mitigate the negative social impacts of such activities.¹⁸⁸

Integrated development planning is a plan that is adopted in South Africa in line with the provisions of chapter 5 of the Municipal Systems Act.¹⁸⁹ It is required to state the long-term developmental goals of individual councils for five years and is required to be updated

¹⁸¹ L Ortolano and A Shepherd ‘Environmental impact assessment’ in F Vanclay and DA Bronstein *Environmental and Social Impact Assessment* 1995 International Association of Impact Assessment John Wiley and Sons Ltd p 3.

¹⁸² L Ortolano and A Shepherd *ibid* p 4.

¹⁸³ *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* [2017] ZAGPPHC 58 para 78 at p 31.

¹⁸⁴ *Ibid*.

¹⁸⁵ *Ibid* at para 81-2 pp 32-3.

¹⁸⁶ *Ibid* para 83 pp33-4.

¹⁸⁷ RJ Burdge and F Vanclay *Social Impact Assessment* in F Vanclay and DA Bronstein *op cit* note 181 p 36.

¹⁸⁸ *Ibid* p38.

¹⁸⁹ As defined in s 1(1) of the SPLUMA.

annually.¹⁹⁰ The plan is required to incorporate the plans of all sectors within a municipality and should promote sustainable developmental activities.¹⁹¹

*Town planning scheme*¹⁹² which applies in South Africa is a layout of the *zones* that exist within a municipality. It outlines the zones and designates what activities may be carried out within specific zones.¹⁹³ It is to aid the implementation of the spatial development framework and must integrate sustainable development considerations. It is legally binding on all land users, whether private individuals, corporations or governments and all developmental activities within a municipality must conform to the planning scheme.

Planning schemes refer to the prescriptive and regulatory standards to be adhered to in drawing up comprehensive plans at the state, city or local government levels in Nigeria. These standards are provided for by the planning laws of various states¹⁹⁴ and they cannot be deviated from.¹⁹⁵

Strategic planning is a planning tool that applies to both South Africa and Nigeria, it sets out the strengths and weakness of a particular area in relation to the master or regional plan.¹⁹⁶ It is integrative and allows for the participation of private stakeholders in the drawing up of the plan.¹⁹⁷ Since it puts into consideration the strengths and weaknesses of the area plan, it seeks to actualise this plan most sustainably, thus incorporating the principles of sustainable development into the planning process.

The *comprehensive master plan* is the official development plan of a state comprised of the sub plans of cities, towns, local government areas and municipal areas. It highlights the development policies and future development plans of each area and is backed by legislation. In addition to

¹⁹⁰ J Forbes et al op cit note 179 at p7.

¹⁹¹ J Glazewski and L du Toit (eds) op cit note 177 p 9-16.

¹⁹² Chapter 5 SPLUMA op cit note 180.

¹⁹³ S 25(2) SPLUMA ibid.

¹⁹⁴ This is provided for in Part 1 of the Nigerian Urban and Regional Planning Act of 1992 which is now only applicable in the federal capital territory Abuja.

¹⁹⁵ O Aluko 'Development control in Lagos State: An assessment of the public compliance to space standards for urban development' *International Multidisciplinary Journal* 169-184 at 173.

¹⁹⁶ Nigerian Institute of Town Planners: State of Planning Report op cit note 123 p 66.

¹⁹⁷ UCLG: *Policy Paper on Strategic Urban Planning* available at http://www.uclg.org/sites/default/files/EN_525_draftpolicypapermonica2504.pdf accessed 15/3/2016.

providing for future development plans, it also lays out the various zones within the area, and it states how the future plans are to be actualised.¹⁹⁸

Development control is a planning tool used in both Nigeria and South Africa. It is aimed at ensuring that the comprehensive master plan and the sub-plans under it are complied with. It maintains planning standards within a town or city and regulates all developmental activities within such an area. In Nigeria, it entails the grant or denial of planning permissions and stipulates planning obligations and requirements. It is usually the crux of planning legislation¹⁹⁹ in most jurisdictions and forms the basis of planning practice for town planners.

Zoning is a way of dividing a city or town into different and sometimes overlapping uses. It is a form of development control applied in both countries under consideration which stipulates what development may be carried out in that area.²⁰⁰ The use of zoning is highlighted in the comprehensive master plan which accurately lays out the various zones within a particular area.²⁰¹ According to Pavlich, the planning process, specifically zoning, is a tool adopted by planners to safeguard public interest.²⁰² Zoning also presents a mechanism to secure the use of land in a manner that is most appropriate for the environmental, social and economic structure of particular societies.²⁰³ The end aim of zoning as a planning tool is to actualise the objectives of the planning system as represented in the master plans or comprehensive plans of the society.²⁰⁴ It is also argued that the purpose of zoning as a planning tool extends to the protection of citizen's interests, the preservation of public and private amenities from nuisance (that would emanate from some land uses) and the protection of property values.²⁰⁵

¹⁹⁸ O Aluko op cit note 195 p 171.

¹⁹⁹ It is provided for in Parts 2 and 3 of the Nigerian Urban and Regional Planning Act of 1992.

²⁰⁰ F Akimoto 'The birth of 'land use planning'' in American urban planning, (2009) 24(4) *Planning Perspectives* 457-483 at 458 notes that zoning developed as a separate practice from city planning and land use planning in the United States. Though provided for by legislation, the practice of zoning was established by the judiciary, especially in the landmark case of *Village of Euclid, Ohio v. Ambler Realty Co.*, [272 U.S. 365](#) (1926).

²⁰¹ DJ Pavlich op cit note 2 at 114.

²⁰² Ibid p 103.

²⁰³ Ibid at 108.

²⁰⁴ Ibid.

²⁰⁵ DL Callies op cit note 25 at 785.

As noted by McAuslan,²⁰⁶ planning law has moved beyond mere planning making and encompasses much more. Planning law is an enhancer of the environment and quality of life within it. It is a coordinator of community aspirations and of resources to meet those needs. Planning law is a tool which the society uses to achieve social and redistributive justice. In more recent times, planning law has become the steward and manager of both built and natural resources within the environment. Given all the above functions, planning law provides a source of information on the environment and the changes that affect it and how the members of the society, individually and collectively, adapt to these changes.

2.7 Conclusion

This chapter sets the framework upon which the rest of the thesis would be built. It considered ways in which the practice of planning evolved in indigenous societies and well as the traditional land use planning as contained in some common law principles such as nuisance and restrictive covenants. Although formal planning as it is known today was not practised in these indigenous African societies, this chapter has proffered an argument that there was some form of regulation of land use, which points to the fact that regulation of land use is an innate characteristic of every organic society. In essence, human societies in regulating their activities in one form or the other take cognisance of the need for order and social wellbeing.

Following this line of argument, the chapter also considered some normative ideologies that underlie planning laws, as well as some theoretical underpinnings of the planning process. This analysis highlights certain points which include the importance of the planning system in guaranteeing social wellbeing and safeguarding not just the public space, but private spaces as well. Also highlighted is the fact that the planning system has evolved from a system of government bureaucracy to a system that is more participatory as evidenced in the provisions of public participation as part of the planning process. These evidence point to the fact that where the planning process now entails social, economic and environmental considerations, it is an effective tool for adaptation to climate change.

²⁰⁶ P McAuslan *Ideologies of Planning* op cite note 17.

The chapter finally considered some tools adopted in both Nigeria and South Africa to fulfil planning obligations. Subsequent chapters of the thesis build upon the discussion in this chapter. Chapter 4 links climate change adaptation and effective land use governance, an important aspect of which is the physical planning process. Then chapters 5 and 6 consider in detail the planning systems in South Africa and Nigeria and how these systems based on the principles highlighted in this chapter have aided or could aid the adaptation to climate change.

CHAPTER 3: THE CONCEPT OF ADAPTATION TO CLIMATE CHANGE AND ITS IMPLEMENTATION AT INTERNATIONAL AND NATIONAL LEVELS

3.1 Introduction

Adaptation is an aspect of the response to climate change at international and national levels. Unlike mitigation, adaptation is less of an environmental problem¹ and more of a developmental problem.² As will be seen in this chapter, the impacts of climate change on natural and human systems, buttress the fact that adaptation should be perceived as a developmental challenge.

Though human systems and communities have the natural tendency to adapt to changes that occur in their physical environment and have been doing so for centuries,³ the availability of scientific knowledge on the likely extent of the impacts of climate change makes it possible for actions to be taken in anticipation of climate impacts within human systems. Such actions include the necessity of incorporating adaptive measures into government policies.⁴ The tendency of climate change impacts to be far-reaching and affecting every sector of human endeavour and interactions further makes it necessary to bolster adaptive capacity⁵ at all levels or spheres of government, amongst private sector interviewees, groups and individuals.⁶ The importance of adaptation to climate change is further underscored by the fact that the impacts are likely to continue over an extended period, hence the need to formulate short, mid and long-term

¹ G Zeirvogel 'Climate change impacts and adaptation in South Africa' (2014) *WIREs Clim Change* 605 at 606.

² L Kotze and others 'Climate change law and governance in South Africa – Setting the Scene' in TL et al Humby *Climate Change: Law and Governance in South Africa* (2016) p 1-6.

³ L Bo and E Spanger-Siegfried (ed) *Development Programme United Nations Adaptation policy frameworks for climate change: developing strategies, policies and measures* p 1, G Ziervogel and S Parnell 'Tackling barriers to climate change adaptation in South African coastal cities' in BC Glavovic and GP Smith (eds) *Adapting to Climate Change: Lessons from Natural Hazards Planning* (2014) pp 67 and 70.

⁴ Ibid.

⁵ N Brooks in his work 'Vulnerability, risk and adaptation: A conceptual framework' *Tyndall Centre for Climate Change Research Working Paper* 38 at page 8 describes "adaptive capacity" as the ability or capacity of a system to modify or change its characteristics or behaviour so as to cope better with existing or anticipated external stresses.

⁶ L Kotze and others op cit note 3p 1-7.

adaptation frameworks.⁷ This chapter looks at the concept of adaptation and its effective implementation.

3.2 The Concept of Adaptation

Adaptation is a term subject to several meanings and applied differently in various fields.⁸ In the context of adjustments to external stimuli in relation to humans, the concept was contextually applied by Charles Darwin regarding the ability of organisms to modify themselves to the changes in their environment.⁹ His theory was built upon by John Dewey who defined the term as meaning how individuals and groups gathered knowledge about their environments in order to adequately respond to the environment and attain their own goals. Dewey's contextual perception of adaptation entailed the acquiring of knowledge of the environment, ability to effectively respond to the environment and changes occurring in the environment, and as the need arises, modifying the environment to aid continued existence.¹⁰

Adaptation in whatever form involves a process of reducing the adverse effects of a state of affairs or condition on human societies and sources of livelihood.¹¹ Following Charles Darwin's theory, the process of adaptation in most organisms and natural systems is not always a deliberate effort, and environmental adaptation has been a continuous semi-deliberate process for human systems for centuries.¹² The reality is thus that in all human systems and societies, adaptation would include any passive, reactive, or anticipatory modification of social, economic and even cultural lifestyles.¹³ This form of continuous semi-deliberate process of adaptation is

⁷ CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2014AR5)* p 837.

⁸ ELF Schipper 'Climate change adaptation and development: Exploring the linkages' (July 2007) 107 *Tyndall Centre Working Paper* pp 4-5.

⁹ *Ibid* p 4.

¹⁰ Adger and others also note that it is inherent in all organisms to adapt to changes within their environment by acquiring knowledge of their environment and using such knowledge or information to respond to the changes in the environment. See WN Adger I Lorenzoni and KL O'Brien, 'Adaptation now' in WN Adger and others (eds) *Adapting to Climate Change: Thresholds, Values, Governance*, (2009) p 1.

¹¹ GJ Nagy and others 'Adaptive capacity for responding to climate variability and change in estuarine fisheries of the Rio' de la Plata (2006) *AIACC Working Paper* p 3.

¹² H Bulkeley and R Tuts 'Understanding urban vulnerability, adaptation and resilience in the context of climate change' (18)6 *Local Environment* 646 at 654-5.

¹³ IPCC AR5 Part A op cit note 7 p 836.

already extending to climate change and its impacts. Climate change impacts, however, raise new issues of vulnerabilities, not only regarding the natural or biophysical environment but social vulnerabilities which put many human systems at great risks and require streamlined and coordinated efforts at adaptation.¹⁴

3.2.1 Climate change adaptation

Adaptation to climate change transcends minor adjustments to changing weather and entails numerous transboundary and global impacts which are drastic and intense.¹⁵ Critical aspects of adaptation are reduction of vulnerabilities, building of resilience and disaster risk response and management. It also includes actions aimed at curtailing damage, actions taken to recover from the damage done and actions taken when recovery is slow or impossible.¹⁶

Adaptation to climate change entails transforming physical, environmental and socio-economic conditions so that minimal harm is experienced, while harnessing the associated benefits. This entails categorising geographical areas based on their resilience or capacities to adapt,¹⁷ identifying and reducing sensitivities to climate change by attaining a degree of preparedness through the improvement of socio-economic conditions.¹⁸ While the capacity to adapt or improved socio-economic conditions do not guarantee preparedness to face the impacts of climate change, these factors reduce social vulnerabilities¹⁹ to climate change.

In relation to climate change, adaptation was first defined by the intergovernmental panel on climate change (IPCC) in 2001 as

¹⁴ H Bulkeley and R Tuts op cit note 12.

¹⁵ WN Adger and others (eds) *Adapting to Climate Change: Thresholds, Values, Governance*, op cit note 10 p 1.

¹⁶ Ibid, also H Bulkeley and R Tuts op cit note 12 at 648-9.

¹⁷ JB Ruhl 'Climate change adaptation and the structural transformation of environmental law' 40 *Environmental Law* 385.

¹⁸ A Kaswan 'Climate change adaptation and land use: Exploring the federal role' (2013) 47 *Marshall Law Review* 513.

¹⁹ Social Vulnerability, according to the IPCC AR5 refers to ways in which individuals, groups and communities are vulnerable to climate change impacts. Social vulnerability is based on several enhancing factors or drivers including gender, age, health, social status, and ethnicity of individuals and groups, and the capacity building institutions in place locally, nationally, regionally, and internationally, see IPCC AR5 Part A op cit n 5 pp 836-40.

[a]djustments in natural or human systems to a new or changing environment...in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.²⁰

Adaptation is defined in the IPCC AR5 as the process of adjustments to actual or expected climate and its effects. Specifically, in human systems, adaptation seeks to moderate harm or to exploit beneficial opportunities. In relation to natural systems, adaptation by human intervention seeks to facilitate some adjustments to the climate and its effects.²¹

Adaptation to climate change as identified by the IPCC occurs in different ways and can be categorised based on various factors including the following: timing, scope, purposefulness and the adapting agent.²² Based on these factors, adaptation could be anticipatory/proactive or reactive, local or regional, short term or long term, autonomous or planned, individual or collective/government action.²³

The IPCC in AR5 further highlights that planned adaptation in human systems could be incremental or transformational.²⁴ Incremental adaptation is the maintenance of the integrity of human systems, such as institutional, economic, technological and social systems, to be able to withstand the impacts of climate change.²⁵ Transformational adaptation, on the other hand, is aimed at changing fundamental aspects of human systems given the impacts of climate change;²⁶ such changes could relate to migration, lifestyle or the forfeiture of established ways of doing things for more adaptable methods. While the incremental form of adaptation entails a gradual integration of climate change adaptation considerations into governance, transformational adaptation is more radical and requires fundamental changes in the governance structure.²⁷

²⁰ JJ McCarthy (ed) *Climate change 2001: impacts, adaptation, and vulnerability: contribution of Working Group II to the third assessment report of the Intergovernmental Panel on Climate Change* (IPCC AR3) p 90-1.

²¹ VR Barros and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability Part B: Regional Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) (IPCC AR5 2014) p 1758.

²² IPCC AR3 op cit note 20 p 88.

²³ Ibid. p 88-9.

²⁴ This view is also supported by Bulkeley in H Bulkeley and R Tuts op cit note 12 at 654-5.

²⁵ AR5 2014 Part B op cit note 21 p 1758; N Brooks 'Tracking adaptation and measuring development' (November 2011) *IIED Climate Change Working Paper* p 12.

²⁶ Ibid.

²⁷ H Bulkeley and R Tuts op cit note 12 at 654-55.

The AR5 discusses another form of adaptation, that is, autonomous adaptation, which refers to a reactionary form of adaptation, as the measures taken are not taken as a result of planned or conscious efforts to tackle climate change and its effects.²⁸ The passive semi-deliberate adaptation process is not targeted at addressing climate change or its impacts on the society but is important in building adaptive capacity among the bio-components of the environment, including individuals within the society.²⁹

3.2.2 Delay in the onset of adaptation

Adaptation is often relegated to the background in matters of development.³⁰ This is because it is often not based on facts or premises, but on scientific estimations and projections which do have an element of uncertainty and variability.³¹

The UNFCCC seems to have foreseen such governance dilemma in addressing climate change impacts and states clearly that the absence or insufficiency of concrete scientific evidence should not be a reason not to take action where there is the likelihood of grievous and irreversible damage being done.³² Sussman³³ and Flatt³⁴ hold the view that rather than most developing countries delaying adaptation due to insufficient scientific evidence, some adaptation should be commenced based on available information and such measures should be improved upon or revised as more scientific knowledge becomes available.

Further, some impacts of climate change may aggravate pre-existing natural or social vulnerabilities in developing countries leading to more significant risks and hazards; in such

²⁸ IPCC AR5 Part B op cit note 21 p 1759.

²⁹ IPCC AR5 Part A op cit note 7 p 838.

³⁰ O Mertz 'Adapting to Climate Change in developing countries' (2009) 43 *Environmental Management* 744; RJ Klein ELF Schipper S Dessai 'Integrating mitigation and adaptation into climate and development policy: three research questions' (2005) 8 *Environmental Science & Policy* 586; E Sussman and others 'Climate change Adaptation: Fostering progress through law and regulations' (2010) 18 *New York University Law School Environmental Law Journal* 55 at 56; H Bulkeley 'Cities and the governing of climate change' (2010) 35 *Annu. Rev. Environ. Resour.* 229–53 at 244; TE Downing and others 'Adaptation to climate change in Africa (1997) 2:1 *Mitigation and adaptation strategies for global change* 19 at 20-1.

³¹ E Sussman and others ibid at p 57.

³² Art 3 principle 3 UNFCCC.

³³ E Sussman op cit note 30 at p 61.

³⁴ VB Flatt 'Adapting laws for a changing world: A systemic approach to climate change' (2012) 64 *Fla .L .Rev.* 269 at 283.

cases, the argument for gradual societal adaptation becomes nullified. In the same way, the social and economic costs of unpreparedness are very likely to outweigh that of anticipatory measures towards adaptation. According to Craig, rather than delay action, climate change should be addressed with principled flexibility.³⁵

Adaptation to projected climate change impacts is seen by most governments as being a capital-intensive programme. The UNFCCC stipulates and provides guidelines for the process of adaptation to the impacts of climate change, including funds transfer, and subsequent protocols to the Convention have set up a trust fund.³⁶ This is partly based on the principle of international cooperation on technology and funds transfer as well as international environmental law principles, that is, the polluter pays and the principle of trans-boundary pollution.³⁷ However, there is the general problem of how funds are generated and accessed. There also seems to be a general scepticism to fund adaptation in developing countries because the processes of adaptation to climate change are economic and developmental, and the impacts are made worse by already existing deficiencies within many developing countries. It is therefore hard to establish the additionality of climate change adaptation projects.

3.2.3 Pro-activeness and directness in adaptation

Besides monetary and socio-economic costs, there could also be political and legal implications. For instance, the government may be unable to adequately respond to adverse effects, giving rise to issues of infringement of human rights, the breach of public trust, and failure to carry out governmental and constitutional obligations.³⁸

³⁵ RK Craig 'Stationarity is dead'-long live transformation: Five principles for climate change adaptation law' (2010) 34:1 *Harvard Environmental Law Review* 9 at 17, also NH Stern *The economics of climate change: Stern Review* p 436.

³⁶ Art 11 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change <http://unfccc.int/resource/docs/convkp/kpeng.pdf> (accessed 31/10/2016). Also articles 10(b)(i)(c) (d) and 12(7) of the Protocol also make reference to the transfer and establishment of funds to help developing nations meet the challenges of adaptation; also <https://www.adaptation-fund.org> and http://unfccc.int/kyoto_protocol/items/2830.php, J Paavola and WN Adger 'Justice and adaptation to climate change' *Tyndall Centre Working Paper* 23 pp 11-2, also *The Stern Review* op cit note 35 pp 554-5 and 557.

³⁷ Art 3 of the UNFCCC contains these and other principles recognized by the UNFCCC as being necessary in addressing the challenge of climate change.

³⁸ Issues of governance in climate change are further addressed in Chapter 4.

In line with the above, the government has certain obligations, both constitutional and stipulated in several international treaties,³⁹ to improve, safeguard and protect lives and property within their jurisdictions. Adaptation - *the need to safeguard the environment and society* against the adverse effects of climate change - gives rise to a legal, binding obligation on the part of the government which requires *direct* and *deliberate* efforts to protect the public interest rather than passive or reactionary efforts.⁴⁰

3.2.4 Adaptation at the international level

The UNFCCC provides that State parties must minimise causes of climate change and to take steps to reduce its adverse effects. It also encourages States to adapt cost-effectively, considering individual socioeconomic capacities. In other words, there need not be a universal template for adaptation, but each State is to adapt depending on its economic and social capacity.⁴¹ Given the transboundary nature of climate change and its effects, it also calls for regional or bilateral and multilateral cooperation in addressing climate change and its impacts.⁴² The Convention also enjoins State parties to take measures to mainstream adaptation into existing government policies across all sectors.⁴³

³⁹ The Constitutions of South Africa and Nigeria as well as the African Charter and the UN Charter recognize the right of citizens to live in a safe environment.

⁴⁰ The African Commission on Human and Peoples Rights, in recognizing the need to take proactive steps to safeguard the rights of people in relation to climate change and its impacts, has passed three Resolutions: Resolution ACHPR/Res. 153(XLVI)09: Resolution on Climate Change and Human Rights and the need to study its impacts in Africa adopted at its 46th session in 2009; ACHPR/Res. 271 (2016): Resolution on Climate Change in Africa adopted at its 55th ordinary session in 2014 and ACHPR/Res. 342(LVIII)2016: Resolution on Climate Change and Human Rights in Africa.

⁴¹ There are various factors that militate against the adaptation ability or capacity of various nations, especially amongst developing countries. A major factor is the availability of funds. Most of these countries as it is lack the monetary capacity to carry out developmental projects and this challenge is further aggravated by climate change. In view of this fact, the Stern Review highlights the need for international collaboration not just in mitigation, but also in adaptation. It notes that: "...governments... will require support from the international community. The poorest countries are the most vulnerable to the impacts of climate change *and* are particularly short of the resources required to manage a changing climate. The ethical foundations for this support... are (i) that common humanity points to support for the poorest members of the world community, and to efforts to build a more inclusive society, (ii) the historical responsibility of industrialised countries for the bulk of GHGs concentrations, and (iii) a common interest in avoiding the instabilities that could arise from the transfer of the dislocation of climate change." Stern Review op cit note 35 Pp 554-5.

⁴² Art 3(3) and Art 4(4) UNFCCC.

⁴³ Art 4 (1)(b)(e) and (f) *ibid*.

After the UNFCCC, there have been some protocols that have emphasised the adaptation agenda and the setting up a special adaptation fund.⁴⁴ The Paris Agreement came up with a global goal towards achieving adaptation, a goal aimed at building adaptive capacity, increasing resilience, reducing vulnerabilities and eventually contributing to sustainable development in a bid to protect people, societies, sources of livelihoods and preserve the natural environment.⁴⁵ The efforts of other COPs on adaptation were discussed in Chapter 1.

Notable work on adaptation has also been done by the United Nations Environment Programme (UNEP), the international body harnesses knowledge and resources to aid adaptation at regional, national and local levels and makes these resources available to countries to aid the process of adaptation. The Organization also helps countries strengthen “...institutional and policy frameworks for adaptation ... [through] national development planning and legislative processes.”⁴⁶ UNEP also established a global adaptation network (GAN) and regional networks. Through these networks, in addition to supporting developing countries, it also fosters multilateral interactions on adaptation to climate change. Also, UNEP has a programme to support developing countries in actualising their National Adaptation Plans,⁴⁷ helping countries access finances from different sources to aid their adaptation process.

Another international effort towards adaptation to climate change is the 2030 Agenda for Sustainable Development.⁴⁸ In line with the UNFCCC, the parties to this framework for sustainable development set out some goals towards achieving adaptation to climate change impacts. Regarding adaptation and adaptive capacity, the Agenda seeks by 2030 to have

⁴⁴ Notable amongst these are the Cancun Agreements Decision 1/CP.16, available at <http://unfccc.int/adaptation/items/5852.php> and the Bali Action Plan Decision 1/CP.13 available at <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf> last access 1/11/2016.

⁴⁵ Arts 7 and 8 of the Paris Agreement FCCC/CP/2015/10/Add.1 Dec. 1/CP.21 available at <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> accessed 1/11/2016.

⁴⁶ Climate change adaptation: Knowledge support and Policy Integration <http://www.unep.org/climatechange/adaptation/KnowledgeandPolicy/tabid/29577/Default.aspx> accessed 28/10/2016.

⁴⁷ The National Adaptation Plan - Global Support Programme (NAP-GSP) for non-Least Developed Countries (non-LDCs) commenced in July 2015, it is funded by the Special Climate Change Fund of the Global Environment Facility see <http://www.undp-alm.org/projects/naps-ldcs/news-updates> accessed 28/10/2016.

⁴⁸ Transforming our world: the 2030 Agenda for Sustainable Development <https://sustainabledevelopment.un.org/post2015/transformingourworld> accessed 28/10/2016. The Agenda was adopted by world leaders at the what has been described as “an historic summit” in September 2015.

achieved global resilience across sectors in all cities of the world.⁴⁹ In addition to this, it advocates urgent action to tackle climate change and its impacts by helping integrate climate change measures into countries' policies and planning.⁵⁰ It also seeks to implement the raising of funds to promote climate change mitigation and adaptation as established under the UNFCCC.⁵¹

A controversial aspect of climate change governance at the international level is liability for loss and damage. It initially was suggested that developing countries, especially the small island countries should be compensated for the effects of climate change for which developed countries were to be liable.⁵² The clamour for liability and compensation led to the Warsaw International Mechanism for Loss and Damage which was established pursuant to the Cancun Adaptation Framework.⁵³ The Mechanism was enhancement of action, knowledge and dialogue on 'comprehensive risk management' to address losses and damages associated with adverse effects of climate change.⁵⁴ At the COP 21, re were negotiations to establish 'loss and damage' liability and compensation as a third independent leg of climate change action, this move was kicked against by the developed nations as it purported to impose mandatory payments on developed countries for losses suffered by vulnerable states.⁵⁵ and the Paris Agreement, in seeking to resolve the issue took a middle ground which ensures the continued existence of 'loss and damage'.⁵⁶ Rather than imposing liability for adverse effects of climate change though, the PA merely encourages states to cooperate to enhance action and provide support on loss and damage associated with effects of climate change.⁵⁷

⁴⁹ Goal 12 2030 Agenda *ibid*.

⁵⁰ Goal 13.2 2030 Agenda *ibid*.

⁵¹ Goal 13.3 of the 2030 Agenda *ibid*.

⁵² Climate Focus Briefing Note 'Loss and damage in the Paris Agreement' December 2015 p 2-3.

⁵³ Decision 2/CP.19/FCCC/CP/2013/10/Add.1 Report of the Parties on its nineteenth session.

⁵⁴ FCCC/CP/2012/8/Add.1 Report of the Conference of Parties on its eighteenth session, Decision 3/CP.18, para 5.

⁵⁵ Climate Focus *op cit* note 52 p 3, RS Dimitrov 'The Paris Agreement on Climate Change; Behind closed doors' (2016) 16(3) *Global Environmental Politics* 1 -11 at 4.

⁵⁶ Art 8 Paris Agreement *op cit* note 45.

⁵⁷ Art 8 para 3 & 4 Paris Agreement *ibid*. See C Okereke and P Coventry 'Climate justice and the international regime: before, during and after Paris' (2016) 7(6) *Wiley Interdisciplinary Reviews: Climate Change* 834 -851, A Savaresi 'The Paris Agreement: a new beginning?' (2016) 34(1) *Journal of Energy and Natural Resources Law* 16 -26 at 23.

3.3 Climate Change Adaptation and the Law

Adaptation to climate change is regarded as a public good. Hence no one can ordinarily be excluded from enjoying or benefitting from it; it is a non-excludable good.⁵⁸ Given this background, it requires the sanction of the law for several reasons.

First, a legal backing is necessary to ensure climate change adaptation retains its character of non-exclusion in all forms. To this end, it is essential to have clear and uniform adaptation objectives and framework to be backed by law and applicable across sectors.⁵⁹ The legal framework for adaptation should actualise three main normative goals: reducing vulnerability, increasing resilience to climate change, and maintaining equity in the adaptation process.⁶⁰ The first two goals are central themes to adaptation in general; the third speaks to rule of law and justice. Adaptation equity examines the adaptation process and seeks the most efficient and equitable way to engage the instrument of the law in such circumstances.⁶¹

Second, the fact that climate change impacts have far-reaching physical, social, economic and developmental effects calls for the intervention of the law to ensure climate justice.⁶² According to Adger, adaptation to climate change raises issues of justice, responsibility and obligations for the adaptation process.⁶³ Adaptation should be viewed as a core governance issue which requires deliberate action by the people of an area, either through a collective will or by individual efforts. The law, in this regard, serves to ensure the effectiveness of government volition to carry out adaptation. It gives legal backing to any action taken on adaptation and allows for any player - whether government, private interviewee or individual - to be held answerable for actions or inactions that jeopardize the adaptation process.

Third, the adaptation process raises legal issues connected to the environment and physical/spatial planning such as:

⁵⁸ G Sosa-Nunez and E Atkins *Environment, Climate Change and International Relations* available at www.E-IR.info accessed 31/10/2016 pp18-9, Seo A theory of adaptation to climate change as a global public good (2010) *USAAE-IAEE WP* p8.

⁵⁹ JB Ruhl and J Salzman 'Climate change meets the law of the horse' (2013) 62:5 *Duke Law Journal* 1019.

⁶⁰ VB Flatt 'Adapting laws for a changing world' op cit note 34 at 290-91.

⁶¹ Ibid.

⁶² E Sussman op cit note 30 at 60.

⁶³ WN Adger I Lorenzoni and KL O'Brien, 'Adaptation now' op cit note 10 p2.

- the duty of the government to safeguard the environment and to provide the citizens with a clean and safe environment to live in;
- compulsory acquisition or limitation of rights to private property to prevent development in certain areas because such land is not safe to inhabit;
- the relocation of inhabitants of unsafe areas;
- the payment of compensation for injury or damage that can be attributed to climate change;
- land tenure as it affects sectors such as agriculture and development;
- adaptation obligations on private establishments and individuals and the liability for non-compliance with such directives;
- the obligation of government to provide basic infrastructure made more essential by climate change impacts, for instance, water, measures for disaster management and reduction;
- planning and re-planning areas likely to be affected by impacts such as floods, coastal erosion and drought.

Finally, law becomes essential in the adaptation process when the complex nature of the problem is considered.⁶⁴ Many climate change impacts are drastic and at times irreversible. The laws and policies governing the pre-climate change era will in most cases become inadequate to address these issues properly. Such laws, especially in developing countries, will be insufficient motivation for the government to take deliberate action on climate change.⁶⁵

In addressing the issue of adaptation to climate change, the law and relevant regulations must maintain a level of flexibility.⁶⁶ The need for adaptation is global, but a significant characteristic of successful adaptation will be the ability to address local impacts while still adhering to overarching global principles and social goals. In essence, adaptation reflects “local circumstances and needs” without being “subject to local veto or avoidance”.⁶⁷

⁶⁴ Craig ‘Stationarity is dead’ op cit note 35 at 24-6, also IPCC AR5 Part A op cit note 7 and Stern Review op cit note 35 pp 56, 97, 112.

⁶⁵ Craig ‘Stationarity is dead’ ibid at 31.

⁶⁶ E Sussman op cit note 30 at 60. The need for flexibility was also highlighted in the Stern Review, the Review points out that due to the relative inability to accurately predict climate change impacts (especially in developing countries), the adaptation process should be flexible enough to be “able to respond to new information, and robust enough to be cost-effective across a range of possible future scenarios.” Stern Review op cit note 35 p 436.

⁶⁷ Craig ‘Stationarity is dead’ op cit note 35 at 17, also Stern Review ibid.

3.4 The role of Physical Planning in the Adaptation Process

The UNFCCC requires nations to formulate measures to facilitate the adaptation to climate change;⁶⁸ the Convention specifically requires adaptation in coastal zone management, water resources, and the protection and rehabilitation of areas affected by floods and droughts.⁶⁹ In this regard, physical planning and land use management are critical tools for working towards adaptation objectives of the UNFCCC.⁷⁰ Physical planning has always been amenable to changes within the society, such as industrialisation, increased developmental and economic activities and land use changes. Moreover, physical planning legislation is designed to accommodate, anticipate and guide such changes. In relation to climate change adaptation, physical planning laws can be employed to reposition development and thereby reduce the sensitivity of the natural or human system to impacts, and increase the capacity to cope with impacts as or where they occur.⁷¹

Physical planning laws are tools of social order and help to ensure a balance in social, economic and developmental activities as they relate to land use and the environment.⁷² Adaptation also seeks a balance of these activities in reducing climate change impacts. Thus, an adoption of the underlying principles of physical planning will help to ensure social justice, equity, sustainability and resilience are considered in the process of climate change adaptation.⁷³ Planning, as a tool for promoting adaptation, will also address developmental and environmental issues of public interest.⁷⁴

Adaptation through physical planning also entails the protection of areas from the impacts of climate change through the provision of infrastructure. For instance, by constructing walls or embankments to control flood or prevent coastal erosion because of sea level rise. Such protection measures include the preservation of natural buffers that act as receptacles for floods

⁶⁸ Art 4(1) (b) UNFCCC.

⁶⁹ Art 4(1)(e) *ibid*.

⁷⁰ C Harris 'Zoning' in E Sussman *op cit* note 30 p 64.

⁷¹ A Kaswan 'Climate change adaptation and land use' *op cit* note 18 at 513.

⁷² C Harris 'Zoning' in E Sussman *op cit* note 30 p 64 - 5.

⁷³ BC Glavovic and GP Smith 'Learning from natural hazards experience to adapt to climate change' *op cit* note 3 at p 21.

⁷⁴ *Ibid* p 26.

or reduce the impact of climate change on human systems; this as well can be integrated into existing physical planning and coastal management agenda.⁷⁵

Physical planning could also be aimed at accommodating or containing impacts within existing developed areas. This is achieved through re-zoning and building regulations that consider climate change impacts such as new setbacks, soft landscaping, greening infrastructure and other measures aimed at reducing impacts. Kaswan⁷⁶ discusses retreat as a form of adaptation to climate change impacts. Like other forms of adaptation, retreat occurs on an individual basis or in a government-coordinated manner.⁷⁷ People could vacate their land without government intervention, either temporarily or permanently as a result of flood, coastal erosion or even drought. Retreat could also be a coordinated government action through physical planning policies to restrict development in certain areas that are likely to experience grave dangers,⁷⁸ or areas that have experienced some impacts and are not faring well post-impact, or areas susceptible to further risks. For instance, where ordinarily unhealthy or hazardous land use or activities are carried on in areas prone to climate change impacts, this should trigger adaptation through land use planning measures to avoid “collateral” injury or damage. A close example of the use of “retreat” through planning as a form of adaptation is seen in the new establishment of coastal management lines in the Western Cape.

A major challenge for physical planning in climate change adaptation would be the issue of migration within and into urban areas, people will move away from areas of high risks and vulnerability or other climate impacts.⁷⁹ This form of migration would lead to increased pressures and escalation of urban challenges already being experienced. This and other challenges make it imperative for adaptation to be mainstreamed into physical or spatial planning processes of the state so that they can be considered holistically. It also iterates the need for focus not just on the environmental or developmental impacts of climate change, but also on the social

⁷⁵ A Kaswan op cit note 18 at 513.

⁷⁶ Ibid at 514-5, According to Kaswan, this is the most controversial method of adaptation as it entails individuals and communities giving up their land and settlements.

⁷⁷ In Chapter 7, some of these measures are discussed as part of the adaptation process already embarked upon or about to be taken in the cities of Cape Town and Lagos.

⁷⁸ A Kaswan op cit note 18 at 515.

⁷⁹ Ibid at 516.

and economic impacts regarding government policies and the environmental, social and economic rights of people or groups likely to be affected by climate change.

3.5 Integrating Climate Change Adaptation into Government Action

The IPCC definition of adaptation includes policy formulations and governmental action directed at adaptation. For adaptation to climate change to be meaningful, it must involve a planned and systematic action by the government or private stakeholders. Such action should be based on findings and projections on the changes in the climate, the impacts of such changes and the need to either maintain a state of social, economic and developmental existence or to improve on the factors as an adaptation move.⁸⁰ The disposition of the government to climate change adaptation is important, as public entities, institutions and the process of governance play a crucial role in engineering the adaptation process.⁸¹ The government is the custodian and expression of the public will and must make decisions and engage in activities that represent the interest of all members of the society, or at least the interest of the majority, as well as protect the interest of particularly weak members of the society. To this end, the primary goals of the government regarding adaptation include protecting vulnerable groups and members of the society by reducing social vulnerability and exposure to risk.⁸² Government is also obliged to provide the information and resources, to protect existing infrastructure and provide specific public goods to aid adaptation. Finally, to lead the way in the adaptation campaign and translation of policies

⁸⁰ IPCC AR5 Part A op cit note 7 p 874.

⁸¹ TJ Finan and DR Nelson ‘Decentralized planning and climate adaptation: Toward transparent governance in WN Adger I Lorenzoni and K L O’Brien (ed) *Adapting to Climate Change: Thresholds, Values, Governance* op cit note 10 p 336.

⁸² The question as to what should be the guiding philosophy of government action has been asked. Should government action be based on the principle of egalitarianism, which seeks to see the optimal good for a few members of the society? Juxtaposed to the adaptation scenario, would it be sufficient if adaptation policies or processes are directed towards the vulnerable members of the society alone in a bid to reduce their vulnerability? On the other hand, should the utilitarian principle which seeks the greatest good for the greatest number of people be adhered to? That is, the adaptation process will seek to achieve ‘maximum efficiency’ for all members of the society, including the natural environment. The conclusion is that for adaptation governance to be most effective, it must engage a blend of both principles in the adaptation process – protect the most vulnerable and ensure an adaptation strategy for all members of the society. See N Brooks and others ‘Tracking adaptation and measuring development’ op cit note 22 p 11.

into action,⁸³ which would be followed by private institutions and individual members of the society.⁸⁴

3.5.1 Relevance of sustainable development to adaptation

Giving that adaptation to climate change impacts needs to involve anticipatory processes,⁸⁵ the effectiveness of such a process would depend on its ability to aid the continued functionality of social, cultural, economic and developmental activities within communities affected by or likely to be affected by climate change.⁸⁶ This points to the fact that adaptation to climate change cannot be isolated from the process of sustainable development.⁸⁷ The UNFCCC encourages state parties to address challenges of climate change through sustainable development.⁸⁸ Where adaptation to climate change involves deliberate actions to aid the continued functioning of the society and its various structures, the underlying causes of vulnerability are addressed.⁸⁹ This indicates a synergy between the process of adaptation to climate change and sustainable development, more so if adaptation is considered as a developmental challenge, rather than an environmental concern.⁹⁰

In line with the principles of sustainable development, Schipper notes that adaptation to climate change requires human systems to be able to overcome factors that cause vulnerability to climate change. Such factors include the lack of access to resources necessary for well-being and continued existence based on gender, age, belief system, the state of the environment in which people live and the viability of livelihoods in existing economic systems.⁹¹ This point is also

⁸³ G Ziervogel and S Parnell 'Tackling barriers to climate change adaptation in South African coastal cities' op cit note 1 p 70.

⁸⁴ WN Adger, I Lorenzoni and K L O'Brien 'Adaptation now' op cit note 10 p 9.

⁸⁵ EL Schipper 'Climate change adaptation and development' op cit note 8 at 5.

⁸⁶ Stern Review op cit note 35 pp 430-2, the Review highlights the important role the government should play in ensuring adaptation to climate change as a way of maintaining the campaign and actions on sustainable development.

⁸⁷ Stern Review op cit note 35 Executive Summary, also p. 430.

⁸⁸ Art 3, principles 1, 4 and 5 UNFCCC, also Goals 2, 11 and 13 of the 2030 Agenda for Sustainable Development, A/RES/70/1 highlight the need for sustainable development to be used as a tool to fight the challenges of climate change adaptation, especially in developing countries.

⁸⁹ There is no way the impacts of climate change can be isolated from pre-existing developmental issues within individual communities. Bulkeley argues that vulnerability to climate change "cannot be divorced from existing economic and environmental challenges facing cities", H Bulkeley and R Tuts op cit note 12 at 652.

⁹⁰ ELF Schipper 'Climate change adaptation and development' op cit note 8 at 6.

⁹¹ Ibid.

buttressed by Stern who holds the opinion that a good adaptation policy based on sustainable development should enable individuals to have continued sources of livelihood through diversification despite climate change impacts.⁹² Schipper further notes that adaptation and sustainability are complementary, and adaptation must entail climate-proof development practices that culminate in economic and environmental sustainability.⁹³ Thus successful adaptation would require aligning both agendas to combat climate change impacts.⁹⁴

While the government at the grass-roots might be able to meet some adaptation needs, it will be constrained in its ability to fulfil other adaptation obligations as a result of limited resources and constitutional powers.⁹⁵ There is thus the need for an ‘all round’ government involvement to achieve effectiveness regarding financing, regulation and implementation of adaptation policies across sectors in order to achieve minimum standards of liveability and sustainability.⁹⁶ Cole⁹⁷ reiterates this point by stating that there is the need for economic empowerment to adapt to the impacts of climate change properly. The UNFCCC also highlights both the economic and developmental dimensions of adaptation, especially in developing countries.⁹⁸

Sustainable development is also essential in the adaptation process regarding government responsibility to safeguard public goods and the interests of the generality of people in the public sphere. The synergy between sustainable development and adaptation points to the much needed reevaluation of planning legislation. Such legislation should be fashioned to take cognisance of and sanction the integration of sustainable practices and decision making in developmental activities carried out by the government and other stakeholders.

The process of adaptation, however, does not exclude individuals or private stakeholders; rather the government must provide knowledge, information and general guidelines to aid autonomous

⁹² Stern Review op cit note 35 p 432.

⁹³ ELF Schipper ‘Climate change adaptation and development’ op cit note 8 at 6-7.

⁹⁴ IR Fledman and JH Kahan ‘Preparing for the day after tomorrow: Frameworks for climate change adaptation’ (2007) 8 *Sustainable Dev. L. & Pol’y* 61 at 62.

⁹⁵ H Bulkeley ‘Cities and the governing of climate change’ op cit note 30238-39, also H Bulkeley and R Tuts op cit note 12 at 657.

⁹⁶ Stern review op cit note 35 p 347.

⁹⁷ DH Cole ‘Climate change adaptation and development’ (2007) 26(1) *UCLA Journal of Environmental Law* 6.

⁹⁸ Art 2 and 3 (e) UNFCCC.

adaptation within the society.⁹⁹ The obligation of adaptation is a continuous working process which includes all members and stakeholders within the society to limit impacts such as monetary loss, loss of life, loss of biodiversity, distribution and equity, and the quality of life.¹⁰⁰ Adaptation must also be geared towards reducing economic vulnerability by making information available and encouraging public participation in the adaptation process. The implication is thus that nations must have well rounded and effective adaptation plans and programmes which include government, private sector and individual action.

3.5.2 Adaptation programme and process in Nigeria and South Africa

Until the year 2010, no separate efforts were taken or planned for adaptation to climate change in Nigeria. The goal was to build adaptive capacity by actualising the millennium development goals, the sustainable development agenda,¹⁰¹ and existing policies on the environment such as policies on reduction of desertification and droughts, erosion and flooding, availability of water and others.¹⁰² This is despite the fact that Nigeria is ranked amongst the ten most vulnerable countries in the world to the adverse effects of climate change,¹⁰³ with vulnerabilities in coastal areas, agriculture, urban and physical infrastructure, transportation among others.¹⁰⁴ Sustainable development plays a significant role in adaptation to climate change and Nigeria projects that by the year 2020 the actualisation of set sustainable development goals would have aided adaptation to climate change.¹⁰⁵ The level of social and geographical vulnerability in the country show that it is unlikely that this goal will be met.

Response to climate change in South Africa as captured in the National Climate Change Response White Paper is based on the principles of equity, special needs and circumstances, uplifting the poor and vulnerable, inter and intergenerational sustainability (continuity) and

⁹⁹ Stern Review op cit note 35 p 437.

¹⁰⁰ N Adger 'Adaptation now' op cit note 10 p 10.

¹⁰¹ This is as contained in the National Adaptation Strategy and Plan of Action for Climate Change Nigeria (NASPA-CCN) and Nigeria's Intended Nationally Determined Contribution available at http://www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_271115.pdf p 6 accessed 28/10/2016.

¹⁰² National Environmental, Economic and Development Study (Needs) For Climate Change in Nigeria available at <https://unfccc.int/files/adaptation/application/pdf/nigerianneeds.pdf> pp 9-12 accessed 28/10/2016.

¹⁰³ Ibid p19.

¹⁰⁴ Ibid p 21-26.

¹⁰⁵ Nigeria's Intended Nationally Determined Contribution op cit note 101 p 6.

sustainable development.¹⁰⁶ The response to climate change impact is aimed at building social, economic and environmental resilience as well as emergency responses,¹⁰⁷ and to achieve the socio-economic goals of sustainable development by building capacity, especially in individuals. The adaptation responses in South Africa and Nigeria are discussed in detail in Chapter 5.

3.6 Conclusion

The chapter has attempted a clarification of the term adaptation, first as it relates to the ability of natural systems to adapt to changes in the environment, as well as humanity's ability to adapt to changes in the weather and environment. It is established that humans have been able to adapt to environmental changes over decades. However, climate change poses new threats to the environment as well as to human systems and more than ever, the vulnerabilities of human systems are pronounced. While there are biophysical vulnerabilities, the primary challenge is that of social vulnerabilities, especially in developing and least developed countries. Social vulnerabilities point to the socio-economic weaknesses of societies and their inability to cope with the impacts of climate change.

The need to build resilience and adaptive capacity and reduce all forms of vulnerabilities presents a strong argument for adaptation at all levels. Climate change impacts are place-specific, thus, the bottom-up approach presents the most effective mechanism for place-specific adaptation. This, however, does not derogate from the fact that successful adaptation would involve collective efforts from the international, regional, national down to the local level. The roles of the government and the law in the adaptation process were discussed, and it was highlighted that this involvement is necessary for coordinated and viable efforts towards climate change adaptation. The role of the physical planning process is also essential because physical planning and the law are tools for social engineering and cohesion, and climate change has and will continue involving a high level of social impacts; hence the need to promote adaptation using the law and planning systems.

¹⁰⁶ The *National Climate Change Response White Paper* p 12 available at https://www.environment.gov.za/sites/default/files/legislations/national_climatechange_response_whitepaper.pdf p 12 accessed 1/11/2016.

¹⁰⁷ The National Climate Change Green Paper 2010 (GN published in GG 25 of November 2010).

At the international level, efforts have been made by the United Nations through its specialised organs to liaise and cooperate with States to aid the adaptation process. South Africa's response strategy lays out the intended adaptation process, highlighting how the process will unfold. While not giving specific timelines and strategies, it states that the proposed responses are to be integrated into specific sectors. Based on Nigeria's climate change policies and strategies, it is argued that the country has done far less on adapting to climate change, the preoccupation being to meet the millennium development goals and promote sustainable development. Both countries still have much work to do in addressing vulnerabilities, especially regarding implementing the adaptation policies on social vulnerabilities and building resilience among particularly vulnerable groups and communities. The role of physical planning as an adaptation tool will be considered in Chapter 5, including ways in which South Africa and Nigeria have or how they plan to employ physical planning as an adaptation tool.

Adaptation to climate change, as has been highlighted in this chapter, involves an interplay of multi-level governance, law, sustainable development, land use and management as well as other political, economic and social factors. The aim of this research is, however, to concentrate on the interplay between law, land use and physical planning and adaptation to climate change. Chapter 4 thus goes on to consider the legal aspects of land use and management in relation to climate change adaptation.

CHAPTER 4: LAND USE AND ADAPTATION GOVERNANCE

4.1 Introduction

Land and land governance are intricately linked to public interest and socio-economic wellbeing. Several stress factors affect the effective, just and equitable governance of land. Climate change recently presents significant stress on land and land use both in South Africa, Nigeria and other developing countries particularly in Africa.

The effects of climate change have extensive and lasting impacts on land, its use, access to land, as well as on the various rights and interests that exist in relation to land.¹ Pressure on land and its resources as a result of climate change include water shortage, crop failures, flooding, erosions and landslides in some instances.² These occurrences have had varying degrees of consequences, ranging from minor disturbances to more severe consequences such as the loss of lives and property. These impacts, whether temporary or permanent affect the various interests attached to land, both private and public. More importantly, the challenges of climate change make the inadequacies of the laws and policies relating to land more obvious.³

The 2014 IPCC Report highlights good land governance as an effective adaptation strategy towards reducing vulnerability and exposure to the effects of climate change.⁴ Because land is connected to the core of every society's existence, it is the usual practice to find some form of land use administration at the local or community level. In a bid to ensure effective land governance, climate change adaptation should be a necessary consideration, especially in economically disadvantaged areas where there is a lot of reliance on land and its resources. This

¹ This has been discussed in Chapter 1.

² Drought has been ongoing in Cape Town, while Lagos has experienced several floods, coastal erosions and landslides, C Reason 'Climate of Southern Africa' (2017) *Oxford Research Encyclopaedia of Climate Science*, S Sanogo and others Spatio-temporal characteristics of the recent rainfall recovery in West Africa (2015) 35(15) *International Journal of Climatology* 4589-4605; SE Nicholson AH Fink and C Funk 'Assessing recovery and change in West Africa's rainfall regime from a 161-year record' (2018) *International Journal of Climatology*

³ D Palmer S Frieska and B Wehrmann 'Towards improved land governance' 2009 UN-HABITAT p 4.

⁴ CB Field and others 'Technical Summary' In *Climate change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of working group II to the fifth assessment report of the intergovernmental panel on climate change* p 85.

further emphasises the need for the integration of sound land governance principles and climate change adaptation.⁵

The FAO and UN-Habitat have described land as “...a place for housing and cities, and a basic factor of economic production as well as a basis for social, cultural and religious values and practices.”⁶ Hence, the mismanagement of land and its resources or weak land governance when coupled with the challenges of climate change implies multiple stresses within the society. Such stresses include housing deficit, loss of land tenure, loss of infrastructure and basic amenities, reduction of economic production as well as alterations in the social, cultural and even religious ways of life.

According to a World Bank study, climate change presents an opportunity for States, through land use planning, to ensure that their poorest and most vulnerable citizens are protected from disasters.⁷ Land administration and management bodies thus have a duty to seek avenues to incorporate climate change into relevant policies and laws, and to ensure proper implementation and enforcement.⁸

This analysis of governance is essential to the thesis given that climate change adaptation cuts across various sectors including land use and physical planning. Also, land governance addresses issues of the social, economic and environmental relevance of land in relation to various stresses including climate change. It is thus essential to consider climate change governance in the light of various interests, players and sectors in relation to different interests and the necessity for a regulating framework.

The chapter builds upon the discussion in Chapter 3 and seeks to establish a link between land as a subject matter of planning, adaptation and governance. The aim of this chapter is the consideration of synergy between land governance and a proposed nodal governance system for

⁵ VR Barros and others *Climate change 2014: impacts, adaptation, and vulnerability Part B: regional aspects* Contribution of Working Group II to the fifth assessment report of the Intergovernmental Panel on Climate Change Chapter 22 p 1229.

⁶ D Palmer S Friciska and B Wehrmann op cit note 3 p 3.

⁷ K Deininger C Augustinus S Enemark and P Munro-Faureeds *Innovations in land rights recognition, administration, and governance* 2010 World Bank Publications p xxi.

⁸ K Deininger and others *ibid*.

climate change adaptation. The analysis in this chapter addresses the research questions relating to the respective roles of the various levels of government in climate change adaptation and the roles to be played by non-government stakeholders. The chapter proposes the application of the nodal system of governance to ensure synergy of adaptation action amongst all players and across sectors.

4.2 The Concept of Land Governance

Land within every state, territory and jurisdiction is usually subject to some form of control, regulation and management structure. These could be through long-term practices of the indigenous people as is found in Nigeria and some parts of South Africa and evidenced by customary tenure systems. Such control and regulation could also be through the machinery of the law and government policies. All these laws, regulations, customs and practices relating to the control and use of land culminate in the land governance system of a State or Country.

Governance refers to how state actors engage with non-state actors to make and implement decisions through an adequate legal framework and policies for the day-to-day running of the State or society.⁹ It entails providing an enabling environment with efficient political, legal, administrative and managerial process to adequately respond to the civic needs of the citizenry.¹⁰ According to the United Nations, Economic and Social Commission for Asia and the Pacific¹¹ good governance ensures participation,¹² consensus, accountability, transparency, responsiveness on the part of the government; effective and efficient service delivery; equitability and inclusiveness of all groups represented within the society; and regard for the rule of law.

⁹ 'What is good governance?' <http://www.unescap.org/sites/default/files/good-governance.pdf> p. 1 accessed 13/03/2017, K Deininger and others op cit note 7 p. xx.

¹⁰ 'Governance' <https://unhabitat.org/governance/> accessed 13/03/2017, A Arko-Adjei and others 'Customary tenure institutions and good governance' paper presented at 2010 FIG Congress Facing the Challenges – Building the Capacity.

¹¹ 'What is good governance?' op cit note 9.

¹² Frohlich and Knieling argue that participation as an element of climate change governance improves the quality and implementation of policies because it engenders cooperation, J Frohlich and J Knieling 'Conceptualising climate change governance' in J Knieling and WL Filho (eds) *Climate Change Governance* (2013) p 17.

Bulkeley and Newell¹³ argue that governance refers to the creation or maintaining of a political order and the provision of ‘common goods for a given political community on whatever level.’¹⁴

Whichever way it is considered, governance entails inclusive management of resources,¹⁵ as it involves an interplay between various actors and stakeholders drawn from the formal government setting, organised private sector, as well as from the informal sector which may include customary or traditional authorities, independent interest groups and individuals within the society.¹⁶ Informal actors in the governance process need not necessarily articulate their interests to the government; such interests or practices of informal governance actors usually become assimilated and integrated into the governance process over time.¹⁷ This is often evidenced in the norms and customary practices of the people of a locality which over time become reflected not just in the general way of life, but in the governance structure and the implementation of government policies and laws.

Land governance highlights the need for clear rules and structures in the management and administration of land. Ordinarily by law, the roles of government institutions on enforcement and implementation are explicit; however, land governance entails a pluralistic institutional framework and thus emphasises the role of informal or non-governmental institutions in the management and administration of land and its resources.¹⁸ It is argued that due to the pluralistic nature of land governance, it works in sync with several legal and policy frameworks, as well as the process of governance within a State, and it is adjudged weak or effective by its outcome.¹⁹

Given the above background, land governance is the convergence of the laws, rules, policies, processes and structures “...through which decisions are made about access to land and its use, the manner in which the decisions are implemented and enforced, the way that competing

¹³ H Bulkeley and P Newell *Governing Climate Change* p 12.

¹⁴ H Bulkeley and P Newell *ibid* p 13.

¹⁵ D Palmer S Friccka and B Wehrmann *op cit* note 3 p 9.

¹⁶ K Deininger and others *op cit* note 7 p xx, D Huitema WN Adger and others ‘The governance of adaptation: choices, reasons, and effects: Introduction to the special feature 21(3) *Ecology and Society* 37, M Betsill and H Bulkeley ‘Cities and multiple governance of global climate change (2006) 12 *Global Governance* 141 – 59 at 144.

¹⁷ This form of inclusive governance has been described by Shearing and other scholars as Nodal Governance and is discussed in more detail later in this chapter.

¹⁸ D Palmer S Friccka and B Wehrmann *op cit* note 3 p 9.

¹⁹ *ibid*.

interests in land are managed.”²⁰ It also entails the use of land resources and the resolution of disputes arising on land,²¹ the security of tenure especially as it affects disadvantaged groups within the society.²² Aspect of land governance also include the guarantee of access to information and services on land, and the fair and equitable distribution of State resources such as the provision of infrastructure and basic amenities.²³ In addition to the above, land governance relates to all processes and structures associated with “land, land rights, land use and land development”.²⁴

4.2.1 Elements of good land governance

While governance and by extension land governance have only recently come to the front burner,²⁵ the concepts exist in principle in every society. According to Deininger and others “land has long been known to be one of the sectors most affected by bad governance”.²⁶ Apart from the need to safeguard the rights of the poor and most vulnerable members of the society, it is also essential for land governance to protect the environment (which includes land) from the effects of climate change and help reduce geographical vulnerability. Good land governance is pertinent in relation to climate change²⁷ considering that land is an integral part of the environment necessary for socio-economic advancement and development for the individual, the private enterprise and the government.

²⁰ *ibid.*

²¹ AUC-ECA-AfDB Consortium ‘Framework and guidelines on land policy in Africa: A framework to strengthen land rights’ *Enhance Productivity and Secure Livelihood Addis Ababa, Ethiopia* (2010) (Guidelines on Land Policies in Africa).

²² A Arko-Adjei and others *op cit* note 10 p.7

²³ *Ibid* p 10.

²⁴ K Deininger and others *op cit* note 7 p xv.

²⁵ World Bank 1992 and 1997 publications on governance and development. World Bank *Governance and development* 1992 <http://documents.worldbank.org/curated/en/604951468739447676/Governance-and-development>, World Bank *World Development Report 1997 : The State in a Changing World* World Bank <https://openknowledge.worldbank.org/handle/10986/5980> accessed 20/03/2017.

²⁶ K Deininger, H Selod, and A Burns *The land governance assessment framework: identifying and monitoring good practice in the land sector* World Bank Publication 2012 p 13.

²⁷ Climate change has been identified as one of three global trends that give rise to the need to reinforce good land governance, K Deininger H Selod and T Burns ‘The land governance framework: methodology and early lessons from country pilots’ in *Innovations in land rights recognition, administration and governance* (2010) p 250.

The loss of value of land or the loss of land as a result of climate change would lead to an adverse chain reaction, such as inter-personal or inter-tribal unrests.²⁸ It could also result in loss of livelihood or increase in the cost of living. Where private establishments and enterprises are victims of loss of land or resources on it, this could result in loss of jobs, loss of production power and a negative impact on the economy. If the government itself is affected, the effects are more far-reaching and affect the ability of the government to meet its obligations to the citizenry. Whichever way it is considered, sound land governance is required to prepare for and protect the society from the likely impacts of climate change.

The African Union has also emphasised the need to revisit land policies and management strategies in Africa due to evolving times, conditions and global changes.²⁹ The revisiting of the land question in Africa is premised on some issues including urbanization, population growth, changing perspectives of gender relations, food and security and most certainly climate change. The Guidelines on Land Policies in Africa highlight the fact that land use should be re-examined to cater for the mitigation of, and adaptation to climate change,³⁰ and seek innovative ways to build the “capacity to manage long-term implications” of climate change.³¹

In the light of the above, good land governance can be identified as entailing a sound legal framework that clearly outlines the intentions of the government in relation to land administration. And which recognizes the rights, interests and obligations in land and clearly outlines the rationale and process of expropriation or other overriding government power over the land of individuals or communities.³² It should also set out the restrictions on private interests in land and the rules guiding such restrictions; for instance, the procedure for acquiring private property for public use including the guidelines for payment of compensation, as well as the

²⁸ This is currently witnessed in Nigeria between the Fulani herdsmen and farming communities. The Fulani are traditionally nomadic herdsmen who rear cattle. Due to the reduction in rainfall in northern parts of Nigeria, they have in recent times had to drive their cattle further into the mid and southern region of Nigeria, leading to trespass and encroachment of farmlands of farming communities. This has led to series of crises between the herdsmen and the farmers.

²⁹ Assembly/AU/Decl.1 (XIII) Rev.1 Declaration on Land Issues and Challenges in Africa available at <https://au.int/web/en/cities/sirte> last assessed 27/03/2017.

³⁰ AUC-ECA-AfDB Consortium op cit note 21 p 10.

³¹ AUC-ECA-AfDB Consortium *ibid*.

³² K Deininger, H Selod and A Burns *The land governance assessment framework* op cit note 27 p 28.

situations when such acquisition will be deemed necessary.³³ These highlighted aspects of good land governance are intricately linked to the planning process and legislation.

The above requires detailed land use planning principles and processes which provide a clear layout allowing for environmental, social, economic and cultural interplay within the land governance framework. There should also be a proper delineation and identification of land designated as government or public land and appropriate provisions for the management and administration of such public property which should be used to serve public interests only.³⁴ The governance framework must also make provisions for public contribution and participation in the management of land and its resources and ensure the availability and accessibility of current and reliable information about any land to members of the public.³⁵ Finally, disputes relating to land are bound to occur; thus, it is necessary to have a functional and timeous dispute resolution mechanism to resolve disputes when they arise either between individuals or involving the government.³⁶

The Guidelines also highlight certain principles that should be used to measure the effective application of improved land administration and developments.³⁷ The Guidelines stress the need for implementation of policies to be focused on clear-cut state objectives, strategies for sustainable implementation, bearing in mind the effects on members of the society, especially the more vulnerable. There should also be a focus on the overall consistency and coherence of the policies with existing customary and statutory laws and interests in land, other objectives of the government such as environmental governance and adaptation to climate change, economic objectives of the government; and other private and government sectors.³⁸

Regardless of laid down guidelines and indicators of good land governance, any good land governance structure and process should follow the basic tenets of equity, accountability, transparency, sustainability, civic engagement, observance of the rule of law and environmental

³³ Ibid pp 28-36.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid p 28.

³⁷ AUC-ECA-AfDB Consortium op cit note 21 p 39.

³⁸ Ibid pp 39-40.

preservation.³⁹ Of utmost importance to good land governance is the safeguard of human rights, which is essential as good governance, in general, is primarily based on the preservation of human rights.⁴⁰ Several international instruments recognize the right to own property or other rights linked to land in one way or the other,⁴¹ and so do the Constitutions of most countries.⁴² The recognition and enforcement of such rights is a way to ensure effective and good land governance.

A point to note however is that there is no defined structure for good land governance. Each state or jurisdiction should put its peculiarities into consideration: the strong points of the society, the peculiar challenges of the land tenure system, the environmental challenges encountered within particular areas, and so on. This has been referred to as drawing knowledge at the grassroots rather than a “one size fits all” approach.⁴³

4.3 Climate Change Adaptation Governance

Climate change governance, however, raises some salient issues due to its transboundary and variable characteristics. According to Bulkeley,

[c]limate change has gathered an ephemeral sense of ubiquity, highly (geographically and politically) uneven, dispersed yet somehow centralised, everywhere and at the same time difficult to locate. Its status as the wicked ...problem sine qua non is seemingly unassailable, attracting sustained resources from across research, practitioner and policy communities, the attention of the world’s media and... the public.⁴⁴

This peculiarity of climate change makes governance approach somewhat different to what would apply in other localised sectors such as land discussed above. Climate change adaptation

³⁹ FAO ‘Good governance in land tenure and administration’ (2007) 9*Land Tenure Studies* p 6-9, and D Palmer S Friccka and B Wehrmann op cit note 3 p 12.

⁴⁰ Ibid.

⁴¹ Art. 14 of the African Charter on Human and Peoples’ Rights, Article 17 of the Universal Declaration of Human Rights.

⁴² S 25 of the Constitution of the Republic of South Africa Act No 108 of 1996; Ss 43 and 44 of the Constitution of the Federal Republic of Nigeria Act No 24 of 1999.

⁴³ K Deininger H Selod and T Burns ‘The land governance framework: methodology and early lessons from country pilots’ op cit note 27 p 252.

⁴⁴ H Bulkeley *Accomplishing Climate Governance* (2016) p 1.

governance (CCAG) would have to lay out clearly what government adaptation objectives are and set out the guidelines and underlining principles for achieving successful adaptation, especially in areas with specific peculiarities resulting from climate change.⁴⁵ According to Mazmanian, issues that CCAG has prompted consideration on include the hitherto inflexibility especially in the delineation of public and private spaces and the “deep uncertainty” of the effects of biophysical and social processes which had hitherto occurred on a scale agreeable to human and societal existence.⁴⁶ In essence, CCAG would relate to the laying down of a legal and regulatory framework to ensure the maintenance of order, provision of commodities and services to aid the adaptation.

Adaptation governance is not limited to government action but includes international community action, activities of specialised institutions, private individual action as well as collective private action.⁴⁷ In this regard, Bulkeley, following Foucault’s thoughts on governance, posits that climate change is not to be governed following the traditional mode of government interactions with the object of governance; rather climate change governance should focus on the *necessary interventions* and how these are ‘mobilized, sustained and contested.’⁴⁸ To this end, she argues that CCAG entails a deliberate *interaction* of ‘mechanisms and measures’ working within social systems to prevent, mitigate and adapt to the impacts of climate change.⁴⁹

These various interactions entail a level of interplay, ‘spill-over’⁵⁰ and friction making it necessary for there to be a clear governance strategy backed by law.⁵¹ In this regard, the thesis suggests a framework to regulate adaptation activities to prevent negative effects on the welfare of the generality. This is only achievable where such adaptation measures are integrated into existing sectors such as local planning and land use regulations.⁵² The governance framework ought also to outline and state guidelines for adaptation measures that would require

⁴⁵ D Mazmanian J Jurewitz and H Nelson ‘A governing framework for climate change adaptation in the built environment’ 18(4) *Ecology and Society* 56.

⁴⁶ D Mazmanian J Jurewitz and H Nelson *ibid* at 56-7.

⁴⁷ L Kotze and others ‘Climate change law and governance in South Africa- Setting the scene’ in TL Humby et al *Climate Change: Law and Governance in South Africa* (2016) p 1-4.

⁴⁸ H Bulkeley *Accomplishing Climate Governance* *op cit* n 44 p 4.

⁴⁹ H Bulkeley *ibid* p 5.

⁵⁰ D Mazmanian J Jurewitz and H Nelson *op cit* note 45 at 61.

⁵¹ *Ibid*.

⁵² *Ibid*.

redistribution of resources or other social justice measures to reduce the vulnerability of areas prone to extensive climate change risks.⁵³

It is evident that the poorer members of the society who are already affected by crises of food shortage, lack of appropriate housing, access to land and other societal issues will again be more affected by climate change impacts. To alleviate such problems, CCAG, in line with universal agenda on equity, poverty and development must include an institutional framework to facilitate access to resources and basic infrastructure entailing the provision of funds and the protection of human rights among other things.

4.3.1 Financing climate change adaptation

Funding and financial facilitation are essential in governance at whatever level or form; it is thus a significant issue to be considered in CCAG as well. The lack of funds is a major reason many developing countries shy away from establishing or even discussing climate change adaptation at great lengths. Based on the commitments under the UNFCCC⁵⁴ funding is to be made available to developing and least developed countries to aid the adjustment to climate change. These funds are required to be administered in line with fundamental principles of transparency, accountability and equity.⁵⁵ In order to ensure availability of funds and transparency for adaptation, there must be broad stakeholder participation in the governance structure. This is because most funds for climate change adaptation in most developing countries are likely to come from non-state actors giving rise to a greater need for transparency and accountability in the administration of such funds. This and other jurisdiction-specific guidelines should form part of the CCAG framework to prevent maladaptation as a result of corruption or lack of accountability.

Climate change financing forms a significant aspect of CCAG at the international and other levels of governance. The Adaptation Fund (AF) evidences a collaboration amongst different players to facilitate adaptation. The Fund, which was established by the Kyoto Protocol is mainly

⁵³ Ibid.

⁵⁴ Art 4 para 3 of the United Nations Framework Convention on Climate Change (UNFCCC).

⁵⁵ L Schalatek and N Bird 'Climate finance fundamentals: A normative framework for climate finance' (2010) *Heinrich Böll Stiftung North America and Overseas Development Institute, Brief 1* p2.

funded by the clean development mechanism (CDM).⁵⁶ In recent years the AF now receives additional funding from developed countries in addition to funding from the Carbon Trading.⁵⁷ Other collaborative funding towards adaptation include the Special Climate Change Fund established under the UNFCCC to ensure adaptation, technology transfer and other things.⁵⁸ There is also the Green Climate Fund established by the 16th Conference of Parties,⁵⁹ and administered for the dual purposes of mitigation and adaptation.

In addition to the existing Adaptation Fund, the Paris Agreement initiated a Sustainable Development Mechanism which serves the dual purpose of mitigating emissions in developed countries and responding to adaptation needs of developing countries. Climate adaptation financing in line with the objectives of the UNFCCC encourage collaboration and participation by all stakeholders, both state and non-state actors.⁶⁰ The AF and GCF also encourage direct access to funds by developing countries in order to allow for some flexibility.⁶¹

Funding of adaptation at lower levels of governance is likely to be a challenge due to the limited funds available at that level. In the light of this challenge, lower level governments are likely to abandon or pay little attention to the idea of climate change adaptation.⁶² This is another reason for a governance synergy between levels of government so that funds and other resources to aid adaptation can be made available to lower levels of government.⁶³ Considering also that the impacts of climate change are mostly felt at the grassroots, decisions on the application of funds should not be made from the top (especially by international non-state governance actors) but at the lowest possible level of governance.⁶⁴ This however again raises the challenge of misadministration of funds, as governments at the lower levels in most developing countries are

⁵⁶ www.unfccc.int/process/bodies/funds-and-financial-entities/adaptation-fund www.adaptation-fund.org

⁵⁷ www.adaptation-fund.org/cop23/previous-cops/cop22 accessed 08/06/2018.

⁵⁸ www.unfccc.int/topics/climate-finance/resources/reports-of-the-special-climate-change-fund

⁵⁹ www.unfccc.int/process/bodies/funds-and-financial-entities/green-climate-fund, Governing instrument for The Green Climate Fund, pp 2&9, www.greenclimate.fund/documents/20182/574763/Governing_Instrument.pdf

⁶⁰ Governing instrument for The Green Climate Fund, pp 2&9.

⁶¹ Op cit notes 57 and 59.

⁶² A Kaswan 'Climate adaptation and land use governance: The vertical axis' 39 *Columbia Journal of Environmental Law* 390 at 431.

⁶³ Ibid at 437.

⁶⁴ L Shalatek and N Bird op cit note 55, A du Plessis and LJ Kotze 'The heat is on: Local government and climate governance in South Africa' (2014) 58(1) *Journal of Africa Law* 145 – 174 at 150

particularly susceptible to corruption and mismanagement. This challenge again iterates the importance and necessity for stakeholder participation in CCAG, especially local non-state actors. A properly structured system of fund administration with active participation from the civil society, private corporations and members of the society would ensure that funds are judiciously applied, and there is no maladaptation because of mismanagement of such funds.

4.3.2 Human rights in climate change governance

The impacts of climate change on human activities will also negatively affect fundamental human rights of members of the society, such as the rights to life, to self-determination, development, decent living (food, shelter, health and so on).⁶⁵ The Paris Agreement recognised this fact by taking cognisance of the need to safeguard the rights of people, especially the minorities and vulnerable groups through the concept of climate justice.⁶⁶ The United Nations High Commissioner for Human Rights (UNHCHR) in a Report (UNHCR Report) to the United Nations General Assembly asserts the “fundamental rights to freedom, equality, and adequate conditions of life within an environment of such quality that ‘permits a life of dignity and well-being’”.⁶⁷ This iterates the undeniable link between the realisation of the necessities of food, housing, water, health and the environment, all of which are likely to be impacted by climate change.

The UNHCR Report elucidates how the impacts of climate change would affect fundamental human rights,⁶⁸ including the collective rights of people, such as the right to self-determination.⁶⁹ On the right to self-determination, it is noted that a people should not be deprived of their source of subsistence. This right particularly gives rise to an obligation on the part of the government to

⁶⁵ Report of the Office of the High Commission for Human Rights (OHCHR) to the 21st Conference of Parties (COP 21) to the United Nations Framework Convention on Climate Change (November 2015) p6 available at <http://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/HRClimateChangeIndex.aspx> (COP 21 HR Report) accessed 17/03/2017.

⁶⁶ Preamble to the Paris Agreement FCCC/CP/2015/10/Add.1 Dec. 1/CP.21 available at <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> accessed 1/11/2016.

⁶⁷ A/HRC/10/61 Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights on 15th January 2009 p 7.available at <http://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/HRClimateChangeIndex.aspx> (UNHCR Report) accessed 17/03/2017.

⁶⁸ A/HRC/10/61 UNHCR Report *ibid* pp 8-14.

⁶⁹ *Ibid* p14.

take reasonable steps to ensure it is safeguarded. A way of meeting this obligation in the face of climate change is to safeguard the access to land by ensuring an effective land governance framework which incorporates guidelines on climate change adaptation, or that works in tandem with a parallel climate adaptation governance structure that takes this into cognisance.

Also mentioned in the UNHCR Report is the challenge of displacement occasioned by disaster, environmental degradation such as desertification or coastal erosions, disaster risks (for instance in flood-prone areas), and societal unrest caused by climate change related factors. The right of people affected to protection by the government is a factor that CCAG must also put into consideration.⁷⁰

An interesting factor alluded to in the UNHCR Report is that of liability on the part of the government for failing to take action to protect the citizenry from the impacts of climate change, especially in cases where there have been predictions and projections about the likely impacts.⁷¹ In a case discussed in the UNHCR Report,⁷² the State was held liable for failing to implement land use planning and emergency relief policies even though they were aware of an increasing risk of a large-scale mudslide. They had also failed to sufficiently warn the inhabitants of the area about the risk. The UNHCR Report notes that the State owes an obligation to its citizens to make information about climate change and environmental degradation public and accessible.⁷³

The Office of High Commission on Human Rights Report to the 21st Conference of Parties⁷⁴ (COP 21 HR Report) also highlights the need for climate change adaptation processes and governance framework to comply with established human rights obligations. The COP 21HR Report iterates this point especially in ensuring the building of adaptive capacity in all members

⁷⁰ Ibid pp 19 and 24.

⁷¹ UNHCR Report op cit note 67 p 24. The UNHCR Report here cited the case of *Budayeva and others v Russia* (ECHR) No. 15339/02.

⁷² Ibid.

⁷³ Here the UNHCR Report cites the case of *Guerra and others v Italy* ECHR 14967/87 and *Claude Reyes et al v Chile* Case 12.108, Report No. 60/03, Inter-Am. C.H.R., OEA/Ser.L/V/II.118 Doc. 70 rev. 2 at 222 (2003).

⁷⁴ The Paris Agreement which is the outcome of the COP 21 recognises in its Preamble the fact that climate change and its impacts are likely to affect human rights and therefore emphasises the need for State Parties to take cognisance of human rights obligations which addressing climate change. This point is further buttressed in Article 7 of the Agreement which iterates the need for an adaptation response which protects “people, livelihoods and ecosystems” especially those most vulnerable.

of the society, particularly those in vulnerable areas and those facing greater risks;⁷⁵ to ensure that adequate and reasonable care is taken to prevent foreseeable harm caused by the impacts of climate change.⁷⁶

The COP 21HR Report also notes the need for equity in carrying out of climate action, especially in line with the “right to development”⁷⁷ which seeks to safeguard the economic, social, cultural and political development of all persons.⁷⁸ The Report thus calls on all countries to take steps to fulfil their obligation of safeguarding the right to development by formulating appropriate development policies;⁷⁹ the creation of favourable conditions;⁸⁰ and implementation of laws and other measures to that effect.⁸¹

Also highlighted is the need for equality and freedom from discrimination in the climate adaptation process, especially as it relates to children, women, people in positions of disadvantage geographically, economically, socially and so on.⁸² To achieve these, the COP 21 HR Report suggests a rights-based approach to climate change policies and governance; by this, it is suggested that “affirmative action” be taken to respect, protect, promote and fulfil all human rights as far as climate change adaptation is concerned.

In incorporating human rights into climate change adaptation governance, cognisance must be taken of the fact that the people most likely to feel the debilitating impacts of climate change have little or no form of governance representation. For instance, people who live in squatter/informal settlements who lack the presence of public infrastructure and accountable government representation.⁸³ In such situations, there ought to be an unequivocal activation of the human rights aspect of climate change governance, so that even where the government feels

⁷⁵ COP 21 HR Report) op cit note 65 p2.

⁷⁶ Ibid p 3.

⁷⁷ A/RES/41/128 Declaration on the Right to Development, adopted at the 97th plenary meeting of the United Nations General Assembly on the 4th of December 1986.

⁷⁸ Art 1 of the Declaration on the Right to Development *ibid*.

⁷⁹ Art 2 para 3 *ibid*.

⁸⁰ Art 3 para 1 *ibid*.

⁸¹ Art 10 *ibid*.

⁸² COP 21 HR Report op cit note 65 p 3.

⁸³ H Bulkeley ‘Cities and the governing of climate change’ (2010) 35 *Annual Review of Environment and Resources* 229-53 at 244, D Palmer S Friccka and B Wehrmann op cit note 3 p 5.

no sense of accountability to such groups of people on the basis of political governance, there should be an obligation to safeguard their rights.

The need to ensure continued development and protect the rights of vulnerable groups begs the question of good land use governance as discussed earlier in this chapter. Security of land tenure, access to land and the existence of a well-structured planning system are ways in which climate change governance can achieve its aim. In this regard, physical planning as an aspect of land use governance is a major driving force towards the building and safeguard of public adaptive capacity. This is discussed in detail in later chapters.

4.3.3 Public participation and cooperation in climate change adaptation governance

As discussed in Chapter 3, humans have an immense capacity to adapt to changes caused by external stimuli; thus private individual adaptation to climate change is ongoing and will continue.⁸⁴ In the light of this inherent adaptive capacity, it is argued that adaptation to climate change should mainly be a private initiative carried out by all stakeholders.⁸⁵ In determining whether or not an adaptation governance framework is necessary, the government will have to decide whether an unregulated approach to adaptation is most suitable for the society. In addition whether individual adaptation measures can continue without negative interrelations (a) within the present generation and in relation to future generations, (b) across social classes and groups and (c) between private and public interests.⁸⁶

Considering that human interrelationships lead to chaos where there are no rules on the maintenance of law and order, it is necessary that CCAG should be backed by the force of law. Such a framework is also necessary to identify the collective will and objectives of adaptation.⁸⁷ Further, private initiatives in adaptation portend greater social inequality as vulnerability, and adaptive capacity are likely to vary based on some factors. Hence the government has a redistributive duty to present to all members of the society equal and equitable opportunities to adapt based on a proper adaptation governance framework.

⁸⁴ D Huitema WN Adger and others op cit note 16 at 37.

⁸⁵ Ibid at 38.

⁸⁶ Ibid p 63.

⁸⁷ *ibid.*

While climate change is viewed as a global challenge, it lies with individual governments to find an adaptation track that will best suit and meet the challenges posed or further aggravated by climate change.⁸⁸ Further, it is argued that an interrelationship in CCAG is essential in order to encompass territorial and jurisdictional variations in policies across levels of government.⁸⁹ According to Bauer, national governments should be more concerned with raising the awareness and laying adaptation guidelines as well as providing funding, while government at the lower levels would be more involved in implementing the adaptation process, considering they are closer to the grassroots where adaptation matters most of all.⁹⁰ In this regard, regional or state governments are essential actors as the bridge between the national and local governments in the adaptation process.

It is acknowledged that non-state actors will take a lot of initiative in carrying out adaptation to climate change.⁹¹ However, the role of the government is vital in harnessing and laying out guidelines for adaptation to climate change.⁹² Proper coordination and cooperation must exist between levels of government as state actors and non-state actors to achieve a sound framework for CCAG. An effective way to achieve such cooperation is through nodal governance as discussed below.

4.4 Nodal Governance in Climate Change Adaptation

Multi-level governance in any context requires, among other things, jurisdictional competencies which is a function of the powers and authorities granted under the constitution of the State.⁹³ In the case of Nigeria and South Africa, policy and legislative competency is shared amongst the various levels or spheres of government in the Constitution, with each level or sphere of

⁸⁸ A Bauer 'Multi-level governance of climate change adaptation through regional partnerships in Canada and England' (2014) 51 *Geoforum* 121-129 at 121.

⁸⁹ M Madzwamuse *Climate Governance in Africa-Adaptation Strategies and Institutions* (2011) p 28.

⁹⁰ A Bauer op cit note 88 at 122, J Corfee-Morlot and others 'Cities, climate change and multilevel governance' 2009 *OECD Environmental Working Papers* p 24, M Madzwamuse op cit note 89 p 28, A Taylor 'Urban Adaptation' in TL Humby et al *Climate Change: Law and Governance in South Africa* op cit note 47 p 11-2.

⁹¹ D Huitema WN Adger and others op cit note 16 at 45.

⁹² A Bauer op cit note 88.

⁹³ L Hooghe and G Marks Types of Multi-Level Governance 5(11) 2001 *European Integration online Papers* (EIoP) available at SSRN: <https://ssrn.com/abstract=302786> or <http://dx.doi.org/10.2139/ssrn.302786> accessed 17/03/2017.

government having its stipulated obligations and authorities.⁹⁴ Multi-level governance also considers how decision making unfolds between the various levels of governance, that is, the way authority flows from one level of government to the other.⁹⁵

4.4.1 Conceptualizing multi-level governance

The conceptualization of governance for the purposes of climate change governance will be approached from two perspectives. These are the theory of nodal governance, and Hooghe and Marks' analysis of multi-level governance.

Hooghe and Marks describe two types of governance. The first in which the jurisdictions are mutually exclusive as is the case in the federalist and quasi-federalist form of government practised in Nigeria and South Africa respectively. The second in which the jurisdictions overlap or are task-specific similar to the nodal governance also described in this chapter.⁹⁶ Type one governance needs little further elucidation as it is the traditional form of government where power flows from the center to sub-national levels of government with different designations depending on the jurisdiction where it is found.⁹⁷

This type of governance places a lot of emphasis on formal government institutions to carry out the tasks of governance. As a justification of cooperative government, Hooghe and Marks point out that the likelihoods of 'spillovers' or externalities, which may be positive or negative, make coordination between levels essential. The greater the potential of harm from the 'spillovers' – as is the case with climate change impacts - the greater the benefits of coordination.⁹⁸ The analysis

⁹⁴ In South Africa, the spheres of government are provided for in s 40 of the South African Constitution, and in Nigeria a similar provision is found in s 3 of the Nigerian Constitution.

⁹⁵ L Hooghe and G Marks op cit note 93 p 3.

⁹⁶ Ibid. p 6.

⁹⁷ In this regard, C Keskitalo and others make a salient point in distinguishing between states that grant a general competence to government at the local level to fulfil obligations permitted by law and those that only grant to local governments the powers to fulfil expressly stated statutory duties, C Keskitalo S Juhola and L Westerhoff 'Connecting multiple levels of governance for adaptation to climate change in advanced industrial states' in J Edelenbos, N Bressers & P Scholten (eds), *Water Governance as Connective Capacity* (2013) 69 at 72, J Frohlich and J Knieling op cit note 12 p 15.

⁹⁸ Ibid p 13.

further points out that multi-level governance is especially necessary for addressing externalities of varying degrees,⁹⁹ such as climate change which is of both global and local concern.¹⁰⁰

Type-two governance also referred to as nodal governance, represents the flexible ‘patchwork of innumerable overlapping jurisdictions’.¹⁰¹ This form of governance is not fixed but has interchangeable competencies as the needs of governance change.¹⁰² It exists at various territorial scales and is usually task-specific and is a specialized form of governance.¹⁰³

Nodal governance refers to the intricate working of individual entities (including state actors) within a network towards the attainment of a common goal or outcome.¹⁰⁴ These actors in the governance scene are referred to as nodes,¹⁰⁵ and they usually possess a level of institutional stability to be able to exert some influence in the governance process.¹⁰⁶ The nodal theory of governance does not necessarily debunk the traditional and formal territorially bound¹⁰⁷ governance, but rather sheds light on and adequately conceptualizes the reality of non-state actors’ involvement in governance. In line with this, Burris, Drahos and Shearing¹⁰⁸ note that governance, as it exists today, is characterized “by a plurality of actors (states, corporations, institutions of ‘civil society’) forming more or less interconnected governance networks”.¹⁰⁹ The diversity of nodes in the network implies that there is a variation in capacity and efficacy and the amount of influence each node can exert.¹¹⁰ Unlike in the traditional form of governance, the interrelationship between nodes in nodal governance does not point to a hierarchy or a pattern of

⁹⁹ Ibid p 4.

¹⁰⁰ L Hooghe and G Marks op cit note 88 p 4.

¹⁰¹ Ibid p 5, L Kotze and others in TL Humby et al op cit note 47 p 16.

¹⁰² Ibid p 5.

¹⁰³ L Hooghe and G Marks op cit note 88 p 12.

¹⁰⁴ S Burris P Drahos and C Shearing ‘Nodal governance’ 30 (2005) *Australian Journal of Legal Philosophy* 30 at 34-5.

¹⁰⁵ That is an entity, be it a state or non-state actor that possesses the “knowledge, capacity and resources” to manage the course of events in the governance process and to influence its outcomes. According to Burris and others, a node possesses the following characteristics: a thought pattern about the subject of governance; a modality for exerting its influence; the resources to operate and exert its influence; and a structure that enables it to mobilize its resources towards achieving its outcome or a common outcome. S Burris P Drahos and C Shearing ibid at 37-8.

¹⁰⁶ S Burris P Drahos and C Shearing op cit note 99 at 38.

¹⁰⁷ C Shearing and J Wood ‘Nodal governance, democracy and the new denizens’ 30(3) (2003) *Journal of Law and Society* 400-19 at 400.

¹⁰⁸ S Burris P Drahos and C Shearing op cit note 99 at 30-58.

¹⁰⁹ J Frohlich and J Knieling op cit note 12 p 13-6.

¹¹⁰ Ibid 39.

flow of authority - for instance from the state actors to non-state actors - thus no set of nodes has priority over the others.¹¹¹ While there are no priorities within the nodal system of government, it is acknowledged that authorization and the power to act still lies with state actors who are by law empowered to carry out the acts of governance, and other actors have only converged on the governance scene as a result of a consensus of interest. A distinction is thus made within the nodal governance network as noted by Shearing and Wood of “first (state), second (corporate or business) and third (non-governmental organizations) sectors... [and] a forth, informal sector, made up of people who operate outside the first three sectors.”¹¹² The priority given to state actors is justified by Burris, Drahos and Shearing who note that state actors are necessary parties in the nodal network because it is through them that ‘knowledge, capacity and resources are focused and legitimized’.¹¹³

As argued by Shearing and Wood,¹¹⁴ the nodal system is an empirical form of governance, existing for a specific purpose of public interest. Nodal governance exists at various times and spaces in response to specific challenges and objectives,¹¹⁵ as can be seen in climate change adaptation governance. Thus, in most cases the only consensus amongst the governance actors is the challenge to be addressed; otherwise, the governance process is often fraught with ‘resistance and contestations’ and polarization of interests.¹¹⁶ In essence, nodal governance or the existence of a common goal or outcome does not guarantee a fair, effective or democratic form of governance.¹¹⁷ In the case of polarization of interests as discussed above, to ensure equity and democracy, there must exist a clear ideology, and ‘the nodes and networks must satisfy tests of

¹¹¹ C Shearing and J Wood op cit note 102 at 404. This point made by Shearing and Wood lends credence to the relationship between the spheres of government under the 1994 Constitution of the republic of South Africa. Each sphere of government exists as a competent entity or governmental node and not relying on other spheres for authority or legitimacy.

¹¹² C Shearing and J Wood op cit n 102 at 405.

¹¹³ S Burris P Drahos and C Shearing op cit note 99 at 47, L Kotze and others in TL Humby et al op cit note 47 1-5.

¹¹⁴ C Shearing and J Wood op cit note 102 at 405.

¹¹⁵ S Burris P Drahos and C Shearing op cit note 99 at 52, C Shearing and J Wood *ibid*, L Kotze and others in TL Humby et al op cit note 47 p1-17.

¹¹⁶ C Shearing and J Wood *ibid*.

¹¹⁷ S Burris P Drahos and C Shearing op cit note 99 at 47.

representativeness, accessibility and deliberation' arrived at from the collective governance process.¹¹⁸

In certain instances, the nodal governance is a deliberate creation of the State. According to Shearing and Wood such deliberate pluralization of governance entails a move by the government to pass on governance or government responsibilities to other agents, some of which are private actors.¹¹⁹ It has increased prominence in climate change governance generally and in climate change adaptation in particular.¹²⁰ For example specialised institutions like the International Council for Local Environmental Initiatives (ICLEI) have done this by creating a network of local governments around the world to strengthen sustainability and climate change adaptation action at the local government level.¹²¹

The application of nodal governance to adaptation is buttressed by arguments that international organizations and institutions have a role to play in laying a framework and setting the stage for climate change governance through negotiations and high-level governance.¹²² Because non-state governance actors are task-specific or aim at governance in relation to a particular problem, it is usual that they possess more knowledge and technical capacity than government actors, and there is usually an overlap in the number of non-state actors fixated on a particular problem. For instance, in the case of climate change, several international and transnational institutions and organisations are trying to address the problems and impacts at the national and sub-national

¹¹⁸ Ibid.

¹¹⁹ This fact is alluded to by Bulkeley in H Bulkeley 'Cities and the governing of climate change' op cit note 83 at 246 in relation to environmental and urban governance in the City of Johannesburg. Lagos State also practices Public-Private partnership in environmental governance to ensure effective implementation for instance in waste disposal and drainage maintenance.

¹²⁰ L Kotze and others op cit note 47 p 1-17.

¹²¹ www.iclei.org.

¹²² Art 4(5) of the UNFCCC highlights this point, and more specifically, the Paris Agreement recognises the necessity of engagements across levels of government and with other non-state actors. H Bulkeley 'Cities and the governing of climate change' op cit note 83, J Paavola WN Adger 'Fair adaptation to climate change' (2006) 56 *Ecological Economics*, WN Adger NW Arnell EL Tompkins 'Successful adaptation to climate change across scales' (2005) 15 *Global Environmental Change* 77-86, A Pohlmann 'Local Climate Change Governance' in Engels, Anita (ed.) *Global Transformations towards a Low Carbon Society*, 5 2011 (Working Paper Series), K Michonski and M Levi 'Harnessing international institutions to address climate change' *International Institutions and Global Governance Programme Working Paper*, A Bauer, J Feichtinger and R Steurer 'The Governance of Climate Change Adaptation in 10 OECD Countries: Challenges and Approaches' (2012) 14:3 *Journal of Environmental Policy & Planning*, 279-304, C Keskitalo S Juhola and L Westerhoff 'Connecting multiple levels of governance for adaptation to climate change in advanced industrial states' op cit note 97.

levels of state actors. The United Nations (UN) through its various specialized agencies,¹²³ the World Bank, the Organization for Economic Co-operation and Development (OECD), the International Council for Local Environmental Initiatives (ICLEI), Heinrich Boll Stiftung (HBS) are some of the specialized organizations that aid adaptation to climate change through development.

Based on the level of expertise of non-state actors and their consensus of interests, climate change governance hinges on multi-level governance for its effectiveness.¹²⁴ In support of this fact, Bulkeley argues that climate governance, especially at the city level, should be based on an interrelationship of state and private actors ‘operating across different scales and through multiple networks.’¹²⁵ Her suggestions of governance methods to be applied in climate change governance bear much likeness to the nodal governance described above.¹²⁶ The process of multi-level governance is summarized as comprising shared responsibilities and mobilization of resources between actors in the governance process and clear guidelines highlighting ideas and norms and how these are applied, shared or challenged.¹²⁷

4.4.2 Applying the multi-level governance concept to climate change adaptation governance

Several researchers hold the view that multi-level governance is a critical factor in climate change governance,¹²⁸ and it has been shown that governance complexities are the greatest hinderance to adaptation in several municipalities in South Africa.¹²⁹ To achieve effectiveness and substantial impact in adaptation, traditional forms of government must be transformed to cooperative governance with other actors.¹³⁰ Bulkeley argues that this form of governance provides an opportunity for specialised governance of climate change which includes

¹²³ For instance, the UN Food and Agriculture Organization (FAO); the UN Human Settlements Programme (UN-Habitat); the UN Development Programme (UNDP); the IPCC; and many others.

¹²⁴ H Bulkeley ‘Cities and the governing of climate change’ op cit note 83 at 239, J Frohlich and J Knieling op cit note 12 p 11.

¹²⁵ Ibid at 248.

¹²⁶ Ibid at 248.

¹²⁷ H Bulkeley ibid at 239.

¹²⁸ J Paavola WN Adger ‘Fair adaptation to climate change’ op cit note 114, A Bauer J Feichtinger and R Steurer The Governance of Climate Change Adaptation in 10 OECD Countries: Challenges and Approaches op cit note 114 at 282-3, Kotze and others in TL Humby et al op cit note 47 p 1-5,6, J Frohlich and J Knieling op cit note 12 p 11

¹²⁹ A Taylor ‘Urban adaptation’ in TL Humby et al op cit note 47 p 11-25

¹³⁰ A Kaswan op cit note 62, Kotze and others in TL Humby et al op cit note 47 p 1 -5.

‘subnational actors and transnational networks’.¹³¹ In line with these positions, climate change adaptation governance has been described as the vertical flow of authority and division of responsibilities between levels of government and its agencies, and the flexible horizontal interrelationship between States, non-state actors and private stakeholders.¹³² The involvement of state actors in climate change governance naturally stems from their government legitimacy which gives them the authority to establish a framework or control in relation to climate change.¹³³ For non-state actors, authority and legitimacy are based on their ability to demonstrate their competency and expertise in the field.¹³⁴ Thus, while most of the information, action and resources for adaptation come by initiatives and intervention of non-state actors, the structure and process of adaptation governance depend strongly on the laid down and existing processes of governance.¹³⁵

Below are two figures, figure 1 shows the uncoordinated interrelationship between actors in CCAG. Figure 2 shows a simplified and coordinated interrelationship between actors. The proper compartmentalization of each group of actors makes regulation more straightforward.

¹³¹ H Bulkeley ‘Cities and the governing of climate change’ op cit note 83 at 240.

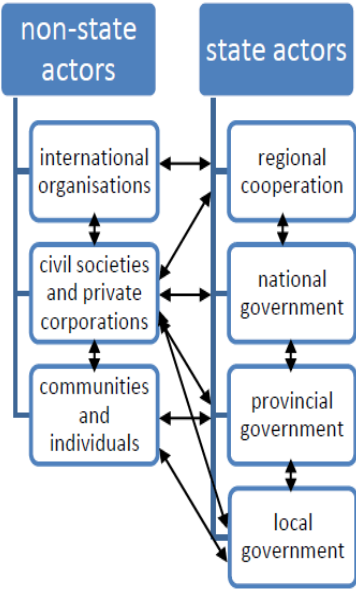
¹³² A Bauer, J Feichtinger and R Steurer op cit note 114 at 282, H Bulkeley ibid at 237.

¹³³ Kotze and others’ in TL Humby et al op cit note 47 pp 1-5

¹³⁴ H Bulkeley *Accomplishing Climate Governance* op cit note 44 p 58-9.

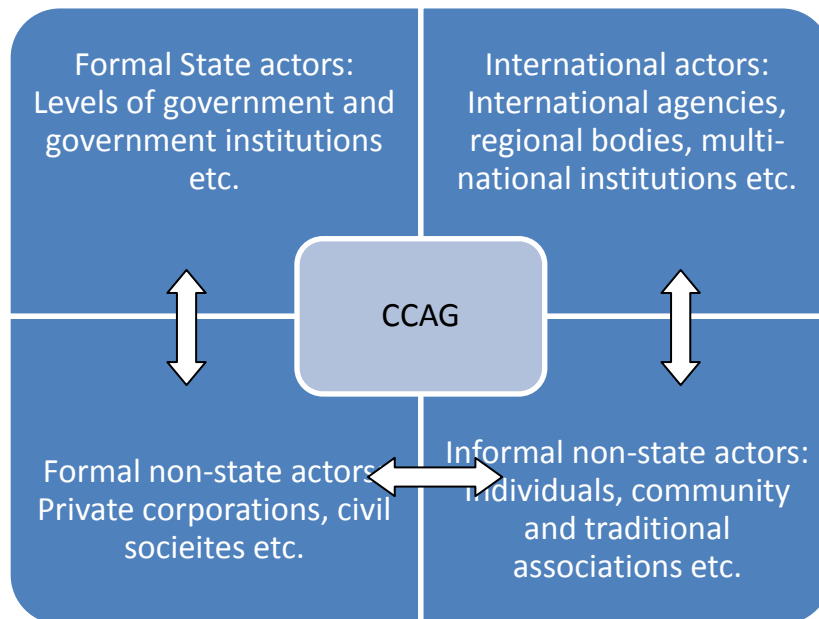
¹³⁵ H Bulkeley ‘Cities and the governing of climate change’ op cit note 83 at 241.

Figure 1 showing the segmented relationship between actors in CCAG



Source: Author’s construction.

Figure 2 Showing a structured relationship of actors in CCAG



Source: Author's construction.

Multilevel governance in climate change adaptation is essential as it provides a framework within the governance context for cooperation and interrelations amongst all actors, state and non-state actors alike.¹³⁶ It also ensures coordinated action and formal decision making across levels and sectors.¹³⁷ Also, the capacity of the government to carry out effective governance especially at the local level is often hampered by the availability of resources and capable workforce;¹³⁸ these factors affect the independence of local governments to act.¹³⁹ Taylor and others argue for 'political, fiscal and administrative innovation' at the local government sphere as well as in cooperation amongst the three spheres of government.¹⁴⁰ The setbacks and innovations

¹³⁶ J Corfee-Morlot and others *op cit* note 85 p 24, H Bulkeley 'Cities and the governing of climate change' *op cit* note 33 at 243, J Frohlich and J Knieling *op cit* note 12 p 11.

¹³⁷ C Keskitalo S Juhola and L Westerhoff 'Connecting multiple levels of governance for adaptation to climate change in advanced industrial states' *op cit* note 97 at 71.

¹³⁸ H Bulkeley 'Cities and the governing of climate change' *op cit* note 83 at 243, A du Plessis and LJ Kotze 'The heat is on: Local government and climate governance in South Africa' (2014) 58(1) *Journal of Africa Law* 145 – 174 at 147

¹³⁹ *Ibid* at 242.

¹⁴⁰ A Taylor 'Urban adaptation' in TL Humby et al *op cit* note 47 p 11-33.

which determine the nature of adaptation responses can be addressed through a legal framework itemising modes of interrelationship amongst actors.

Climate change adaptation brings to the fore several governance issues including equity, public trust, human rights, access to knowledge and information regarding climate change, and public participation in the adaptation process.¹⁴¹ In the light of these societal issues, Bulkeley posits that governance in climate change should be geared towards ensuring and safeguarding the public interest by improving the conditions of the members of the society across all spheres of ‘social life’.¹⁴² In the same vein and more specifically, Pavoola and Adger argue that climate change adaptation governance must importantly work towards striking a balance between competing interests of various parties.¹⁴³ They argue that beyond aiming to achieve justice, whether procedural or normative, climate change adaptation governance should ensure fairness towards all parties across class, generation, gender and other societal stratifications.¹⁴⁴ They thus suggest that climate change adaptation governance should be based on set principles regulating the activities and safeguarding the interests of all actors.¹⁴⁵

4.5 Integrating Climate Change Adaptation into Land Governance

Land governance faces new challenges occasioned by climate change – land vulnerability, institutions unequipped to deal with climate change and many more incidental challenges. In both South Africa and Nigeria, despite the guarantee of property rights and access to land and its resources, there still exist a lot of socio-economic imbalance due to the lack of access to land and its resources by majority of the citizens of both countries. The lack of access to land and its resources further aggravates vulnerabilities to climate change and should be given a consideration in climate change governance.¹⁴⁶

Land governance, in general, will have to address vital problems occasioned by climate change: disaster reduction and management, flood control, erosion and so on. A synergy of both

¹⁴¹ Madzwamuse op cit note 84 p 29-33.

¹⁴² H Bulkeley *Accomplishing Climate Governance* op cit note 44 p 10.

¹⁴³ J Paavola WN Adger op cit note 114 at 600, J Frohlich and J Knieling op cit note 12 p 11.

¹⁴⁴ Ibid at 600-02.

¹⁴⁵ Ibid at 602.

¹⁴⁶ D Palmer S Fricska and B Wehrmann op cit note 3 p 10.

governance structures, especially with respect to land use planning is imperative to enable societies handle novel challenges posed by climate change which legislation guiding land use did not envisage. Climate change poses a complex and continuously evolving problem with land use which is occurring on a massive scale¹⁴⁷ and which requires specialised adaptation responses. As with land governance, most of adaptation governance would take place at the grass root in order to adequately address issues of land-related climate change impact, while support and enablement would be made available from higher levels of governance.¹⁴⁸

A link between land and climate change adaptation governance and the application of multi-level governance is physical planning. The challenges highlighted about climate change and land use, such as erosion, displacement and resettlements, disaster risk management and so on, invoke the application of physical planning laws for adequate resolution. As will be discussed in the following chapters, planning laws provide a workable option for the integration of climate change adaptation into governance as it provides for sufficient interactions between levels and spheres of government and gives ample allowance for public participation by all stakeholders, thereby giving room for governance inputs by non-state actors.

4.6 Conclusion

The chapter addressed the issue of land governance, land being a significant sector that would be affected by climate change impacts and the subject matter of planning laws. In analysing land governance, attention was paid to the fact that the lack of effective and good land governance creates social vulnerability to climate change on its own and this challenge is further compounded by the fact that the adverse effects on land could also lead to geographical vulnerabilities. Such vulnerabilities could lead to problems such as temporary or permanent loss of land, the inability to make use of land either by the individual or by a private or government corporate entity. The need for good land governance is highlighted to ensure social stability, justice and equity and adaptation to the impacts of climate change.

¹⁴⁷ Ibid at p 12.

¹⁴⁸ A Kaswan op cit note 62 at 439, Keskitalo and others hinge the effectiveness of adaptation to the land use governance system, especially as it relates to physical planning, see C Keskitalo S Juhola and L Westerhoff 'Connecting multiple levels of governance for adaptation to climate change in advanced industrial states' op cit note 97 at 71.

Climate change adaptation, like land governance, raises questions of social, economic and cultural stability and the possible instability in the face of climate change impacts. In this regard, it is essential that climate change adaptation should not take place in an uncoordinated manner as is already being experienced, especially in Nigeria. State actors and non-state actors should be appropriately coordinated to achieve an effective adaptation structure. In line with this, it is suggested that a multi-level governance structure be adopted in climate change adaptation governance, that is, the adoption of a tested form of cooperation in governance to tackle a new challenge.

In addition to discussing multi-level governance in relation to climate change adaptation, the chapter also considered the mainstreaming of adaptation to climate change into land governance. This is based on the inherent link between land, land use and climate change. Such integration would ensure that land governance takes cognisance of climate change and that climate change adaptation governance takes cognisance of land and land use. Having laid the background of land governance, the next chapter specifically considers the adaptation framework in Nigeria and South Africa.

CHAPTER 5: ADAPTATION TO CLIMATE CHANGE IN NIGERIA AND SOUTH AFRICA

5.1 Introduction

This chapter sets out to consider the extent of adaptation to climate change in both Nigeria and South Africa. It entails an analysis of policies on adaptation and empirical study on the need or otherwise for legislation on climate change. The empirical research also answers to an extent the question of sufficiency of planning laws to address the issue of climate change in both Nigeria and South Africa.

As with the rest of this thesis, the aspect on South Africa in this chapter focuses on the Western Cape at the provincial level and the City of Cape Town at the municipality level; the Nigerian aspect focuses on Lagos State.

The chapter discusses the policy documents on climate change in both countries and at various levels or spheres of government. This chapter also considers the necessity or otherwise of specific legislation on climate change. Notably, the empirical study seeks to answer this question and the question of whether or not existing physical planning legislation adequately caters for adaptation. Some of the findings of the empirical study are incorporated into various sections of the chapter, and other findings are discussed in full later in the chapter.

5.2 International Background for Climate Change Adaptation in South Africa and Nigeria

As seen in chapter 1 both Nigeria and South Africa are member states of the UNFCCC.¹ South Africa and Nigeria as member states are required to integrate climate change considerations into social, economic and environmental policies to reduce adverse impacts on environmental and socio-economic conditions of life. The Convention also calls on states to create awareness, spread the knowledge on climate change and to encourage full participation in the process of combating climate change and its impacts.² This lends credence to the argument in Chapter 4 for all-inclusive governance as a means of adequately addressing the issue of climate change. Specifically, regarding public awareness and participation in climate change action, State

¹ This is discussed in Chapter 1 in section 1.1.1.

² Art 4(1) (i) *ibid* of the United Nations Framework Convention on Climate Change (UNFCCC).

members are mandated to promote inter-governance cooperation across all levels, and make information on climate change readily accessible to members of the public and encourage public participation by knowledge and technology exchange, training and other forms of inclusive action.³

Given the above background and the need to protect public interests threatened by the adverse effects of climate change,⁴ this thesis proposes a central regulatory framework which would harness all the issues raised in the UNFCCC, the Conference of Parties and other international instruments on climate change adaptation. The uniformity of a legal or regulatory framework on climate change adaptation will aid streamlined action targeted at identified vulnerabilities and other matters that may arise. A regulatory framework will also raise the level of compliance with internationally stipulated adaptation measures, especially in relation to sustainable development. Through such a framework, adaptation actions across sectors can be regulated appropriately and monitored (against a specific yardstick). Thereby providing an avenue to know how much work has been done regarding research, policies, laws and their implementation.

The requirement of a legal framework does not denigrate from the fact that adaptation has been taking place and has in fact been successful in some sectors and areas. However, effective adaptation measures in line with sustainable development will require a lot of coordinated and sequential action and financing across sectors, spheres of government, with international agencies and may often require regional and sub-regional activities and investments. Such a legal framework would give assurance of government's sincerity and transparency to investors and international actors in adaptation and developmental activities.

5.3 Climate Change Adaptation in South Africa

Climate change action in South Africa is geared towards securing the implementation of the UNFCCC regarding both climate change mitigation and adaptation.⁵ South Africa's response to

³ Art 6 *ibid*.

⁴ This argument is mainly because almost all resources emanate from land – water, energy resources, and other factors of production necessary for economic well-being and growth.

⁵ National Climate Change Response White Paper, page 5 and 9 available at www.gov.za/documents/national-climate-change-response-white-paper

climate change has so far been based on policies. In resolving the challenge of adaptation to climate change, South Africa seeks to focus on the attainment of the sustainable development goals, especially the eradication of poverty and the promotion of development. This link between sustainable development and climate change adaptation resonates throughout the country's policies and plan of action on climate change.⁶

5.3.1 The National Policy on Climate Change

The climate change policy response in South Africa began in 2004 with the 2004 National Climate Change Response Strategy. There were several documents which focused on mitigation and are therefore not within the purview of this chapter.⁷ The Green Paper titled “National Climate Change Response” (NCCR) of 2010, which documented the government's intentions and objectives on the subject matter of climate change was made available to the public for consultation and comments in early 2011.⁸ The comments and consultations on the Green Paper culminated in the National Climate Change Response Policy White Paper of 2011 (NCCRP). The White Paper is an executive policy,⁹ having been adopted by the South African government as the document outlining the plan of action for climate change adaptation and mitigation.

Concerning adaptation, the White Paper aims to promote effective management of climate change impacts to promote social, economic and environmental well-being of the country. Also, the White Paper is based on a long-term action towards a resilient and low carbon country.¹⁰ The long-term plan of action in relation to climate change here implies that adaptation, for instance, will not be limited to addressing present or apparent vulnerabilities, but will entail programmes or actions that span an extended period, the end aim being to attain resilience. Seeing that climate

⁶ The National Climate Change Response Strategy of 2004, National Climate Change Response Green Paper 2010 and the National Climate Change Response Policy White Paper 2011, also, L Kotze and others ‘Climate change law and governance in South Africa- Setting the scene’ in TL Humby et al *Climate Change: Law and Governance in South Africa* (2016) p 1-19.

⁷ The Long-Term Mitigation Scenario Study of 2004; and the Vision, Strategic Direction and Framework for Climate Policy of 2008.

⁸ For instance, the Green Paper was open for comments on a dedicated website - <http://www.climateresponse.co.za>, accessed 27/10/2017.

⁹ O Fuo ‘Constitutional basis for the enforcement of “executive” policies that give effect to socio-economic rights in South Africa’ (2013) (16) *4PER / PELJ*.

¹⁰ NCCRP White Paper op cit note 5 p 9.

change is still unfolding, this implies the possibility of amendments to the policy and its probable eventual culmination in legislation on the subject matter.

The guiding principles and validation for the White Paper as a government policy flow primarily from the Constitution of the Republic of South Africa, particularly the Bill of Rights and the National Environmental Management Act at the national level. In international Law, these validating principles environmental law, human rights and sustainable development. These include principles such as the principle of common but differentiated responsibilities, equity, the needs and dignity of the poor and vulnerable, the principle of intra and inter-generational sustainability, the precautionary principle, the principle of informed public participation, and so on.¹¹

The White Paper iterates the South African and UN position that climate change remains a challenge to sustainable development and could undermine the process already made in that regard regarding sustainable development.¹² Also, the White Paper, by highlighting sectors where the most action is required, confirms the country's obligations regarding the UNFCCC to, amongst other things, develop responses to climate change for coastal zones, water resources, land use, and integrate climate change into all social, economic and environmental policies.

An important aspect of climate change adaptation and resilience also highlighted in the White paper is the building of capacity for disaster risk management as a means of addressing inevitable impacts of climate change. Given the reliance on sustainable development, the country's policy on climate change seeks to provide the most satisfactory response regarding available resources. Also, such responses aim at social and economic development.

A characteristic of long-term climate change action is that its implementation is in phases or incrementally.¹³ The climate change strategy outlined in the White Paper meets this criterion as it states that action on climate change entails incremental interventions. First, there is the

¹¹ Ibid at p 12.

¹² Ibid p 9.

¹³ AC/2017/13 Technical Paper on long-term adaptation planning, outcome of the 12th Meeting of Adaptation Committee, in Bonn Germany 19-22 September 2017, para 8, p 6. Available at www.unfccc.int/files/adaptation/groups-committee/application/pdf/ac12_7b-longterm.pdf, accessed 21/10/2017.

implementation of climate change interventions already envisaged in existing legislation, regulations and policies. The next step would be the review of other laws, regulations and policies that have no climate change considerations to include benefits for climate change action in addition to the core provisions of such instruments. Finally, will be the fashioning of new and subsequent legislation to incorporate climate change considerations. Further, in this regard, the government at the national level must audit existing policies and laws to ensure compliance with the policy objectives set out in the White paper.

At the national level, government responsibilities include the amendment and promulgation of legislation to address issues connected to climate change. The White Paper also highlights the role of provincial governments in formulating of strategies for climate change response. Also, the role of the local government as stipulated in the White Paper includes ensuring resilience through the planning of human settlements and urban development. At this point, it is argued that the speculative tone employed in the Policy document regarding the roles of local governments is a likely recipe for inaction or insufficient action in terms of climate change adaptation. Thus, to rectify this, it is argued that there would be a need for a binding legal framework setting out specific government obligations and the extent of each sphere's responsibility regarding climate change adaptation.¹⁴

Another major component of adaptation action outlined in the White Paper is that it cuts across sectors and engenders development in these sectors.¹⁵ Part of the aim of such spread is to protect and support vulnerable groups. While this is a laudable goal, not much has been done to alleviate the plight of the poor and vulnerable in terms of climate change adaptation. Many of the adverse effects of climate change affect mostly people living in slums and informal settlements.¹⁶ Part of the adaptation strategies to sectoral vulnerabilities is the increase in knowledge and access to

¹⁴ The NCCRP White Paper iterates this point at p 38.

¹⁵ Some of the sectors considered in the NCCRP White Paper include – the water sector, agriculture, biodiversity and ecosystems, health, human settlements, disaster risk management,

¹⁶ For example, the storm recently experienced in the Western Cape led to an extensive and debilitating fire incident in the Sedgefield-Knysna-Plettenberg area in the Western Cape, and a lot of low-income settlements in Knysna were affected. See www.saforestryonline.co.za/articles/knysna-great-fire-of-2017 accessed 02/11/2017.

information about climate change. The provision of a legal and regulatory framework and financial resource to tackle the effects of climate change is also considered as being essential.¹⁷

It is noted here that the Department of Environmental Affairs at the national level of governance is presently working on a Climate Change Bill and a National Adaptation Strategy (NAS).¹⁸ The policy and legislation are aimed at synchronising climate change adaptation action in South Africa and to provide a common set of objectives for the mainstreaming of climate change into various sectors and institutional frameworks.¹⁹ The NAS is based on six strategic interventions which are linked to six corresponding outcomes. One of the expected outcomes of the NAS is to “define and legislate for adaptation governance through the Climate Change Act by 2019”.²⁰

5.3.2 Provincial climate change policy

The Western Cape Climate Change Response Strategy 2014 (WCCCRS) recognises the fact that traditional measures of addressing environmental and developmental challenges and disaster risk management have become insufficient and there is the need for improvement.²¹ Particularly given climate change, its impacts and the need to adapt. The Province aims to reduce vulnerabilities and increase resilience in the people, the economy, the ecosystem and infrastructure in line with its sustainable development goals.

In line with the national White Paper, the WCCCRS also employs an institutional framework that entails the government collaborating with non-governmental organisations, the private sector and businesses, academia and research community and other stakeholders. In this regard, as with the White Paper, the areas of implementation of climate change adaptation are not watertight, due to the points of interrelationship between the various relevant sectors. These interrelations in the adaptation process further buttress the expediency of legislation or regulatory framework to regulate the interactions between sectors and to lay down clear principles for climate change

¹⁷ NCCRP White Paper op cit note 5 p 18.

¹⁸ The Climate Change Bill was not accessible at the time of concluding this research, however a draft of the National Climate Change Adaptation Strategy was made available to the public for the second round of comments in October 2017.

¹⁹ Draft of the National Climate Change Adaptation Strategy p 38.

²⁰ Draft NCCAS p 21.

²¹ Available at www.westerncape.gov.za/eadp/climate-change-municipal-support-forum/key-climate-change-documents accessed 02/11/2017.

adaptation. The NCCAS, which is still in the draft stage, seeks to achieve this by aiming to harmonise the goals of various instruments linked to climate change adaptation.²²

5.3.3 The local government climate change policy

The City of Cape Town Framework for Adaptation to Climate Change identifies specific sectors which would most feel the impact of climate change and where the need for adaptation is greatest. It outlines a mode of operation to address identified vulnerabilities to climate change and prioritises the most suited adaptation measures. The Framework also highlights the need to follow the Integrated Development Plan. The IDP emphasises the need to address the impacts of climate change by improving on human development indicators and access to basic services, amongst others to increase economic, social development and eradicate poverty.

The City of Cape Town Climate Change Policy of 2017, (CCTCCP) builds on the Framework for Adaptation and other climate adaptation policies and initiatives. The City aims to mainstream climate change into all its policies and decision-making processes so that eventually there will no longer be a need for a stand-alone climate change policy.²³ Regarding adaptation specifically, it aims to attain a “compact urban form” that is economically and socially inclusive. The CCTCCP also aims to take cognisance of climate change adaptation in the development of infrastructure for service delivery and to take a proactive approach to disaster risk management. This entails the management of risks in a way that increases social and economic development and the protection, preservation and management of natural systems to achieve a vibrant ecosystem and ensure the sustenance of ecosystem services.²⁴

The principles guiding adaptation action in the CCTCCP aim at identifying impacts across sectors, improving resilience and reducing vulnerabilities, enabling a functional ecosystem that can provide necessary services and contribute to adaptation.²⁵ The principles also promote an

²² These include the National Development Plan, the Sustainable Development Goals Agenda, the Sendai Framework on Disasters and so on, see the Draft NCCASS p 37.

²³ The City of Cape Town Climate Change Policy of 2017, p 15 available at www.capetown.gov.za/Document-centre# accessed 02/11/2017.

²⁴ CCTCCP ibid p 16.

²⁵ A significant measure towards achieving this is eco-system based adaptation, which is discussed in detail later in this chapter.

equitable spread of socio-economic development and encourage a behavioural change amongst members of the society.²⁶

To fulfil its adaptation objectives, the City set out to implement its policy collaboratively with other stakeholders, including other spheres of government, the private sector, the academic and research community, civil societies, non-governmental organisations and so on.²⁷ However, according to CT Interviewee 9, the City of Cape Town has not been very successful in proactively engaging with members of the public to build adaptive capacity. The interviewee noted that this shortcoming came to the fore with the ongoing water crisis and noted that there still exists a huge gap regarding advocacy and engagement with other non-government stakeholders on the issue of adaptation to climate change.

A primary strategy the City seeks to employ in ensuring climate change adaptation is urban design and the development or maintenance of infrastructure. In a bid to achieve this, the City relies on urban planning and improvement of infrastructure, especially in areas where these are lacking, such as informal settlements. Given this, there is the need for incorporation of climate change considerations planning, land use and development control,²⁸ as well as an appropriate review of the relevant legislation to reflect the city's policy on climate change.²⁹

Like the national and provincial policies on climate change, the city's climate change policy focuses on sustainable development and aligns itself with the United Nations Sustainable Development Goals (SDGs), particularly Goals, 8, 9, 10 and 13. The City's climate change policy has an implementation plan majorly aimed at incorporating climate change into the existing lines of action. This is a practical approach. However, the question here is how the City will be able to monitor and ensure implementation across board without a regulatory, legal framework. Also, how is the City or any of its agencies or departments held to account without a specific legal framework outlining duties, obligations and liabilities for non-performance?

²⁶ CCTCCP op cit note 23 p 17.

²⁷ Ibid.

²⁸ Ibid p 24.

²⁹ Ibid.

Some interviewees in the empirical research held the view that saddling the local governments with the additional task of ensuring adaptation to climate change amounted to saddling an already overburdened sphere of government with more responsibilities and that this could result in underperformance. CT Interviewees 1, 6 and 8 held the view that climate change adaptation should not be a responsibility of the local governments. According to them, many local governments, except the metropolitan municipalities, lacked the technical and financial capacity to carry out climate change adaptation on their own effectively. The thesis will attempt to address these questions later in this chapter.

5.4 Climate Change Adaptation in Nigeria

Nigeria's response to climate change at the national level entails a national response strategy and a Bill before the National Assembly for the establishment of a Climate Change Commission to oversee and coordinate climate change action in the country. Pending the passing of the Bill into Law, climate change response in Nigeria remains based on policies. The policies on climate change are based on the Constitution of the country, the UNFCCC and its protocols, and the principles of sustainable development.

It is noteworthy that in 2007 there was a Bill before the National Assembly on the issue of climate change. The Bill was however merely for the establishment of a National Climate Change Commission which was to have the duties of ensuring the mainstreaming and compliance with policies and international instruments on climate change across sectors.³⁰ This Bill was never passed and has been replaced with a 2017 Bill which improves on the 2007 Bill by outlining specific goals and guiding principles in the Bill.³¹

In addition to proposing the establishment of a Climate Change Council or Commission, the 2017 Bill also requires that climate change considerations are to be mainstreamed into government policies. Such responses are also required to be in line with international agreements

³⁰ The Long Title reads: "A BILL FOR an Act to Establish the National Climate Change Commission and for Other Matters Connected Therewith."

³¹ Climate Change Bill 2017, a Bill for an Act to provide a legal framework for the mainstreaming of climate change responses and actions into government policy formulation and implementation, and the establishment of the National Climate Change Council and for related matters.

and sustainable development goals.³² The Bill requires the Climate Change Council to formulate a Strategy, as well as a National Climate Change Action Plan. Both instruments are to guide planning around climate change issues,³³ and to identify specific areas of vulnerability.³⁴

It is noted however that the Bill does not make provision for intergovernmental cooperation regarding climate change action. Also, the Council on Climate Change is to be comprised of rather high-sounding officials – the Vice President of the Federation and Ministers of various Ministries and other politically appointed members of the executive arm of government.³⁵ The membership of the Council as provided for in the Bill does not give room for sustainability and continuity of climate change governance and action in Nigeria.

5.4.1 National policies on climate change

The National Strategy on Adaptation adopts the strategy of integrating its considerations and policy objectives into existing developmental programmes and projects. Thus primarily, climate change adaptation hinges on sustainable development,³⁶ as is the case in South Africa. Also, Nigeria's Vision 2020: Economic Transformation Blueprint highlights the need to act to address the impacts of climate change on socio-economic development in the country.³⁷

Responses to climate change adaptation in the national policy entail collaborative action between the three levels of government, the private sector, and the civil society. The role of the federal government in the response strategy is mainly to provide policy and implementation guidance on climate change adaptation.³⁸ In reality, however, there is little guidance or collaboration between Lagos State and the federal government in these terms. On the contrary, Lagos State has been the trailblazer in the country regarding climate change action. According to the national policy, the

³² S 1 of the Climate Change Bill 2017.

³³ S 8 *ibid.*

³⁴ S 9 *ibid.*

³⁵ S 1 *ibid.*

³⁶ National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) p 25 available www.csdevnet.org/climate-change-in-nigeria/ accessed 02/11/2017.

³⁷ Available at www.nationalplanning.gov.ng/index.php/national-plans/nv20-2020 accessed 02/11/2017.

³⁸ NASPA-CCN op cit note 36 p 28.

states and local governments have the responsibility to initiate and carry out climate change adaptation within their various jurisdictions.³⁹

It is noted that the policy does not provide guidelines or a framework for collaboration amongst the various stakeholders. This lack of structure on collaborative action is quite unlike the situation in South Africa where the White Paper provides a guideline for vertical and horizontal interaction and collaboration and even states specific government agencies required to spearhead action or response to climate change.

Also, the choice of language pre-supposes that the federal government has failed to live up to its duties as the coordinating level of government. The policy states as follows: “... the States and the Local Governments must provide leadership for climate change adaptation in their areas of jurisdiction”.⁴⁰ This statement is based on the presumption that environmental protection is a responsibility shared by all levels of government. This position contradicts the position of the Supreme Court in *A.G. Lagos v A.G. Federation* where the Court held that environmental protection was a concurrent responsibility of the federal and state government, but not of the local government.

The challenge of climate change is viewed as both an environmental⁴¹ and a developmental issue. Thus, the policy iterates that climate change adaptation should be integrated into the country's sustainable development Agenda, especially regarding economic development, provision and strengthening of infrastructure, food security and the management of the environment. The national policy also highlights the need for advocacy and public awareness on climate change, its impacts, the projections, and the need for adaptation.

A significant adaptation strategy highlighted in the national policy is the use of indigenous knowledge and capacity, which implies a reliance on community-based adaptation.⁴² In

³⁹ Ibid p 29.

⁴⁰ NASPA-CCN op cit note 36 p 29.

⁴¹ Ibid p 29.

⁴² In a series of projects carried out on community-based adaptation in Nigeria, it was discovered that major challenges encountered by communities in adaptation to climate change were the lack of access to land, insecurity of tenure, lack of infrastructure and basic services. Other limitations were as a result of gender and lack of access to

promoting community-based adaptation, the national policy notes that resilience will be best achieved through a synergy between traditional and scientific knowledge.⁴³ This implies that at all levels of government steps should be taken to promote and build capacity in the use of traditional means of adaptation and also ensure that local communities benefit from the sustainable development agenda.

To build capacity for action on climate change adaptation, the national policy pays attention to the plight of women, children and other people in a disadvantaged position. This is a major point because, in most developing countries like Nigeria, women and children bear the brunt of social and economic instability of lack of resources. Lagos Interviewee 2 in the fieldwork particularly noted that Lagos State has not lived up to the policy objective of building capacity for community-based adaptation. The interviewee noted the need for capacity building for people at the grassroots. Without this, he argues that there cannot be effective adaptation in the state.

The national policy identifies specific sectors where the impacts of climate change will be most felt and requires adaptation action to begin from such sectors. These include water, agriculture and food, biodiversity and ecosystems, coastal zones, human settlements, disaster risk management and so on. The fact that climate change impacts are all-encompassing means that action in that regard also has to be multi-dimensional, flexible and continuous.⁴⁴ Thus a major part of the action plan is to enact legislation on climate change, and mainstream climate change adaptation into the National Development Plans across government departments and agencies.⁴⁵ The policy also requires States to take similar steps, and local governments are mainly required to provide the capacity for community-based adaptation.⁴⁶

In addition to legislation and instruments already highlighted, the national policy is guided by the United Nations Development Group principles which are based on a human rights approach,

education and information. See 'Learning from Experience – Community-based Adaptation to Climate Change', p 12-13 available at www.nestinteractive.org/publications.php?OrderPublication accessed 02/11/2017.

⁴³Ibid p 31.

⁴⁴ J Frohlich and J Knieling 'Conceptualising climate change governance' in J Knieling and WL Filho (eds) *Climate Change Governance* (2013 p 20.

⁴⁵ NASPA-CCN op cit note 36 p 60.

⁴⁶ Ibid p 62.

gender equality, environmental sustainability and capacity building.⁴⁷ These principles, according to the national policy, are linked to the fundamental objective and directive principles contained in Chapter 2 of the Constitution for validity and implementation. The unsettling issue here is that Chapter 2 of the Constitution is by the Constitution itself rendered non-justiciable and unenforceable. This non-justiciability puts a huge question mark on the enforceability of the climate change response strategy itself. This point is further addressed later in this chapter.

5.4.2 Climate change action at the state level

Lagos State has by far been the most proactive regarding action on climate change in Nigeria,⁴⁸ yet it has no standalone policy on climate change adaptation. The state addresses issues of climate change through its development plan. Action taken by the state to address climate change include advocacy and public awareness, developmental activities such as the improvement of basic services and infrastructure⁴⁹ and increased reliance on physical planning strategies.

Lagos State, having held Summits on climate change annually since 2008 commissioned a project on a suitable climate change strategy to be prepared for Lagos State. This culminated in the Report “Towards a Lagos State Climate Change Adaptation Strategy (LAS-CCAS) 2012”. The Report, which is a precursor to the Lagos State policy on climate change, aligns with the guidelines set by the national policy.

The LAS-CCAS focuses majorly on adaptation to climate change and the approach outlined in the Report cuts across the same sectors highlighted in the national policy. The Report is not a policy document. Thus, it mainly describes steps and responses that Lagos State has employed in tackling the issue. The LAS-CCAS also makes recommendations which include the need for a policy on climate change, proper planning for climate change adaptation action and improved capacity on information management (this is particularly essential for disaster risk management).

⁴⁷ Ibid p 32.

⁴⁸ Lagos State Development Plan 2012 – 2025 p 121 and p 19, ‘Towards a Lagos State Climate Change Adaptation Strategy’ available at www.nestinteractive.org/publications.php?OrderPublication accessed 02/11/2017.

⁴⁹. In recent years, Lagos State has paid attention to the improvement of services such as waste management, road infrastructure, public transport by the introduction of the Bus Rapid Transit (BRT), erosion control and shoreline protection. While the increase in infrastructure is noted, they are still not adequate to build the required resilience to issues such as flooding, storm surges and contamination of groundwater.

It also makes recommendations on risk reduction and livelihood development. The recommendations also highlight the need for gender considerations, especially the need to build capacity and encourage individual adaptation to the challenges of climate change.

The LAS-CCAS requires that climate change action should be long-term and should include the relocation of communities along the Lagos coast and strict control for land reclamation along the state's coast. This chapter highlights these because the state is already conflicting with these recommendations with the building of the Eko Atlantic City and the eviction of the residents of Otodo-gbame community within the State. Several Lagos interviewees noted that many of the adaptation steps taken in Lagos State might end up being counterproductive. For instance, Lagos Interviewees 2 and 6 noted that the land reclamation exercises being carried out to accommodate the new Eko Atlantic City and other new exclusive settlements on the Islands of Lagos could end up being counter-adaptation. They noted that the environmental assessments for the reclamation did not take into consideration the likely adverse effects of such an activity on other areas of Lagos State. Interviewee 6 particularly noted that effective adaptation would require an integration of science, engineering, planning, law and policy.

The Lagos State Development Plan 2012-2025 (LSDP) integrates climate change considerations as a significant factor towards achieving sustainable development. The LSDP recognises that adverse impacts of climate change are a bane to social, economic and environmental well-being; thus, it considers climate change as a factor in risk management and safety,⁵⁰ environmental management and protection,⁵¹ protection of ecosystem and biodiversity,⁵² urban development,⁵³ and sustainable development.⁵⁴

Although the LSDP considers climate change quite extensively, the Plan itself recognises the need for a stand-alone policy.⁵⁵ This is for the State to have a proper guideline framework for climate change action, especially regarding adaptation. Regarding the immediate action needed

⁵⁰ LSDP op cit note 48 p 26.

⁵¹ Ibid pp 106 and 120.

⁵² Ibid p 205.

⁵³ Ibid p 195.

⁵⁴ Ibid p 204.

⁵⁵ Ibid 204.

in Lagos State for effective adaptation, most of the interviewees unanimously mentioned the need for education and awareness, the need to adapt and the things citizens can do to reduce vulnerabilities.⁵⁶ Lagos Interviewee 3 particularly noted the need for continuous staff training and capacity building across relevant sectors to aid adaptation as well.

5.5 Climate Change Adaptation and Sustainable Development

The various policies and other documents examined in this chapter show that both South Africa and Nigeria rely on sustainable development as a viable way of addressing the challenges of climate change. The principles of sustainable development initially did not apply directly to issues of climate change, nevertheless the need for adaptation interlinks with sustainable development goals. Thus, the actualisation of sustainable development goals leads to fewer vulnerabilities, increased resilience and adaptation to climate change. The Rio+20 United Nations Conference on Sustainable Development iterates that the adverse effects of climate change are counter-productive for development in many countries and emphasises the need for its adaptation as an “urgent global priority”.⁵⁷

Specifically, the Brundtland Report states the need for four strategies to address the issue of climate change. These include the “adoption of strategies needed to minimise damage and cope with climate changes”,⁵⁸ that is, adaptation measures. Also, a general theme that runs through the Rio Declaration is the need to ensure human well-being by protecting the environment and paying attention to development as a significant factor in enhancing human well-being. Of interest and relevance here are principles 1, 3 and 4 of the Brundtland Report which can be summed up as the need to incrementally ensure a safe and healthy existence in a well-managed environment which provides development geared towards meeting the social and economic needs of all. This is the summation of adaptation to climate change.

⁵⁶ Lagos Interviewees 3, 4, 5, 6, 7,8,12 and 13.

⁵⁷ ‘The Future we want’ Outcome Document of the United Nations Conference on Sustainable Development 2012, p 50 available at www.sustainabledevelopment.un.org/futurewewant.html accessed 02/11/2017, also L Kotze and others in T Humby et al op cit note 6 p 1-19.

⁵⁸ ‘Our Common Future’ Chapter 7 Energy: Choices for Environment and Development, para 23 at p 141 available at www.un-documents.net/our-common-future.pdf accessed 02/11/2017.

The Johannesburg Plan of Implementation (JPOI) also highlights the need for adaptation to climate change to prevent, reduce and respond to disaster risks.⁵⁹ The JPOI especially focuses on the need to address adverse effects of climate change, especially in developing countries.⁶⁰ The JPOI also notes that the adverse effects of climate change in aggravating the challenges of poverty, access to resources, land degradation, food, and human health are challenges to the attainment of sustainable development.⁶¹ Thus the failure to attain sustainable development increases the vulnerabilities, and the adverse effects of climate change slow down the process of sustainable development.

The UNFCCC also recognises the link between sustainable development and measures to address climate change in an integrated manner.⁶² The Convention notes the need for countries to promote sustainable development when taking measures to address the effects of climate change.⁶³ The Convention also encourages states to put climate change into consideration in their social, economic and environmental policies, and put proper measures in place to reduce its impact on the various sectors most essential for sustainable development.⁶⁴ The Paris Agreement also highlights the fact that adaptation strategies must contribute to sustainable development.⁶⁵

5.6 Disaster Risk Management and the Adaptation Process

There is a major link between weather and disasters, and many communities in both Nigeria and South Africa are prone to these weather-related disasters, especially since the changes in climate aggravate these disasters.⁶⁶ It is noted that climate change could destabilise pre-existing social

⁵⁹ Johannesburg Plan of Implementation (JPOI) p 20, paragraph 37 available at www.un.org/esa/sustdev/documents/WSSD_POI_PD/WSSD_PlanImpl.pdf accessed 02/11/2017.

⁶⁰ Ibid p 20.

⁶¹ Ibid p 21.

⁶² The Preamble to the UNFCCC op cit note 2.

⁶³ Art 3 paragraph 3 and 4 of the UNFCCC ibid.

⁶⁴ Art 4(1) (f) of the UNFCCC op cit note 2.

⁶⁵ Art 7(3) of the Paris Agreement FCCC/CP/2015/10/Add.1 Dec. 1/CP.21 available at <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> accessed 1/11/2016.

⁶⁶ Y Lei and J Wang 'A preliminary discussion on the opportunities and challenges of linking climate change adaptation with disaster risk reduction' 2014 *Natural Hazards* 1587 – 1597 at 1588, W Solecki R Leichenko and K O'Brien 'Climate change adaptation strategies and disaster risk reduction in cities: connections, contentions, and synergies' (2011) *Current Opinion in Environmental Sustainability* 135-141 at 135.

and environmental resilience, thereby leading to new vulnerabilities.⁶⁷ The UNFCCC notes that climate change comes with adverse effects,⁶⁸ which are damaging and harmful to the ecosystem, human health and welfare and socio-economic conditions within the society.⁶⁹ The Cancun Framework thus requires member states to take action on disaster risk management and take into consideration the Hyogo Framework for Action regarding early warning signs, risk assessment and management. The Paris Agreement iterates this need for disaster risk management.⁷⁰

The Hyogo Framework requires that states take steps to increase public awareness of the disaster risks associated with climate change across various sectors.⁷¹ The Hyogo Framework also states the need to incorporate climate risks into future measures to address and reduce the risk of disasters as a result of climate change.⁷² The Sendai Framework for Disaster Risk Reduction 2015 - 2030, which is the successor Framework to the Hyogo Framework, notes that between 2008 and 2012 about 144 million people were displaced by disasters, which were made worse by climate change.⁷³ The Sendai Framework also notes the need to reduce vulnerabilities to climate change so that that would, in turn, reduce the disaster risks associated with it.⁷⁴

The Sendai Framework in its Guidelines also iterates the need to integrate disaster risk reduction into policies and plans relating to climate change and sustainable development, amongst other factors, thereby establishing an irrefutable link between climate change, disaster risk reduction and sustainable development.⁷⁵ In recognition of the continuous and incremental action on climate change, the Sendai Framework acknowledges that disaster risk reduction must be proactive, in that there should be a frequent review and update of disaster risk reduction plans and measures.⁷⁶

⁶⁷ Y Lei and J Wang *ibid.*

⁶⁸ The Preamble to the UNFCCC *op cit* 2.

⁶⁹ Art 1 of the UNFCCC *ibid.*

⁷⁰ Art 7(5) of the Paris Agreement *op cit* note 65.

⁷¹ International Strategy for Disaster Reduction, Hyogo Framework for Action 2005-2015 para 19, p 10 available at <https://www.unisdr.org/we/coordinate/hfa>, accessed 03/11/2017.

⁷² *Ibid.*, para 19 (c), p 11, para 30 p 15.

⁷³ Sendai Framework for Disaster Risk Reduction 2015-2030 para 4, p 10 <http://www.unisdr.org/we/inform/publications/43291> accessed 03/11/2017.

⁷⁴ *Ibid* para 6, p 10. Para 13, p 11.

⁷⁵ *Ibid* para 19, p 13.

⁷⁶ *Ibid* para 33, p 21.

Climate change adaptation policies in both South Africa and Nigeria note that disaster risk management is an essential sector for action on climate change adaptation. The approach to disaster risk reduction in South Africa, especially in the Western Cape, is proactive and is on a short-term basis⁷⁷ aimed at reducing vulnerability to the adverse effects of climate change.⁷⁸ On the other hand, the outlook for disaster management in Lagos State is more reactive than proactive. Apart from being reactive, interviewees in the fieldwork noted that even though some laws and policies provide for disaster risk management, the level of responsiveness to disaster is low and there is little preparedness for adaptation to climate change.⁷⁹ Lagos Interviewee 12 noted that the culture of preparedness for disasters has not been imbibed in Nigeria and much work still needs to be done.

A key objective of disaster risk reduction in both countries is to reduce vulnerabilities in human systems (that is within communities where people live), and in natural systems (the marine, terrestrial, freshwater ecosystem).⁸⁰ The reduction of vulnerabilities in human systems implies the provision of basic infrastructure and services. In relation to natural systems, it implies the protection and conservation of natural environments that act as buffers and absorbers of natural occurrences that would otherwise result in disasters. Here again, an undeniable link is recognised between climate change adaptation, disaster risk reduction and development. Interviewees in the fieldwork in Cape Town noted that disaster risk management in the City has a major role to play in adaptation to climate change, and most of the interviewees noted the establishment of new coastal management lines as a proactive step towards disaster management. This move however has its challenges as it constitutes a further restriction on a landowner's right to their land thereby resulting in some form of socio-economic loss.⁸¹

Given the discussion above, adaptation framework, which integrates robust disaster risk management must entail an assessment of the new risks arising or likely to arise, and

⁷⁷ Y Lei and J Wang argue that disaster risk reduction is an event related response and is therefore short-term in terms of interventions and procedures, unlike adaptation, which requires long-term processes. Y Lei and J Wang op cit note 66 at 1589.

⁷⁸ A van der Berg, A du Plessis and M Murphree 'Local disaster risk reduction and management in South Africa's response to climate change' Murphree in TL Humby et al op cit note 6 p 12-5.

⁷⁹ Lagos Interviewees 13, 5, 4, 3, 2 and 12.

⁸⁰ A van der Berg, Anel du Plessis and M Murphree in TL Humby op cit note 6 p 12-7-8.

⁸¹ W Freedman 'Climate change and coastal zone management' in TL Humby op cit note 6 p 10-19

preparedness to respond and recover appropriately.⁸² This point buttresses the application of the precautionary principle of environmental law to adaptation action. The absence of sufficient information should not be a reason not to take necessary action on climate change and associated risks. It is also opined that disaster risk reduction and management should be an integral aspect of community-based adaptation. This is because most disasters occur at the local or community level,⁸³ and adaptation governance at that level ought to be capable of addressing it adequately as first responders. Also, disaster risk reduction, as an aspect of adaptation to climate change, should be community specific, taking into cognisance the specific vulnerabilities or hazards communities are prone to and how they can be addressed.

5.7 Ecosystem-Based Adaptation and Public Interest

The policies examined for Nigeria and South Africa highlight the need to conserve and protect the ecosystem as part of climate change action. The IPCC also indicates the need to preserve the ecosystem and employ it as a means of adaptation. According to the IPCC, ecosystem-based adaptation (EBA) is the use of biodiversity and ecosystem services as a means of adapting to the adverse effects of climate change.⁸⁴ EBA is also seen as the management, protection and restoration of the ecosystem as a means of adaptation to climate change. This is a fundamental concept of land and natural resource management used in most African communities to protect and conserve the ecosystem.⁸⁵ This system of adaptation to climate change can be linked to environmental principles of ecocentrism and biocentrism. The underlying goal of the practice in indigenous African societies was to preserve and replenish the environment naturally. The practice of EBA has been adopted in both Lagos and Cape Town, for instance, using soft landscaping and the restoring of some areas to the natural state in which they existed.

⁸² W Solecki R Leichenko and K O'Brien 'Climate change adaptation strategies and disaster risk reduction in cities: connections, contentions, and synergies' (2011) *Current Opinion in Environmental Sustainability* at 136.

⁸³ Y Lei and J Wang op cit note 66 at 1590, A van der Berg, A du Plessis and M Murphree in TL Humby op cit note 6p 12-10.

⁸⁴ IR Noble and others 'Adaptation needs and options' In CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability Part A: Global and Sectoral Aspects* Fifth Assessment Report of the Intergovernmental Panel on Climate Change p 846, IO Niang and others Africa In VR Barros *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects* Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change p 1234.

⁸⁵ IO Niang and others 'Africa' ibid p 1234.

Public participation and the involvement of all stakeholders, primarily indigenous and traditional systems, is essential for the success of EBA. It is also argued that it should be integrated into economic and development sectors.⁸⁶ This creates a social, economic and environmental cohesion, which is the basis of sustainable development within communities. Other benefits of EBA include the fact that adaptation occurs naturally, therefore has no negative implications for the environment or the people within such environments. It also ensures the continuity of ecosystem services and the protection of biodiversity within such areas.⁸⁷

5.8 Discussion of Outcome of Empirical Research

The empirical study sampled the opinion of the interviewees in Lagos and South Africa on the measure they felt was most suitable for climate change action. The responses of the interviewees from each country will be presented separately. The outcome of the empirical research is similar to the opinion of Taylor and others on the challenges of urban adaptation in South Africa, their position thus serves to buttress these findings.⁸⁸

5.8.1 Empirical research in Nigeria

The empirical study showed that climate change adaptation is not sufficient. Aspects of the interviews pointed to possible mal-adaptation measures taking place, which could further exacerbate the adverse effects of climate change. Examples of these are the government of Lagos State constructing the Eko Atlantic City as an attempt to reclaim land lost to coastal erosion and coastal communities that are beginning to lose their sources of livelihood and natural habitats because of inaction on the part of the government. In some cases, the inhabitants of these communities have been evicted without any resettlement plans. The research showed that actual climate change adaptation in Nigeria falls below the standard set by even the Nigerian policies, and is far below international standards. This was evident also in the responses by some of the Lagos Interviewees, which pointed to the fact that the staff expected to implement policies on climate change did not have sufficient training and capacity building. The observed outcome of

⁸⁶ UNEP/CBD/COP/12/INF/29 - 'Promoting synergies in addressing biodiversity and climate change adaptation issues' available at www.cbd.int/cop12/information accessed 02/11/2017.

⁸⁷ MR Shaw JT Over peck and GF Midgley 'Cross-chapter box on ecosystem-based approaches to adaptation—emerging opportunities' in CB Field and others (eds) op cit note 84 p. 102.

⁸⁸ A Taylor 'Urban adaptation' in TL Humby et al op cit note 6 p 11-25 – 11-32.

the empirical research in this regard falls below what is anticipated by or required for effective climate change adaptation.

A major issue addressed by the empirical research is legislation on climate change adaptation. Two interviewees (Lagos Interviewee 8 and 9) opined legislation should expressly back climate change action. Eight interviewees (Lagos Interviewees 2, 3, 4, 5, 6, 11, 12 and 13) held the view that there is no need for further legislation.

- Lagos Interviewee 11 opines that existing laws are sufficient to tackle any eventualities that might arise from the adverse effects of climate change. Lagos Interviewee 2 and 3, on the other hand, held the view that policies are an adequate response to climate change and that legislation is no guarantee of enforcement.
- Lagos Interviewee 4 held the opinion that the implementation of existing laws in other sectors would be sufficient for climate change adaptation.
- Lagos Interviewees 6 and 11 firmly held the view that planning laws were adequate for adaptation to climate change and there is no need for further legislation.
- Lagos Interviewee 7 held the view that there is the need for adaptation to climate change to be legislated upon, but held the view that rather than have a standalone legislation, this should be incorporated into physical planning laws of the State.
- Lagos Interviewee 13 held the opinion that laws might be necessary, but that it would be a premature move if adaptation to climate change were legislated upon presently. In the interviewee's opinion, climate change should be integrated into the laws across sectors, especially physical planning laws, and then later, separate laws could be made on the subject matter.

In all, 10 out of 13 interviewees in Lagos believed some form of legislation was necessary for effective climate change adaptation. Also, 8 of them held the view that climate change adaptation should be integrated into existing laws and all 8 of them with varying degrees of emphasis were of the opinion that climate change consideration should be incorporated into physical planning

laws. The outcome of the research regarding the need for legislation points to the fact that legislation may become inevitable for effective climate change adaptation in Nigeria.

5.9 Empirical research in South Africa

Just like the fieldwork carried out in Nigeria, in South Africa aspects of the fieldwork focused on the effectiveness of adaptation being carried out in the City of Cape Town and if there is the need for some form of legislation on adaptation to climate change.

The fieldwork revealed that a significant step taken in climate change adaptation in the Western Province is the review of coastal management lines. This move doubled as an action towards climate change adaptation and a disaster risk reduction.

- On the question of legislating on climate change adaptation, most of the interviewees held the opinion that climate change considerations should be integrated into existing legislation.⁸⁹ CT Interviewee 3 opined that a dual approach should be adopted where there is integration into existing legislation and a separate legislation to cover eventualities that cannot be accommodated in existing laws regulating other sectors.
- CT Interviewee 9 held the opinion that the ultimate goal would be to have climate change considerations integrated into existing legislation, noting however that a separate legislation might be necessary to aid a smooth transition phase.
- CT Interviewee 7 was ambivalent on climate change whether climate change was integrated into existing legislation or was a standalone, but noted legislation was only necessary to ensure compliance and penalties for non-compliance. The interviewee instead favoured a clear policy on the subject matter.
- CT Interviewees 1, 6 and 8 particularly opposed a separate legislation for climate change and held the opinion that all eventualities of climate change are already considered in

⁸⁹ CT Interviewees 1, 2, 3, 4,5,6,8 and 9, L Kotze and others reflect this position also in L Kotze and others in T Humby et al op cit note 6 p 1-25.

various existing legislation, especially the Disaster Risk Management Act and the Spatial Land Use and Management Act.

- CT Interviewee 2 noted that while existing legislation can be interpreted to cover climate change, implementation of such laws has not been happening. Thus, there should be express provisions in laws directed at climate change. Summarily, all the interviewees in the fieldwork in Cape Town were of the view that legislation should regulate action on climate change.
- CT Interviewees 3, 4 and 9 held the opinion that policies would work best in an ideal situation, but the need for action on climate change is quite drastic and as such should be addressed with regulations and legislation.

5.10 Conclusion

This chapter analysed and assessed the existing framework on climate change adaptation in both Nigeria and South Africa by way of desktop analysis and empirical study. Both countries have addressed climate change adaptation through policies at all levels or spheres of government. The analysis shows the policies of both countries focus on reducing vulnerabilities and increasing resilience to adequately adapt to the adverse effects of climate change.

Specific tools for adaptation include inter-sectoral and inter-governmental collaboration, as well as public participation by international, regional, national, local and private stakeholders. While South Africa's NCCRP White Paper provides a detailed framework for the various collaborative action, Nigeria's NASPA-CCN provides no framework for such collaboration or inter-relationship. The thesis highlights this as a significant shortcoming in climate change action in Nigeria.

The policies of both countries require that climate change considerations should be mainstreamed into the legislation and policies of the most affected sectors, but have failed to

provide a strategy or guide for such implementation.⁹⁰ There is also yet no mechanism to monitor the level of compliance with the national policies on climate change, especially regarding adaptation. This is a shortcoming, and the thesis presents this as a basis for a legal framework for climate change adaptation.

Sustainable development features strongly in the policies of both countries as an underlying theme of climate change adaptation. It is a fundamental aspect of two major approaches to climate change adaptation highlighted in the policy documents of both countries, that is, community-based adaptation and ecosystem-based adaptation. For adaptation to be effective, it must be based on social and economic development, equity and environmental protection.

The empirical study showed that there is the likely need for some form of legislation for effective adaptation to climate change. The interviewees of the study, drawn from Lagos, Nigeria and Cape Town, South Africa noted that there was the need for some form of legislative backing for successful adaptation to climate change. Most of the interviewees in both countries favoured an integration of climate change considerations into existing legislation across sector, and they all emphasised integration into the Spatial Planning and Land Use Management Act and the Disaster Risk Management Act in South Africa. In Nigeria, the interviewees emphasised the need for integration into the Lagos State Urban and Regional Planning and Development Law and the environmental laws at the national and state levels.

The analysis in this chapter points to the fact that there is ongoing action on adaptation to climate change, but a lot still needs to be done. This is particularly the case in Lagos, Nigeria where there is a considerable knowledge gap amongst the populace. The empirical study also showed that many government officials are not up to date with global issues of climate change. In South Africa, there are well laid out climate change action policies as well as ongoing discussions and interactions between the government, the private sector, the academia and other stakeholders. This coupled with well established and functional institutions put South Africa in a vantage position to address climate change adaptation. The major challenge encountered in South Africa

⁹⁰ It is noted here however that CT Interviewee 5 mentioned that are series of ongoing capacity building projects with stakeholders of various sectors within the Western Cape to aid them in mainstreaming climate change action into policies and lines of action.

is that of implementation of the policies and the fact that the municipalities are overburdened; without the assistance of the provincial and national governments, adaptation to climate change would be an added burden. These and other challenges highlighted point to the fact that in addition to integrating climate change adaptation into existing legislation (which is the main argument of this thesis), there will be need for a legislative framework to guide the adaptation process in both Nigeria and South Africa. This will be further highlighted along with other recommendations in Chapter 8, which is the concluding chapter. The next two chapters consider the legal framework of physical and spatial planning in Nigeria and South Africa and the considerations given to climate change adaptation in these frameworks.

CHAPTER 6: PHYSICAL PLANNING LAW IN NIGERIA

6.1 Introduction

This chapter highlights the legal framework of physical planning in Lagos State, Nigeria. Physical planning in Nigeria falls within the competencies of the states and local governments as provided for in the 1999 Constitution of the Federal Republic of Nigeria, and confirmed in the landmark case of *Attorney General of Lagos v Attorney General of the Federation and 35 others*.¹ The chapter also includes the analysis of data gathered by way of semi-structured interviews, which have been transcribed using the intelligent semi-verbatim transcription method.² This chapter contains findings of the empirical research conducted in Nigeria alongside Nigerian case law and legislation analysis.

Nigeria in general and Lagos in particular has a charted history of physical planning laws. By the decision in *AG Lagos v AG Federation and Others*, the federal government no longer has a role to play in physical planning within states. The empirical study, however, shows that some interviewees are of the opinion that the process of physical planning is one that must run through all the levels of government. Lagos is a coastal state, and this implies the necessity for some form of coastal area planning. Regarding coastal area planning, Lagos State has in recent times experienced severe coastal erosion that led to the government taking major steps regarding the protection of its coastline. Some of the measure taken encroach on the jurisdiction of the federal government and have negative implications for climate change adaptation in the state. This and other issues raise the necessity of inter-governmental relationship in CCAG and physical planning process as discussed in Chapter 4. Also, proper physical planning requires that the government at the grassroots should be most involved in the physical planning process. The chapter considers the role of the local governments in physical planning within Lagos State, what the laws provide and what exists in practice.

¹ (2003) LPELR-SC.353/2001.

² The transcription records the views and clear words expressed by the interviewees and leaves out word or phrase repetitions, mannerisms and non-verbal gestures of the interviewees; all uses of slangs and languages other than English are also edited or interpreted.

The analysis of planning laws of Lagos State in this chapter begins with the provisions of the Constitution on physical planning, then the 1992 Nigerian Urban and Regional Planning Act which was a federal law applicable in the whole of Nigeria. This is followed by analysis of the 2005 and 2010 Urban and Regional Planning and Development Laws of Lagos State. The chapter will address specific themes in the various laws which are most relevant to adaptation to climate change. It will also consider interdependence of the national, state and local levels of government to achieve effective physical planning and by extension adaptation to climate change.

The empirical study was by way of qualitative research aimed at finding out amongst other things the effectiveness of the law, the challenges of implementation and the roles played by each arm of government in the physical planning process with a focus on climate adaption in Lagos State.

6.2 Constitutional Background of Physical Planning in Nigeria

The 1999 Constitution of the Federal Republic of Nigeria provides that the State has a duty to protect and improve the environment, including land which is the subject matter of planning.³ The Constitution guarantees the right of all citizens to own and enjoy the use of their property.⁴ However, such use and enjoyment are subject to the clause that private property may be subject to acquisition by the government for public interest.⁵ It is also subject to laws regulating interests and rights in land,⁶ such as appropriation where such property is in a state or position as to be injurious to human or natural systems.⁷ Other than the provisions of section 20 and 44, the Constitution makes no other reference to physical or land use planning except in relation to local governments which are empowered to carry out land use management at the grassroots level.⁸ At this point, there are two possible arguments on constitutional provisions on physical planning.

³ S 20 of the 1999 Constitution of the Federal Republic of Nigeria (subsequently referred to as the Constitution).

⁴ S 43 of the Constitution.

⁵ S 44 (1) *ibid.*

⁶ S 44(2) *ibid.*

⁷ S 44 (2) (f) *ibid.*

⁸ Schedule 4 to the Constitution.

On the one hand, it could be argued that the provision of section 20 of the Constitution on government responsibility to safeguard land includes physical and land use planning. In that regard, it would fall under the Exclusive Legislative List of the National Assembly, and the federal government would be the competent level of government to regulate land use planning in Nigeria.⁹ This was the position adopted through the Nigerian Urban and Regional Planning Act which was a national legislation.

On the other hand, it could be argued that by the provisions of section 4 of the Constitution, the House of Assembly of a state is empowered to make laws on matters not falling within the Concurrent List of legislative competencies of the federal and state Houses of Assembly. Thus, the State and the local governments are the competent levels of government to regulate and implement physical planning laws in Nigeria. This was the position favoured by the Supreme Court.

It is argued that neither of these positions is satisfactory. Instead physical planning is a system that requires intergovernmental collaboration, especially given the need to mainstream climate change considerations into the law and its implementation. More so, the challenges of climate change do not respect nor are they limited by administrative or constitutional jurisdictions or delineations.

6.3 The Nigerian Urban and Regional Planning Act of 1992

The physical planning and development system under the Nigerian Urban and Regional Planning Act¹⁰ (NURPA) was based on master plans. At the federal level, there was the National Physical Development Plan, at the State level there were the Regional and Sub-Regional Plans, and at the local level, there were the Town and Local plans.¹¹ The NURPA placed responsibility for the preparation and implementation of development plans for the country in the hands of bodies established at the federal, state and local government levels. At the federal level, it was referred to as the Commission, at the state level it was called the Board and the Authority at the local

⁹ Item 60 Part 1 Schedule 2 to the Constitution.

¹⁰ Nigerian Urban and Regional Planning Act No 88 of 1992 (NURPA).

¹¹ S 1 NURPA *ibid*.

government level.¹² The planning and development control duties of the government at all three levels were vested in these bodies, and they were empowered to create specific departments to carry out the specific duties of development control and development planning.

To ensure uniformity in the planning framework across the country, the Commission set up to oversee the National Physical Development Plans (NPDPs) required the input of all stakeholders, state actors and non-state actors alike.¹³ There was, however, poor implementation of this provision as with other aspects of the law.¹⁴ The problem of implementation of physical planning laws will be discussed later in the chapter.

The Department of Development Control established by the various levels of government had the duty of approving development on any land within their jurisdiction and of implementing the development plans. Every person or organisation, including government agencies, who intended to carry out developmental activities had to apply for a development permit from the Department before commencing any development.¹⁵

The local governments were also required to control development within their respective jurisdictions.¹⁶ Considering that all land falls within a local government, it can be implied that the Act in putting development control within the jurisdiction or the purview of the local governments intended that local governments have the most fundamental planning responsibilities. They were also required to make town and country plans which are the most basic plans and were to be applied at the grassroots.

The grounds of approval or refusal of a permit were stated in the Act as including where the planned development was not in line with the Physical Development Plan (PDP) of the area.¹⁷ A

¹² S 5 *ibid.*

¹³ S 13 *ibid.*

¹⁴ This is based on the fact that up till the late 1990s most states of the Federation did not comply with the requirement of the NURPA on the preparation of Development Plans at the state and local government level. See, T Agbola and others 'Issues and challenges of urban and regional planning in Nigeria' in, State of Planning Report by The Nigerian Institute of Town Planners p51 available at <http://nitpng.com/new-nitp-town-planning-articles-for-download/> accessed 28/05/2017 p 5 and 7.

¹⁵ S 30 NURPA *op cit* note 10.

¹⁶ S 4 NURPA *ibid.*

¹⁷ S 31(c) NURPA *op cit* note 10.

refusal could also be based on the non-fulfilment of an obligation stipulated in the Act. Development control under the Act gave some consideration to the environment;¹⁸ thus a proposed development could be refused if likely to cause a nuisance to the community and its inhabitants.¹⁹ Development could also be refused if likely to have a significant impact on the environment, facilities and the inhabitants of the area.²⁰ Further, an environmental impact statement (EIS) was required where development on residential land is more than two hectares or for development of a factory or office complex where it is more than four floors or is for a major recreational development.²¹ Also, in line with the common law principle of Nuisance, the Act empowers the Department to take necessary steps if development or other activities on a particular parcel of land seriously injures the conditions on an adjoining piece of land. Such steps include the issuance of a notice to the owner of the offending land to abate the injury or the cause of injury.²²

Further about the environment, the Act empowered the Department to impose an obligation of tree planting and preservation of existing trees on the developer.²³ The tree planting obligation is in line with the federal government nationwide campaign to abate deforestation in Nigeria. This presents an example of how planning laws can be used as a tool to address the challenges of climate change. Particularly, climate change adaptation obligations can be linked to such provisions of the law to provide for a level of resilience within towns and cities.

In fulfilment of its positive planning obligations, the Act granted powers to the various regulating bodies for development plans at the federal, state and local government level to revoke an occupier's right of occupancy where it is necessary to obtain any land to actualise the planned development at any level of government. Such revocation and compensation are to be in

¹⁸ At the time of the drafting and implementation of this Act in the early 1990s, climate change (whether in terms of mitigation or adaptation) have not gained notoriety as a governance issue in most developing countries, including Nigeria. As a matter of fact, the NURPA came into force the same year the United Nations Framework Convention on Climate Change was adopted.

¹⁹ S 31(d) NURPA *op cit* note 10.

²⁰ S 31 (c) NURPA *ibid*.

²¹ S 33 (a) – (c) NURPA *ibid*.

²² S 74 NURPA *ibid*.

²³ S 72(a) and (b) NURPA *ibid*.

line with the provisions of the Land Use Act.²⁴ The Act allows for the planning authority at the local government level to declare an area as an improvement area in implementing the local plan of that community. Such improvement could be carried out by the joint efforts of the Control Department and members of the community²⁵ for the social, infrastructural or physical improvement of the area. The relevance of a similar provision about the responsibilities of climate change adaptation governance amongst state and non-state actors will be discussed when the current physical planning law of Lagos State is considered.

After a permit has been granted, the Act provided that such a permit could be revoked in the case of a non-compliance with its provisions, or revocation could be on the basis of overriding public interest as stipulated in the Land Use Act.²⁶

This Act was applied throughout the Federation until its constitutionality was contested in the case of *A.G. Lagos v A.G. Federation and 35 others*.²⁷ The Court action was based on conflicts between the federal government and the state government on which level of government was empowered by the Constitution to grant planning applications within Lagos State.

6.4 The Contestation of the Federal Government's Role in Physical Planning

The case of *A.G. of Lagos v A.G. Federation and 35 others*,²⁸ came before the Supreme Court of Nigeria in its original jurisdiction to hear matters between the Federation and States within the Federation.²⁹ The plaintiff, Lagos State contended among other things the overstepping by the federal government of its authority by granting planning permits to individuals and federal government agencies within the geographical jurisdiction of Lagos State.

Summarily, the contentions arose due to the breakdown of cooperation between levels of government in relation to planning and physical development within Lagos State. The plaintiff thus sought relief in the Supreme Court (SC) as per the unconstitutionality of specific provisions

²⁴ Cap L5 Laws of the Federation of Nigeria 2004.

²⁵ S 75 and 76 NURPA op cit note 10.

²⁶ S 41 NURPA *ibid*.

²⁷ Op cit note 1.

²⁸ *Ibid*.

²⁹ S 232(1) of the Constitution.

of the NURPA vesting planning powers on land within states in the federal government.³⁰ It also contested that federal laws which allowed the federal government exercise land use powers should be exercised for the specific purposes and should not be construed as granting land use regulation powers to the federal government on land within states. The plaintiff pointed out that physical planning falls within the Residual List and is therefore within the competency of the states and local governments.³¹

The federal government, the first defendant in the matter, hinged its argument on section 20 of the Constitution which provides that it is an objective of the government to protect and improve the environment and safeguard the water, land, forest and wildlife in Nigeria. It was further contended that the NURPA was incidental to the performance of the duties of the federal government in relation to safeguarding land and the environment.³²

The SC, though affirming that physical planning could fall within the purview of section 20 of the Constitution, held by a majority decision that it was unconstitutional for the NURPA to require development plans of individual states to conform to the NDP. The Court held that the drafters of the Constitution did not avert their minds to physical planning in drafting section 20 of the Constitution. The Court referred to the 1994/95 Constitutional Conference which highlighted environmental issues as construed by the drafters of the 1999 Constitution as including afforestation and reforestation, desertification, and natural disaster management and reduction.³³

It was also held that the Act contravened the principle of federalism in seeking to control planning within states.³⁴ This they based on the principle of autonomy inherent in federalism in Nigeria.³⁵ The Court held, per Uwaifo JSC that

...the national Assembly cannot make a law in the form and to the detail and territorial extent of the present Nigerian Urban and Regional Planning Decree No. 88 of 1992... It

³⁰ Schedule 2 to the Constitution.

³¹ *AG Lagos v AG Federation and Others* op cit note 1 at 14.

³² Ibid at p 16.

³³ Ibid at 58-9.

³⁴ Ibid at 35-8, 40, 50, 65, 67.

³⁵ Ibid at 66.

is a noncontroversial political philosophy of federalism that the federal government does not exercise supervisory authority over the state governments.³⁶

The Court further held that it must

always be borne in mind that constitutionally, town planning and development power belongs to the States ...[And] Ownership of land in any State by the Federal Government is primarily limited to the question of title and the right to possession and use of it... Like any other individual land owner...the federal government must respect the planning laws and regulations of the State, or at least act in consultation with the appropriate authorities or agencies with a view to achieving mutual accommodation for the project intended.³⁷

The decision of the SC on the unconstitutionality of the NURPA was thus to the effect that each state of the Federation should make laws relating to physical planning. The federal government has by that decision been excluded from physical planning, except within the Federal Capital Territory which is the only geographical jurisdiction within which the NURPA still applies. However, going by the decision in this case, disaster risk management falls within the legislative and executive competency of the federal government. Thus, climate change adaptation, to the extent that it relates to the reduction of risks and hazards relating to climate change, remains a responsibility of the federal government.

6.4.1 Case analysis

In this case the SC and the first defendant did not avert their minds to the responsibility of the federal government in relation to physical planning as provided for in the NURPA. It is agreed that development control should be within the purview of the levels of government closer to the people, that is, the state and local government. However, the intention of the Act was not to grant development control powers to the federal government in relation to land within a state. Rather the role of the Federal government was to maintain uniformity in planning standards and principles all over the country. The Federal government, through a Commission, had the duties of preparing and implementing National Physical Developmental Plans,³⁸ and the Commission was also required to have States' representations on its Board.³⁹ The fact that the states of the

³⁶ Ibid at 68.

³⁷ Ibid at 70.

³⁸ S 5 NURPA op cit note 10.

³⁹ S 6(1) (e) NURPA Ibid.

federation were represented on the Planning Commission was evidence that planning under the Act was intended to be a collaborative exercise aimed at fostering interconnectivity and cooperation in the planning process.

From the above, it is evident that the role of the Federal government was to be that of a coordinating agent, rather than an intermeddling overlord as the case had become before Lagos State going to Court. This was quite evident as the Federal government has no actual control over land within the Federation, all land having been vested in the States by the Land Use Act,⁴⁰ the exception being when land is acquired for federal government use.

A look at section 9 of the NURPA shows that development control powers were vested in the States in addition to powers to formulate and implement development plans.⁴¹ The Act explicitly established the Department for development control at the State level,⁴² and stipulated that the Department at the federal level was to exercise its powers of development control only in respect of federal lands and estates and no more.⁴³ Federal lands as used in the Act implied lands acquired for developmental activities by the Federal government, “state lands” on the other hand implied lands within the territory of a State. If section 27 of the NURPA which confers powers of development control is to be read in the light of section 7 of the same Act and section 1 of the Land Use Act, the Control Department at the federal level really had no development control powers. This is because all land within the federation and all control of such land is vested in the governments at the State level.

Thus, rather than completely pronounce physical planning at the federal level unconstitutional, perhaps the Court ought to have properly qualified the role of each level of government as far as physical planning is concerned. In the empirical study carried out in Lagos, four interviewees held the view that physical planning should cut across all levels of government.⁴⁴ In response to the question of which level of government should have the most fundamental planning

⁴⁰ S 1 of the Land Use Act of 1978 (LUA).

⁴¹ S 9(c) NURPA op cit note 10.

⁴² S 27 *ibid.*

⁴³ S 27 (3) *ibid.*

⁴⁴ Lagos Interviewee Interview 1; Lagos Interviewee Interview 10; Lagos Interviewee Interview 9 and Lagos Interviewee Interview 13.

responsibility, Lagos Interviewee 13 held the opinion that in a democratic government like Nigeria has, the three levels of government should take active parts in physical planning. He noted that there were some planning functions the local government would be unable to carry out due to the limitation of financial and technical capacity. The interviewee iterated the inter-related and integrated nature of planning and concluded that the three levels of government should share planning responsibilities, but the federal and state governments should empower the local governments more.⁴⁵

The strict compartmentalization of physical and land use planning in Nigeria will inevitably slow down the process of climate change adaptation. International best practices in urban adaptation to climate change point to an inter-relationship and collaboration amongst levels of governance to achieve adaptation. Bulkeley notes that adaptation to climate change is now regarded as a matter requiring both infrastructural and economic capacity.⁴⁶ Given this, multi-level governance regarding urban planning is essential for successful adaptation to climate change.⁴⁷

The position in South Africa is in total contrast to what obtains in Nigeria, and as will be seen in Chapters 6 and 7, South Africa has capitalized on its co-operative governance strategy as one of the ways of addressing climate change.

6.5 Physical Planning Laws of Lagos State

Before the promulgation of the NURPA, Lagos State had its physical planning process backed by law. There was the Town and Country Planning Law of Lagos State,⁴⁸ and other Orders⁴⁹ and Guidelines.⁵⁰ The Orders and Guidelines had the force of law and together with the Law regulated the process of physical planning and allocation of land for infrastructure in Lagos State.

⁴⁵ Lagos Interviewee Interview 13.

⁴⁶ H Bulkeley and MM Betsill 'Revisiting the urban politics of climate change' (2013) 22(1) *Environmental Politics* 140-141.

⁴⁷ Ibid 143 -144, J Frohlich and J Knieling 'Conceptualising climate change governance' in J Knieling and WL Filho (eds) *Climate Change Governance* (2013) p 16.

⁴⁸ Cap 133 Laws of Lagos State of Nigeria.

⁴⁹ Order No 5 of 1982 of Lagos State.

⁵⁰ Guideline No 6 of 1983 of Lagos State and Guideline No 14 of 1983 of Lagos State.

Following the SC decision, Lagos State passed the 2005 Lagos State Urban and Regional Planning and Development Law.⁵¹ The 2005 Law improved on the 1992 Act as it set out the physical planning tools to be adopted in Lagos State, that is, the use of development plans and development control. The Law also established the Urban Renewal Authority and the Physical Planning and Development Authority.⁵²

A fundamental aspect of the 2005 Law is that it empowered the Development Authority to establish planning offices in the local government areas to carry out planning duties.⁵³ This implied the stripping of the local governments of their planning powers, including planning powers assigned to local governments by the Constitution.⁵⁴ Although the Law subtly expressed this incursion, the actual implementation of the Law stripped the local governments of planning powers, and they had no powers to negotiate or refuse the propositions of the State government. The 2005 Law was repealed by the Lagos State Urban and Regional Planning and Development Law 2010 (URPDL 2010).⁵⁵

6.5.1 The Urban and Regional Planning and Development Law of Lagos State 2010

The Urban and Regional Planning and Development Law 2010 (URPDL 2010) was passed as a law to provide for the “administration of physical planning, urban development and building control in Lagos State”.⁵⁶ The URPDL 2010 empowers the Ministry of Physical Planning and Urban Development to implement its provisions regarding formulation, approval and implementation of various development plans and policies that relate to physical planning and development within the State. This responsibility includes decisions on the provision and locating of public infrastructure within the State.⁵⁷ Particularly, the URPDL 2010 provides that the Ministry has the responsibility of advising the State government on “...development projects/programmes with socio-economic and environmental impacts”.⁵⁸ Section 2 further

⁵¹ Law No 9 of Lagos State, 2005.

⁵² S 2 Urban and Regional Planning and Development Law of 2005 (URPDL 2005).

⁵³ S 49(c) (URPDL 2005) *ibid*.

⁵⁴ Schedule 4 of the Constitution.

⁵⁵ No 3 Laws of Lagos State 2010.

⁵⁶ The Long Title to the Urban and Regional Planning and Development Law 2010 (URPDL 2010).

⁵⁷ S 2(e) URPDL 2010 *ibid*.

⁵⁸ S 2(f) URPDL 2010 *ibid*.

stipulates that the Ministry of Urban and Regional Planning and its agencies are to liaise with the agencies of other governments, including the federal, states and local governments, in the executing of physical planning, urban development, urban regeneration and building control.⁵⁹ This includes formulating the necessary guidelines to engender “inter-governmental, bilateral and multilateral cooperation on physical planning” and other aspects of urban development.⁶⁰ This section suggests multi-level cooperation in physical planning development and buttresses the argument earlier presented in this chapter that physical planning process cannot be carried out by one level of government in isolation from other levels or neighbouring States or regions.

The URPDL 2010 does not state what principles underline physical planning and development within the State, a fact already discussed in Chapter 2. In this chapter, however, attempts will be made to identify some possible principles underlining physical planning in Lagos State.

6.5.2 Coastal management under the URPDL 2010

Even though Lagos is a coastal state, the URPDL 2010 contains no provisions on coastal planning or management. The Law, however, speaks of demolitions of unauthorised structures or development “on, under, or over any land or seabed in the State”.⁶¹ The management of shorelines, coasts, inland waterways,⁶² the territorial sea,⁶³ the exclusive economic zone and continental shelf⁶⁴ fall within the jurisdiction of the Federal government. While the Constitution makes no direct reference to legislative competencies on coastal management within the Federation, it can be implied on several grounds.

⁵⁹ S 2(m) URPDL 2010 *ibid.*

⁶⁰ S 2(h) URPDL 2010 *ibid.*

⁶¹ S3 (c) URPDL 2010 *ibid.*

⁶² National Inland Waterways Act; Section 10 of the Act vests jurisdiction in this regard in the Federal government; the Act in section 29 defines an Inland waterway to include all waters and water ways that exist within the landward territory of the Federal Republic of Nigeria, beginning from the baseline or low watermark of the Territorial Sea.

⁶³ S 1(2) vests the jurisdiction of the territorial Sea in the Federal government.

⁶⁴ The Exclusive Economic Zone Act in section 2 vests the jurisdiction of the Exclusive Economic Zone, the Sea bed and the subsoil beneath it in the Federal government by virtue of sections 1, 2, 4 and 6 read together. Section 6 particularly refers to the federal government as the authority as used in the Act; section 4 grants to the Attorney General of the Federation to prosecute any matters that may arise in relation to the EEZ and the subsoil and sea bed beneath.

First, the Constitution empowers the National Assembly to make laws on the implementation of treaties to which Part A of Schedule 2 relates.⁶⁵ One of the issues dealt with under Part A of Schedule 2 in the exclusive legislative list is navigation, tidal waters and seaports.⁶⁶ These are of course matters dealt with in the United Nations Convention on the Law of the Sea.⁶⁷ Thus the National Assembly has the exclusive jurisdiction to legislate on matters relating to the application of the treaty in Nigeria, and this includes the management of the country's coastlines. The National Assembly is also empowered to legislate on matters involving water from sources affecting more than one State.⁶⁸ Considering that the Federal government has control over the seas, waterways, shorelines and coastlines within the State, it is argued that the provisions of section 3 of the URPDL 2010 seek to extend the planning powers of the State beyond its jurisdiction.

It is here argued that coastline management cannot be separated from physical planning within a country or city. For instance, according to International Guideline on Urban Planning, there must exist a spatial framework that aims at protecting and managing the “natural and built environment of cities...including their biodiversity...and natural resources to ensure integrated and sustainable development.”⁶⁹ In this regard, the Guideline states that national governments, in particular, have a duty to create regulations to protect the water and other natural resources including coastlines and wetlands to ensure sustainable use.⁷⁰ This further strengthens the argument for collaborative governance across tiers of government in physical planning, especially in trans-boundary issues such as coastline management, taking particular cognizance of the need for adaptation action for communities along the coast.

6.5.3 Development control under the URPDL 2010

Section 2 of the URPDL 2010 provides for the forms of Development Plans applicable in Lagos State. These plans include the regional, the sub-regional, district, model city, urban and town,

⁶⁵ Para 31 Part A of Schedule 2 to the Constitution.

⁶⁶ Para 36 Part A *ibid*.

⁶⁷ UNCLOS 1982.

⁶⁸ Para 64 Part A *op cit* note 65.

⁶⁹ UN HABITAT International Guidelines on Urban and Territorial Planning (2015) p 20, available at <https://unhabitat.org/books/international-guidelines-on-urban-and-territorial-planning/> last accessed 28/05/2017.

⁷⁰ UN HABITAT International Guidelines on Urban and Territorial Planning *ibid* p 21.

urban regeneration, development guide, and local plans.⁷¹ The Law also provides for the process of review of an Operative Development Plan (ODP).⁷² The process entails a level of public participation as it provides for inputs from non-governmental stakeholders and individual members of the society.⁷³ While section 5 provides that aspects of the ODP may be reviewed or revised, it does not state the circumstances that would warrant a review or revision. Section 23, however, states that the process of review is to be carried out every five years.⁷⁴ This thesis argues that the URPDL should state situations that will trigger a review of the ODP, and climate change should be outlined as being significant in that regard.

6.5.3.1 The role of local governments in development control

Section 26 of the URPDL 2010 provides that the Lagos State Planning Permit Authority (LASPPA) is to establish “local planning permit offices” for the discharge of planning functions at the local government level.⁷⁵ The LASPPA is also empowered by the URDPL 2010 to prepare and review District Plans, Town Plans and Local Plans,⁷⁶ as well as exercise “operational control and supervision of its District Planning Permit Offices and Local Planning Permit Offices”.⁷⁷ The actual implication of the provisions in this section of the Law is the systemic stripping of the local governments of their planning duties. According to some interviewees of the study,⁷⁸ the justification for stripping the local governments of their powers is because they had not been functional,⁷⁹ hence the State government took over their duties, including those provided for in the Constitution of the Federal Republic.⁸⁰

The response of Lagos Interviewee 1 sheds light on the operation of section 26(c) and (e) of the URPDL. According to him,

⁷¹ S 2 (c) URPDL 2010 op cit note 56.

⁷² S 5 URPDL 2010 *ibid*; An Operative Development Plan according to section 102 of the URPDL 2010 refers to any plan that has been ratified for implementation.

⁷³ S 5(2) URPDL 2010 op cit note 56.

⁷⁴ S 23 URPDL 2010 *ibid*.

⁷⁵ S 26 (d) URPDL 2010 *ibid*.

⁷⁶ S 26(e) URPDL 2010 *ibid*.

⁷⁷ S 26 (l) URPDL 2010 *ibid*.

⁷⁸ Lagos Interviewees Interviews 1, 4,9, 12 and 13

⁷⁹ Lagos Interviewee 1 states as follows - ‘As far as I am concerned, the local governments are not doing enough. That is why the State government is working in synergy with the local governments to carry out their duties.’

⁸⁰ Schedule 4 of the Constitution.

For there to be planning at the local level, we should have the local planning authority as we had it in the olden days to move planning to the grassroots. Now we have District offices that overlook [*sic*] planning in the local government and the District offices report to the Ministry of Physical Planning.⁸¹

The above statement is further elaborated upon by Lagos Interviewee 9 who noted that –

...what the local governments should be doing ... is done by the state government though in a pseudo manner. So, for the 20 local governments as provided by the Constitution, we have District planning offices headed by state officials, and under them, there are some 37 LCDAs making 57 in Lagos State. Those ones are under the Districts. What is normally supposed to be is that we should have a Board of Planning Authority for every local government... And they worked at that time. Then it was mandatory for us to try and turn out a plan for the settlements within your local government at that time. But it was stopped because some local governments were not carrying out their duties and were only interested in what accrues to them, because ... they [the Board of Planning Authority] were given a percentage of the income that goes to the local governments. The money that goes to them was meant to cater for plans within the local government but rather the funds were [...] it was for that reason that the state government came up with a pseudo arrangement with the local governments. The District offices are within the local governments but the officials are from the State.

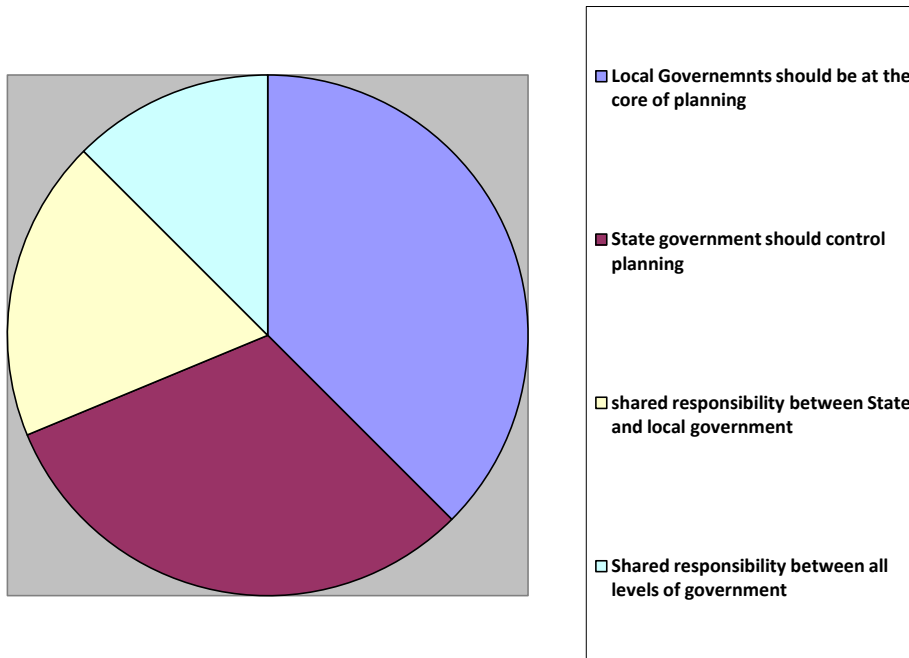
Some interviewees, however, felt the state government had deliberately relegated the local governments to the background. Interviewee 2 noted that the laws were implemented in a way that allowed their powers to be withdrawn by the state. Another interviewee, expressing the inadequacies in the planning system in Lagos State noted that

Today in Lagos we only have the State, only the state controls planning. At the local government levels across the State, they are weakened because they do not have the resources or the technical abilities to fulfil their mandates.

The responses from the interviewees on the role of the local governments in planning within the State differed and this is represented in the chart below.

⁸¹ Lagos Interviewee Interview 10.

Figure 3 showing interviewees opinions on the role of Local governments in physical planning in Lagos State.



Source: Author’s construction

6.5.3.2 Public interest and climate change considerations

The LASPPA is empowered to refuse the grant of a planning permit or withdraw a permit already granted if, in its opinion, the development is likely to cause a nuisance or “have major impacts which cannot be mitigated on the environment...or inhabitants of the community or in the public interest.”⁸² The URPDL 2010 does not define “public interest” or what would amount to public interest.⁸³ It would, however, be appropriate to infer what would amount to public interest from the context in which the phrase was used, that is, in relation to environmental

⁸² S 31 (b) URPDL 2010 op cit note 56.

⁸³ Although ‘public interest’ as a concept has over decades featured in planning legislation and other government policies, there is no agreed conceptualisation or definition it is said to be the “yardstick of indefinite length with no inches or feet marked on it, FJ Sorauf ‘The public interest reconsidered’ 19(4) 1957 *The Journal of Politics* 616-639 at 624. Rather, it is identified by the function it performs in specific contexts. ER Alexander ‘The public interest in planning: From legitimation to substantive plan evaluation’ 1(3) 2002 *Planning Theory* 226 -249, H Campbell and R Marshall ‘Utilitarianism’s bad breath? A re-evaluation of the public interest justification for planning’ 1(2) 2002 *Planning Theory* 163-187, CW Lewis ‘In pursuit of the public interest’ 66(5) Sept/Oct 2006 *Public Administration Review* 694 -701.

matters, nuisances and in more recent times, the need for climate change adaptation. On conditions precedent to the grant of a planning permit, the Law also stipulates as a requirement the preservation of trees and greenery, and where none exist, to take steps to plant them.⁸⁴

As seen above, the URPDL 2010 takes cognisance of the environment, and these are avenues that can be exploited to integrate climate change adaptation measures. As pointed out earlier, the Law alludes to “public interest” but does not define the term. The concept has however been described as commonly held values or desired goal on the grounds of which citizens are willing to engage in some form of political struggle.⁸⁵ It is also defined as a matter in which the best course of action most suited for a particular society based on accepted rules of behaviour or a common good determined through a democratic process.⁸⁶ In Chapter 2, it was established that public interest is a justification for physical planning laws.⁸⁷ Given these definitions of public interest, the point is reiterated that climate change is a matter that would affect the general welfare, as well as the various interests of the populace and so qualifies as a matter of public interest to be considered the URPDL 2010.

6.5.4 Urban renewal and vulnerabilities to climate change

The URPDL 2010 establishes an Urban Renewal Agency (URA),⁸⁸ which has the general duties of identifying areas that need to be upgraded or rehabilitated within the State and carrying out the renewal or upgrading process on behalf of the government of the State.⁸⁹ The Law further grants to the URA powers to designate an area within an ODP as an “improvement area” to rehabilitate, renovate or upgrade “the physical environment” or “infrastructure of the area”.⁹⁰ Apart from section 53, the URPDL 2010 gives no further indications or conditions that could trigger the urban renewal process within a particular area. It is argued here that the Law ought to stipulate conditions that would set in motion the urban renewal process, and a framework established to

⁸⁴ Ss 40 and 41 URPDL 2010 *ibid*.

⁸⁵ FJ Sorauf ‘The public interest reconsidered’ *op cit* note 83 p 625, the article also presents MacIver’s view of public interest, “a consensus about the values cherished in common...pursued through some inclusive organization” at 632.

⁸⁶ A Downs ‘The public interest: Its meaning in a democracy’ (1962) 29(1) *Social Research* 1 -36 at 11-5.

⁸⁷ See section 2.3.3 of Chapter 2.

⁸⁸ S 49 URPDL 2010 *op cit* note 56.

⁸⁹ S 51 URPDL 2010 *ibid*.

⁹⁰ S 53 (1) URPDL 2010 *ibid*.

ensure that the urban renewal interventions address the issues they are meant to address. This is particularly essential as urban renewal can be employed as a viable tool to address geographical and social vulnerabilities to climate change.

Climate change adaptation ought to be considered as a major trigger of urban renewal processes in areas within Lagos State where resilience to climate change is made difficult or impossible as a result of limited or non-existent infrastructure. For instance, during the fieldwork, several interviewees pointed out that Lagos State is an entirely urban State and has no rural areas,⁹¹ but that there are areas within Lagos State that have little or no government presence and lack even the basic infrastructure.

According to Lagos Interviewee 6

there are communities on the beach...there is a sand beach separating the Atlantic and the Lagoon. There are communities along that stretch, we call them riverine communities, these communities are not connected to the national grid [electricity supply] because of their locations.⁹²

Lagos Interviewee 2 also pointed out that as follows:

A project I carried out targeted the coastal communities in Lagos State, these are grassroots people... there is Ituaga in Amuwo Odofin...the conditions we met in Ituaga were so bad...the children cannot go to school, the infrastructure has broken down, there is so much air pollution, during the day, it is as if it is night.⁹³

Such communities that are highly vulnerable can benefit from the process of urban renewal as a way of using the planning process to build resilience, reduce vulnerabilities and promote adaptation to the adverse effects of climate change.

⁹¹ The declaration of Lagos State as urban by Governor Lateef Jakande in 1980 was also discussed in Chapter 4.

⁹² Lagos Interviewee Interview 6.

⁹³ Lagos Interviewee Interview 2.

6.6 Role of Development Plans under the URDPL 2010

Development plans form an integral part of physical planning legislation, as development controls provided for within the Law only operate based on the operative development plan or comprehensive master plan. According to Utuama and agreed to by the Supreme Court, the development plan is a ‘legal device which authorises [the] government to plan and control development in an area or region where such relates.’⁹⁴ According to the URPDL 2010, the “Comprehensive Development Plan” operative in Lagos State is an instrument which clearly states the intentions of the State government on the “use and development” of land within the State. It achieves its aims by “providing a statutory framework” for the physical planning process and development control within the State.⁹⁵

The operative comprehensive plan of the State provides for development within the State regarding socio-economic opportunities, including projections for future population increase. According to a Report by the Nigerian Institute of Town Planners, these master plans, referred to as operative development plans in Lagos State, are meant to be adopted in solving physical environmental challenges within the city,⁹⁶ to ensure that the present and future growth of the city is well planned and prepared for.⁹⁷ In summary, they hold the view that the master plan or development plan is aimed at creating a ‘physical environment which is functional, efficient, healthful and aesthetically pleasant for human activities.’⁹⁸

Most interviewees in the study carried out held the opinion that physical planning laws should take greater cognisance of the social, cultural and economic well-being of members of the society.⁹⁹ According to an interviewee,

we have not taken a lot of social considerations into urban development...we need to tweak the law a bit to have a human eye, a human face...we must move from planning

⁹⁴ See *A.G Lagos v A.G Federation and others* op cit note 1.

⁹⁵ Para 1 Part 1 of the First Schedule to the URPDL 2010 op cit note 56.

⁹⁶ T Olurin and KG Jiriko ‘Assessment of planning tools and instruments’, State of Planning Report by The Nigerian Institute of Town Planners op cit note 14 p 51.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Lagos Interview Interviewees 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13.

laws as a tool of oppression to planning laws as a tool of social development. People need to recognise that the laws are there to help them enjoy a better environment.¹⁰⁰

Another interviewee succinctly summarised the role of planning laws in socio-economic wellbeing by pointing out that ‘the mind of the city can be determined by the look of the city’.¹⁰¹ In arguing for a socio-economic perspective to planning, Lagos Interviewee 9 noted that the physical planning process should be “inclusive” and the process must study people to know how to plan. He further pointed out that ‘you cannot plan *for* the people, you can only plan *with* them.’¹⁰² In arguing for inclusivity in the planning process, another interviewee opined that there should be reviews of planning laws in Nigeria. The interviewee suggested that the review should be “holistic” in that it should take cognisance of the prevalent ‘socio-economic status of the people’,¹⁰³ the peculiarities of the areas being planned, as well as the cultural heritage of the people. The fieldwork also showed that to encourage socio-economic integration, the people themselves must be part of the planning process.¹⁰⁴

The reaction of the interviewees points to the fact that sustainable development is an integral part of physical planning and both cannot and should not be separated. In the same vein, the outcome of the fieldwork in this regard points to the fact that physical planning is a viable tool for addressing social and physical vulnerabilities in the short-term and building resilience in the long-term.

The Schedules to the URPD 2010 also require the development plans to make provision for the preservation of natural resources and other components of the natural environment. All the interviewees but two held the view that physical planning had a role to play in environmental protection and climate change action. One of the dissenting interviewees felt physical planning rather had a role to play in population control and management,¹⁰⁵ while the other held the view that laws already exist on environmental protection, and that if planning laws were to incorporate

¹⁰⁰ Lagos Interviewee Interview 12.

¹⁰¹ Lagos Interviewee Interview 11.

¹⁰² Lagos Interviewee Interview 9.

¹⁰³ Lagos Interviewee Interview 13.

¹⁰⁴ Ibid.

¹⁰⁵ Lagos Interviewee Interview 6.

aspects of environmental protection that could result in confusion and overlap of duties.¹⁰⁶ The other interviewees, however, proposed that environmental management and climate change should either be explicitly included in the development plans or should be a condition precedent to the grant of permits. Some of the interviewees also held the opinion that specific steps should be taken to mainstream adaptation to climate change into development plans and development control mechanisms. For instance, Lagos Interviewee 12 emphasised the need to invoke some planning measure to protect citizens from coastal erosion. For her, it is expected that the setback line of development from the ocean should have been reviewed in line with the realities of climate change, but she noted that nothing had been done to establish such a setback. This is unlike the situation in Cape Town where a new coastal management line has been adopted as an adaptation mechanism.

In addition to the above, the Schedule to the URPDL also requires the development plans to include factors such as the assessment and projections for the future in the transportation, education, human settlement and cultural facilities sectors.¹⁰⁷ It is argued here that assessments and future projections should include climate change considerations and measures to ensure adaptation across sectors that will be most affected. For instance, a major future requirement across sectors would be disaster risk control and management facilities in the event of floods or other adverse effects of climate change.

In addition to the Comprehensive Development Plan which outlines the State's development and physical planning strategy, there are the District Plans applicable at the District levels, which break down the Comprehensive Development Plan in terms of jurisdictions and timelines for implementation.¹⁰⁸ The District Plans are expected to show existing developments within their jurisdictions and more importantly, the constraints or challenges experienced regarding development and infrastructure.¹⁰⁹ The Plans are also expected to contain future projections regarding layout of the area, expected developments, population increase, employment

¹⁰⁶ Lagos Interviewee Interview 13.

¹⁰⁷ Para 6-11 of First Schedule to the URPDL 2010 op cit note 56.

¹⁰⁸ Para 1 Part 1 of the Second Schedule to the URPDL 2010 *ibid*.

¹⁰⁹ Para 8, Part 3 *ibid*.

opportunities and projected challenges to development.¹¹⁰ These District Plans are also expected to highlight climate change as a major challenge to development, as well as note the constraints to climate change adaptation. Also considering that the District Plans are closer to the people at the grassroots, it presents a good opportunity to highlight social and geographical vulnerabilities to the expected and present climate change impacts and ways in which these can be addressed.

Zoning as a tool of physical planning is introduced at the District Plan level. The Plans are required to show and delineate roads, green belts and wooded areas and so on.¹¹¹ In addition to these, zoning should be used as a tool to identify areas of high geographical vulnerabilities and the activities permitted in these areas should be such as will be most minimally affected by adverse effects of climate change. Further, the integration of environment into physical planning will help protect sensitive areas and prevent developmental activities within such areas.

The Local and Town Plans are last in the hierarchy of operative development plans within Lagos State. They are required to complement the District Plans and to state in more significant details development within specific areas and the conditions for the approval of development permits within these areas.¹¹² These plans are to be implemented at the local government level and also show details of zoning, layouts, drainages and transportation.¹¹³ Also, the Local Plans show the sub-division of land within an area into plots and indicate the number of dwelling units that exist within an area.¹¹⁴ The URPD 2010 surprisingly does not require the Local Plan to make provisions for sensitive or endangered areas within a locality. Considering that this is the most basic of all the Operative Development Plans, it should be required to highlight specific constraints or environmental challenges such as vulnerability to flooding, erosion or other such risks, especially given the need to adapt to climate change.

On Development Plans in Lagos, two of the interviewees of the study who are planning professionals noted that Local Plans had been upgraded to the level of Model City Plans. In addition to this, there are also Development Guides for specific local governments. The Model

¹¹⁰ Para 9 Part 3 *ibid.*

¹¹¹ Para 10 Part 3 *ibid.*

¹¹² Para 1 and 2 of the Third Schedule to the URPD 2010 *ibid.*

¹¹³ Para 3 (1) - (5) *ibid.*

¹¹⁴ Para 3 (4) and (9) *ibid.*

City Plans are aimed at engineering the process of redevelopment of already developed areas of Lagos State.¹¹⁵ According to the Report by the Planning Institute, the Model City Plans became necessary to address the “breakdown of physical and social infrastructure leading to... inadequate water supply... and the reduction in the quality of life of the residents”.¹¹⁶ Again, it is noted that no cognisance is taken of climate change or the need for adaptation in the upgrading of settlements within Lagos State.

One of the downsides of the Model City Plan is that it has led to lop-sidedness in physical planning governance within Lagos State. Interviewees in the study and the Town Planners Report on the state of planning note that the implementation of the City Model Plans requires state capacities; thus, officers are deployed from the State to the local governments and districts. This has led to the redundancy of the local planning authorities, and it amounts to a usurping of local government planning roles as provided for in the 1999 Constitution.

In order to effectively plan for climate change adaptation, there is the need to integrate specific climate change considerations into these Model Plans and to empower the local governments, as the first responders, to deal with issues that fall within their jurisdiction. As opposed to the State taking over planning at the local government level and at the same time carrying out functions that should ordinarily fall within the purview of the Federal government, that is, coastline planning management and trans-boundary planning concerns.

6.7 Findings on Challenges in the Implementation of the Law

The study revealed that officers saddled with the responsibilities of implementing the laws are often faced with numerous challenges. Some of the challenges encountered include the following:

- c. Lack of education: The lack of proper education on the part of the officials of the government often leaves them at a loss as to how to implement the law. The field work showed that often people are employed based on their having a godfather who puts them forward for employment and not necessarily because they are adequately qualified for

¹¹⁵ Lagos Interviewee Interview 10.

¹¹⁶ T Olurin and KG Jiriko ‘Assessment of planning tools and instruments’ p 53 op cit note 14.

the job. This thus presents a challenge as the officials are unable to understand and implement the provisions of the Law properly.

- d. Cultural empathy: According to several interviewees, this presents a challenge in the implementation of the Law. Lagos falls within a demographic group of highly cultural people and often, planners are unable to implement planning laws for fear of, for instance, leaving an elderly woman homeless or upsetting the cultural heritage of a group of people. Thus, in most cases, the planning officers would rather turn a blind eye than upset the culture or traditions that they also firmly believe.
- e. Lack of technical knowledge: The research also showed that the officers usually lack in the technical knowledge required to implement the Law. A significant factor in this regard is the lack of essential tools and training to carry out their duties. The field work also showed that these officers are not up to date with planning practices now applicable in other parts of the world.
- f. Lack of interest in the job: Many the officers and civil servants in general within the State lack any form of interest in their jobs. Many have become disenchanted due to poor working conditions or only took the job in the first place because nothing else was available. Thus, there is the factor that many of the officers lack any keen interest in their job or the responsibilities it entails.
- g. Unsuitability of the planning process: Several interviewees held the opinion that the planning process is unsuitable for Nigeria in general and Lagos in particular. The process is viewed as one of the last vestiges of colonialism and that it is ill-fitted as it does not take into consideration the cultural, social and economic realities of the society within which it is to operate. It was also pointed out that the Law applicable now has not improved much since the days of colonialism and this further makes it ill-suited as it has not factored in the changes in society since that era.
- h. Lack of sincerity of government and bad governance system: According to some interviewees, often the government makes laws that it lacks the capacity or will-power to implement. Or the laws are not implemented because the government lacks the sincerity

of purpose, and the economy is unfavourable for the implementation of such laws or policies. It was also pointed out that the lack of de-centralisation in the planning process within the State is a major bane to its effective implementation. The need for regional collaboration in the planning process was also highlighted. An interviewee made an interesting point on the duplicity of functions, in that several agencies or departments across the government are saddled with the same responsibility, and this impairs the effective implementation of the Law.

A major aspect of political insincerity is political influence which leads to the selective application of the law in a way that it favours members of the ruling class to the detriment of other members of the society. When individuals wield political influence, even when they are not actively part of the government, they can profoundly influence the decisions of the government as per policy and law implementations.

- i. Over-population and migration: According to one of the interviewees, about 3000 people enter Lagos daily, and most do not leave. Thus, the factors of over-population and migration lead to urban sprawl and the excessive growth which occurs at a higher pace than envisaged by the Law. Hence the Law is unable to keep up with the pace of development and urbanization, and much development is carried out without government approval or planning permits.
- j. The “ownership mentality”: A interviewee pointed out that at times in the implementation of the Law, they are challenged by the inhabitants of an area who strongly oppose the planning process and the proposed changes because they believe it would destroy their cultural and social heritage. He particularly cited the example of Lagos Island which is a hub of intense commercial activities and is the bedrock of cultural heritage in the city of Lagos. This represents a case of clashes between government plans and policies and the desires of the people.
- k. Lack of knowledge and illiteracy on the part of the citizens: Often it is difficult for planning officers to implement the Laws because many the populace are uneducated or lack knowledge of the Law. In this regard, it was suggested that there should always be

public participation and advocacy before the implementation of the Law is embarked upon.

1. Lop-sidedness of development and socio-economic instability: Interviewees also noted that the implementation of the Law is difficult because often these laws unduly favour the elite and pay more attention to highbrow areas of the City. This is often at the expense of the welfare of the generality, and it further makes more pronounced already existing socio-economic instabilities.

The above are some of the challenges encountered by officers of the physical and planning agencies in the implementation of the Law, presenting evidence as to why the letter of the Law is at total variance with the existing realities. To address these inadequacies and prepare for adaptation to climate change, there is the need to explicitly set out the guiding principles for physical planning within the State. Also, there is the need for advocacy and public participation which have been discussed in Chapter 2 as being essential to an effective planning process. In this regard, the Law must put into consideration the peculiarities of the areas being planned for, the special features and vulnerabilities, the risk of disasters and most importantly the interest of the people to which the plans will apply.

Further, the challenges highlighted above show that there is a great need for capacity building, training and technological enhancement. Observations in the course of the research include evidence that many of the government officials, even at the senior level do not even have the basic requirements such as a desk and chair to carry out their duties. Many of their offices are overcrowded with as many as ten people squeezing into an office space meant originally for not more than four people. It was also observed that many of them were not up to date on the issues of climate change and much less so on the issue of adaptation.

6.8 Conclusion

The chapter discussed physical planning in Lagos State, and the application of the 1992 Urban and Regional Planning Act throughout the country was highlighted. While the general intention of the Act was to unify planning throughout the country and establish set guidelines, what resulted was that federal planning officers bullied and usurped the role of States in the planning process. This led Lagos State to successfully challenge the legality of the Act in Court. The

outcome is that every State of the Federation now has its physical planning laws. The applicable Law on physical planning in Lagos now is the Urban and Regional Planning and Development Law of 2010. The Law provides a clear structure for physical planning within Lagos State. However as shown both in the Law and from the fieldwork, there are several areas in which the Law falls short regarding its effectiveness and ability to address developmental, environmental and socio-economic challenges which will inevitably escalate climate change adaptation problems.

First is the fact that the local governments within the States have been systematically stripped of their planning duties and specific agencies created by the State government to carry out these functions. Some interviewees of the study justified the move by the State government on the basis that the Local governments had over time become ineffective, corrupt and inept in carrying out their duties. This was majorly attributed to over politicising of governance, the lack of technical capacity and even cultural restraints. Others were of the opinion that physical planning within Lagos State could only be effective through the proper inclusion of the local governments in the planning process.

The role of the federal government was also considered in the planning process, especially as it relates to transboundary planning issues and coastline management. The involvement of the federal government in the planning process becomes even more essential in the face of impacts of climate change and the need to adapt to these impacts.

Also considered was the effectiveness of the Law in addressing socio-economic and environmental issues, as preparatory or possible inlets for the integration of climate change adaptation considerations into the Law. The Law minimally considers both environmental and socio-economic issues. Most interviewees in the study held the view that the Law ought to consider these factors as these to them form the basis of planning in the first instance.

The chapter also examined the use of development plans within Lagos; it was noted that the Operative Development Plan within the State has the force of Law and must be complied with by the government, the districts and local governments within the State as well as private developers. The issues dealt with in the various Development Plans were also discussed. It was

however noted that the Law does not require the Development Plans to expressly provide for existing or potential natural disaster risks or climate change risks.

For proper adaptation to the effects of climate change within Lagos State, which is a major coastal city in Nigeria, there is the need for the physical planning Law to give due consideration to the various issues that make Lagos particularly vulnerable to climate change and expressly incorporate these into the Law. Lagos, being a coastal city experiences both coastal erosion and flooding due to excessive rainfall; there have also been reported cases of landslides. These are environmental challenges that will become more pronounced by climate change. It is thus required that the physical planning Law should give due consideration to all these factors in the grant of development permits, in the siting of developments and provision of infrastructure. There is also the need for the Law to consider particularly vulnerable areas in the implementation of its new City Model Plans. To achieve this, there is the need for the State government to move towards an integrative environmental planning and management approach as against mere physical planning as is presently experienced. There is the need to properly engage the local governments in the planning process,¹¹⁷ promote sustainable development as a fundamental means of adaptation, and build resilience to climate change in line with best international planning guidelines.¹¹⁸ The next chapter considers physical planning in South Africa, using Cape Town municipality and the Western Cape provincial government as a case study. This is done the light of issues highlighted in relation to Lagos Nigeria.

¹¹⁷ UN Habitat International Guidelines on Urban Planning op cit note 69 pp 4 and 8-10.

¹¹⁸ Ibid, pp 20-22.

CHAPTER 7: PHYSICAL AND SPATIAL PLANNING IN SOUTH AFRICA

7.1 Introduction

This chapter considers adaptation to climate change and physical planning in South Africa in the various ways it is couched: spatial planning, land use planning and management, and coastal planning.¹ Physical planning in South Africa spans all spheres of government and presents an example of collaborative governance discussed in Chapter 4. Although the actual physical planning is the responsibility of the municipalities,² other spheres of government have significant input regarding frameworks and guidelines that regulate planning all over the Republic.³ The analysis of laws on planning in South Africa starts with the 1996 Constitution. This chapter then examines national planning legislation, provincial planning legislation, that is, the Western Cape Land Use Planning Act 3 of 2014, and finally, the City of Cape Town Municipal Planning Bye-Laws.⁴

The research question which this chapter seeks to address is: “What roles do the three spheres of government in South Africa play, and how do they interact in climate change adaptation through spatial planning laws?” Considering that not all planning laws across spheres of government in South Africa make direct reference to climate change adaptation,⁵ to answer the research question the chapter assesses the contributions of the spatial and land use planning laws in reducing social and geographical vulnerabilities and building resilience. This is then linked to

¹ The terms physical planning, spatial planning and land use planning are used in this thesis. In the context of this chapter they refer to the process of land use and development planning. This is in line with the position that these terms could be used interchangeably to describe the process of land use planning within South Africa. This view is expressed in AR Patterson ‘Draft case study: South Africa’ (unpublished) prepared for IUCN Environmental Law Centre Integrated Planning Project p10.

² S 156(1) and (2) of the Constitution of South Africa (referred to as ‘the Constitution’ in this chapter) empowers municipalities to exercise executive and legislative powers over matters listed in Parts B of Schedule 4 and 5 of the Constitution.

³ This is pursuant to section 155(7) of the Constitution which enables the national and provincial governments to exercise both legislative and executive authority ensure that municipalities effectively carry out their responsibilities as contained in Schedules 4 and 5, which include land use planning and management.

⁴ Published in Provincial Extraordinary Gazette 7414 of 29 June 2015.

⁵ L Kotze and others ‘Climate change law and governance in South Africa- Setting the scene’ in TL Humby et al *Climate Change: Law and Governance in South Africa* (2016) p 1-22.

climate change adaptation using the City of Cape Town as a case study. To achieve this, the chapter entails both doctrinal and empirical research.

The doctrinal aspect of the research considers the planning laws through primary and secondary legislation. The empirical aspect of the study relating to this chapter entails the assessment of interviewees' responses on the effectiveness of physical planning laws, especially in relation to adaptation to climate change and the reduction of social and geographical vulnerabilities in the City of Cape Town.

The empirical study in this chapter was carried out through semi-structured interviews as was done in Chapter 5. The interviewees in the study were drawn from academia, policy makers and implementers at the municipality and provincial level, and private practitioners in environmental management, planning and development field in Cape Town.⁶

7.2 Relevance of the 1996 Constitution of the Republic of South Africa to physical planning

The Constitution of the Republic of South Africa forms the basis of all laws operative in the country as the basic norm. It is thus pertinent that all laws relating to spatial and land use planning be in conformity with and get their validity from the Constitution.

Relevant to land use planning in South Africa is the constitutional provision on co-operative governance between spheres of government.⁷ The Constitution provides that each sphere of government is “distinctive, interdependent and interrelated”,⁸ and no sphere of government is to assume any power or responsibility except as assigned to it by the Constitution itself.⁹ The fourth and fifth schedules to the Constitution set out the duties and competencies of each sphere of government in relation to land use management and planning.

⁶ A description of the interviewees is attached as an Appendix to this thesis. The description is given to enable a better appreciation of their opinions. In line with the ethical requirements of this thesis, their names and other personal details are kept confidential.

⁷ Ss 40 and 41 op cit note 2.

⁸ S 40 *ibid*. This provision speaks to the discussion on multi-level governance in the adaptation to climate change discussed in Chapter 4. As with adaptation, land use planning and management also call for and require inter-governmental collaboration to aid effective planning from the community all the way to the national level.

⁹ S 41 of the Constitution op cit note 2.

The legislative competence of the national and provincial spheres of government regarding land use planning and developmental activities extends to disaster management, environment, housing, regional planning and development, and urban and rural development.¹⁰ The local governments in relation to planning have the legislative competences on building regulations, municipality planning, municipality public works and storm-water management in built-up areas.¹¹ Regarding executive competence, the provincial government is only empowered regarding provincial planning, while the local governments have all other planning responsibilities by virtue of section 156(1) of the Constitution which grants to the municipalities the power to administer municipal planning along with other matters listed in Schedules 4 Part B and Schedule 5 Part B.¹² The issue of what amounts to “municipal planning” and the roles of others spheres of government in planning was settled in the cases discussed below, and these cases culminated in the SPLUMA which is also discussed in this chapter.

There have been instances of overlap as various spheres of government carry out their duties in relation to land use and planning.¹³ The Constitutional Court acknowledged this possibility of overlap by noting that the functions of the various spheres of government “are not contained in hermetically sealed compartments.”¹⁴ The Court however further noted that despite the lack of watertight compartmentalisation, the functions of each sphere “remain distinct from one another.”¹⁵

¹⁰ Part A of Schedule 4 *ibid*. This Schedule provides for areas of concurrent National and Provincial legislative competence, however by virtue of s 156 (4) of the Constitution, matters falling within the concurrent jurisdiction of the National and Provincial spheres of government may by agreement be assigned to a municipality.

¹¹Part B of Schedule 4 pursuant to s 156 (1) of the Constitution which provides for the executive authority of municipalities.

¹² Part B of Schedule 5 of the Constitution *op cit* note 2.

¹³ In this regard, the CC held in the *Gauteng Development Tribunal* Case that “41(1) (e)-(g) [of the Constitution] establishes the principles of co-operative government and intergovernmental relations... it specifically requires the spheres of government to respect the functions of other spheres, not to assume any functions or powers not conferred on them by the Constitution and not to encroach upon the functional integrity of other spheres. This is amplified by section 151(4) which precludes the other spheres from impeding or compromising a municipality’s ability or right to exercise its powers or perform its functions.”

¹⁴ *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal and Others* [2010] ZACC 11 para 55.

¹⁵ *Ibid*.

In essence, each sphere of government is required to act within its constitutional boundaries and fulfil its roles in that regard.¹⁶ This point is adequately couched in the Constitution to the effect that all spheres and organs of government are to fulfil their duties and responsibilities in such a way as not to “encroach on the geographical, functional or institutional integrity” of other spheres of government.¹⁷ The constitutional provision on cooperative governance regarding spatial planning is relevant in the adaptation to climate change. As discussed in Chapter 4, governmental inter-relationship is essential to ensure the effectiveness of climate change action.

The provisions of section 24 of the Constitution can very well be extended to the use of land, as land use is the subject matter of planning and development.¹⁸ It can also be extended to measures necessary to mitigate and adapt to climate change. In this regard, a fieldwork interviewee mentioned that if climate change adaptation is considered important enough, it would soon become a further factor restricting or qualifying property rights.¹⁹

Further, the Constitution provides for the safeguard of property rights.²⁰ The constitutional provision on property rights is significant as land use planning and management often entails the restriction of development rights.²¹ It provides that no one may be denied their rights to property arbitrarily unless such deprivation is by way of expropriation in line with a legitimate statute of general application.²² It further stipulates the valid grounds for the expropriation of property rights, which is mainly public purpose and interest.²³ Thus, in line with the Constitution, land use planning limitation on private property or developmental rights must take into account, amongst

¹⁶ NJJ Olivier, C Williams and PJ Badenhorst ‘*Maccsand (Pty) Ltd v City of Cape Town* 2012 (4) SA 181 (CC)’ PER / PELJ 2012(15)5 at 546.

¹⁷ S 46(1) of the Constitution op cit note 2.

¹⁸ J Glazewski and L du Toit, ‘Planning Law and the Environment’ in Jan Glazewski (Ed), *Environmental Law in South Africa* Loose leaf edition (issue 4) 2016, p 9-7.

¹⁹ CT Interviewee Interview 4.

²⁰ S 25 of the Constitution highlights the rights and duties of the citizenry and the government respectively.

²¹ The restriction of rights, according to an interviewee in the fieldwork is an essential part of land use or physical planning. He notes that "the Constitution does enable all kinds of planning... that would impact on property rights. The Constitution presumes that property rights are not unlimited, they are limited by the gradual argument and processes of managing cities, managing the urban environment and all of the processes, managing the environment, heritage, and so on." CT Interviewee Interview 4.

²² S 25(1) and (2) of the Constitution op cit note 2.

²³ S 25 (2) (a) ibid.

other things, the necessity and extent of the limitation, and such limitations must be based on human dignity, equality and freedom.²⁴

7.3 The Development Facilitation Act of 1995

The Development Facilitation Act (DFA)²⁵ was the forerunner legislation to the Spatial and Land Use Management Act of 2013 (SPLUMA) by which it has been repealed. It was the applicable law regarding land use and development within the Republic and provided a guideline for the “exercise of discretion...dealing with land development, including the subdivision, use and planning of or in respect of land”.²⁶ The DFA was to provide for reconstruction and development,²⁷ and was to be applied to ease “cumbersome planning procedures”,²⁸ and to fast-track decision making on low-cost housing and infrastructural development.²⁹ The provincial development tribunals created by the DFA³⁰ infringed on the Municipalities’ jurisdiction, they could operate within individual jurisdictions³¹ and, amongst other functions, had the power to grant development applications from landowners and developers.³² This meant that the Provincial Tribunals usurped the roles of Municipality development tribunals under the DFA.³³ This usurping of roles led to the challenge by the City of Johannesburg of the constitutionality of the Provincial Tribunals in relation to planning duties of the Municipalities. The constitutionality of the DFA was successfully challenged in the case of *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal*.³⁴

²⁴ S 36 *ibid*.

²⁵ Act No. 67 of 1995.

²⁶ S 2(c) *ibid*.

²⁷ J Glazewski and L du Toit, ‘Planning Law and the Environment’ *op cit* note 18 p 9-7.

²⁸ J Glazewski and L du Toit *ibid*, M Kidd ‘Country Report: South Africa: The Spatial Planning and Land Use Management Act 16 of 2013’ 5 *IUCNAEL Ejournal* 240.

²⁹ M Kidd *ibid* at 240.

³⁰ S 15 DFA *op cit* note 25.

³¹ S 15(10) DFA *ibid*.

³² S 31 DFA *ibid*.

³³ M Kidd *op cit* note 28.

³⁴ *Op cit* note 20.

7.3.1 City of Johannesburg v Gauteng Development Tribunal³⁵

The case vividly illustrates the tension between local and provincial government spheres, and the clarification of the roles of local governments in planning. The City of Johannesburg, upon failure of the parties to reach an amicable resolution of their differences, instituted an action at the High Court, amongst other things, to challenge the constitutionality of the actions of the Provincial Tribunals. The matter went on appeal to the Supreme Court of Appeal (SCA) following the decision of the High Court that the actions of the provincial tribunals did not amount to an infraction on the responsibilities of the municipality. The SCA held that the actions of the Provincial Tribunal were an intrusion on the areas of competencies and jurisdiction of the Municipality. And that the vesting of parallel authority in two separate organs of government would inevitably lead to disruptions “to orderly planning and development within a municipal area”.³⁶

Further, the SCA, in recognition of the primary role of municipalities in land use planning, noted that the 1996 Constitution set out the roles of municipalities,³⁷ and that those roles are exclusive to the municipalities. Thus, any legislation purporting to vest those duties in any other sphere of government was to the extent of such vesting invalid.³⁸ The SCA pointed out that as far as planning was concerned, each sphere of government had its distinctive role to play. Also, planning responsibilities are to flow from the general responsibility of giving broad guidelines and frameworks to the narrower responsibilities of the provincial sphere in also offering guidelines and finally to the narrowest and most specific responsibilities of seeing to planning and the implementation of planning procedures at the local sphere of governance.³⁹

In the final analysis the SCA held that the planning responsibilities of the municipalities as provided in the 1996 Constitution could not be construed in any way as to fall outside the purview of the responsibilities assigned to the Provincial Tribunals by the DFA. The SCA further held that the use of the term ‘municipal planning’ in Part B of Schedule 4 to the

³⁵ Ibid.

³⁶ *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal* [2009] ZASCA 106 para 1 p 3.

³⁷ Ibid para 24 p 13.

³⁸ Ibid para 28 p 14.

³⁹ Ibid para 36 p 17.

Constitution included the functions assigned to the municipalities under the Land Use Planning Ordinance. Thus, those duties could not be assigned to other organs or spheres of government by any legislation as was done in the DFA. To this end, chapters V and VI of the DFA were declared invalid.

The decision of the SCA was upheld by the Constitutional Court (CC) to the effect that “the impugned chapters were inconsistent with section 156 of the Constitution read with Part B of Schedule 4”.⁴⁰ The CC further held that each sphere of government had exclusive jurisdiction to carry out their duties and that the duties of one sphere of government could not be deemed as extending into the jurisdiction of another,⁴¹ except in a supervisory role as in the case with the national government over land use planning in the municipalities. According to the CC,

[t]he legislative authority in respect of matters listed in Part B of Schedule 4 vests in the national and provincial spheres concurrently, while the legislative authority over matters listed in Part B of Schedule 5 vests in the provincial sphere exclusively. But the national and provincial spheres cannot, by legislation, give themselves the power to exercise executive municipal powers or the right to administer municipal affairs. The mandate of these two spheres is ordinarily limited to regulating the exercise of executive municipal powers and the administration of municipal affairs by municipalities.⁴²

Following the Constitutional Court’s decision on the unconstitutionality of the Development Facilitation Act, an order of invalidity was made regarding chapters V and VI of the Act which empowered provincial tribunals to consider development applications over land falling within the jurisdiction of the municipalities. This eventually culminated in the repeal of the DFA and its replacement by the Spatial Planning and Land Use Management Act of 2013 outlined in section 7.4 below.

While climate change adaptation was not an issue before the Courts in this case, the repeal of the DFA gave room for the passing of a well thought out planning legislation. Although the SPLUMA considers climate change adaptation, it takes cognisance of the environmental, social and economic consequences of planning which can be suited to address climate change impacts.

⁴⁰ *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal and Others* op cit note 14 para 70.

⁴¹ Ibid para 68 p 40.

⁴² Ibid para 59 p 35.

7.3.2 Maccsand (Pty) Ltd v City of Cape Town and others⁴³

The issue for determination in this case, was that of the overlap of jurisdiction between an organ of the national sphere of government and that of the municipality.⁴⁴ The contention as it related to land use planning was whether having been granted a mining right under the Mineral and Petroleum Resources Development Act (MPRDA),⁴⁵ it was necessary for the mining right holder to apply for a change of the use of land from the municipality. The application for change of use was required to be made pursuant to the provisions of the Land Use Planning Ordinance,⁴⁶ the DFA had not been passed at the time this matter commenced. The land upon which a mining right had been granted was zoned by the Western Cape as open space and belonged to the Municipality. Given the intended use of land which the land was to be put which was in contravention of the purpose for which it had been zoned in the IDF, the Municipality applied to the Court for a determination of whether or not the land use regulations and laws applied to land earmarked for mining. At the High Court (HC),⁴⁷ it was held that the fact that the land was to be used for mining did not preclude the application of the provincial Land Use Planning Ordinance.⁴⁸ The HC also acknowledged the possibility of an overlap of authority evident in the case at hand.⁴⁹ The HC further held that mining constituted use of land and this brought the proposed activity under the purview of provincial and local legislation on land use planning.⁵⁰

At the Supreme Court of Appeal,⁵¹ it was held that municipalities have a central role to play in land use planning within their jurisdictions.⁵² The SCA further held that the LUPO was applicable alongside the MPRDA and it would be out of place for the Minister of Mining to provide “a surrogate municipal planning function” in place of the requirements of the LUPO.⁵³ Rather, according to the Court, both government departments were to perform their duties which

⁴³ [2012] ZACC 7.

⁴⁴ Ibid at p 2.

⁴⁵ Act 28 of 2002.

⁴⁶ Ordinance 15 of 1985.

⁴⁷ *City of Cape Town v Maccsand (Pty) Ltd and Others* [2010] ZAWCHC 144.

⁴⁸ Ibid at p 21.

⁴⁹ Ibid at p 20.

⁵⁰ Ibid at p 24-25.

⁵¹ *Maccsand (Pty) Ltd and another v City of Cape Town and Others* [2011] ZASCA 141.

⁵² Ibid para 21 p 9.

⁵³ Ibid para 33 p 13.

were aimed towards different ends in line with their constitutional competencies.⁵⁴ In essence, the SCA found in favour of the municipality on the need to apply for a rezoning of the land before it could be used for mining.

At the CC, it was held as follows:

While the MPRDA governs mining, LUPO regulates the use of land. An overlap between the two functions occurs due to the fact that mining is carried out on land. This overlap does not constitute an impermissible intrusion by one sphere into the area of another because spheres of government do not operate in sealed compartments.⁵⁵

The CC also emphasised the relevance of land use planning regulations to other sectors and developmental activities by pointing out that the Land Use Planning Ordinance, and by extension, any planning law applicable, becomes relevant where any development or activity has to do with land use.⁵⁶ The decision of the Court in this case also highlights the independence of spheres of government in the carrying out of their function. The CC iterates the provisions of the Constitution on individual competencies of each sphere of government.⁵⁷ Moreover, the CC emphasised that the fact that the land use involved a permit granted by the national government did not preclude the Municipality from carrying out its constitutional duty. Thus, the requirement by the Municipality that the exercise of a mining right granted by the national government was subject to an application for re-zoning was in order and not unconstitutional.⁵⁸ The conclusion was that each sphere of government is entitled to make any decision pursuant to its constitutional functions. However, where the exercise of its powers encroaches on the jurisdiction of another sphere of government, there is a duty to seek the consent of the relevant sphere of government or its agency.

In line with the principles of co-operative government, the case highlights the essence of mutually exclusive spheres of government. Specifically, it iterates the provision of the Constitution⁵⁹ that municipalities have a duty to carry out their administration, including land use

⁵⁴ Ibid para 34, p 14.

⁵⁵ *Maccsand (Pty) Ltd v City of Cape Town and Others* op cit note 43 para 43 p 24.

⁵⁶ Ibid para 43, p 24.

⁵⁷ Ibid para 47 p 26.

⁵⁸ Ibid para 48 p 26.

⁵⁹ S 153 (a) of the South African Constitution.

and planning in a way to minimise negative impacts, including climate change.⁶⁰ The decision of the Court in this case also ratifies place-specific planning which is essential for planning as an effective tool of climate change adaptation. This decision reiterates the use of zoning as a planning tool in two ways, first to safeguard areas of geographical vulnerability and secondly the designation of activities that can be carried out within specific areas.

*Minister of Local Government, Environmental Affairs and Development Planning, Western Cape v The Habitat Council and others*⁶¹

The consolidated matter instituted by the City of Cape Town and the Habitat Council originated at the Western Cape High Court contesting the constitutionality of appeals of the decision of the City of Cape Town's Spatial Planning, Environment and Land Use Management Committee to the Western Cape Provincial Government by section 44 of the LUPO.⁶² The case was based on the refusal of the City of Cape Town to grant a 'special consent' for demolition and construction in an area that fell within an urban conservation area.⁶³ Upon the City's refusal to grant the special consent, the developer appealed to the Provincial government of the Western Cape who upheld the developer's appeal,⁶⁴ and gave its own set of conditions for the development.⁶⁵

In determining the matter, the HC held that provincial and municipal planning should be contextualised differently and that the prefixes 'provincial' and 'municipal' should be viewed as qualifying each sphere's role in planning.⁶⁶ Given the distinction between the extent of municipal planning and provincial planning, the Court held that section 44 of the Land Use Planning Ordinance allowing the provincial planning authority to hear appeals from planning decisions made by a municipality was unconstitutional.⁶⁷

⁶⁰ A du Plessis and LJ Kotze 'The heat is on: Local government and climate governance in South Africa' 58 (1) *Journal of African Law* 145 – 174 at 156.

⁶¹ [2014] ZACC 9.

⁶² *Habitat Council and Another v Provincial Minister of Local Government, Environmental Affairs and Development Planning in the Western Cape and Others* [2013] ZAWCHC 112 Pp 2-3.

⁶³ *Ibid* p 6, para 20 – p 7 para 20.

⁶⁴ *Ibid* para 25 p7-8.

⁶⁵ *Ibid* para15 p8.

⁶⁶ *Ibid* para 25 p 12 – para 5 p 14.

⁶⁷ *Ibid* para 15 p 28 – para 5 p 29.

The Western Cape Province, through the Minister of Local Government, Environmental Affairs and Development Planning, made an application to the CC for a confirmation of the decision of the High Court.⁶⁸ In confirming the decision of the HC, the CC held that no matter how big the issues of municipal zoning and subdivision, decisions on such matters should reside in the municipality and not the national or provincial government.⁶⁹ The CC also refused the argument by the Provincial government on the need to have appellate powers in the exercise of its “regulating” role over municipalities.⁷⁰ It held that section 155(7) of the Constitution did not envisage the Province exercising appellate powers over the decisions of the Municipality.⁷¹ In upholding the order of invalidity made by the HC, the CC held that the Provincial government cannot be allowed to exercise appellate powers over the decisions of the municipalities, even on an interim basis. Rather that the duty on the Province is to use its constitutional powers to assist the municipality in making decisions properly.⁷² In essence, the Constitutional Court confirmed that section 4 of the LUPO was unconstitutional and invalid.⁷³

This judgement of the Court highlights the independence of the spheres of government. The municipalities are empowered to take decisions, make policies and laws, without recourse to other spheres of government, for the governance of the areas within their jurisdiction as far planning and land use management is concerned. As will be seen later in this chapter, the City of Cape Town has taken advantage of this to incorporate climate change adaptation and mitigation into its planning Bye-Laws regardless of similar provisions being absent from the SPLUMA. The independence to take decisions on land use also implies that municipalities will be able to carry out adaptation within their jurisdiction regardless of the actions or inactions of other spheres of government in that regard.

⁶⁸ *Minister of Local Government, Environmental Affairs and Development Planning, Western Cape v The Habitat Council and Others* op cit note 61.

⁶⁹ Ibid para 19, p 15.

⁷⁰ Ibid para 25, p 19.

⁷¹ Ibid para 22, p 17.

⁷² Ibid para 27 p 20.

⁷³ Ibid para 31 p 21.

7.3.3 Implications of municipal planning on the planning system in South Africa

In addition to the core issues of co-operative governance highlighted in the cases above, Du Plessis and Kotze note that these cases also serve to protect the constitutional powers of the local governments power to respond to climate change.⁷⁴ . To buttress this point, all interviewees in the fieldwork were unanimous in their opinions that the municipality is the right sphere of government to handle planning responsibilities, and by extension social and economic development at the local level. However, CT Interviewee 8 noted that action in the local government sphere must be informed by provincial planning initiatives and national planning initiatives. This, according to the interviewee, creates a kind of synergy through the ‘filtering down’ process which eventually places the actual tangible implementation of planning legislation within the purview of local planning authorities.⁷⁵

Despite the consensus on municipal planning, other interviewees in the fieldwork expressed reservations about the planning system established under the SPLUMA. Some of the reservations expressed include the multiplicity of planning systems within the Republic, which the SPLUMA set out to unify.⁷⁶ In this regard, it is argued that the SPLUMA set out to provide a uniform system of spatial planning and land use management,⁷⁷ while allowing for independence of the municipalities to carry out their own are-specific planning.

Other shortcomings of the municipal planning system highlighted by the interviewees include the lack of workforce, the continuous tension between the provinces and municipalities on the implementations of the Spatial Development Framework,⁷⁸ insufficient finances and funding, and necessary skills and technology in smaller municipalities especially in more rural areas of the country.⁷⁹ Also highlighted is the fact that the municipalities often do not have “control of many important levers in the city space” such as public transportation. It was also noted that “the provinces have the biggest landholding within the city, the municipality has no say in that and

⁷⁴ A Du Plessis and LJ Kotze op cit note 60 at 157.

⁷⁵ CT Interviewee Interview 8.

⁷⁶ CT Interviewee Interview 1.

⁷⁷ S 3 (a) of the SPLUMA.

⁷⁸ CT Interviewee Interview 9.

⁷⁹ CT Interviewee Interview 7

that is meant to be resolved through intergovernmental mediations and operations, and that is highly dysfunctional.”⁸⁰ The argument proffered in this regard by CT Interviewee 8 is that if the city oversees municipal planning, then it should control all the resources necessary to fulfil its planning responsibilities. The above opinion was also echoed by another interviewee who noted that most municipalities lack adequate information to carry out their planning responsibilities. The lack of information means at times decisions must be made without sufficient information or technical capacity to carry out necessary investigations.⁸¹

The implications of these observations from the fieldwork regarding municipal planning as a tool of adaptation to climate change is that the ability of the municipalities would be limited in reducing vulnerabilities. This will be particularly so for smaller municipalities. CT Interviewee 6 noted that climate change being the ‘wicked problem’ it is, creates what she described as a “confluence of really complicated things”. She noted that municipal planning already had socio-economic and environmental aspects and now climate change had been introduced into the mix and its interactions with existing problems such as flooding, droughts, fires and so on.⁸² On the other hand, it is argued that the passing of the SPLUMA avails municipalities to take independent action on adaptation based on the development principles set out in the Act.⁸³

7.4 The Spatial Planning and Land Use Management Act of 2013

As is the case in Nigeria, the decision of the Courts on the roles of each sphere of government in land use planning led to a fundamental shift in physical planning legislation in South Africa. As a result of the law reform in the physical and land use planning sector, the planning regime, which has the SPLUMA as its flagship legislation, is more integrated and entails spatial planning, land use management and integrated development planning.⁸⁴

⁸⁰ CT Interviewee Interview 3.

⁸¹ CT Interviewee Interview 7.

⁸² CT Interviewee Interview 6.

⁸³ Section 7 of SPLUMA, A Taylor ‘Urban Adaptation’ in T Humby et al *Climate Change: Law and Governance in South Africa* (2016) pp 11-14,15.

⁸⁴ A Barnes and G Gerber ‘The role of land use planning in governance and delivery’ in Western Cape Government, Department of Environmental Affairs and Developmental Planning *Land Use Planning Law Reform in the Western Cape: The Road to Transformation* p 7-13.

The planning process in South Africa is regulated by the Spatial Planning and Land Use Management Act (SPLUMA).⁸⁵ The Act aims at providing a framework for planning and land use management within South Africa considering the “inclusive developmental, equitable and efficient spatial planning”⁸⁶ across the various spheres of government.

The planning legislation in South Africa exists at the national, provincial and municipality spheres of government. At the national level, the SPLUMA makes provisions for spatial planning and functions as a framework or guideline for planning at the provincial and municipality levels.⁸⁷ Section 5 of SPLUMA makes provisions for planning at the municipality, provincial and national spheres of government. It also itemises the duties of the different spheres of government.⁸⁸

The SPLUMA provides a general framework and sets out the government’s objectives regarding spatial planning and development. These objectives include:

- provision of a uniform system of land use and spatial planning applicable all over the country,⁸⁹
- promotion of social and economic inclusion through the planning process;
- engendering development and sustainable land use through requisite norms, principles and standards;
- ensuring collaboration and cooperation among the three spheres of government; and
- providing for avenues to create an equitable and inclusive spatial planning, development and land use management system that takes cognisance of all members of the society.⁹⁰

To achieve the above objectives, the SPLUMA requires that each sphere of government should prepare and adopt a “Spatial Development Framework” (SDF). It also sets out the principles and

⁸⁵ Act No 16 of 2013.

⁸⁶ The Long title to the Spatial Planning and Land Use and Management Act No 16 of 2013.

⁸⁷ J Glazewski and L du Toit, ‘Planning Law and the Environment’ op cit note 18 pp 9-7&8, S Berrisford and others ‘SPLUMA Implementation: Guidance for practitioners’ (unpublished course material 2017) p.17.

⁸⁸ S 5 (1) – (3) of the SPLUMA op cit note 85.

⁸⁹ In order to promote uniformity in the planning system, s 5 of the SPLUMA provides for categories of planning. Municipal planning entails, amongst other things, the control and regulation of the use of land within the municipality, while provincial planning entails amongst other things, ensuring compliance by the municipalities with the guidelines set out in the SPLUMA. At the national level, planning roles include measures to monitor and support other spheres in their planning functions. The provision of section stresses the importance of uniformity in spatial planning envisaged in objectives itemised in section 3. Further on the need to ensure uniformity, Schedule 1 to the SPLUMA provides a list of things to be covered by provincial planning legislation.

⁹⁰ S 3 (a) to (d) of the SPLUMA op cit note 85.

guidelines which are to guide the spatial planning and land use management and development process.⁹¹ It further makes provisions for the procedure to be adopted in the making and granting of development applications within the country.⁹² These principles referred to as ‘development principles’ are to apply across all spheres of government and to all agencies of government in carrying out their land use management and developmental activities.⁹³

The responsibilities of the municipalities under the SPLUMA include the compilation, approval and review of Integrated Development Plans,⁹⁴ a Spatial Development Framework and a land use scheme.⁹⁵ It is argued that the SDFs, following the principle of spatial justice should include informal settlements and the socio-economic and environmental conditions affecting such areas.⁹⁶ The Act also puts within the jurisdiction of the municipalities the right to control and regulate land use, provided such uses do not affect or infringe on provincial or national interests.⁹⁷ At the provincial sphere of government, the SPLUMA empowers the provinces also to compile, approve and review the spatial planning development framework. The SPLUMA requires the government at the provincial level to monitor the compliance of the municipalities with both national and provincial legislation in their preparations and implementation of land use and spatial management processes. The provinces are empowered by the SPLUMA to make laws towards the implementation of provincial planning.⁹⁸

At the national sphere of government, planning entails more of legislation, policy formulation and framework compilation. The SPLUMA provides that the national government is empowered to compile national spatial development framework, as well as make and review policies and laws necessary for the implementation of national planning to properly carry out their duties regarding spatial planning, land use management and land development.⁹⁹

⁹¹ S 4 (a) and (b) *ibid.*

⁹² S 4 (d) *ibid.*

⁹³ S 6 *ibid.*

⁹⁴ According to the Local Government: Municipal Systems Act, an Integrated Development Plan is a single strategic document which aligns the resources and capacity of the municipality with its development plans.

⁹⁵ S 5(1) (a) and (b) of the SPLUMA *op cit* note 85.

⁹⁶ A Taylor ‘Urban adaptation’ *op cit* note 83 p 11-14.

⁹⁷ S 5(1) (c) of the SPLUMA *op cit* note 85.

⁹⁸ S 5 (2) *ibid.*

⁹⁹ S 5 (3) (a) and (c) *ibid.*

Regarding intergovernmental support in the planning process, Chapter 3 of the SPLUMA requires the government at the national level to provide support for and monitor the activities of other spheres of government in relation to spatial planning and land use management.¹⁰⁰ This is particularly about compliance with the set principles, norms and guidelines on spatial planning, in their drawing up of spatial development frameworks and generally in the implementation of the provisions of the Act.¹⁰¹ The provincial government is also expected to provide similar support to the local government and to ensure that legislation at the provincial level gives room for local government participation in the planning and land use management process.¹⁰²

The SPLUMA in Chapter 2 sets out basic principles and norms which are to guide development and the planning process in South Africa. The Act stipulates the need to adopt or apply the principles of spatial justice to address the inadequacies and lop-sidedness of developments and planning processes of the past. In the same vein, the SPLUMA requires that the planning process be inclusive and equitable regarding people and areas. Particularly cognisance should be taken of people in informal settlements, former homeland areas and areas characterised by widespread poverty and deprivations.¹⁰³ The Act pays attention to people of little or no means or people disadvantaged in some ways as it highlights the need to redress inadequacies in the access to land, as well as the gradual re-integration of informal areas through socio-economic developments.¹⁰⁴

SPLUMA also requires adherence to the principle of sustainability. It is required that land development should be within the financial capacity of the specific sphere of government where it is to be implemented. The principles of sustainability and efficiency also require that planning and development decisions should be taken in ways that would reduce social, economic and environmental impacts and such decisions should be in line with the requirements of environmental management.¹⁰⁵

¹⁰⁰ S 9 (a) and (b) *ibid.*

¹⁰¹ S 9 (b) *ibid.*

¹⁰² S 10 (6) *ibid.*

¹⁰³ S 7 (a) (ii) *ibid.*

¹⁰⁴ S 7 (a) (iii) – (v) *ibid.*

¹⁰⁵ S 7 (b) and (c) *ibid.*

The SPLUMA also considers the principle of *spatial resilience* by which land use plans and management processes are to be carried out sustainably, especially as it affects communities most likely to experience some form of risks or disasters.¹⁰⁶ This provision provides an avenue to integrate climate change adaptation into the planning process as it recognises the fact that certain areas are socially or geographically vulnerable. The principles of inclusivity and equitability can also be applied in ensuring that adaptation through planning reaches all members of the society. The Act finally provides for the application of the principle of good administration or governance as it relates to land use and spatial planning. In this regard, it requires an integrated approach across spheres of government, as well as public involvement and participation in the spatial planning and land use management process.¹⁰⁷

7.4.1 Spatial Development Frameworks under SPLUMA

In the development of the Spatial Development Frameworks (SDFs) the various spheres of government are required to put into consideration the environment and all related issues as provided for in environmental management regulations and policies.¹⁰⁸ The Act also gives consideration to socially vulnerable areas and requires that cognizance should be taken of such areas in drawing up environmental, social and economic objectives.¹⁰⁹ In this regard, there is the need for the SDFs to give consideration to climate change and its impacts as they affect specific areas, and how such impacts can be addressed. This could be through development restrictions or the imposition of certain obligations in order to promote individual and group adaptation to the impacts of climate change. Ways in which land use planning can aid climate change adaptation will be discussed further in detail in Chapter 5.

As noted in Chapters 3 and 4, effective climate change adaptation requires collaborative governance between spheres of government and non-governmental players. In this regard, the SPLUMA provides for this collaboration where the spatial or land use management process is likely to affect other spheres of government.¹¹⁰ An elaboration of this provision would be where

¹⁰⁶ S 7 (d) *ibid.*

¹⁰⁷ S 7 (e) *ibid.*

¹⁰⁸ S 12 (1) (m) *ibid.*

¹⁰⁹ S 12 (1) (h) *ibid.*

¹¹⁰ S 13 (3) (a) *ibid.*

the issues involved are trans-boundary or inter-jurisdictional, such as climate change and its impacts. In the same vein, the provincial SDF is required to coordinate municipal SDFs for municipalities where the developments or areas are contiguous,¹¹¹ and to give due consideration to development strategies of the national government as they affect the provinces. In this regard again, where the national SDF makes provisions for areas vulnerable to climate change, the provinces and municipalities become bound to reflect such factors in their SDFs too. To further buttress this point the SPLUMA provides that the national SDF must consider issues that are likely to “impact on spatial planning, land development and land use management”.¹¹²

Despite the levels of planning responsibilities and the various decisions of the CC on the responsibilities of each sphere of government as far as planning within the Republic is concerned, there still exists the likelihood of conflicts. In this regard, CT Interviewee 9 noted that where conflicts arise, there is no right or wrong answer as to whose decisions should take precedence, but rather in resolving those conflicts the courts or relevant bodies should view each matter on its own merits.¹¹³ Her opinion can particularly be related to the possibilities of conflicts arising regarding climate change. She holds the opinion that there should be a provincial oversight on issues relating to climate change.

...It's different for different situations and for different municipalities... you will get some municipalities that have fully embraced the idea of, for example, adaptation and interconnectiveness ... I think if a municipality has got that perspective then the decision-making power should sit with the municipality. But if you've got a municipality for example that wants to attract investment and allow any kind of development at any cost then that's fundamentally a problem. Because you have all these issues around sustainability, and building resilience and the ecosystems of your businesses communities etc and such a Municipality hasn't taken that approach.¹¹⁴

It is noted at this point that the opinion aired by CT Interviewee 9 is contrary to the decision of the CC in *The Habitat* case¹¹⁵ and provisions of the SPLUMA that the provincial government is

¹¹¹ S 16 *ibid.*

¹¹² S 13(3) (b) *ibid.*

¹¹³ CT Interviewee Interview 9.

¹¹⁴ CT Interviewee Interview 9.

¹¹⁵ [2014] ZACC 9.

not to exercise appellate powers over planning decisions of the municipality.¹¹⁶ The question that arises here is whether adaptation to climate change can constitute an exception to that rule.¹¹⁷

The SDF at the municipal level is the most detailed of all, and it forms part of the greater integrated development plan of the municipality.¹¹⁸ There is, of course, the requirement that it conforms to the set guidelines of the national SDF and the provisions of the SPLUMA.¹¹⁹ In addition to other requirements, the municipal SDF is to specify the rate and pattern of population growth and identify other “significant structuring and restructuring elements such as development and economic growth tendencies.”¹²⁰ Most relevant here is the requirement for the SDF to provide an assessment of “environmental pressures...including the spatial location of environmental sensitivities”.¹²¹ This provision is significant as far as climate change impacts and adaptation opportunities are concerned.¹²² Such sensitivities and environmental pressures are extended to include climate change vulnerabilities as well as occurring and future impacts of climate change. This kind of provision lacks in land use planning laws, and requirements of Master plans in Nigeria. As noted in Chapter 5, this omission results in the lack of a proper representation of the likely impacts of climate change and how development planning can be employed to address such climate change challenges.

7.4.2 The Land Use Scheme under the SPLUMA

In furtherance of land use planning and management, the SPLUMA provides for the land use scheme as a physical planning tool. Every municipality is required to have a land use scheme which must, amongst other requirements, consider the zoning of land for different uses, as well as adopt and comply with the appropriate environmental management legislation and other instruments.¹²³ The land use scheme is required to ensure efficient land use, economic growth, inclusiveness in the development process and the reduction of negative environmental impacts of

¹¹⁶ Ibid at Para 27, p 20.

¹¹⁷ See discussion in section 7.4.2 below.

¹¹⁸ S 20 (2) of the SPLUMA op cit note 85.

¹¹⁹ S 21 (a) ibid.

¹²⁰ S 21 (d) and (e) ibid.

¹²¹ S 21 (j) ibid.

¹²² A Taylor ‘Urban adaptation’ op cit note 83 p 11-14.

¹²³ S 24 SPLUMA op cit note 85.

development.¹²⁴ The Schemes have the force of law as no developmental activity may be carried out unless it agrees with the land use or town planning scheme of the municipality.¹²⁵ The land-use scheme has been said to be relevant to adaptation as it is required to comply with instruments on environmental management and stipulate special conditions, including climate change, for land use in specific zones.¹²⁶

As with the laws in Nigeria, the SPLUMA refers to “public interest” but does not define the term.¹²⁷ It provides in section 26 that a ground for the amendment of the land use scheme is public interest. Further, section 42 of the SPLUMA also provides that the Municipality Planning Tribunal should put public interest into consideration in the deciding whether to grant or deny an application for development. It is also mentioned as a requisite for the removal of a restrictive condition to the grant of a developmental application.¹²⁸ In this regard, the definition proffered in Chapter 5 is adopted and the same argument put forward as to the extension of the term ‘public interest’. Climate change affects all facets of human life and activities thus qualifies to be considered as a factor in determining what would amount to public interest. Thus, consideration should be given to whether development is likely to aggravate vulnerabilities or increase resilience in an area, as well as what the impact of any activity would be when measured against the general capacity of an area to adapt to the impacts of climate change.

The SPLUMA provides that all land use applications and appeals should be made within the authority and jurisdiction of the municipality, or any authority outside the municipality so designated by the municipality to act as an appeal tribunal.¹²⁹ Thus, decisions regarding development restrictions or obligations to aid adaptation action should emanate at the municipality. The Act, however, makes provisions for an application for land use to be made to the Minister in the national sphere of government where a proposed development affects or is likely to affect national interest,¹³⁰ or matters that fall within the sphere of operation of the

¹²⁴ S 25 Ibid.

¹²⁵ S 26 (1) (a) and (2) ibid.

¹²⁶ A Taylor ‘Urban adaptation’ op cit note 83 p 11-15

¹²⁷ The lack of a definition of public interest has been discussed in section 6.5.3.1 of Chapter 6.

¹²⁸ S 47 (2) SPLUMA op cit note 85.

¹²⁹ S 51 ibid.

¹³⁰ S 52(3) ibid.

national government.¹³¹ Such an application can also be made to the national government where it affects the interests of more than one province of the Republic.¹³² SPLUMA does not provide that climate change is a factor that could inform a land use application to the national government. However, where climate change implications are so far reaching as to be capable of being transboundary, it could trigger this provision of the law.

7.5 The Western Cape Land Use Planning Act of 2014

As with the SPLUMA at the national sphere of government, the provincial legislation on land use planning was significantly influenced by the decisions of the Constitutional Court in several cases,¹³³ including those already discussed in this chapter. Other factors that influenced the reform of land use planning legislation in the Western Cape are the principles of sustainable development and climate change.¹³⁴ Although the reform of the Western Cape land use planning legislation had been on-going, the process was concretised by the promulgation of the SPLUMA, as the Western Cape Land Use Planning Act was eventually designed to align with SPLUMA's framework and guidelines.¹³⁵

According to the Western Cape Land Use Planning Act (WCLUPA),¹³⁶ municipalities within the province are responsible for land use planning within their various jurisdictions.¹³⁷ The provincial governments have the duty under the WCLUPA to prepare and implement a provincial spatial development framework and to monitor the implementation of this framework by the municipalities.¹³⁸ The provincial spatial development framework is aimed at coordinating development within the province regarding the areas of planning that fall within its province.¹³⁹ The SPDF is also required to outline the objectives and strategies of the province in relation to

¹³¹ S 52(1) Ibid.

¹³² S 52(2) ibid.

¹³³ K Munro 'A case for provincial land development management' in Western Cape Government (Department of Environmental Affairs and Development Planning) *Land Use Planning Law Reform in the Western Cape* op cit note 84 p 61.

¹³⁴ A Mullera 'Brief history of land use planning the South African context' in *Land Use Planning Law Reform in the Western Cape* ibid p 39.

¹³⁵ *Land Use Planning Law Reform in the Western Cape: The Road to Transformation* ibid p i.

¹³⁶ Act 3 of 2014.

¹³⁷ S 2 (1) of the Western Cape Land Use Planning Act of 2014 (WCLUPA).

¹³⁸ Section 3 ibid.

¹³⁹ S 4(2) ibid.

certain environmental and socio-economic factors such as adaptation and mitigation to climate change, agriculture, socio-economic development, and so on.¹⁴⁰ The WCLUPA also puts certain aspects of land use planning directly under the jurisdiction of the Province. These areas include disaster management; housing; regional planning and development; urban and rural development; adaptation to climate change and the mitigation of the impact of climate change; or economic development.¹⁴¹

The Act also requires the Province to monitor the effectiveness of the land use planning at the municipality level in relation to the matters under its purview as provided for within the Act itself.¹⁴² In its overseeing function over the municipalities, the Province has a duty to provide guidelines or principles to which the municipalities are to adhere in carrying out their duties.¹⁴³ For instance, the spatial development frameworks of the municipalities must conform to provincial development plans and must take cognisance of issues like biodiversity, conservation areas, pollution control and the adaptation to climate change.¹⁴⁴

The Province also has the duty to coordinate regional development and planning. To this end, it has the responsibility to adopt a spatial development framework for regions under the Province in line with the provincial development framework.¹⁴⁵

The Province under the WCLUPA also provides a set of guidelines which the municipalities must comply with in drawing up their municipality spatial development framework.¹⁴⁶ As provided for in section 10(3) the spatial development frameworks of the municipalities must conform to provincial development plans and must take cognisance of issues like biodiversity, conservation areas, pollution control and the adaptation to climate change.

Part 8 of the WCLUPA stipulates the conditions precedent to the grant of a land use application. Amongst many other conditions, the Act provides that consideration is to be given to

¹⁴⁰ S 4(3) *ibid.*

¹⁴¹ S 3(5) *ibid.*

¹⁴² S 3(5) *ibid.*

¹⁴³ S 3(8) *ibid.*

¹⁴⁴ S 10 (3) *ibid.*

¹⁴⁵ S 7 *ibid.*

¹⁴⁶ S 10 *ibid.*

requirements aimed at addressing climate change.¹⁴⁷ This provision is couched in broad terms and gives room for the imputation of both mitigation and adaptation to climate change. By this provision, the municipalities will be able to impose conditions aimed at fostering adaptation to climate change, especially in areas that have been identified as being high risk or susceptible to some risk from the impacts of climate change.

Following the provisions of the SPLUMA on the principles to guide land use planning, the WCLUPA provides in detail for land use planning principles applicable within the Province. These include the principles of spatial justice, spatial sustainability, efficiency, good administration and spatial resilience.¹⁴⁸ Of relevance to this thesis is the principle of spatial sustainability. The principle requires that land use planning must give due consideration to the need for climate change adaptation.¹⁴⁹ As discussed in chapter 2 of this thesis, such consideration could be achieved through the use of various planning tools such as the Integrated Development Plan to highlight the vulnerable and resilient areas within the Province and other tools such as Zoning and EIA could subsequently be used to regulate and monitor the sort of development or activities carried out in such areas.

Section 59 addresses several issues that are either directly or indirectly a consequence of climate change; the section notes that development and land use must consider issues of "sea-level rise, storm surges, flooding, fire hazards" and so on.¹⁵⁰ Considering that informal developments on land do not go through the rigours of land use applications and approval, these makes them particularly vulnerable to the impacts of climate change or risks flowing from those impacts. In the light of this consideration, the WCLUPA discourages informal settlements.¹⁵¹ CT Interviewee 5 in the fieldwork pointed out that these informal settlements are usually found in areas unsuitable for development such as floodplains and on steep slopes which increases their likelihood of being affected by disasters.¹⁵² These factors highlighted by CT Interviewee 5 also predispose such settlements to the adverse impacts of climate change, and CT Interviewee 8

¹⁴⁷ S 40(2) (i) *ibid.*

¹⁴⁸ S 59 (1) – (5) *ibid.*

¹⁴⁹ S 59(c) *ibid.*

¹⁵⁰ S 59 (2) (e) *ibid.*

¹⁵¹ S 59 (2) (f) *ibid.*

¹⁵² CT Interviewee Interview 5.

notes that a question mark on planning system is how to create a flexible framework that addresses the diversity of developments within the Province, especially informal settlements.

7.6 The City of Cape Town Municipal Bye-Law 2015

At the municipality level, planning is regulated by the Constitution, the SPLUMA, the WCLUPA, the Local Government: Municipal Systems Act,¹⁵³ and the municipal planning bye-law which in the case of Cape Town is the City of Cape Town Municipal Planning Bye-Law.¹⁵⁴ The Municipal Systems Act provides that municipalities are to carry out planning in a manner to foster development to achieve the responsibilities of local governments as provided for in the Constitution, as well as the realisation of planning guidelines provided for at the national level.¹⁵⁵ The Act also requires municipalities to partake in co-operative developmental governance along with other spheres and organs of government.¹⁵⁶ Regarding cooperative governance, municipalities are required to “comply with planning requirements regarding national or provincial legislation”.¹⁵⁷

By the Local Systems Act, each municipality is required to formulate or adopt¹⁵⁸ a strategic planning framework for development within the municipality.¹⁵⁹ The planning framework is required to consider a link between the “proposals of development within the municipality”, the capacity and resources of the municipality, and national and provincial planning legislation.¹⁶⁰ Section 26 of the Municipal Systems Planning Act provides that the planning framework, which is referred to as an integrated development plan, should include a spatial development framework, a disaster management plan, local aims of economic development and “national and provincial sectoral plans and planning requirements.”¹⁶¹

¹⁵³ Act No 32 of 2000.

¹⁵⁴ Published in Provincial Extraordinary Gazette 7414 of 29 June 2015.

¹⁵⁵ S 23 of the Local Government: Municipal Systems Act of 2000.

¹⁵⁶ S 24 *ibid.*

¹⁵⁷ S 24 (3) *ibid.*

¹⁵⁸ By s 25(3) of the Municipals Systems Act op cit note 153, a municipal council may choose to adopt the integrated development plan of its predecessor.

¹⁵⁹ S 25(1) Municipal Systems Act *ibid.*

¹⁶⁰ S 25 (1) *ibid.*

¹⁶¹ S 26 *ibid.*

While no direct mention is made of climate change or adaptation programmes, the Municipal Systems Act requires the municipalities' integrated development plans to align with each municipality's most critical developmental needs and with national and provincial sectoral planning requirements.¹⁶² In this regard, climate change and adaptation to social and geographical vulnerabilities can be read into or implied from these provisions.

The City of Cape Town Municipal Planning Bye-Law (MPBL) governs land use planning within the Cape Town municipality. The Law is based on the stratified system of land use governance in line with the 1996 Constitution and the Municipal Systems Act, by which municipalities are empowered to carry out land use planning within their jurisdiction. The guidelines followed by the municipalities flow directly from national (SPLUMA) and provincial (WCLUPA) legislation.¹⁶³ Following the decisions in the *City of Johannesburg* and the *Macssand* and the *Habitat* cases, municipal planning is not subservient to or subsumed under national or provincial planning; neither do these spheres of government confer planning powers on the municipalities. Instead the empowerment to plan is a constitutional provision, while the principles and guidelines to be applied in planning at the municipality sphere flow from the national and provincial spheres.¹⁶⁴

The MPBL provides for three spatial development frameworks at the municipality level, the district level and the local level. The spatial development frameworks are required to take cognisance (amongst other things) of the form and structure of the geographical area planned for, spatial coordination and social and economic interests in areas within the municipality.¹⁶⁵ On the relevance of social and economic interests to planning, CT Interviewee 5 noted that the City's SDF and District Plans highlight socio-economic benefits for the well-being of the citizenry which has a strong link to adaptation to social vulnerabilities to climate change.

To further buttress the point on the link between socio-economic and environmental factors and physical and spatial planning, three of the interviewees referred to the Philippi Horticultural Area

¹⁶² S 26 (a) and (d) *ibid*.

¹⁶³ This point is made in the Preamble to the City of Cape Town Municipal Planning Bye-Law (MPBL 2015).

¹⁶⁴ The position in South Africa is totally different from what is applicable in Nigeria. This point will be elaborated upon in Chapter 8.

¹⁶⁵ S 3 MPBL2015 *op cit* note 154.

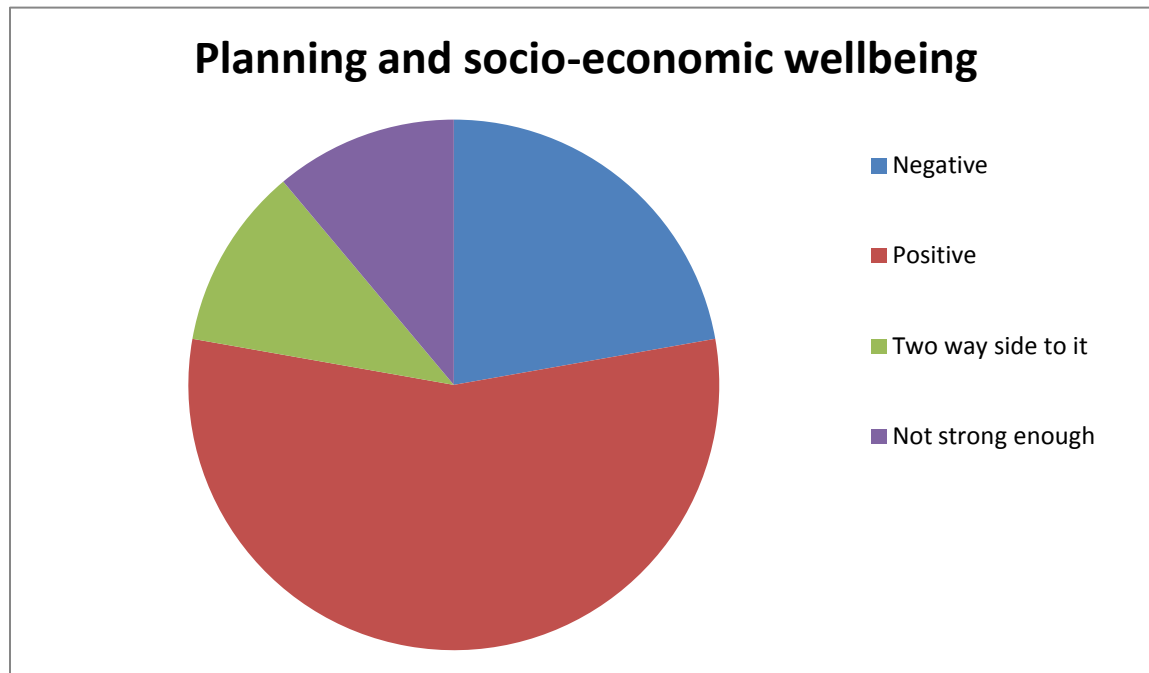
in Cape Town and its relevance as an ecosystem and economic infrastructure. One of the interviewees commented as follows

For instance... like we recently had for Philippi Horticultural Area, that area where they grow vegetables south of Cape Town, it is a very large area in the middle of Cape Town's urban area. It is this big farming area. There is a lot of development pressure to build houses there, and the municipality has changed the urban edge and said yes, you can build houses there... Then this heritage objection came and said no, the food security and this very unique agricultural area in the middle of Cape Town where vast amounts of vegetables are grown, those housing opportunities don't trump the heritage significance which is very high. This is not some houses in the streets this is of provincial significance. So, in that case, it was felt by the heritage authorities that it outweighs the socio-economic benefits of building some houses because this is for all and those houses are for some.¹⁶⁶

On the role of land use planning in fostering social and economic well-being of the citizens in Cape Town, the interviewees' response is as shown in the chart below.

¹⁶⁶ CT Interviewee Interview 5.

Figure 4 showing Interviewees' opinions on the socio-economic content of planning legislation in Cape Town



Source: Author's construction.

CT Interviewees 1 and 4 opined that spatial planning in the City of Cape Town does not play a role in the socio-economic well-being of the people, especially the poor. CT Interviewee 3 held the opinion that the role played in enhancing socio-economic well-being by the spatial planning process in the City of Cape Town was not strong enough. On the other hand, CT Interviewees 2, 5, 7, and 8 opined that spatial planning within the City has a positive impact on socio-economic well-being. CT Interviewee 9 took the middle ground by noting that there are two sides to the story. According to her, there had been a disconnect between spatial planning and socio-economic well-being within the City. She, however, noted that many discussions are ongoing about how to make spatial planning more integrated, especially regarding disaster risk management and poverty alleviation. The outcome of the field study in this regard shows that the socio-economic development factor is germane to successful spatial planning, especially as a tool for reducing vulnerabilities and adapting to climate change.

The district spatial development plan goes further to give specific details and guidelines on land

use in environmentally sensitive or vulnerable areas,¹⁶⁷ an important requirement especially regarding climate change and the need to take steps towards adaptation. While not expressly mentioned, climate change will be taken into consideration in determining what areas are environmentally sensitive. Also, the district spatial development framework also identifies areas “where strategic intervention is required to enable desired changes to land use or urban form”.¹⁶⁸

Further on the relevance of the Bye-Law to climate change, the Law provides for certain criteria which are to be factored in when considering an application. This has to do with the desirability of the proposed land use. The Bye-Law itemises certain determining factors of desirability, and these include economic impacts; social impacts; compatibility with surrounding uses; impacts on safety, health and well-being of the surrounding community; impacts on heritage; and impacts on the biophysical environment.¹⁶⁹ Again in this instance, the law makes no direct mention of climate change, but these are factors that if adequately monitored have a significant impact on the ability of the city or a specific area to adapt to the impacts of climate change.

It is worthy of note that the use rights conferred by this Bye-Law vest in the land and not in the person holding the title to land.¹⁷⁰ This portends that the rights to use the land in a particular way and the conditions of approval of land use pass with the land and are not necessarily attached to anyone in particular. Although the Law later provides that successors in title are bound by the conditions for the approval of land.¹⁷¹ About the conditions of approval, CT Interviewee 2 argued that these restrictions often get lost when land is transferred from one person to another. He holds the opinion that in addition to such restrictions being attached to the land itself, they should be stated as covenants in the title deed thereby binding the holder of the title to land at every specific time. According to him,

What we would like to do is to install those conditions within individual title deeds... because people leave, managers leave, people sell [and] responsibility gets lost in the

¹⁶⁷ S 11(c) (4) MPBL op cit note 154.

¹⁶⁸ S 11(d) (ii) MPBL ibid.

¹⁶⁹ S 99(3) ibid.

¹⁷⁰ S 35(1) ibid.

¹⁷¹ S 35(4) ibid.

process. Whereas if it is transferred each time the flat is sold then the owner becomes very aware of the responsibility. That is one of the things we would like to do.¹⁷²

As has consistently been pointed out in this thesis, climate change has great impacts on land use, and effective land use is a major vehicle of adaptation. In this regard, it is noted that the Municipal Bye-law in its entirety does not give any direct consideration to climate change. However, it provides that the Municipality may take cognisance of or adopt policies to guide the implementation of the provisions of the Bye-Law.¹⁷³

The MPBL gives a lot of consideration to environmental protection and conservation,¹⁷⁴ and provides for a development management scheme which amongst other things is aimed at protecting environmentally sensitive areas which could be affected by development.¹⁷⁵ These provisions considering policies and the environment will have to be fully exploited to pursue the campaign and process of adaptation to climate change as far as land use is concerned.

The interviewees in the fieldwork were unanimous in their view that environmental management and protection was essential for proper planning, especially given the challenges raised by climate change and the need for both adaptation and mitigation. According to CT Interviewee 1, there exists a great amount of overlap between the two regimes and what they seek to achieve. He argues that both regimes increasingly work towards the same “regulatory benefits” (for sustainable development which sustains ecological, environmental, economic, social wellbeing). He points out that despite the similarity in goals, they “are run through two separate regulatory silos with different institutional themes.” This set-up to him is highly inefficient. The conclusion for him is that historically physical planning laws can be categorised as being pro-development, while environmental laws are seen as being anti-development.¹⁷⁶

¹⁷² CT Interviewee Interview 2.

¹⁷³ Ss 21(1) and 138(1) MPBL op cit note 154.

¹⁷⁴ Schedule 3, chapter 12 and 20 of the Planning Bye-Law deal specifically with the conservation of the environment through various means.

¹⁷⁵ S 26 MPBL op cit note 154.

¹⁷⁶ CT interviewee Interview 1.

CT Interviewee 1 further noted that the SPLUMA and other relevant legislation now provide for the “integration of authorisations and permitting and planning.”¹⁷⁷ Further, on this point, CT Interviewee 6 stated that as far as the Western Province is concerned, there has been much integration of the environmental and physical planning regimes. She noted that in the Western Cape Province, environmental affairs and development planning are one department. According to her, this is because “the two are supposed to be integrated and always working together.” She further pointed out that planning legislation specifically provides “that all plans and all planning documents need to take environmental laws into account... [and] policy[ies] produced by the environmental management authority, and to incorporate those.”¹⁷⁸

Other interviewees expatiated on these points by stating that planning law through the spatial development frameworks is in recent times giving cognisance to environmental considerations in land use planning as a way to address some imminent issues such as climate change. (Examples of such integration of environmental protection and physical planning were given to include the “conservation worthiness” to prevent or reduce development in areas that are environmentally at risk, to regulate biodiversity loss; the provision of densification or activity corridors to reduce urban sprawl and conserve the use of resources; coastal setback or management lines to prevent or reduce development along the coastline; and ecological infrastructure to provide ecological services to the society such as soft landscaping to allow for water permeation to recharge aquifers and allow for flood reduction.¹⁷⁹)

To further buttress the opinions on the interplay between environmental protection and physical planning, CT Interviewee 7 noted that making of planning applications spans both the city and the province. He iterated that all environmental aspects are dealt with at the provincial level, while all planning aspects are dealt with at the City level. He mentioned that development applications implied ‘ticking boxes’ and “if you did a planning approval and you haven’t gotten an environmental approval, you can’t go ahead with it and vice-versa.”¹⁸⁰

¹⁷⁷ Ibid.

¹⁷⁸ CT Interviewee Interview 6.

¹⁷⁹ CT Interviewee Interviews 4, 7, 8 and 9.

¹⁸⁰ CT interviewee Interview 7.

The outcome of the fieldwork regarding the relationship between environmental protection and spatial planning speaks to the use of physical planning as a tool to address geographical and physical vulnerabilities to climate change. As will be seen in Chapter 5, this option forms part of international suggestions on adaptation in the form of eco-system and community-based adaptation. Thus, evidence of a strong link between the planning process and environmental protection suggests the ability of the planning process to aid adaptation to climate change.

Finally, climate change adaptation involves all spheres of government as it entails a network of duties and obligations in relation to environmental protection and planning which span both developmental and environmental terrains.¹⁸¹ The situation was summed up by CT Interviewee 9 who argued that physical and spatial planning should be more focused on emphasising the roles of natural systems in protecting both people and infrastructure.¹⁸² According to her, this ecosystem-based approach to planning means that natural systems are not only protected but are also created for the sake of safeguarding the environment as well as for the benefits society would derive. These ecological and infrastructural benefits are then weighed against having such an area developed and the likely downsides of such development, such as biodiversity loss or the killing off of a flood attenuation area. This, to her, helps to change the narrative about “the role the environment plays for a city to function well.”¹⁸³

7.7 Some Other Legislation Relevant to Physical Planning in South Africa

7.7.1 National Environmental Management Act 107 of 1998

In order to ascertain the suitability of a developmental activity within a particular locality, the SPLUMA provides that the spatial development framework must contain “a strategic assessment

¹⁸¹ A Taylor ‘Urban adaptation’ op cit note 83 p 11-8

¹⁸² This is the ecosystem-based approach to adaptation which though characteristic of most indigenous societies has gained prominence in recent times. According to the IPCC AR5 ecosystem-based adaptation is the use of the natural environment and biodiversity to adapt to the adverse effects of climate change. The Ecosystem-based approach is “implemented through the sustainable management of natural resources and conservation and restoration of ecosystems” and had several “social, economic, and cultural co-benefits for local communities” MR Shaw JT Overpeck and GF Midgley, ‘Ecosystem-based approaches to adaptation—emerging opportunities’ cross-chapter box in CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge University Press 2014 p 101.

¹⁸³ CT interviewee Interview 9.

of environmental pressures¹⁸⁴ as well as identify areas that are environmentally sensitive.¹⁸⁵ In addition, the SPLUMA also requires the relevant authority to stipulate procedures for application and decisions on environmental impact assessments (EIA).¹⁸⁶ While the EIA has its origin in environmental law and is an environmental management tool under the National Environmental Management Act, it remains a viable planning tool.¹⁸⁷

The NEMA, provides for the integration of environmental management principles into all decisions pertaining to the environment,¹⁸⁸ including land use, as seen in the preceding paragraph. The purpose of the integrated environmental management is to identify and evaluate likely impacts of activities on the environment, socio-economic and other conditions within the society.¹⁸⁹ Section 24 of NEMA evidences an interplay between planning and IEM. It provides that the spatial development tools of specific areas are to be employed in determining where IEM is to be applied.¹⁹⁰ The NEMA specifically provides for Environmental Impact Assessment as an IEM tool. It is to be applied to investigate the impacts of specific activities on the environment, the possible alternatives to the activities, steps that can be taken to minimize negative impacts and the gaps in knowledge available to address the envisaged impacts.¹⁹¹ The EIA is useful in climate change adaptation as it presents an opportunity to put climate change impacts into consideration which assessing impacts of activities on the environment. The Court emphasised this point in the *Earthlife Africa Johannesburg v Minister of Environmental Affairs*,¹⁹² that climate change assessment was essential in the case under consideration and by extension,¹⁹³ would be relevant in other activities where climate change impacts are a consideration.

¹⁸⁴ S 21(j) SPLUMA op cit note 85.

¹⁸⁵ Ibid.

¹⁸⁶ S 54(1)(d) SPLUMA ibid

¹⁸⁷ J Glazewski and Susie Brownlie 'Environmental assessment' in *Environmental Law in South Africa* op cit note 18 p 10-3.

¹⁸⁸ S 23 (1) and (2)(a) National Environmental Management Act 107 of 1998 (NEMA)

¹⁸⁹ Section 23 (2)(b) NEMA ibid.

¹⁹⁰ S 24 (2) NEMA ibid.

¹⁹¹ S 24(4) (b) NEMA ibid.

¹⁹² [2017] ZAGPPHC 58; [2017] 2 All SA 519 (GP).

¹⁹³ Ibid para 82 – 91, particularly at 91.

7.7.2 National Environmental Management: Integrated Coastal Management Act 24 of 2008

Freedman has iterated the vulnerabilities that South Africa faces along its coastline and the need to take adaptation measures.¹⁹⁴ He highlights several possible options towards adaptation, several of which hinge on land use management and development control.¹⁹⁵ To ensure the proper use and management of coastal areas, especially the landward side of such zones, the Integrated Coastal Management Act provides for the establishment of a coastal planning scheme.¹⁹⁶ The coastal planning scheme aims to define the coastal zones clearly and to state specifically development activities allowed or prohibited within such areas.¹⁹⁷ While it specifies the uses to which coastal areas can be put, the coastal planning schemes do not confer any “rights to use land or coastal waters.”¹⁹⁸ Also, municipalities may integrate their coastal planning schemes into land use planning schemes applicable within the municipality.¹⁹⁹ However, where there is a conflict between a municipality’s land use planning scheme and the coastal planning scheme as provided for in line with the Coastal Management Act, the coastal planning scheme takes precedence.²⁰⁰ Further regarding land use planning, the Integrated Coastal Management Act provides that the organ of government responsible for implementing national, province and municipality land use planning regulation must implement such regulations in the landward coastal zones. Such implementation must conform to the principles of co-operative governance provided for in the Constitution.²⁰¹

As part of coastal management programmes,²⁰² in recent times there has been a redefinition of the coastal management lines or set back lines given sea level rise accessioned by climate change.²⁰³ According to Freedman, coastal management lines are planning tools used to demarcate buffer zones and areas threatened by coastal erosion.²⁰⁴ To safeguard property rights

¹⁹⁴ W Freedman ‘Climate change and coastal zone management’ in TL Humby et al op cit note 5 p10-4,6

¹⁹⁵ Ibid at 10-7,8.

¹⁹⁶ S 56 of the Integrated Coastal Management Act 24 of 2004 (ICMA).

¹⁹⁷ S 56 (1) *ibid*, W Freedman op cit note 194 p 10-16.

¹⁹⁸ S 56 (96) *ibid*.

¹⁹⁹ S 57 (1) *ibid*.

²⁰⁰ S 57 (2) (b) *ibid*.

²⁰¹ S 62(1) *ibid*.

²⁰² S 1(1) *ibid*.

²⁰³ This was discussed in Chapter 5 as a form of adaptation to the adverse effects of climate change.

²⁰⁴ W Freedman ‘Climate change and coastal zone management’ in TL Humby et al op cit note 5 p 10-18

and protect the government from incessant claims regarding coastal land use management, the Coastal Management Act adopts the common law principle of accretion and erosion. This is to the effect that where an owner of coastal land loses land to naturally occurring erosion, no claim can be made against the State as such submerged land becomes state property.²⁰⁵ Further, no owner of land is allowed to take steps to prevent erosion or accretion of land unless such process occurs naturally and such measures are to be taken only in line with the National Environmental Management Act or other relevant Acts.²⁰⁶ The ICMA in Section 15 (2) provides for some form of land use planning restrictions by stating that no person is to “construct, maintain or extend any structure, or take other measures on coastal public property to prevent or promote erosion or accretion of the seashore”.²⁰⁷

According to interviewees in the study, the coastal area is a “murky area” because there is no proper jurisdictional delineation, and this, according to them calls for proper delineation of coastal planning process and responsibilities.²⁰⁸ The delineation is provided for in the Constitution and the ICMA, however, the physical reality is fraught with a lot of discrepancies and irregularities. For instance, CT Interviewee 2 noted that there was the accepted notion that the municipality manages the coastal area up to the high-water mark; however, the challenge the municipality encounters in that space is that they really can't tell where the high-water mark is. This is because there hasn't been a survey in recent times and this, according to him, is "problematic from a jurisdictional perspective."²⁰⁹

Buttressing the above argument, CT Interviewee 9 noted that there is the need for proper planning legislation in the coastal areas. This she argues for to properly establish the jurisdiction of the municipality as far as coastal planning is concerned. She pointed out that the space managed by the local government is unclear as there is often little or no land to be declared as

²⁰⁵ S 14 (5) (a) ICMA op cit note 196.

²⁰⁶ S 15 ICMA *ibid*.

²⁰⁷ S 15 (2) *ibid*.

²⁰⁸ CT Interviewees 2 and 9.

²⁰⁹ CT Interviewee Interview 2.

open space between privately held property abutting the sea and what is perceived as the high-water mark.²¹⁰

7.7.3 Disaster Risk Management Act No 57 of 2002

Also, relevant to the discourse on physical planning and climate change adaptation in South Africa is disaster risk management. Extreme natural events in recent times have shown the tendency to be more adverse than experienced in times past. According to the IPCC AR5, extreme weather events are further aggravated by climate change.²¹¹ To this end, disaster risk management (DRM) becomes an essential aspect of physical and land use planning. DRM is regulated in South Africa by the Disaster Risk Management Act (DRMA).²¹²

The core principles of DRM in South Africa are prevention and mitigation, and these to be incorporated into the disaster management guidelines in development plans of the various spheres of government.²¹³ The DRMA provides for the “integrated and co-ordinated” management of disasters and stipulates that a DRM plan must provide for an integral part of planning at the province and municipality.²¹⁴ To this end, the Act focuses on establishing a DRM framework at all spheres of government for the purposes of prevention or reducing of disaster risks, mitigating the seriousness of disasters and preparedness and responding to such disasters that might occur.²¹⁵ The aim of the framework is to reduce vulnerability in places, communities and households found to be disaster-prone.²¹⁶

It has been argued that municipalities have a primary role in DRM.²¹⁷ In line with the requirement of the DRMA, the Municipal Systems Act provides that municipalities’ integrated development plans should comprise of a disaster management plans along with other

²¹⁰ CT Interviewee Interview 9.

²¹¹ CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A Global and Sectoral Aspects* op cit note 184 pp 12, 61 and 552.

²¹² Act No 57 2002.

²¹³ Ss 19(e), 20(1)(c) and (d), 33 (1) (c) and 53 (2) Disaster Risk Management Act No 57 of 2002 (DRMA).

²¹⁴ Ss 38(2), 39(2) (a), 47 (1) (c), and 53(2) (a) *ibid*.

²¹⁵ Ss 7, 38 *ibid*.

²¹⁶ S 7(2) *ibid*.

²¹⁷ A van der Berg, A du Plessis and M Murphree ‘Local disaster risk reduction and management in South Africa’s response to climate change’ in TL Humby et al op cit note 5 p 12-10.

components.²¹⁸ Also, the City of Cape Town’s Municipal Planning Bye-Law makes provision for “risk management and prevention” plans to be developed as part of its requirements for the grant of development applications.²¹⁹

Considering that the City of Cape Town is prone to potential risks from climate change, it is imperative that land use planning within the Municipality should identify the likely risks to which specific areas and communities are prone, highlight such risks in its spatial development plans and take necessary steps to reduce the vulnerabilities of such areas. The DRMA also requires municipalities to put in place prevention and mitigation strategies,²²⁰ and “facilitate maximum emergency preparedness”.²²¹ In relation to disaster risk management preparedness, it was pointed out by one of the interviewees that the City of Cape Town as part of its planning procedure has moved from reactionary approach to disasters to the more viable proactive approach to planning.²²²

7.8 Challenges and gaps in the planning law and system in South Africa

The field study identified what the interviewees in their various fields of expertise considered as weaknesses, challenges and gaps in the planning law and system, and its implementation. Some of those challenges and gaps are as listed below.

- a. Checks and balances: The fieldwork revealed that all planning powers more or less lie with the municipality and all appeals stay within the municipality as well, described as an “unqualified devolution” of power. Some interviewees see this as being unconstitutional as it does not provide for checks in the way municipalities exercise their planning powers. To tackle this, it was proposed by an interviewee that provincial and national spheres of government must then put in place “clear standards and criteria, norms and

²¹⁸ S 26 Local Government: Municipal Systems Act op cit note 155.

²¹⁹ See Item 1 Schedule 3 to the City of Cape Town Municipal Planning Bye-Law op cit note 154.

²²⁰ S 2(i) DRMA op cit note 213.

²²¹ S 53(2) DRMA *ibid*.

²²² CT Interviewee Interview 9.

regulations so that the municipalities exercise that discretion within a tighter regulatory environment”.²²³

- b. The duplicity of laws and systems: Interviewees highlighted the need for less duplicity of processes and laws and argued instead for an integration of all planning processes and mechanisms into a unified planning system. Thus, for instance, there should not be a separate coastal planning mechanism as is proposed, but coastal planning should be integrated into the planning system that already exists.
- c. Non-implementation of policy suggestions: Some interviewees expressed the frustrations of making planning policy suggestions and such policies not being implemented or taking an unrealistically long time to be implemented. CT Interviewee 3 gave two examples of slow response and no response at all in policy implementation as follows.

One case might be public transport-based development and densification. That’s being on the table for 40 to 50 years. When I studied at UCT in the 80s, they were already tired of pushing that argument. 30 years on, it is now getting traction, they are now buying into the idea of densification, but it’s been in policy for 30 to 40 years.²²⁴

About 25 years ago in the 1990s with the new SA dispensation, the first new big policy on the table was the metropolitan spatial development framework... that had as a key argument the integration of the formerly disparate city and the location of a new metropolitan node which was to be at Philippi in Cape Town... the idea was that it should become a new node of economic development and so on. That hasn’t really transpired. And that has been policy now for 30 years and comes up with each new iteration of policy. I am just looking now at the revised CT Municipal Spatial Development Framework which is being revised now. It has got that on the table again but it just hasn’t happened.²²⁵

The interviewee ascribed the failure to implement policies to the lack of political will and a disparity between what the authorities deem as being the desirable way forward and what the market sees as an opportunity. Where such disparities exist between market forces and the

²²³ CT Interviewee Interview 1.

²²⁴ CT Interviewee Interview 3.

²²⁵ CT Interviewee Interview 3.

government, an outcome is the inability of the government to see policies through into implementation.

- d. The “not in my backyard” syndrome: This expresses the conflict of personal development interests and property rights with the implementation of government policies. Everyone sees the policies as necessary and desirable, as long as they do not affect their property or development rights. Thus, when the government makes certain policies with apparent negative impacts, citizens make motivations for the stand down of such implementations because it conflicts with personal interests. Shedding light on the same issue, CT Interviewee 4 noted that the lack of clarity between civic expectations and property rights, economic drivers of development and infrastructural needs often leads to a conflict of interest and problems of policy implementation. He further noted that planning law is not clear on how to resolve the conflicts of interests between the various drivers of development.
- e. Too many interactions: It was also noted that the implementation of planning mechanisms becomes difficult because planning interacts with too many other sectors and this is often overwhelming for the planning system and officials. According to CT Interviewee 6, “there are so many considerations to be juggled regarding land use planning, there is the socio-economic aspects, environmental aspects, and now climate change and its various interactions, it is much information to process.”²²⁶
- f. Retrofitting and application of Law: The study showed that it is often difficult to apply the law which is definite and inflexible, to issues of planning which are often fluid and pertain to a continually changing society. The law is usually a step or more behind societal development. Thus it ends up being reactive rather than proactive. CT Interviewee 9 noted that development in Cape Town is diverse, as with many cities around the world, ranging from formal to informal development and it is difficult for the law to keep up with such diversity. The inability of the law to keep up and non-enforcement is said by many to allow for extensive non-compliance. Also, planning laws

²²⁶ CT Interviewee Interview 6.

are based on scientific projections which are often hypothetical, so that at times, the laws are made in abstraction.

- g. Discrepancies between SDFs and approved developments: Interviewees also noted that in recent times, there have been conflicts between what the spatial development framework provided for and the development approved in certain areas. This has been attributed to the fact that though having a legal standing, the SDFs are more principle-based than directive based. Thus, rather than being construed as a law, the SDF is construed as being advisory and thus jettisoned when overriding personal or political interests arise. Kotze and others also highlight this as a challenge to climate governance in South Africa.²²⁷ As noted by CT Interviewee 9, most of the actual planning is based on policies and policies do not give or take away any rights.
- h. Other challenges include financing, the capacity of smaller municipalities to fulfil their roles and availability of information. These have been addressed in the course of the chapter.

7.9 Conclusion

The chapter through doctrinal and empirical study analysed the legal regime of physical planning in South Africa and narrowed in on the City of Cape Town. In general terms, the focus of the chapter was physical and land use planning; however, attention was paid to climate change and adaptation and several factors that could foster or hamper the adaptation to climate change. Such factors include the social and economic significance of physical planning as a means of addressing social vulnerabilities to climate change, environmental protection and natural resource conservation as a means of engendering resilience and fostering an ecosystem-based approach to adaptation.

As has been highlighted in Chapters 4 and 5, collaborative governance is essential to effective land use and adaptation. The chapter discussed two cases in which the Constitutional Court upheld and iterated the constitutional provisions on the division of power and collaborative

²²⁷ L Kotze and others, 'Climate change law and governance in South Africa' in TL Humby et al op cit note 5 p 1-24.

governance in land use and physical planning in South Africa. These decisions of the Court resulted in the passing of the SPLUMA and other land use planning legislation at the provincial and municipal sphere of government in the Western Cape and the City of Cape Town respectively. This legislation showcases the collaborative governance in land use planning in South Africa. Each sphere of government has its responsibilities with the national and provincial governments acting in an advisory and guiding capacity while the actual planning responsibilities lie with the municipality.

The chapter also highlighted the role of some other legislation in land use planning in South Africa, especially regarding climate change and the need for the integration of necessary adaptation measures. The chapter ended by looking at the challenges and weaknesses of the planning system and legal regime. The next chapter concludes the thesis.

CHAPTER 8: CONCLUSION AND RECOMMENDATIONS

8.1 Overview

The thesis set out to examine the role which planning legislation has played and could play in the process of adaptation to climate change. Based on the premise that there is the need for climate change adaptation and that planning legislation has a role to play, this thesis addressed specific research questions, set out in Chapter 1. Chapters 2, 3 and 4 provided a background to the issues to be addressed, that is, physical and land use planning, climate change adaptation and the relationships between them the broad spectrum of governance and inter-government cooperation. Chapters 6 and 7 then considered in detail the planning laws of Nigeria and South Africa and how these laws have or can play a role in the adaptation to climate change. Chapter 5 examined how both countries have approached the issue of adaptation to climate change. It also considered the more viable option for legislation on climate change between a stand-alone legislation and a mainstreaming into existing legislation like planning laws. The overall conclusion drawn in this chapter was that the inclusion of climate change considerations in existing legislation provides a more viable and sustainable approach to adaptation.¹

In addition to its core components, the research also highlighted the importance of sustainable development and disaster risk management to both climate change adaptation and planning. The thesis noted that these two concepts are essential to social and economic wellbeing. As discussed in Chapters 6 and 7, social and economic well-being are integral parts of effective planning legislation which will contribute to successful adaptation.

As with other legislation, planning laws in both Nigeria and South Africa are based on some form of justification. In the case of planning legislation, these justifications are based on the procedural theories of planning as well as normative theories which provide a moral or ethical basis for legislation. The planning laws in South Africa clearly set out the principles upon which they are based, and the way planning duties are to be executed by the various spheres of government. Drawing from these theoretical and normative justifications and the history of planning legislation, the chapter highlights public interest and societal well-being

¹ As mentioned in Chapters 1 and 5, the Department of Environmental Affairs is working on a Climate Change Response Act, but this was unavailable at the time of concluding this thesis. A similar law in Nigeria has passed the second reading in the National Assembly and was considered in Chapter 5.

as key considerations in planning legislation and climate change adaptation. The justifications for planning and the tools of planning discussed in Chapter 2 form the basis of the application of planning laws to climate change adaptation in both Nigeria and South Africa.

Despite the hitches that are still experienced in the implementation of planning laws in South Africa, it is a better experience than what exists in Nigeria. In both countries, the judiciary has played a key role in the functionality or otherwise of planning legislation. In the case of South Africa, several cases discussed in Chapter 7 have properly helped to define the scope of responsibility of each sphere of government, and it is settled that the bulk of planning responsibilities rests with the local government. In Nigeria, the case discussed in Chapter 6 stripped the federal government of planning powers and did little to clarify the role of the local government in planning, thus the bulk of planning duties and implementation of planning legislation rests with the state government.

Adaptation to climate change, like planning raises issues of interactions and cooperation among levels or spheres of government and how these interactions should be coordinated. For instance, in Nigeria environmental matters fall within the purview of the federal government, while physical planning and development are within the jurisdiction of the local and state governments; aspects of infrastructural development fall within the purview of the federal government only regarding power supply and other infrastructure that are interstate.² If climate change is perceived as a developmental challenge, it raises the question of intergovernmental collaboration and cooperation. In South Africa, there exists a better structure for government cooperation in both environmental and physical planning matters among the spheres of government.

The thesis argues that climate change adaptation should be viewed more as a developmental rather than an environmental challenge. As with other developing countries, citizens in Nigeria and South Africa depend on land and its resources for social and economic development. All the adverse effects of climate change, ranging from droughts to flooding and coastal inundation affect the use of and access to land. Land use also relates to effective adaptation actions regarding vulnerability reduction and building resilience. As is seen in chapters 6 and 7, all planning legislation and several adaptation measures imply some form of

² Schedule 2 to the 1999 Constitution of the Federal Republic of Nigeria.

restrictions on property rights. The thesis establishes a tie between climate change adaptation and land use governance. It is argued in Chapter 4 that both effective adaptation and planning processes must incorporate indigenous land use systems in order to be place and theme specific, this point again iterates the need for the local government to be the main government participant in both adaptation and planning.

Multi-level participation and interaction is a core essential of the governance structure, especially in countries like Nigeria and South Africa that have multiple spheres or levels of government. Governance also requires a unification of purpose and ideology on individual issues such as development, climate change or land use. The strategies may differ, but it is essential that there exists some synergy and commonalities as the foundation of the governance structure.

Adaptation requires action at all levels, and it is essential that national and local adaptation efforts should complement already existing international framework on climate change adaptation. The fact that climate change adaptation takes place between many players, state and non-state actors alike further underscores the need for a clear and specific governance structure creating unequivocal obligations. The thesis highlights arguments posited by Adger and Bulkeley on the underlying factors of effective climate change governance. These criteria include multi-level governance or nodal governance, adequate financing, the safeguard of human rights and public participation. The chapter gives an analysis of climate change governance following the nodal system of governance based on the works of Shearing and Wood, and Hooghe and Marks. The bottom line of the analysis is the need for clear guidelines and framework regulating the participation and cooperation in climate change adaptation governance.

The thesis considers several approaches in answering the question of how climate change adaptation governance can be established. First, a new regulatory sector can be created that would be dedicated entirely to the objectives of climate change adaptation governance.³ Such a regulatory sector would draw from the expertise of the various fields that are connected to climate change adaptation, especially planning and land use governance. Secondly, an

³ A Dewulf S Meijerink, and H Runhaar 'Editorial: The governance of adaptation to climate change as a multi-level, multi-sector and multi-actor challenge: A European comparative perspective' (2015) *Journal of Water and Climate Change* 3.

alternative and probably more affordable and viable approach would be to have climate change considerations integrated into existing legal frameworks across sectors that have the highest relevance to the climate change problems, such as water resources, spatial planning, agriculture and so on.⁴ In essence, the adaptation framework should be framed as a local problem or within a local problem to which governance within a specific jurisdiction can relate.⁵

The thesis highlights some challenges to successful climate change adaptation in Nigeria and South Africa. The major shortcoming of the system in South Africa is the lack of a specific mechanism to monitor compliance with the set framework. In Nigeria, the study also shows that there is a lack of adequate information on climate change amongst government employees and other members of the society. Having established that planning as an aspect of land governance is essential in climate change adaptation, the thesis considers the planning legislation in Nigeria and South Africa to assess the extent to which they expressly or impliedly provide for climate change adaptation.

The analysis of policies on climate change in Nigeria and South Africa shows a reliance on concepts such as disaster risk management and sustainable development as tools of adaptation. While the policies on climate change adaptation in both countries are extensive and attempt to cover the field, a major challenge is the issue of implementation and enforcement. Policies are guidelines and highlight state objectives and do not have the force of law. It is however noted that both countries are working on climate change legislation. Some of the questions the empirical study set out to answer is the necessity or otherwise of legislation on climate change adaptation. The responses of interviewees point to the need for some of legislative guidelines on adaptation. The interviewees, however, showed a preference for the mainstreaming of climate change considerations into existing legislation, primary of which is planning legislation in both South Africa and Nigeria. To ensure immediate action, adaptation should be integrated into sectors of the local government including land use planning, coastal area management, development, natural resources management and so on.

⁴ Ibid.

⁵ H. Bulkeley 'Cities and the governing of climate change' (2010) 35 *Annu. Rev. Environ. Resour.* 229–53 at 245.

The extent to which there has been an integration of adaptation into planning in Nigeria and South Africa is elaborated upon in Chapters 5, 6 and 7.

Planning legislation in Lagos State does not provide for climate change in general or adaptation in particular. This thesis, however, argues that in the absence of such specific provisions, the import of provisions of the legislation on environmental protection and societal wellbeing can be extended to cover climate change considerations. These include provisions on disaster risk management, urban renewal and development control and development plans. The thesis argues that land use schemes should contain issues of social and geographical vulnerability in addition to other requirements. Coastal planning and management do not fall within the purview of land use planning in Nigeria, the thesis however argues that this should also be integrated into planning so that land use and coastal planning can be holistically deployed towards climate change adaptation. The empirical study also highlights challenges that militate against the proper implementation of planning legislation in Lagos State and how these challenges will in turn affect climate change adaptation.

In South Africa, the planning legislation at the national and provincial spheres do not make direct reference to climate change, but the provisions are broad enough to give room for climate change considerations. Unlike the position in Nigeria, there exists a level of interrelationship between planning laws and legislation on other related matters such as environmental management, disaster risk management and coastal management. This interrelationship implies that South Africa has a better chance of applying existing planning legislation to adaptation. The empirical study highlights the challenges of implementing planning legislation and how best adaptation to climate change can be realised through planning legislation. An important finding in the empirical study in both Nigeria and South Africa is that the integration of climate change adaptation into existing legislation is preferred to a standalone climate change legislation.

8.2 Recommendations

Given the research carried out in this thesis as summarised above, the main arguments put forward are two-pronged. First, the thesis argues for a re-evaluation and overhaul of physical planning legislation in Nigeria. Secondly, the work suggests a climate change adaptation governance which emphasises adaptation action at the grassroot government level. An example of adaptation at the grassroot is the community-based adaptation process which

combines the traditional or indigenous knowledge of land use management and the formal adaptation strategy.

8.2.1 The need for a review of the physical planning system and legislation in Nigeria

The research shows that physical planning responsibilities exist mainly at the state government level and that local governments have little or no relevance in planning. Also, the federal government has no input into planning. This implies a lack of legislative provision for intergovernmental cooperation in planning as is the case in South Africa. Intergovernmental cooperation is an integral part of the physical planning process in South Africa, and the judiciary has played a significant role in clearly delineating the roles of each sphere of government regarding planning. On the other hand, the planning process in Nigeria rests majorly at the state level of government and the local governments are not very active in the planning process due to the lack of funds and technical capacity and other problems highlighted in Chapter 5. Given this shortcoming, there is no actual interrelationship in planning although the Constitution hints at it.

In this regard, this thesis argues that the form of planning process in Nigeria where the main primary responsibilities rest with the state government is an anomaly. Proper planning governance requires that the main planning responsibilities rest at the local level of governance, while the state and national governments provide guidance, support and a framework for adaptation. The planning process in Nigeria should be revisited, the role of the national level of government reinstated, and the position of the local government should also be constitutionally reinforced. It is necessary that the local government in Nigeria should be recognised as a distinct and independent level of government, rather than being subservient to the state government.

Given the fact that most impacts of climate change are localised, and the local governments are the first responders to these impacts, the land/physical planning structure plays an important role. As seen above, South Africa has a better pre-existing structure that enables all spheres of government to contribute to adaptation to climate change based on their respective roles in physical planning. This is however again not the case in Nigeria, and the anomaly in intergovernmental cooperation in the planning process in Nigeria poses a problem and militates against the role of physical planning laws and process in adaptation to climate change.

The analysis of the planning system of both countries points to the fact that South Africa has a better system. Notably, the use of the Spatial Development Framework and the Integrated Development Plan as a planning tools in South Africa allow for a holistic consideration of social and economic factors in the planning process. The use of these tools also allows for future planning, thus making it a viable tool for the planning for future projections of climate change. This, therefore, places South Africa on a higher pedestal than Nigeria in the protection of natural and human systems and adaptation. The planning process in Nigeria is not sufficiently forward-looking and has not fully incorporated sustainable development as an integral factor, let alone climate change adaptation. The spatial planning process should be adopted in Nigeria so that the physical planning process takes a holistic look and consideration regarding social, cultural, environmental and economic perspectives to physical and land use planning. Such a process on its own would ensure less social and even physical vulnerabilities and would, in turn, boost the adaptation process.

8.2.2 Focus on adaptation through a synergy between indigenous land use management and physical planning

The call in the Paris Agreement⁶ for the adoption of traditional and indigenous knowledge in adaptation is buttressed by a Lagos interview interviewee who noted that planning must be with the people and not for the people. For planning to be most effective in addressing pressing societal challenges including climate change, it must be considered in tandem with the customary land use norms and practices. For instance, the community-based adaptation system, when considered within the framework of climate adaptation and land use governance, provides a viable option for less expensive adaptation processes which the people at the grass root are better able to identify with and accept.

An effective way to carry out such adaptation would be through integrated planning which synergises indigenous land use practices discussed in Chapter 2 and the formal physical planning process to achieve adaptation. Following this pattern, the community-based adaptation process should be a significant adaptation tool especially in Nigeria where indigenous land use systems are still prevalent. In places like Cape Town where indigenous planning might be non-existent, the creation of synergy between eco-system based adaptation

⁶ Art 7 (2) and (5) of the 2015 Paris Agreement.

and physical planning would engender effective adaptation to the impacts of climate change. This has been discussed in Chapters 4 and 5.

As noted in Chapter 2, land use planning in many indigenous societies recognised the essence and importance of the environment to human existence. This was based on the fact that the members of such societies understood their environment and saw themselves as integral parts of it, rather than seeing the environment as a resource to be continually explored. It must be mentioned here that not all indigenous land use planning traditions were necessarily the best for the environment and the society. Rather, the argument is that both planning and adaptation regimes should draw from effective traditional practices best suited for individual communities.

The mutual co-existence of humans with the ecosystem in these societies was gradually eroded by the advent of technological advancement and industrialisation. With time, these indigenous practices gave way to formal modernised forms of planning which were ill-suited. These planning regulations were adopted in many developing countries like Nigeria and South Africa without consideration for the efficacy or the suitability of these forms of regulation to the societies where they were transplanted.⁷ It is noted that physical planning practices in these donor countries have moved away from this stereotype of planning and embrace socio and economic considerations.⁸ Countries like Nigeria, on the other hand, continue to struggle and grapple with the failings of an ineffectual planning system and those problems are now compounded by the problem of climate change and the need to adapt to its negative impacts.

Evidence from the fieldwork in both Nigeria and South Africa converge on the fact that there was some form of progressive land use system in indigenous societies in both countries. Although not as detailed or structured as exists in the spatial planning process practised today, indigenous planning was organic and developed by the needs of the society. It was an adaptable system of planning, unlike the inflexible planning process that now exists in most developing countries where a unitary planning system is adopted and which gives little room for environmental or social peculiarities. Also, despite the absence of formality, at the core of

⁷ R Glass 'The evaluation of planning: some sociological considerations' in A Faludi *A Reader in Planning Theory* p 65.

⁸ Ibid p 50.

indigenous land use system was social, economic and environmental cohesion. Land use was seen as a common bond which bound the society together. This point is also discussed in Chapter 2. The indigenous land system in Nigeria especially was economically and socially relevant as it provided sustenance and public services for the people and revenue for the rulership. The environmental aspects of this system were inherent in the way land use was carried out – for farming, public use, housing and the provision of amenities. This social, economic and environmental cohesion speaks to the interest of the generality, that is, the public interest.

The United Nations Environmental Programme traces the evolution of eco-system based adaptation from 2005 when in fact it has been the way of land use of many indigenous societies for centuries. As discussed in Chapter 2, indigenous land use planning was highly localised which meant the societies existed in small units which made for easy land governance and the monitoring of use. This also implied that there was effective interaction and public contribution to the system of land use. These characteristics of indigenous land use give implications of public participation which is also a key aspect of ecosystem-based adaptation.

This recommendation is premised on McAuslan’s position that planning law (which is traditionally private-property oriented) is becoming more accommodative of issues within the realm of public interest such as environmental matters and other matters which can be argued for by experts in a public forum to expand to reach of development control.⁹ It also hinges on Justice Weeramantry’s position in the *Gabcikovo Nagymaros Project Case* that there is the need to “take note of the experience of the past” in seeking a convergence between development and environmental values.¹⁰ The conclusion here is thus that land use planning needs to ensure that it draws from past traditions that help support local level engagement in adaptation such as the community-based adaptation, as well as ensure the environment is considered as integral to adaptation as is seen in ecosystem-based adaptation.

⁹ P McAuslan *Ideologies of Planning Law* p 208.

¹⁰ *Gabčikovo-Nagymaros Project, Hungary v Slovakia (Separate Opinion of Vice-President Weeramantry)* [1997] ICJ Rep 88 at 109.

8.2.3 Public Interest and Planning

A central theme that runs through this thesis is the importance of planning legislation in engendering and safeguarding public interest. The adverse impacts of climate change as shown in Chapter 1 and 3 affect social, cultural, environmental and economic interests of members of the society. These are the same interests that planning legislation has over the years sought to protect. Given this fact, planning legislation needs to again re-evolve to address the climate change and chain of events that would arise from it as matters affecting public interest.

The research showed that the planning systems in both South Africa and Nigeria refer to public interest as a basis for planning or development control. The legislation of both countries does not define what amounts to public interest or the parameters to be used in measuring public interest. As discussed in Chapter 2, it is difficult to determine what amounts to public interest in relation to physical planning. Thus, this research argues that in determining what amounts to public interest, due to the impossibility and impracticability of considering all individual interests, the interests of specific groups should be given consideration based on pre-determined categorisations such as gender, age, disabilities or health status, and so on. In other words, public interest as a factor in planning legislation, and by extension climate change adaptation action, cannot be standardised but must entail a level of subjectivity.

Further, climate change is a factor that will alter the context of public interest, thus planning laws ought to be re-invented or evolved to be able to meet emerging and projected challenges. An adaptation process hinged on planning law should thus take into consideration the social, economic, cultural and environmental interests of various groups within the society. The protection of these conglomeration of interests as public interest in both planning and adaptation further emphasise two arguments proffered in this thesis. First is the strengthening of local governments to effectively carry out planning and adaptation. Second is a climate change adaptation governance structure based on the nodal governance structure. In terms of formal governance and the question of public interest, the local government is most suited to identify vulnerable groups within the society and factor in their needs when determining what would amount to public interest. In the same manner the nodal governance presents an opportunity for non-state actors, ranging from the non-governmental organisations to the individual, to actively take part in adaptation in one form or the other.

8.2.4 Integrated governance strategy for climate change adaptation

Chapter 4 highlights the need for effective land governance as a means of adapting to the adverse effects of climate change. An example of where this has been in place in South Africa is the Resilience Building Options (RBO) which has been adopted in the EThekweni Municipality. The RBO 2, highlighted in the Durban Resilience Strategy, has adopted an integrated planning system which incorporates the municipal land governance system and the traditional land governance system.¹¹ This strategy takes cognisance of the societal peculiarities of the areas being planned for,¹² and those peculiarities are in turn exploited in the adaptation process. It is important to point out that this form of governance which integrates local participation may amount to maladaptation or increased vulnerability as a result of apathy lack of support from the local community. Thus, advocacy and provision of information play key roles in the success of such an adaptation plan.

The necessity for the nodal governance structure in climate change adaptation is based on the fact that the responsibility for climate change adaptation spans the entire society from the formal government structure to the individual member of the society.¹³

As noted in Chapter 3, adaptation capacity is inherent in the individual, is autonomous and unregulated, and extends to the immediate community, in which case it is still largely informal, though there is a higher chance of deliberate adaptation and some regulation. Thus, the larger the community, the more likely that adaptation initiatives become more deliberate. Regarding government adaptation initiatives, there is more formality and structure. This thesis argues that climate change adaptation should be approached from a nodal system of governance that extends to all levels and spheres of adaptation initiatives. The system should involve individuals, communities, corporate and civil societies, departments and organs of government, regional and international bodies as far as climate change is concerned. An effective way to ensure individual involvement for instance would be through planning obligations and incentives that encourage activities geared towards adaptation.

¹¹ Durban Resilience Strategy pp 86-88.

¹² A du Plessis and LJ Kotze 'The heat is on: Local government and climate governance in South Africa' 58 (1) *Journal of African Law* 145 – 174 at p 153.

¹³ The role of NGOs is particularly noted as facilitating the first climate change Court decision in South Africa in the case of *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* [2017] ZAGPPHC.

8.2.5 The necessity of legislation on climate change adaptation

The second leg of the argument proffered in this thesis is the need to legislate upon climate change adaptation. This argument is again two-way. The first option is for a stand-alone legislation on climate change adaptation. This option as discussed in Chapter 5 is a necessary but unpopular option as it creates extra legislation that stakeholders and legislation implementers across various sectors must deal with.¹⁴ This was a significant argument against a stand-alone legislation by the interviewees in the fieldwork as was discussed in Chapter 5.

The need for a legal framework for climate change adaptation is however nonetheless essential. The issue of climate change adaptation should not be left to executive speculations or reserved for judicial consideration and interpretation. Rather it should be a matter of legislative expediency and should set out in clear terms the responsibilities of each sphere of government regarding funding, support and implementation.

First, there is a clear distinction between law and policy, and at best a policy is an outline of government aspiration and the methods and principles it wishes to adopt in reaching those aspirations. Law, on the other hand, is a set of standards, procedures and principles that must be followed and the failure to follow them is backed by penalties also sanctioned by the law.¹⁵ Although the climate change policies in both countries are based on the provisions of the Constitutions and other relevant legislation, this does not guarantee their enforceability as noted in Chapter 5. Although Fuo argues that policies that are made for the implementation of human rights are as enforceable as the legislation upon which they are based and are thus in themselves enforceable.¹⁶ This thesis, however, argues that it is unlikely that the Courts will infinitely extend the frontiers of fundamental human rights. Thus is in the interest of the State to prevent a barrage of fundamental human rights claims premised on climate change or its impacts. It is particularly essential that this floodgate is not allowed to open given the many

¹⁴ As noted in Chapter 5, both countries are exploring this option.

¹⁵ www.etu.org.za accessed 31/10/2017. Also, according to Hughes, “a legal system is not an invitation to play but an **obligatory** impress on "natural" living...we can never opt out of those large sectors of the legal system which impose duties or expose us to the legal powers of others and, in practice, the social sacrifice that would be involved makes it prohibitive to opt out of those areas of the system which afford us privileges and powers to achieve certain social ends.” G Hughes ‘Rules, Policy and Decision Making’ (1968) 77 *Yale L.J.* 411, 416.

¹⁶ O Fuo ‘Constitutional basis for the enforcement of “executive” policies that give effect to socio-economic rights in South Africa’ (2013) 16 (4) *PER / PELJ*.

uncertainties that still surround climate change and its effects on human systems. To prevent such a situation and at the same time ensure that there is some level of uniformity, equity and fairness in climate change action, this thesis argues for some form of legislation on climate change for several reasons.

Secondly, climate change governance as discussed in Chapter 4 will involve many actors, including government departments who have their internal administrative policies into which climate change is to be mainstreamed. Without a central regulatory framework, climate change adaptation might end up being a muddling through affair lacking the uniformity which should characterise governance. The existence of a regulatory or legal framework will aid specific and streamlined action targeted at identified vulnerabilities and nationally identified goals.

Thirdly, climate change adaptation is a long-term, capital-intensive programme that will require funding from international and local sources including private investors. Investors in climate change adaptation will require the assurance of a transparent legislative framework to ensure that their funds are going to the right places and meeting the needs for which they are meant.

Fourthly, in addressing the regulatory aspect of climate change action, the policies discussed in Chapter 5 leave the role of ensuring the integration of climate change considerations into existing laws in the hands of government departments in the case of South Africa, and in the hands of state and local governments in the case of Nigeria. This, as argued above, will lead to indiscriminate and uncoordinated action. If climate change considerations are to be integrated into existing laws, there must be a legal framework emanating from the national government to guide such integration. An example is the case with spatial and land use planning in South Africa where the Spatial and Land Use Management Act (SPLUMA) provides a framework for spatial planning all over the country.

Fifth, climate change adaptation will entail issues of land appropriation, review of land use planning regulations, stricter environmental impact assessments and more stringent measures to ensure proper adaptation and mitigation. Some of these issues may give rise to claims of compensation by citizens against the government or its agencies. The absence of a legal framework limiting the extent of government liability and at the same time ensuring equitable climate change action could lead to incessant claims against the government, necessitating

action to prevent such an eventuality. Also, in the inevitable instance when there is a matter before the courts on the issue of climate change, a legal framework would provide a proper basis for the courts to decide such cases, not merely in the light of environmental or developmental considerations, but on climate change considerations.

8.2.5.1 Mainstreaming climate change considerations into physical planning and spatial planning legislation

The second and more popular option that emerged from the interviews is the express mainstreaming of climate change adaptation into existing legislation across sectors, especially planning legislation. This is a more viable option as it then makes climate change adaptation an extra consideration for stakeholders within existing legislative frameworks, as against separate legislation to deal with.

Relating this normative principle to the planning laws in Nigeria and South Africa, the research, both regarding fieldwork and empirical research points to the fact that there has been a considerable level of mainstreaming climate change considerations into legislation on planning and land use particularly in South Africa. Where the law makes no direct mention of climate change, it gives room for consideration of factors including climate change, for example, future spatial planning instruments. In Nigeria however, there is little consideration for climate change in planning laws or the planning process. Climate change action is very much divorced from the planning process. The analysis of planning laws in Nigeria in Chapter 6, however, shows that there is room for mainstreaming climate change into planning laws in Nigeria.

This thesis particularly argues for the inclusion of adaptation consideration in planning legislation because most of the issues around climate change affect land use, and the environment and relate to the built and natural environment. While it is given that planning laws relate to the built environment, there has been an increased application of planning legislation to the natural environment. This, as discussed in Chapters 5 and 6 relate to issues of conservation, protection and preservation of weak ecosystem and the general enhancement of the environment. Given this background, planning laws are necessary for the short-term goal of adapting to climate change and the long-term goal of building resilience.

8.2.6 Contributions

This thesis has contributed to knowledge in the field of physical planning law and environmental law in several ways.

The research has examined and shown the nexus between planning, sustainable development, law and governance in addressing the challenges associated with climate change adaptation. There has also been an application of various theories to the process of planning and the research narrowed down on the use of ‘public interest’ as a justification for both planning and climate change adaptation.

The research has conducted an analysis planning legislation in Nigeria and South Africa in the light of climate change adaptation through a mixed research method. This analysis of planning legislation and its implementation in both countries led to the identification of challenges likely to be encountered in the employment of planning legislation in the adaptation to climate change. Qualitative empirical research was adopted to highlight the efficacy or otherwise of planning legislation and climate change action in both South Africa and Nigeria.

Also, through an analysis of the adaptation policies of both countries, the research has been able to identify the lacunae in the policies, and the need for climate change governance to be backed by a purposeful legal framework. Through this analysis, the research has contributed a legal angle to existing knowledge on urban adaptation to climate change in Nigeria.

8.3 Areas of further research

In the course of carrying out the research, certain issues were encountered which fall outside the scope of this research. These possible areas of further research are as follow.

Issues of torts and compensation for harm occasioned by the adverse impacts of climate change and government liability for actions or inactions resulting in maladaptation to climate change: Chapters 5 and 6 considered the necessity of migration or loss of land or property due to the adverse effects of climate change. This could give rise to issues of compensation for loss of property as a result of government inaction. Further, in a bid to carry out adaptation initiatives, there is the possibility that the government may require individual members of the society to forfeit their property, either for their own or communal safety. The issue of compensation may arise in such instances as well and should be further explored.

International and regional collaboration in the funding of climate change adaptation: Chapter 1 briefly addressed the issue of funding for climate change adaptation. The availability of funding is a significant factor that could affect the effectiveness of climate change adaptation in developing countries. Thus, the issue of what roles international and inter-regional collaborations can play in ensuring sufficiency of funding and capacity to carry out climate change adaptation will arise, especially in Africa.

Governance of coastal areas for climate change adaptation: The thesis briefly addressed this in Chapters 5 and 6, however the scope was limited to coastal planning. There nonetheless exists a plethora of issues to be addressed in that area, particularly in Nigeria where the extent of state or national jurisdiction in the coastal areas is unclear. The clarification of each level of government's responsibilities in the coastal area will make it possible for proper adaptation to be carried out in such areas. Also, worthy of consideration here is the necessity or otherwise of revisiting the 1982 United Nations Convention on the Law of the Sea to make it compliant with the necessity for climate change adaptation.

On a final note, this thesis argues that the concept of adaptation is an essential component of physical planning. Thus, a definition of physical planning should take into consideration existing, and projected variations in socio-economic and environmental circumstances, and the planning system should entail a viable adaptation regime. It is a moot point that physical planning in all its designations addresses the issues and expediency of changes in the society. At this point in the international and local society, the challenges of climate change are germane issues that planning legislation should take cognisance of. Given this argument which lies at the core of this thesis, it is argued that in South Africa planning legislation has the potential to mainstream climate change adaptation. On the other hand, the legislation in Nigeria is not sufficiently adaptable to the mainstreaming of climate change.

APPENDIX 1: INFORMATION SHEET AND CONSENT FORM

Introduction

Title: The role of planning laws in the regulatory framework of climate change adaptation in South Africa and Nigeria

PhD Research carried out by Olubunmi Afinowi

University of Cape Town, Cape Town South Africa

Mode of Data Collection: Informal Interview

Good day sir/ma, my name is Olubunmi Afinowi, I am conducting a research towards the award of a doctoral degree. I am researching into the effectiveness of planning legislation and implementation in adaptation to the adverse effects of climate change in Nigeria and South Africa, and would like to invite you to participate in the project.

As part of my research, I would like first-hand information on the efficacy of the planning legislation in practice, and if these laws can be implemented in such a way to aid adaptation to the adverse effects of climate change. I would thus like to interview people who have the duty of implementing these planning laws or who are conversant with the laws and how they are supposed to operate.

Please note that your participation is voluntary. Your participation is not tied to any obligation, and there will be no negative consequence if you do not wish to participate. If you choose to participate, you may decide not to answer any particular question, and you may withdraw from the interview at any point you feel so inclined. However, I would be grateful if you would assist me by allowing me to interview you and answering my questions.

The interview will be **audio recorded**, and will be informal in form. The audio recording will help me conduct the interview faster and will be a complete documentation of the interview. I

will however like your **express permission**, if you do not feel comfortable with audio recording and will like any other form of documentation, please let me know.

I will ask questions to guide the information you provide, you are however welcome to provide more information than envisaged by the question. If you do not understand any question, please be free to ask me to repeat it. The interview will span 10 to 15 minutes and will hold in your office or a comfortable space within your office premises, please note that it does require you to incur costs of any kind.

Please be informed that your participation is without any form of payment or benefit (monetary or otherwise). Also, the research does not require you to give any intimate or private details about yourself and there is no danger of physical, mental or psychological discomfort or harm.

You will be required to state your name and position, and how long you have worked in the government planning ministry/department. No information provided in this research will be used against you in any way, neither will information be divulged with your name or description tagged to it. The purpose of the interview is strictly research and any information you provide will only be publicised as part of analysed data. If, however, there is the need to make direct reference to any information you give, this will be done anonymously or a separate consent will be sought to publicise your name in relation to the information.

Your interview and others will be transcribed and analysed, and the analysis incorporated into my PhD thesis. The recordings and transcription will afterwards be submitted to the University of Cape Town as part of work done towards the PhD degree. The Ministry of Planning or any relevant government spatial planning establishment will be given a feedback of the outcome of the research project, in order to aid the integration of climate change adaptation into planning laws.

'If you have concerns about the research, its risks and benefits or about your rights as a research interviewee in this study, you may contact the Law Faculty Research Ethics Committee Administrator, Mrs Lamize Viljoen, at 021 650 3080 or at lamize.viljoen@uct.ac.za. Alternatively, you may write to the Law Faculty Research Ethics Committee Administrator, Room 6.28 Kramer Law Building, Law Faculty, UCT, Private Bag, Rondebosch 7701.'

CONSENT

I have read the above information sheet and fully understand its import and meaning. I understand that my participation in this research on the **role of planning laws in the adaptation to climate change** is voluntary, and I give my consent.

I **agree/do not agree** that the interview should be audio recorded.

Name:

Signature:

Date:

APPENDIX 2: INTERVIEW QUESTIONS

1. Questions on Planning Law

- a. Please give your opinion on spatial planning in indigenous African societies?
 - i. Can you please give examples of indigenous planning systems in Africa?
- b. What gaps can you identify between planning law in theory and its practical application?
- c. What are the challenges usually encountered in the implementation of planning laws?
- d. What is your opinion of planning laws being adopted in the protection of infrastructure and the built environment?
- e. The law states that the bulk of planning responsibilities lies with the local government, how do you think these impacts the implementation of the law?
- f. In your opinion, what level of government should have the most crucial planning responsibilities?
- g. How do you think planning laws can be adopted to protect the social and economic well-being of our cities?

2. Questions on climate change

- a.
 - i. How close would you say we are to experiencing the effects of climate change?
 - ii. Can you identify any pointers to the realities of climate change?

- b.** Do you think the built environment and infrastructure will be affected by climate change?
 - i.** What risks of climate change do you think Cape Town is most exposed to?
 - ii.** What do you suggest should be done to reduce vulnerability to risks of climate change?
 - c.** Is there a possibility of adapting to these adverse effects of climate change?
 - i.** If so, how?
 - d.** What measures do you think can be taken to protect ourselves from the adverse effects of climate change?
- 3.** Questions on integrating climate change considerations into planning law
- a.** How do you think planning laws can help us adapt to the adverse effects of climate change?
 - i.** Can you give any practical suggestions as to the planning tools that can be applied?
 - b.** What is your opinion on including climate change consideration in planning laws?
 - c.** Will the planning laws as they exist be sufficient to help protect the built environment and infrastructure against the adverse effects of climate change?
 - d.** In your opinion, is there any relationship between planning laws and disaster management?
- 4.** Is there any information or recommendation you would like to add?

Thank you for your time.

APPENDIX 3: LIST OF INTERVIEWS AND INTERVIEWEE INFORMATION

Interviews in the City of Cape Town

Interviewees	Job description	
CT Interviewee 1	Consultant and member of the Academia, Physical Planning	University of Cape Town
CT Interviewee 2	City of Cape Town, policy implementer	City of Cape Town, Environmental Resource Management Department
CT Interviewee 3	City of Cape Town Policy Maker	City of Cape Town, Transport and Urban Development Authority
CT Interviewee 4	Member of the Academia Physical Planning	University of Cape Town
CT Interviewee 5	Private planning practitioner	Private Practice
CT Interviewee 6	Expert on Climate change adaptation, Western Province policy maker	Western Cape Province, Department of Environmental Affairs and Development Planning
CT Interviewee 7	Private planning practitioner	Private practice
CT Interviewee 8	Member of the Academia, Environmental Law	University of Cape Town
CT Interviewee 9 ¹	Policy Maker on Climate change adaptation and Planning at City of Cape	Western Province, Green Economy/ City of Cape Town, Department of

¹ Interviewee 9 was interviewed based on their earlier posting in the City of Cape Town.

	Town and Western Province	Environmental Policy and Strategy
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Interviews carried out in Lagos State

Lagos Interviewee 1	Lagos State Ministry of the Environment	Policymaking
Lagos Interviewee 2	Lagos State Ministry of the Environment	Policymaking
Lagos Interviewee 3	Lagos State Ministry of the Environment	Policy and legislation Implementation
Lagos Interviewee 4	Lagos State Ministry of the Environment	Policy and legislation Implementation
Lagos Interviewee 5	Lagos State Ministry of the Environment	Policymaking
Lagos Interviewee 6	Lagos State Ministry of the Environment	Policy and legislation Implementation
Lagos Interviewee 7	Lagos State Ministry of the Environment	Policymaking
Lagos Interviewee 8	Lagos State Ministry of the Environment	Policy and legislation Implementation
Lagos Interviewee 9	Lagos State Ministry of Physical Planning	Policy and legislation Implementation
Lagos Interviewee 10	Lagos State Ministry of Physical Planning	Policy and legislation Implementation

Lagos Interviewee 11	Lagos State Ministry of Physical Planning	Policymaking
Lagos Interviewee 12	University of Lagos	Member of the academia
Lagos Interviewee 13	University of Lagos	Member of the Academia

BIBLIOGRAPHY

Books/ Chapters in Books

Adelusi-Adeluyi, A and L Bigon 'City planning: Yoruba city planning' in H Selin *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures* , (2016), Springer, Dordrecht.

Adger, W N, I Lorenzoni & K L O'Brien 'Adaptation now' in Adger, W N, I Lorenzoni & K L O'Brien (ed) *Adapting to Climate Change: Thresholds, Values, Governance* (2009) Cambridge University Press, Cambridge.

Adger, W N, I Lorenzoni & K L O'Brien *Adapting to Climate Change: Thresholds, Values, Governance*. (2009) Cambridge University Press, Cambridge.

Adger, W Net al (ed) *Fairness in Adaptation to Climate Change* (2006) MIT Press, Cambridge.

Afolayan, F S *Culture and Customs of South Africa* (2004) Greenwood Publishing Group, Westport Connecticut.

Alexander, E R *Approaches to Planning: Introducing Current Planning Theories, Concepts, and Issues* 2nd ed, (1992) Gordon and Breach Science Publishers, Luxembourg.

Alexander, E. 'After rationality: Towards a contingency theory for planning' in S J Mandelbaum, L Mazza & R W Burchell *Explorations in Planning Theory*, Transactions Publishers, Rutgers, 45 - 54.

Allmendinger, P *Planning in Postmodern Times* (2001) Routledge, London.

Allmendinger, P *Planning Theory* 2nd ed, (2009) Palgrave Macmillan, Basingstoke.

Allmendinger, P *Planning Theory* 3rd ed, (2017) Palgrave, London.

Archibugi, F *Planning Theory: From Political Debate to the Methodological Reconstruction* (2008) Springer-Verlag Italia 2008.

AUC-ECA-AfDB Consortium 'Framework and guidelines on land policy in Africa: A framework to strengthen land rights' *Enhance Productivity and Secure Livelihood Addis Ababa, Ethiopia* (2010) African Union: African Development Bank: Economic Commission for Africa, Addis Ababa.

Barnes, A & Gerber, G 'The role of land use planning in governance and delivery' in Western Cape Government, Department of Environmental Affairs and Developmental Planning *Land Use Planning Law Reform in the Western Cape: The Road to Transformation* (2016) 1-21.

Barros, V et al *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects' (2014) Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, New York.

Barros, V R et al (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability Part B: Regional Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) Cambridge University Press.

Bennett, T W & N Peart A *Sourcebook of African Customary law for Southern Africa* (1991) Juta Legal and Academic Publishers, Cape Town.

Bennett, T W *Customary Law in South Africa* (2004) Juta and Company Ltd, Cape Town.

Bennett, T W *The Application of Customary Law in Southern Africa: The Conflict of Personal Laws'* (1985) Juta and Co Ltd.

Bentham, J '*An Introduction to the Principles of Morals and Legislation (Chapters I–V)*' (1972) Blackwell Publishing Ltd.

Bentham, J *Theory of Legislation* (1887) Trubner & Company, London.

Berrisford, S. '*How to make planning law work for Africa*' (2013) Africa Research Institute, London.

Brooks, N et al *Tracking Adaptation and Measuring Development* (2011) International Institute for Environment and Development, London.

Brooks, N et al *Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures* (2005) Cambridge University Press, Cambridge.

Brooks, R O, R Jones & R A Virginia 'Law and Ecology: The rise of the ecosystem regime' (2002) Aldershot Ashgate United Kingdom.

Bulkeley, H *Accomplishing Climate Governance* (2015) Cambridge University Press, Cambridge.

Bulkeley, H & Newell, P *Governing Climate Change* 2nd ed (2015) Routledge, London.

Bulkeley, H et al 'The role of Institutions, governance and urban planning for mitigation and adaptation' in Daniel Hoornweg (ed) *Cities and Climate Change: Responding to an Urgent Agenda* (2011) World Bank Publication p 125 - 159.

Burdge, R J & Vanclay, F 'Social Impact Assessment' in Vanclay, F & D A Bronstein *Environmental and Social Impact Assessment* (1995) John Wiley, Chichester.

Camhis, M *Planning Theory and Philosophy* (1979) Tavistock Publications, London.

Cartwright, A et al (eds) *Climate Change at the City Scale: Impacts, mitigation and adaptation in Cape Town* (2012) Routledge, Abingdon, Oxon; New York.

Cartwright, A et al 'Climate at the city scale' in Cartwright, An, et al., eds. *Climate Change at the City Scale: Impacts, Mitigation and Adaptation in Cape Town*. (2012) Routledge.

Chui, W H 'Quantitative legal research' in M. McConville & WH Chui *Research Methods for Law* (2017) Edinburgh University Press, Edinburgh.

Chynoweth, P 'Legal research' in Knight, A and L Ruddock (eds) *Advanced Research Methods in the Built Environment*, Blackwell Publishing Limited, Iowa.

Claassens, A & B Cousins (eds) *Land, Power & Custom: Controversies Generated by South Africa's Communal Land Rights Act* (2008), UCT Press, Cape Town.

Cullingworth, J B & V Nadin *Town and Country Planning in the UK* 13th ed (2002) Routledge, London.

Davidoff, P. & Reiner, TA. 'A choice theory of planning' in A Faludi (ed), *A Reader in Planning Theory* 1st ed (1973) Pergamon Press, New York.

Davoudi, S, J Crawford & A Mehmood(eds) *Planning for climate change: strategies for mitigation and adaptation for spatial planners*' (2009) Earthscan, United Kingdom.

Deininger, K et al *Innovations in land rights recognition, administration, and governance* (2010) World Bank Publications.

Deininger, K, H Selod & A Burns *The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector* (2012) World Bank Publications, Washington D.C.

Deininger, K, H Selod & A Burns *The land governance assessment framework: identifying and monitoring good practice in the land sector* (2012) World Bank Publications, Washington DC.

Deininger, K, H Selod & T Burns 'The land governance framework: methodology and early lessons from country pilots' in *Innovations in Land Rights Recognition, Administration and Governance* (2010) World Bank Publications, Washington DC.

Dryzek, J S, R B Norgaard & D Schlosberg (eds) *The Oxford Handbook of Climate Change and Society* (2011) Oxford University Press, Oxford.

Elias, T O *Nigerian Land Law and Custom* 2nd ed. (1953) Routledge and Kegan Paul Ltd, London.

Fainstein, S S & J DeFilippis *Readings in Planning Theory* (2015) John Wiley & Sons.

Fainstein, S S 'Spatial justice and planning' in Fainstein, S S & J DeFilippis (ed.) *Readings in Planning Theory* 4th ed (2015) John Wiley and Sons.

Faludi, A (ed) *A Reader in Planning Theory* 1st ed. (1973) Pergamon Press Ltd, Oxford.

Faludi, A 'The idea of planning' in A Faludi (ed) *A Reader in Planning Theory* (1973) Pergamon Press.

Feinstein, C H *An Economic History of South Africa: Conquest, Discrimination, and Development* (2005) Cambridge University Press, Cambridge.

Field, C B and others 'Technical summary' In IPCC *Climate change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of working group II to the fifth assessment report of the intergovernmental panel on climate change.*

Field, C B et al *Climate Change 2014: Impacts, Adaptation, and Vulnerability: Part A, Global and Sectoral Aspects: Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) Cambridge University Press Cambridge and New York.

Field, C B, V Barros & T F Stocker *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: Special Report of the Intergovernmental Panel on Climate Change* (2012) Cambridge University Press, New York.

Finan, T J & D R Nelson 'Decentralized planning and climate adaptation: toward transparent governance' *Adapting to Climate Change: Thresholds, Values, Governance* (2009) Cambridge University Press, Cambridge.

Finan, T J & Nelson D R 'Decentralized planning and climate adaptation: Toward transparent governance' in W.N. Adger, I Lorenzoni & K L O'Brien (eds) *Adapting to Climate Change: Thresholds, Values, Governance* Cambridge University Press, Cambridge.

Freedman W 'Climate change and coastal zone management' in T Humby et al (eds) *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

Friedmann J '*Planning in the Public Domain: from Knowledge to Action*' (1987) Princeton University Press, Princeton New Jersey.

Friedmann, J 'Two centuries of planning theory: An overview' in S J Mandelbaum, L Mazza and RW Burchell *Explorations in Planning Theory* (1996) Center for Urban Policy Research, New Brunswick New Jersey.

Frohlich J & J Knieling 'Conceptualising climate change governance' in J Frohlich & W Filho (eds) *Climate Change Governance* (2013) Springer-Verlag Berlin.

Garner, B A (ed) *Black's Law Dictionary* 10th ed (2014) Thomas Reuters, St Paul MN.

Geary, W M *Nigeria Under British Rule (1927)* (2013) Routledge, London.

Gerrard, M B & K F Kuh *The Law Adaptation to Climate Change: United States and International Aspects* (2012) American Bar Association Environment, Energy and Natural Resources Law Section, Chichago.

Ghallab, M, D Nau & P Traverso *Automated Planning: Theory & Practice* (2004) Morgan Kaufmann Publishers, San Francisco.

Glavovic, B C and G P Smith (eds) *Adapting to Climate Change: Lessons from Natural Hazards Planning. Environmental Hazards* (2014) Springer Science and Business, New York.

Glazewski, J & L du Toit 'Planning Law and the Environment' in Jan Glazewski *Environmental Law in South Africa* Loose leaf edition (Issue 4) (2016) Lexis Nexis Butterworths, Durban.

Glazewski, J 'Towards a climate-resilient and low-carbon City of Cape Town' in A Cartwright et al *Climate Change at the City Scale: Impacts, Mitigation and Adaptation in Cape Town* (2012) Earthscan Oxon UK.

Glazewski, J *Environmental Law in South Africa* 2nd ed (2005) LexisNexis Butterworths, Durban.

Godden, L & M Tehan *Comparative Perspectives on Communal Lands and Individual Ownership: Sustainable Futures* (2010) Routledge, Abingdon.

Habermas, J *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (translated by Thomas Burger) (1989) MIT Press, Cambridge Massachusetts.

Hahn, R W & A Ulph 'Thinking Through the Climate Change Challenge' in Hahn R & A Ulph (eds) *Climate Change and Common Sense: Essays in Honour of Tom Schelling* (2012) Oxford University Press, Oxford 3-18.

Hahn, R W & A Ulph *Climate Change and Common Sense: Essays In Honour of Tom Schelling'* (2012) Oxford University Press, Oxford.

Hartmann, D L et al 'Observations: atmosphere and surface' *Climate Change 2013 the Physical Science Basis: Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2013) Cambridge University Press, New York.

Hartmann, D L et al 'Observations: Atmosphere and Surface' in TF Stocker et al (eds.) *Climate Change 2013: The Physical Science Basis Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2013) Cambridge University Press, Cambridge.

Haverfield, F J *Ancient Town-Planning* (1913) Clarendon Press, Oxford.

Hayford, J E C *The Truth about the West African Land Question* (1971) Frank Cass and Co Ltd, London.

Healey, P 'Territory, Integration and Spatial Planning' in M Tewdwr-Jones, P Allmendinger (eds) *Territory, Identity and Spatial Planning: Spatial Governance in a Fragmented Nation* (2006) Routledge, London 64 -79.

Hebinck, P G M & Lent, P C *Livelihoods and Landscapes: The People of Guquka and Koloni and their Resources* (2007) Brill, Leiden.

Hendler, S (ed) *Planning Ethics a Reader in Planning Theory, Practice, and Education* (1995) Centre for Urban Policy and Research Press,

Hirokawa, K H & Rosenbloom, J D 'Land use planning in a climate change context' in Verschuuren, J (ed) *Research Handbook on Climate Adaptation Law*, (2013) Edward Elgar Publishing Inc., Cheltenham, UK 12 -33.

Hoornweg, D (ed) *Cities and Climate Change: Responding to an Urgent Agenda* (2011) World Bank Publications.

Humby, T et al (eds) *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

IPCC, 2014 'Summary for policymakers' CB Field et al (eds) in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge University Press, New York.

Johnson, S *The History of the Yorubas* (1921) Routledge and Sons Ltd, London.

Kerr, A J *The Customary Law of Immovable Property and of Succession* 2nd ed (1976) Grahamstown Rhodes University.

Keskitalo, C, S Juhola & L Westerhoff 'Connecting multiple levels of governance for adaptation to climate change in advanced industrial states' in J Edelenbos, N Bressers & Scholten, P (eds), *Water Governance as Connective Capacity* (2016) Routledge, London 69 - 88.

Khan, M R 'Climate change, adaptation and international relations theory' in Sosa-Nunez G & Atkins E *Environment, Climate Change and International Relations* (2016) E-International Relations Publishing, England 14 -28.

Knight, A & L Ruddock *Advanced Research Methods in the Built Environment*' (2008) Blackwell Publishing Ltd, United Kingdom.

Koresawa, A & Konvitz, J 'Towards a new role for spatial planning' in OECD, *Towards a New Role for Spatial Planning* (2001) OECD Publishing 11 - 30.

Kothari, C R, *Research Methodology: Methods and Techniques* (2004) New Age International.

Kotze L et al 'Climate change and governance in South Africa-Setting the scene' in T Humby et al (eds) *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

Lim, B et al *Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures* (2004) Cambridge University Press, Cambridge.

Lloyd, P C *Yoruba Land Law* (1964) Oxford University Press, London.

Low, N *Planning Politics and the State: Political Foundations of Planning Thought* (1991) Unwin Hyman Ltd, Oxford.

Masters, L & L Duff (eds) *Overcoming Barriers to Climate Change Adaptation Implementation in Southern Africa* (2011) Africa Institute of South Africa and the Institute for Global Dialogue, South Africa.

Maziotti, D F 'The underlying assumptions of advocacy planning: Pluralism and reform' in C Paris (ed) *Critical Readings in Planning Theory* (1982), Pergamon Press, Oxford 207-225.

McAuslan, P '*Bringing the Law Back In: Essays in Land, Law and Development*' (2003) Ashgate Publishing Ltd Aldershot England.

McAuslan, P *Land, Law and Planning: Cases, Materials and Text* (1975) Weidenfeld and Nicolson, London.

McAuslan, P *The Ideologies of Planning Law* (1980) Pergamon Press, Oxford.

McCarthy, J J et al (ed) *Climate change 2001: impacts, adaptation, and vulnerability: contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR3)* (2001) Cambridge University Press, Cambridge.

McConville, M & W H E Chui *Research Methods for Law* (2007) Edinburgh University Press, Edinburgh.

Mearns, R & A Norton *Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World* (2010) World Bank Publications Washington DC.

MR Shaw JT Overpeck and GF Midgley, 'Ecosystem-based approaches to adaptation—emerging opportunities' cross-chapter box in CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects Contribution of*

Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2014) Cambridge University Press.

Mukheibir P and Ziervogel G *Framework for Adaptation to Climate Change in the City of Cape Town (FAC⁴T)* (2006) Environmental Resource Management City of Cape Town, Cape Town.

Muller, A ‘Brief history of land use planning the South African context’ in *Land Use Planning Law Reform in the Western Cape* (2016) Western Cape Government Department of Environmental Affairs and Development Planning 31 -40.

Munro, K. ‘A case for provincial land development management’ in *Land Use Planning Law Reform in the Western Cape* (2016) Western Cape Government Department of Environmental Affairs and Development Planning 60 -72.

Mwalimu, C. *The Nigerian Legal System: Public Law Vol. 1* (2005) Peter Lang, New York.

Needham, B *Planning, Law and Economics: The Rules We Make for Using Land*’ (2006) Routledge, London.

Niang, I, et al ‘2014: ‘Africa’ in VR Barros et al (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge University Press, New York 1199 - 1265.

Noble, I. R. Et al ‘Adaptation needs and options’ In CB Field and others (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability Part A: Global and Sectoral Aspects Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge University Press, New York 833 - 868.

OECD, *Integrating Climate Change Adaptation into Development Co-Operation: Policy Guidance*, (2009), OECD Publishing, Paris.

Palmer, D, S Fricška & B Wehrmann *Towards Improved Land Governance* (2009) UN-HABITAT& FAO.

Paris, C *Critical Readings in Planning Theory: Urban and Regional Planning Series* (1982) Pergamon Press, Oxford.

Parry M L *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the International Panel on Climate Change* (2007) Cambridge University Press, New York.

Parry, M L et al 'Assessing the Costs of Adaptation to Climate Change: A review of the UNFCCC and other recent Estimates' (2009) IIED and the Grantham Institute for Climate Change, London.

Reiner, T A *The Place of the Ideal Community in Urban Planning* (1963) University of Pennsylvania Press, Philadelphia.

Richardson, B J (ed) *Local Climate Change Law: Environmental Regulation in Cities and Other Localities*' (2012) Edward Elgar Publishing, Massachusetts, USA.

Richardson, B J et al (eds) *Climate Law and Developing Countries: Legal and Policy Challenges for the World Economy* (2009) Edward Elgar Publishing, Cheltenham.

Ruppel, O C et al (eds) *Climate Change: International Law and Global Governance* (2013) Nomos, Baden-Baden.

Sandercock, L (ed) *Making the Invisible Visible: A Multicultural Planning History*' (1998) University of California Press, Berkeley.

Schernewski, G, J Hofstede & T Neumann (eds) *Global Change and Baltic Coastal Zones*' (2011) Springer Science & Business Media, Dordrecht.

Scholz, W, P Robinson & T Dayaram 'Colonial planning concept and post-colonial realities: The influence of British planning culture in Tanzania, South Africa and Ghana' in Silva, C N (ed) *Urban Planning in Sub-Saharan Africa: Colonial and Post-Colonial Planning Cultures* (2015) Routledge, New York.

Silva, C N(ed) *Urban planning in Sub-Saharan Africa: Colonial and Post-Colonial Planning Cultures* (2015) Routledge, New York.

Sosa-Nunez, G & E Atkins *Environment, Climate Change and International Relations* (2016) E-International Relations Publishing, Bristol England.

South African Cities, Network *Addressing the Crisis of Planning Law Reform in South Africa* (2012). South African Cities Network, South Africa.

Stern, N H *The Economics of Climate Change: The Stern Review* (2007) Cambridge University Press, New York.

Stocker, T F *Climate Change 2013: The Physical Science Basis: Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) Cambridge University Press, Cambridge.

Stocker, T, et al *Climate Change 2013: The Physical Science Basis* (2014) Cambridge University Press Cambridge, UK, and New York.

Stroud F, A Millbrook & Greenberg Stroud's Judicial Dictionary of Words and Phrases 6th ed Sweet and Maxwell, London.

Taylor A et al 'Urban Adaptation' in T Humby et al (eds) *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

Taylor, N '*Urban Planning Theory Since 1945*' (1998) Sage Publications, London.

Tewdwr-Jones, M. & Allmendinger, P. '*Territory, Identity and Spatial Planning: Spatial Governance in a Fragmented Nation*' (2006) Routledge, London.

Trollip H, S Ward, V Walsh & City of Cape Town (Environmental Resource Management Department) *Moving Mountains: Cape Town's Action Plan for Energy and Climate Change* (2011) City of Cape Town Environmental Resource Management Department, Cape Town.

Van der Berg A, A du Plessis and M Murphee ‘Local disaster risk reduction and management in South Africa’s Response to climate change’ in T Humby et al (eds) *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

Van der Berg A, Anel du Plessis & M Murphee ‘Local disaster risk reduction and management in South Africa’s response to climate change’ in T L Humbly and others *Climate Change: Law and Governance in South Africa* (2016) Juta, Cape Town.

Van Wyk, J. *Planning Law* 2nd ed (2012) Juta and Company Ltd, Cape Town.

Verschuuren, J ‘Legal aspects of climate change adaptation’ in Hollo E, K Kulovesi & M Mehling, *Climate Change and the Law* (2013) Springer, Dordrecht 257-285.

Verschuuren, J *Research Handbook on Climate Change Adaptation Law* (2013) Edward Elgar Publishing.

Ward, S V et al *British Planning History 1900-1952* (1992) Altair Pub., Hebden Bridge England, also available at <http://www.microform.co.uk/guides/G17527.pdf> accessed 8 March 2016.

Watkins, D & M Burton(eds) *Research Methods in Law* (2013) Routledge, London.

Whitfield, G M B *South African Native Law* 2nd ed (1948) Juta, Cape Town.

Wold, C, D Hunter & M Powers *Climate Change and the Law* (2009) Lexis Nexis Matthew Bender, New Jersey.

Zeirvogel, G. & Parnell, S. ‘Tackling barriers to climate change adaptation in South African coastal cities’ in Glavovic, B C & G P Smith (eds) *Adapting to Climate Change: Lessons from Natural Hazards Planning* (2014) Springer, New York.

Journal Articles

Abram, S A ‘Planning the public: some comments on empirical problems for planning theory’ (2000) 19(4) *Journal of Planning Education and Research* 351-357.

Adger, W N, N W Arnell & E L Tompkins ‘Successful adaptation to climate change across scales’ (2005) 15(2) *Global Environmental Change* 77- 86.

Adger, W N et al ‘Resilience implications of policy responses to climate change’ (2011) *Wiley Interdisciplinary Reviews: Climate Change*. 2(5):757-766.

Agyeman, J. & B Evans ‘“Just sustainability”: the emerging discourse of environmental justice in Britain?’ (2004) 170(2) *The Geographical Journal* 155-164.

Akimoto, F ‘The birth of ‘land use planning’’ in American urban planning, (2009) 24(4) *Planning Perspectives* 457-483.

Alexander, E R ‘A transaction-cost theory of land use planning and development control: towards the institutional analysis of public planning’ (2001) *The Town Planning Review* 45-75.

Alexander, E R ‘The public interest in planning: From legitimation to substantive plan evaluation’ (2002) 1(3) *Planning Theory* 226–249.

Aluko, O ‘Development Control in Lagos State: an assessment of public compliance to space standards for urban development’ (2011) 5(5) *African Research Review*, 169-184.

Arnold, C A ‘Planning Milagros: Environmental justice and land use regulation’ (1998) 76(1) *Denv.UL Rev.* 1 -153.

Arnold, C A T ‘Resilient Cities and Adaptive Law’ (2014) 50 *Idaho Law Review* 245-264.

Banfield, E ‘Ends and means in planning’ (1959) 9 *International Social Science Journal* 361.

Bauer, A ‘Multi-level governance of climate change adaptation through regional partnerships in Canada and England’ (2014) 51 *Geoforum* 121-129.

Bauer, A, J Feichtinger & R Steurer ‘The Governance of Climate Change Adaptation in 10 OECD Countries: Challenges and Approaches’ (2012) 14(3) *Journal of Environmental Policy & Planning*, 279 -304.

Bayles, J W & D Polden 'Protecting the Urban Heritage: Lessons Learned from the United Kingdom and the United States Experience' (1988) 28 *Washburn LJ*. 51.

Beatley, T 'Environmental ethics and planning theory' (1989) 4(1) *Journal of Planning Literature* 1-32.

Bengs, C 'Planning theory for the naïve' (2005) *European Journal of Spatial Development-Http://www.Nordregio.se/EJSD/-ISSN. 1650:9544*.

Berrisford, S & others 'SPLUMA Implementation: Guidance for practitioners' (unpublished course material 2017).

Betsill, M & H Bulkeley 'Cities and multiple governance of global climate change (2006) 12 *Global Governance* 141 – 59.

Bilchitz, D 'Is the Constitutional Court wasting away the rights of the poor? Nokotyana v Ekurhuleni Metropolitan Municipality' (2010) 127(4) *South African Law Journal*, 591-605.

Birkmann, J. & von Teichman, K. 'Integrating disaster risk reduction and climate change adaptation: key challenges—scales, knowledge, and norms' (2010) 5(2) *Sustainability Science* 171-184.

Booth, P 'From property rights to public control: The quest for public interest in the control of urban development' (2002) 73(2) *Town Planning Review* 153-170.

Booth, P 'From regulation to discretion: the evolution of development control in the British planning system 1909-1947' (1999) 14(3) *Planning Perspectives*. 277-289.

Booth, P 'Planning and the rule of law' (2016) 17(3) *Planning Theory & Practice* 344–360.

Brand, R. & F Gaffikin 'Collaborative planning in an uncollaborative world' (2007) 6(3) *Planning Theory*. 282-313.

Bronstein, V 'Mapping legislative and executive powers over municipal planning': Exploring the boundaries of local, provincial and national control' (2015) 132 (3) *South African Law Journal*. 639-663.

Brooks, R O 'Jurisprudence of planning: Notes on the outline of law required to support and control planners, A' (1978) 24 *Cath. Law* 1.

Bulkeley, H & M M Betsill 'Revisiting the urban politics of climate change' (2013) 22 (1) *Environmental Politics* 136 - 154.

Bulkeley, H & R Tuts 'Understanding urban vulnerability, adaptation and resilience in the context of climate change' (18) 6 *Local Environment* 646 - 62.

Bulkeley, H 'Cities and the governing climate change' (2010) 35 *Annual Review of Environment and Resources* 229-53.

Burris, S, P Drahos & C Shearing 'Nodal governance' (2005) 30 *Australian Journal of Legal Philosophy* 30.

Byrne, J A & C I Portanger 'Climate change, energy policy and justice: A systematic review' (2014) 36(2) *Analyse & Kritik*, 315-344.

Caldwell, L K 'Land and the law: problems in legal philosophy' (1986) *U.Ill.L.Rev.* 319.

Callies, D L 'Land Use Controls: Of enterprise zones, takings, plans and growth controls: Committee on Land Use, Planning and Zoning' (1982) 14 *The Urban Lawyer.* :781-846.

Camhis, M 'Planning Theory and Philosophy' (1978) 10 (2) *Antipode* 44-63.

Campbell, H & R Marshall 'Ethical frameworks and planning theory' (1999) 23 (3) *International Journal of Urban and Regional Research.* 464-478.

Campbell, H & R Marshall 'Utilitarianism's bad breath? A re-evaluation of the public interest justification for planning' (2002) 1(2) *Planning Theory* 163-187.

Campbell, S 'Green cities, growing cities, just cities?: Urban planning and the contradictions of sustainable development' (1996) 62(3) *Journal of the American Planning Association* 296-312.

Cannon, T & D Müller-Mahn 'Vulnerability, resilience and development discourses in context of climate change' (2010) 55(3) *Natural Hazards* 621-635.

Carmin, J, D Roberts & I Anguelovski 'Planning Climate Resilient Cities: Early Lessons from Early Adapters' (2009) *Fifth Urban Research Symposium, Cities and Climate Change: Responding to an Urgent Agenda* 28.

Chen, J 'Modern disaster theory: Evaluating disaster law as a portfolio or legal rules' (2011) 25 *Emory Int'l L. Rev.* 25 (2011) 1123& 29.

Cole, D H 'Climate change adaptation and development' (2007) 26 (1) *UCLA Journal of Environmental Law* 6.

Craig, R K 'Stationarity is dead'-long live transformation: Five principles for climate change adaptation law' (2010) 34 (1) *Harvard Environmental Law Review* 9 -75.

Davidoff, P & T A Reiner 'A choice theory of planning' (1962) 28 (2) *Journal of the American Institute of Planners* 103-115.

Davidoff, P 'Advocacy and pluralism in planning' (1965) 31(4) *Journal of the American Institute of Planners* 331-338.

Davidse, B J, M Othengrafen & S Deppisch 'Spatial planning practices of adapting to climate change' (April 2015) 57(1) *European Journal of Spatial Development*.

Davidson, O et al 'The development and climate nexus: the case of sub-Saharan Africa' (2003) 3(sup1) *Climate Policy* S97-S113.

Davoudi, S et al. 'Resilience: A Bridging Concept or a Dead End? "Reframing" Resilience: Challenges for Planning Theory and Practice Interacting Traps: Resilience Assessment of a Pasture Management System in Northern Afghanistan Urban Resilience: What Does It Mean in Planning Practice? Resilience as a Useful Concept for Climate Change Adaptation? The Politics of Resilience for Planning: A Cautionary Note: Edited by Simin Davoudi and Libby Porter' (2012) 13 (2) *Planning Theory & Practice*. 299-333.

Dewulf, A, S Meijerink & H Runhaar 'Editorial: The governance of adaptation to climate change as a multi-level, multi-sector and multi-actor challenge: A European comparative perspective' (2015) *Journal of Water and Climate Change* 1 -7.

Dowdall, H C & S Adshead 'The Law of town planning' (1910) 1(1) *The Town Planning Review*. 39-50.

Downing, T E et al 'Adaptation to climate change in Africa' (1997) 2 (1) *Mitigation and adaptation strategies for global change* 19 - 44.

Driessen, P P & H F van Rijswijk 'Normative aspects of climate adaptation policies' (2011) 2(4) *Climate Law* 559-581.

Du Plessis, A & L Kotze 'The heat is on: Local government and climate governance in South Africa' (2014) 58(1) *Journal of African Law* 145 – 174.

Du Plessis, A 'Climate change, public trusteeship and the tomorrows of the unborn' (2015) 31 (2) *South African Journal on Human Rights* 269-293.

Du Plessis, W J 'African indigenous land rights in a private ownership paradigm' (2011) 14*PER / PELJ* 49.

Ellis, G 'Discourses of objection: towards an understanding of third-party rights in planning' (2004) 36 (9) *Environment and Planning A* 1549.

Fainstein, N I & Fainstein, S S 'New debates in urban planning' (1979) 3 (1-4) *International Journal of Urban and Regional Research*.381-403.

Fainstein, S 'Spatial justice and planning' (2009) 1 *Justice Spatiale/ Spatial Justice* 1 -13.

Fainstein, S S 'New directions in planning theory' (2000) 35(4) *Urban Affairs Review* 451 -478.

Fainstein, S S 'Planning theory and the city' (2005) 25 (2) *Journal of Planning Education and Research*. 121-130.

Feldman, I R & J H Kahan 'Preparing for the day after tomorrow: frameworks for climate change adaptation' (2007) 8 *Sustainable Dev.L. & Pol'y*. 61.

Flatt, V B 'Adapting laws for a changing world: A systemic approach to climate change' (2012) *Fla.L.Rev.* 269.

- Frieden, B J 'Legal role in urban development' (1965) 12 *UCLA L. Rev.* 856 - 879.
- Friedmann, J 'Planning in the public domain: Discourse and praxis' (1989) 8(2) *Journal of Planning Education and Research* 128-130.
- Friedmann, J 'Planning theory revisited' (1998) 6 (3) *European Planning Studies* 245-253.
- Friedmann, J 'Teaching planning theory' (1995) 14(3) *Journal of Planning Education and Research* 156-162.
- Friedmann, J 'The city in history' (1962) 33(1) *The Town Planning Review* 73-80.
- Friedmann, J 'The uses of planning theory: A bibliographic essay' (2008) 28 *Journal of Planning Education and Research* 247-257.
- Friedmann, J 'Why do planning theory?' (2003) 2 (1) *Planning Theory* 7-10.
- Fuo O N 'Constitutional basis for the enforcement of "executive" policies that give effect to socio-economic rights in South Africa' 2013(16) 4 *PER / PELJ* 1 -45.
- Füssel, H & R J Klein. 'Climate change vulnerability assessments: an evolution of conceptual thinking' (2006) 75(3) *Climatic Change*. 301-329.
- Füssel, H 'Adaptation planning for climate change: concepts, assessment approaches, and key lessons' (2007) 2(2) *Sustainability Science*. 265-275.
- Glass, R 'The evaluation of planning: some sociological considerations' in Faludi, A. (ed) *A Reader in Planning Theory* (1973).
- Grant, C & Osanloo, A 'Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house"' (2014) 4(2) *Administrative Issues Journal* 12 - 26.
- Gremellion, T.M. 'Setting the foundation: climate change adaptation at the local level' (2011) 41 *Envtl.* 1221 - 1253.
- Grove Jr, W R 'Metropolitan Planning' (1966) 21 *U. Miami L. Rev.* 60-98.

Harper, T L & S M Stein 'The centrality of normative ethical theory to contemporary planning theory' (1992) 11(2) *Journal of Planning Education and Research*. 105-116.

Haughton, G. 'Environmental justice and the sustainable city' (1999) 18(3) *Journal of Planning Education and Research* 18:233-243.

Healey, P 'Collaborative planning in perspective' (2003) 2(2) *Planning Theory*. 2(2):101-123.

Holifield, R 'Defining environmental justice and environmental racism' (2001) 22(1) *Urban Geography* 78-90.

Huchinson, T & N Duncan 'Defining and describing what we do: Doctrinal legal research' (2012) 17 *Deakin L.Rev.* 83.

Hudson, B M, T D Galloway & J Kaufman 'Comparison of current planning theories: Counterparts and contradictions' (1979) 45(4) *Journal of the American Planning Association* 387 -398.

Hughes, G 'Rules, Policy and Decision Making' (1968) 77 *Yale L.J.* 411.

Huh, T, Y Park, & J Y Yang 'Multilateral Governance for Climate Change Adaptation in S. Korea: The Mechanisms of Formulating Adaptation Policies' (2017) 9(8) *Sustainability* 1364-1375.

Huitema, D et al 'The governance of adaptation: choices, reasons, and effects: Introduction to the special feature (2016) 21(3) *Ecology and Society* 36 -51.

Humby, T 'Hands on or hands off? The constitutional court's denial of a provincial municipal planning role; Habitat Council v Provincial Minister of Local Government, Western Cape 2013 6 SA 113 (WCC) Minister of Local Government, Western Cape v The Habitat Council (City of Johannesburg Metropolitan Municipality Amicus Curiae) 2014 5 BCLR 591 (CC): regspraak. (2015) 1*Tydskrif Vir Die Suid-Afrikaanse Reg.* 178-188.

Hurlimann, A C & A P March 'The role of spatial planning in adapting to climate change' (2012) 3(5) *Wiley Interdisciplinary Reviews: Climate Change* 477-488.

Hurlimann, A et al 'Urban planning and sustainable adaptation to sea-level rise' (2014) 126 *Landscape and Urban Planning* 84-93.

Innes, J & D Booher 'Collaborative dialogue as a policy making strategy' (2000) Institute of Urban & Regional Development Institute of Urban and Regional Development, University of California at Berkeley.

Innes, J & D Booher 'Planning institutions in the network society: Theory for collaborative planning' (1999) University of California at Berkeley, Institute of Urban and Regional Development.

Johnsson, A 'Climate change in International Environmental Law' (2012) 17 *E. & Central Eur.J.on Env'tl.L* 1.

Jutla, R S 'The rational approach in environmental planning and design' (1993) 27 *Design Methods: Theories Research, Education and Practice*.

Karassin O 'Mind the gap: Knowledge and need in regulating adaptation to climate change' (2009) 22 *Geo. Int'l Env'tl L Rev* 383.

Kaswan, A. 'Climate adaptation and land use governance: The vertical axis' (2014) 39 *Columbia Journal of Environmental Law* 390.

Kaswan, A. 'Climate change adaptation and land use: Exploring the federal role' (2013) 47 *J. Marshall L.Rev.* 509.

Kidd, M 'Country Report: South Africa: The Spatial Planning and Land Use Management Act 16 of 2013' 5 *IUCNAEL Ejournal* 240.

Kiernan, M. J 'Ideology, politics, and planning: reflections on the theory and practice of urban planning' (1983) (10) 1 *Environment and Planning B: Planning and Design* 71-87.

Kihl, M 'Integrating Planning Theory and Practice' (1995) 23(3) *Policy Studies Journal* 551-554.

Klein, R J, E L F Schipper & S Dessai, S. 'Integrating mitigation and adaptation into climate and development policy: three research questions' (2005) 8 (6) *Environmental Science & Policy* 579 - 588.

Klosterman, R E 'Arguments for and against planning' (1985) 56(1) *The Town Planning Review* 5.

Lai, L W C 'Property rights justifications for planning and a theory of zoning' (1997) 48(3) *Progress in Planning* 161-245.

Lane, M B 'Public participation in planning: An intellectual history' (2005) 36 (3) *Australian Geographer* 283- 299.

Leaf, M, et al 'Planning history and the black urban experience: Linkages and contemporary implications' (1994) 14 *Journal of Planning Education and Research* 1-11.

Lei, Y & J Wang 'A preliminary discussion on the opportunities and challenges of linking climate change adaptation with disaster risk reduction' (2014) 73 (1) *Natural Hazards* 1587 – 1597.

Lewis, C W 'In pursuit of the public interest' (Sept/Oct 2006) 66(5) *Public Administration Review* 694 -701.

Mabin, A & D Smit 'Reconstructing South Africa's cities? The making of urban planning 1900–2000' (1997) 12(2) *Planning Perspectives* 193-223.

Macintosh, A, A Foerster & J McDonald 'Policy design, spatial planning and climate change adaptation: a case study from Australia' (2015) 58(8) *Journal of Environmental Planning and Management* 1432 - 1453.

Mazmanian, D, J Jurewitz & H Nelson 'A governing framework for climate change adaptation in the built environment' (2013) 18(4) *Ecology and Society* 56.

McAuslan, P 'Planning law's contribution to the problems of an urban society' (1974) 37 *Mod. L. Rev.* 134 -153.

Mertz, O et al 'Adaptation to climate change in developing countries' (2009) 43(5) *Environmental Management*. 43(5):743-752.

Milton J R L 'Planning and property' (1985) *Acta Juridica* 267- 288.

Mmom, P & G Chukwu-Okeah 'Factors and processes of coastal zone development in Nigeria: A review' (2011) 3(6) *Research Journal of Environmental and Earth Sciences*. 625-632.

Mukheibir, P & G Ziervogel 'Developing a Municipal Adaptation Plan (MAP) for climate change: the city of Cape Town (2007) 19(1) *Environment and Urbanization* 143-158.

Nagy, J A 'Planning and the public interest: A critical review' (2015) 11(2) *Romanian Review of Regional Studies* at 115.

Negro, S E 'Recent developments in coastal adaptation to climate change' (2013) *The Urban Lawyer* 991-1005.

Niang, I, et al '2014: Africa in VR Barros et al (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* 1202.

Njoh, A J 'Urban planning as a tool of power and social control in colonial Africa' (2009) 24 (3) *Planning Perspectives* 301 – 317.

Nolon, J R 'Comparative land use law: Patterns of sustainability' (2005) 37 *Urb. Law*. 807- 852.

O'Brien, G, P O'Keefe, J Rose, & B Wisner 'Climate change and disaster management' (2006) 30 (1) *Disasters* 64-80.

Omole, F K & O B Akinbamijo 'Land development and planning laws in Nigeria; The historical account' (2012) 8 *Journal of Law, Policy and Globalisation* 25 -31.

Onyenechere, E 'Climate change and spatial planning concerns in Nigeria: Remedial measures for more effective response' (2010) 32 (3) *Journal of Human Ecology* 137-148.

Ortolano, L & A Shepherd 'Environmental impact assessment' in Vanclay, F. & Bronstein, D. A. *Environmental and Social Impact Assessment* (1995) John Wiley and Sons Ltd.

Oshio, P E 'The indigenous land tenure and nationalization of land in Nigeria' (1990) 10 *Boston College Third World Law Journal* 43.

Paavola, J & W N Adger 'Fair adaptation to climate change' (2006) 56 (4) *Ecological Economics* 594-609.

Pavlich, D J 'Zoning law and administration in the United States of America and the Republic of South Africa' (1978) 95 *S. African LJ.* 102.

Pearsall, H & J Pierce 'Urban sustainability and environmental justice: evaluating the linkages in public planning/policy discourse' (2010) 15(6) *Local Environment* 569-580.

Peel, J, L Godden & R J Keenan 'Climate change law and governance from the bottom up: Introduction to the Special Issue' (2011) 2 *Climate L.* 459.

Pielke, R et al 'Climate change 2007: Lifting the taboo on adaptation' (2007) 445(7128) *Nature* 597-598.

Pieterse, M 'Development, the right to the city and the legal and constitutional responsibilities of local government in South Africa' (2014) 13(1) *South African Law Journal* 149-177.

Preston, B L, R M Westaway & E J Yue. 'Climate adaptation planning in practice: An evaluation of adaptation plans from three developed nations' (2011) 16(4) *Mitigation and Adaptation Strategies for Global Change* 407-438.

Reid, S M 'The scope of planning law in England: Decision criteria in development control' (1978) 10 *Urb. Law.* 623- 700.

Roggema R, P Kabat & A Van Den Doddlesteen 'Towards a spatial planning framework for climate adaptation' (2012) 1(1) *Smart and Sustainable Built Environment* 29 -58.

Ruhl, J B & J Salzman 'Climate change meets the law of the horse' (2012) 62(5) *Duke Law Journal* 975.

Ruhl, J B 'Climate change adaptation and the structural transformation of environmental law' (2010) 40 *Environmental Law*. 363 - 435.

Ryan, P 'Freedom of property - An urban planning perspective' (1988) 11 *U.N.S.W.L.J.* 48 – 65.

Rydin, Y 'Re-examining the role of knowledge within planning theory' (2007) 6 (1) *Planning Theory* 52-68.

Sager, T 'Positive theory of planning: the social choice approach' (2001) 33(4) *Environment and Planning A* 629-648.

Salkin, P E & A Lavine 'Community benefits agreements and comprehensive planning: Balancing community empowerment and the police power' (2009) 18 *Journal of Law and Policy* 157.

Satterthwaite, D & D Dodman 'Towards resilience and transformation for cities within a finite planet' (2013) 25 (2) *Environment and Urbanization*. 291-298.

Schipper, E L F 'Conceptual history of adaptation in the UNFCCC process' (2006) 15(1) *Review of European Community & International Environmental Law* 82-92.

Scholtz, W 'The promotion of regional environmental security and Africa's common position on climate change' (2010) 10(1) *African Human Rights Law Journal*. 1-25.

Scott, A J & S T Roweis 'Urban planning in theory and practice: a reappraisal' (1977) 9 (10) *Environment and Planning A* 1097-1119.

Shearing, C & J Wood 'Nodal governance, democracy and the new denizens' (2003) 30(3) *Journal of Law and Society* 400 - 419.

Smit, B et al 'An anatomy of adaptation to climate change and variability' (2000) 45 *Climate Change* 223.

Smith, M E & E Michael 'Form and meaning in the earliest cities: a new approach to ancient urban planning' (2007) 6(1) *Journal of Planning History* 3-47.

Solecki, W, R Leichenko & K O'Brien 'Climate change adaptation strategies and disaster risk reduction in cities: Connections, contentions, and synergies' (2011) 3 (3) *Current Opinion in Environmental Sustainability* at 135- 141.

Sorauf, F J 'The public interest reconsidered' (1957) 19(4) *The Journal of Politics* 616-639.

Stein, S M and T L Harper 'Rawls's "Justice as Fairness": A moral basis for contemporary planning theory' (2005) 4 (2) *Planning Theory* 147 -172.

Stern, N 'Managing climate change and overcoming poverty: Facing the realities and building a global agreement' (2009) *Centre for Climate Change Economics and Policy (CCCEP) and the Grantham Research Institute on Climate Change and the Environment, London, United Kingdom*.

Sussman, E 'Case study: climate change adaptation planning guidance for local governments in the United States' (2009) 9(2) *Sustainable Development Law & Policy* 11.

Sussman, E et al 'Climate change adaptation: Fostering progress through law and regulations' (2010) 18 *New York University Law School Environmental Law Journal* 55.

Tait, M 'Planning and the public interest: Still a relevant concept for planners?' (2016) 15(4) *Planning Theory* 335-343.

Taylor, N 'Planning theory and the philosophy of planning' (1980) 17(2) *Urban Studies Journal* 159 -172.

Termeer, C, et al 'The regional governance of climate adaptation: a framework for developing legitimate, effective, and resilient governance arrangements' (2011) 2(2) *Climate Law* 159-179.

Thomas, D S & C Twyman 'Equity and justice in climate change adaptation amongst natural-resource-dependent societies' (2005) 15(2) *Global Environmental Change* 115-124.

Thompson, R 'Re-defining planning: The roles of theory and practice' (2000) 1(1) *Planning Theory & Practice* 126 -133.

Tompkins, E L et al 'Observed adaptation to climate change: UK evidence of transition to a well-adapting society' (2010) 20(4) *Global Environmental Change* 627 – 635.

Turok, I 'Urban Planning in the transition from apartheid: The legacy of social control' (1994) 65 (4) *Town Planning Review* 247.

Van Assche, K et al 'Co-evolutions of planning and design: Risks and benefits of design perspectives in planning systems' (2013) 12(2) *Planning Theory* 177-198.

Van Wyk, J & M Oranje 'The post-1994 South African spatial planning system and Bill of Rights: A meaningful and mutually beneficial fit?' (2014) 13(4) *Planning Theory* 349-369.

Wilson, E & C Termeer 'Governance of climate change adaptation: Introduction to the Special Issue' (2011) 2 *Climate L.* 149.

Wilson, E. 'Adapting to climate change at the local level: the spatial planning response' (2006) 11 (6) *Local Environment* 609-625.

Winkler, T & J Duminy 'Planning to change the world? Questioning the normative ethics of planning theories' (2016) 15(2) *Planning Theory* 111-129.

Yamin, F, A Rahman & S Huq 'Vulnerability, adaptation and climate disasters: a conceptual overview' (2005) 36(4) *IDS Bulletin* 1-14.

Zeirvogel, G et al. 'Climate change impacts and adaptation in South Africa' (2014) 5 (5) *WIREs: Climate Change* 605 - 620.

Ziervogel, G, L Pasquini & S Haiden 'Nodes and networks in the governance of ecosystem-based adaptation: the case of the Bergvliet municipality, South Africa' (2017) 11(2) *Climatic Change* 271-285.

Zinn, M D 'Adapting to Climate Change: Environmental Law in Warmer World' (2007) 34 *Ecology LQ.* 61.

Working Papers

Blankespoor, B., Dasgupta, S., Laplante, B. & Wheeler, D. 'The economics of adaptation to extreme weather events in developing countries' (2010) *Center for Global Development Working Paper*.

Brooks, N. 'Tracking adaptation and measuring development' (November 2011) *IIED Climate Change Working Paper*.

Brooks, N. 'Vulnerability, risk and adaptation: A conceptual framework' (2003) 38 *Tyndall Centre for Climate Change Research Working Paper*.

Carmin, J A, D Dodman, D & E Chu 'Urban climate adaptation and leadership: From conceptual understanding to practical action' (2013) 26 *OECD Regional and Development Working Papers*.

Corfee-Morlot, J et al 'Cities, climate change and multilevel governance' (2009) 14 *OECD Environment Working Papers*.

Fünfgeld, H & D McEvoy 'Framing climate change adaptation in policy and practice' (April 2011) Working Paper, *Victorian Centre for Climate Change Adaptation Research, Melbourne*.

Innes, J E & D E Booher 'Collaborative dialogue as a policy making strategy' (2000) *IURD Working Paper Series*, Institute of Urban and Regional Development.

Luzzi, J 'The rational planning model in forest planning: Planning in the light of ambivalence' (2001) 3 *EPW Working Paper*.

Luzzi, J. 'The rational planning model in forest planning: planning in the light of ambivalence' (Fall 2001) EWP Working Paper No 2.

Michonski, K & M Levi 'Harnessing international institutions to address climate change' *International Institutions and Global Governance Programme Working Paper*.

Nagy, G J et al 'Adaptive Capacity for Responding to Climate Variability and Change in Estuarine Fisheries of the Rio De La Plata' (2006) 36 *AIACC Working Papers*.

Nagy, G J et al ‘Adaptive Capacity for Responding to Climate Variability and Change in Estuarine Fisheries of the Rio’ de la Plata (2006) *AIACC Working Paper*.

Paavola, J & W N Adger ‘Justice and adaptation to climate change’ (2000) 23 *Tyndall Centre Working Paper*.

Peltonen, L, S Haanpää & S Lehtonen ‘The challenge of climate change adaptation in urban planning’ (2005) *FINADAPT Working Paper 13* Finnish Environment Institute.

Pohlmann, A ‘Local Climate Change Governance’ in Engels, Anita (ed.) (2011) 5 *Global Transformations towards a Low Carbon Society* (Working Paper Series).

Schipper, E L F ‘Climate change adaptation and development: Exploring the linkages’ (2007) 107 *Tyndall Centre for Climate Change Research Working Paper*.

Seo, S N ‘A theory of adaptation to climate change as a global public good’ (2010) *USAEE-IAEE Working Paper*.

Wheeler, D. ‘Quantifying vulnerability to climate change: implications for adaptation assistance’ (2011) *Center for Global Development Working Paper*.

Reports and Conference Papers

Agbola, T. and others ‘Issues and challenges of urban and regional planning in Nigeria’ in State of Planning Report by The Nigerian Institute of Town Planners available at <http://nitpng.com/new-nitp-town-planning-articles-for-download/> accessed 28 May 2017

Arko-Adjei, A et al ‘Customary tenure institutions and good governance’ paper presented at FIG Congress 2010, Facing the Challenges – Building the Capacity Sydney Australia April 2010.

Bernstein, L et al ‘IPCC, 2007: climate change 2007: Synthesis report’ (2007) *Contribution of working groups I II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change Intergovernmental Panel on Climate Change, Geneva*.

Bulkeley, H et al 'The role of institutions, governance, and urban planning for mitigation and adaptation' (2011) *Cities and Climate Change: Responding to an Urgent Agenda*. 62696:125-159.

Cartwright A 'Global Climate Change and Adaptation: A Sea-level rise risk assessment' *Phase three A Sea-level risk assessment for the City of Cape Town* prepared by Stockholm Environment Institute and LaquaR Consultants CC (2008).

Cartwright, A, G B Brundrit & L Fairhurst. 'Global climate change and adaptation—a sea-level rise risk assessment' *Phase four: Adaptation and risk mitigation measures for the City of Cape Town*. Prepared for the City of Cape Town by LaquaR Consultants CC (2008).

Change, I C 'Impacts, adaptation, and vulnerability. Part A: global and sectoral aspects' (2014) Contribution of working group II to the fifth assessment report of the intergovernmental panel on climate change.

City of Keene New Hampshire, *Adapting to Climate Change: Planning a Climate Resilient Community*. 2007.

Department of Environment Affairs and Tourism Scenario Building Team, 'The Long-Term Mitigation Scenarios: Strategic options for South Africa' (October 2007) Department of Affairs and Tourism South Africa

Fairhurst, L 'Global Climate Change and Adaptation—A Sea-Level Rise Risk Assessment' *Phase two: Risk and impact identification*. Prepared for the City of Cape Town by LaquaR Consultants CC (2008).

FAO. 'Good governance in land tenure and administration' (2007) *9Land Tenure Studies* p 6-9.

Field, C B (ed) *Managing the risks of extreme events and disasters to advance climate change adaptation: Special Report of The Intergovernmental Panel on Climate Change* (2012).

Hendler, P & T Wolfson 'The Planning and 'Unplanning' of Urban Space 1913 to 2013: Privatised Urban Development and the Role of Municipal Governments' paper presented at the

Conference on *Land Divided: Land and South African Society in 2013, in Comparative Perspective*, March 2013.

ISDR 'Hyogo framework for action 2005-2015: building the resilience of nations and communities to disasters' (2005) *Extract from the Final Report of the World Conference on Disaster Reduction (A/CONF. 206/6)*.

Kidd, M 'Country Report: South Africa, the Spatial Planning and Land Use Management Act 16 of 2013' 5 *IUCNAEL EJournal*.

Lamond, J et al 'Urban land, planning and governance systems in Nigeria' Research Report of the Urbanisation Research Nigeria (URN) 2015.

Madzwamuse, M *Climate Governance in Africa-Adaptation Strategies and Institutions* Heinrich Boll Stiftung Synthesis Report 2011.

Moser, S C & J A Ekstrom 'A framework to diagnose barriers to climate change adaptation' (2010) *Proceedings of the National Academy of Sciences of the United States of America*. 107(51):22026-22031.

Nigerian Institute of Town Planners: State of Planning Report (undated) 80 available at www.nitp.com accessed 28/03/2017.

Olurin, T & Jiriko K G 'Assessment of planning tools and instruments' in State of Planning Report by The Nigerian Institute of Town Planners (undated) 47 – 80 available at www.nitp.com accessed 28/03/2017.

Patterson, A R 'Draft case study: South Africa' (unpublished) prepared for IUCN Environmental Law Centre Integrated Planning Project.

Schalatek, L & N Bird 'Climate finance fundamentals: A normative framework for climate finance' (2010) *Heinrich Böll Stiftung North America and Overseas Development Institute, Brief 1*.

Slaev, A ‘Property rights, objectives and methods of planning’ in A Slaev et al *TURAS Report on The Balance between Planning and the Market relating to Sustainable and Resilient Development of Suburban Areas* (2014).

Stead, D ‘Spatial planning: key instrument for development and effective governance with special reference to countries in transition’ (2008) United Nations Economic Commission for Europe Publication.

United Nations Human Settlements Programme *Cities and Climate Change: Global Report on Human Settlements 2011*’ (2011) Earthscan, London.

Verschuuren, J M ‘Adaptation to climate change: opportunities and barriers’ (2007) *Proceedings of the International Colloquium on Global Warming, Rio De Janeiro*.

Internet Sources

‘Learning from Experience – Community-based Adaptation to Climate Change’ available at www.nestinteractive.org/publications.php?OrderPublication accessed 2 November 2017.

‘Our Common Future’ Chapter 7 Energy: Choices for Environment and Development, para 23 at p 141 available at www.un-documents.net/our-common-future.pdf accessed 2 November 2017.

‘The birth of town planning’ available at <http://www.parliament.uk/about/living-heritage/transformingsociety/towncountry/towns/overview/townplanning/> accessed 8 March 2016.

‘The Future we want’ Outcome Document of the United Nations Conference on Sustainable Development 2012, p 50 available at www.sustainabledevelopment.un.org/futurewewant.html accessed 2 November 2017.

‘What is a disaster’ <https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/>, accessed 6 August 2015.

‘What is good governance?’ <http://www.unescap.org/sites/default/files/good-governance.pdf> p. 1 accessed 13 March 2017.

AC/2017/13 Technical Paper on long-term adaptation planning, outcome of the 12th Meeting of Adaptation Committee, in Bonn Germany 19-22 September 2017, available at www.unfccc.int/files/adaptation/groups-committee/application/pdf/ac12_7b-longterm.pdf, accessed 21 October 2017.

African Planning Association (APA) and UNHABITAT: 'The state of planning in Africa: An overview 2014' pp10-1 available at <http://unhabitat.org/books/the-state-of-planning-in-africa-an-overview/> accessed 9 March 2016.

Apartheid Legislation available at <http://www.sahistory.org.za/politics-and-society/apartheid-legislation-1850s-1970s> accessed 10 March 2016.

Ayeh, K A 'Traditional planning elements of pre-colonial African towns' available at [http://dspace.nwu.ac.za/bitstream/handle/10394/5325/No_39\(1996\)_Amankwah-Ayeh_K.pdf?sequence=1](http://dspace.nwu.ac.za/bitstream/handle/10394/5325/No_39(1996)_Amankwah-Ayeh_K.pdf?sequence=1) accessed 7 March 2016.

Bali Action Plan Decision 1/CP.13 available at <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf> last access 1 November 2016.

Benevolo, L. 'The origins of modern town planning' *Contemporary City Review* available at <http://contemporarycity.org/wp-content/uploads/2014/03/Benevolo.pdf> accessed 8 March 2016.

Bengs, C. 'Planning theory for the naïve?' (2005) *European Journal of Spatial Development* 5 available at <http://www.nordregio.se/EJSD/-ISSN> accessed 15 November 2017.

Brockett, L. 'The history of planning South African new towns: Political influences and social principles adopted, available at [http://dspace.nwu.ac.za/bitstream/handle/10394/5351/No_40\(1996\)_Brockett_L.pdf?sequence=3](http://dspace.nwu.ac.za/bitstream/handle/10394/5351/No_40(1996)_Brockett_L.pdf?sequence=3) accessed 10 March 2016.

Climate change adaptation: Knowledge support and Policy Integration <http://www.unep.org/climatechange/adaptation/KnowledgeandPolicy/tabid/29577/Default.aspx> accessed 28 October 2016.

Davidse, B. J., Othengrafen, M. & Deppisch, S. ‘Spatial planning practices of adapting to climate change’ (2015) *European Journal of Spatial Development* available at [http://www.nordregio.se/Global/EJSD/Refereed articles/refereed57.pdf](http://www.nordregio.se/Global/EJSD/Refereed%20articles/refereed57.pdf) accessed 10 June 2015.

De Visser, J et al “Report on a Roundtable on Law Reform in Planning” Department of Rural Development and Land Reform 2012 available at http://sacitiesnetwork.co.za/wp-content/uploads/2014/07/roundtable_law_reform_in_planning-_report.pdf accessed 06 October 2015.

Du Plessis, W. ‘A self help guide: Research methodology and dissertation writing’ http://www.puk.ac.za/opencms/export/PUK/html/fakulteite/regte/pdf/Du_Plessis_Research_Methodology_FINAL.pdf accessed 06 October 2015.

Eley, ‘Environmental Justice Through Planning’ American Planning Association <https://www.planning.org/blog/blogpost/9101589/> accessed 13 November 2017.

Encyclopaedia Britannica available at <http://www.britannica.com/place/Sahel> accessed 16 June 2015.

Explorations in Classical Sociological Theory: Authority and rationality – Max Weber

Forbes J et al *An Introduction to Municipal Planning within South Africa* (2011) available at [http://www.salga.org.za/app/webroot/assets/files/PLANNING%20BROCHURE\(1\).pdf](http://www.salga.org.za/app/webroot/assets/files/PLANNING%20BROCHURE(1).pdf) accessed 16 March 2016.

Governance’ <https://unhabitat.org/governance/> accessed 13 March 2017.

Habitat Agenda Goals and Principles, Commitments and the Global Plan of Action http://www.unhabitat.org/declarations/habitat_agenda.htm, accessed 11 November 2017.

Hooghe, L. & Marks, G. Types of Multi-Level Governance 5(11) (2001) *European Integration online Papers* (EIoP) available at SSRN: <https://ssrn.com/abstract=302786> or <http://dx.doi.org/10.2139/ssrn.302786> accessed 17 March 2017.

Horne, J. 'Time to recognize the basic flaw in our whole approach to flood prevention' www.thelensnola.org/2017/08/11/time-to-recognise-the-basic-flaw-in-our-whole-approach-to-flood-prevention/ accessed 31 August 2017.

<http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=79398> accessed 17 June 2015.

<http://floodlist.com/tag/nigeria>, accessed 17 June 2015.

<http://www.climateresponse.co.za>, accessed 27 October 2017.

<http://www.lse.ac.uk/GranthamInstitute/legislation/countries/nigeria/#legislative> accessed 28 October 2016.

<http://www.museumofthecity.org/project/hippodamus-and-early-planned-cities/> accessed 7 March 2016.

http://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html accessed 16 February 2015.

<http://www.nationsencyclopedia.com/geography/Slovenia-to-Zimbabwe-Cumulative-Index/South-Africa.html>;

<http://www.nesrea.org/images/NIGERIA'S%20AGENDA%2021.pdf> accessed 31 July 2015.

http://www.sagepub.com/sites/default/files/upmbinaries/6109_Allen__Chapter_5__Authority_and_Rationality__Max_Weber.pdf. [1]

<http://www.southafrica.info/about/geography/>; <http://www.southafrica.info/about/geography/geography> accessed 17 June 2015

<http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/effective-law---regulation-for-disaster-risk-reduction.html> 45-67 accessed 06 August 2015.

<http://www.unisdr.org/we/inform/terminology> assessed 06 August 2015.

<http://www.vanguardngr.com/2012/10/rage-of-nature-flood-ravages-communities-across-nigeria/>;

<https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/>

IFRC&UNDP ‘Effective law and regulation for disaster risk reduction: A multi-country report’

International Strategy for Disaster Reduction, Hyogo Framework for Action 2005-2015 available at <https://www.unisdr.org/we/coordinate/hfa>, accessed 3 November 2017.

Johannesburg Plan of Implementation (JPOI) available at www.un.org/esa/sustdev/documents/WSSD_POI_PD/WSSD_PlanImpl.pdf accessed 02 November 2017.

Key Steps to Adaptation on the UNFCCC website available at <http://unfccc.int/adaptation/workstreams/items/6995.php> accessed 09 October 2015.

New Towns <http://www.parliament.uk/about/livingheritage/transformingsociety/towncountry/towns/overview/newtowns/> accessed 8 March 2016.

Orupabo, S. Coastline Migration in Nigeria available at http://www.hydro-international.com/issues/articles/id291-Coastline_Migration_in_Nigeria.html, accessed 31 July 2015.

Preamble to the United Nations Framework Convention on Climate Change (UNFCCC) available at http://unfccc.int/key_documents/the_convention/items/2853.php accessed 05 October 2015.

Report of the Office of the High Commission for Human Rights (OHCHR) to the 21st Conference of Parties (COP 21) to the United Nations Framework Convention on Climate Change (November 2015) p6 available at <http://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/HRClimateChangeIndex.aspx> (COP 21 HR Report) accessed 17 March 2017.

Sendai Framework for Disaster Risk Reduction 2015-2030
<http://www.unisdr.org/we/inform/publications/43291> accessed 03 November 2017.

Sosa-Nunez, G & Atkins, E. *Environment, Climate Change and International Relations* available at www.E-IR.info accessed 31 October 2016.

Stead, D. 'Spatial planning: key instrument for development and effective governance with special reference to countries in transition' (2008)
https://www.unece.org/hlm/publications_recent10.html accessed 03 March 2018.

The National Adaptation Plan - Global Support Programme (NAP-GSP) for non-Least Developed Countries (non-LDCs) <http://www.undp-alm.org/projects/naps-ldcs/news-updates> accessed 28 October 2016.

The Nigerian Institute of Town Planners: State of Planning Report available at <http://nitpng.com/pdf%20docs/soplanning.pdf> accessed 3 March 2016.

Transforming our world: the 2030 Agenda for Sustainable Development
<https://sustainabledevelopment.un.org/post2015/transformingourworld> accessed 28 October 2016.

UCLG: *Policy Paper on Strategic Urban Planning* available at http://www.uclg.org/sites/default/files/EN_525_draftpolicypapermonica2504.pdf accessed 15 March 2016.

UN HABITAT International Guidelines on Urban and Territorial Planning (2015), available at <https://unhabitat.org/books/international-guidelines-on-urban-and-territorial-planning/> last accessed 28 May 2017.

UNEP/CBD/COP/12/INF/29 - 'Promoting synergies in addressing biodiversity and climate change adaptation issues' available at www.cbd.int/cop12/information accessed 02 November 2017.

United Nations Office Disaster Risk Reduction 'Terminology'
<http://www.unisdr.org/we/inform/terminology>, assessed 06 August 2015.

World Bank 1992 and 1997 publications on governance and development. World Bank *Governance and Development* 1992 <http://documents.worldbank.org/curated/en/604951468739447676/Governance-and-development>, accessed 02 March 2017.

World Bank *World Development Report 1997: The State in a Changing World* World Bank <https://openknowledge.worldbank.org/handle/10986/5980> accessed 20 March 2017.

www.etu.org.za accessed 31 October 2017

www.nationalplanning.gov.ng/index.php/national-plans/nv20-2020 accessed 02 November 2017.

www.saforestryonline.co.za/articles/knysna-great-fire-of-2017 accessed 02 November 2017.

www.westerncape.gov.za/eadp/climate-change-municipal-support-forum/key-climate-change-documents accessed 02 November 2017.

International Instruments

A/CONF.206/6 United Nations Hyogo Declaration on Disaster Reduction, January 2005.

A/HRC/10/61 Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights on 15th January 2009.

A/RES/41/128 Declaration on the Right to Development December 1986.

A/RES/48/189 United Nations Framework Convention on Climate Change, 1994.

A/RES/69/283 Sendai Framework for Disaster Risk Reduction 2015 -2030, June 2015.

A/RES/70/1 Transforming our World: The 2030 Agenda for Sustainable Development, October 2015

ACHPR/Res. 271, Resolution on Climate Change in Africa adopted at its 55th ordinary session in 2014 and ACHPR/Res. 342, 2016:

Assembly/AU/Decl.1 (XIII) Rev.1 Declaration on Land Issues and Challenges in Africa.

CAB/LEG/67/3rev.5, 21 ILM 58 African Charter on Human and Peoples' Rights, 1982.

Decision 1/CP.16 The Cancun Agreements: Outcome of the work of the Ad-Hoc Working Group on Long-term Cooperative Action under the Convention.

Resolution ACHPR/Res. 153(XLVI)09 Resolution on Climate Change and Human Rights and the need to study its impacts in Africa, 2009.

U.N. Doc FCCC/CP/1997/7/Add.1, Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 1997.

UNFCCC/CP/2015/10/Add.1 Dec. 1/CP.21 The Paris Agreement, December 2015.

United Nations Convention on the Law of the Sea, December 1982.

United Nations General Assembly, Universal Declaration of Human Rights December 1948.

Policy Documents

City of Keene, New Hampshire, Adapting to Climate Change: Planning a Climate Resilient Community (2007).

Department of Environmental Affairs and Tourism, 'The National Climate Change Response Strategy' (September 2004)

EThekweni Municipality, 'Durban Resilience Strategy' of August 2017 available at http://www.durban.gov.za/City_Services/development_planning_management/environmental_planning_climate_protection/About%20Durban%E2%80%99s%20Resilience%20Programm/Pages/Durban%E2%80%99s-Resilience-Strategy.aspx accessed 03 March 2018.

Guideline No 14 of 1983 of Lagos State.

Guideline No 6 of 1983 of Lagos State.

Lagos State Development Plan 2012 – 2025, 'Towards a Lagos State Climate Change Adaptation Strategy' available at www.nestinteractive.org/publications.php?OrderPublication accessed 02 November 2017.

National Adaptation Strategy and Plan of Action for Climate Change Nigeria (NASPA-CCN) and Nigeria's Intended Nationally Determined Contribution available at http://www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_271115.pdf accessed 28 October 2016.

National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) p 25 available www.csdevnet.org/climate-change-in-nigeria/ accessed 2 November 2017.

National Environmental, Economic and Development Study (Needs) For Climate Change in Nigeria available at <https://unfccc.int/files/adaptation/application/pdf/nigerianeeds.pdf> pp 9-12 accessed 28 October 2016.

South African National Climate Change Response White Paper (GenN 757 in GG 34695 of 19 October 2011).

The 'National Climate Change Response Green Paper 2010' (GN 33801 published in GG 25 of 25 November 2010).

The City of Cape Town Climate Change Policy (Policy Number 46824 21 of July 2017)

The National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (Naspa-CCN), November 2011 available at www.nigeriaclimatechange.org (accessed 26 August 2013).

Acts, Constitutions, Laws and Legislation

South Africa

Constitution of the Republic of South Africa Act 108 of 1996.

City of Cape Town Municipal Planning By-Law 2015 (NN 206 in GG 7414 of 26 June 2015).

Development Facilitation Act No 67 of 1995.

Disaster Risk Management Act No 57 of 2002.

The National Environmental Management: Integrated Coastal Management Act 24 of 2008.

Integrated Coastal Management Act 24 of 2004.

Local Government: Municipal Systems Act No 32 of 2000.

National Environmental Management Act 107 of 1998.

Spatial Planning and Land Use and Management Act No 16 of 2013.

Western Cape Land Use Planning Act 3 of 2014.

Nigeria

1999 Constitution of the Federal Republic of Nigeria Act No 24 of 1999.

Lagos State Urban and Regional Planning and Development Law (URPDL), 2010

National Environmental (Coastal and Marine Area Protection) Regulations, 2010.

National Inland Waterways Act CAP N47, LFN 2004.

Nigerian Urban and Regional Planning Act No 88 of 1992 (NURPA).

Nigerian Climate Change Bill 2017

The Exclusive Economic Zone Act CAP E17 LFN 2004.

The Lands and Native Rights Ordinance 1910.

Lagos State Urban and Regional Planning and Development Law of 2005.

Land Use Act of 1978 CAP L5 LFN 2004.