

**INSTITUTIONAL ARRANGEMENTS FOR CLIMATE
CHANGE GOVERNANCE IN SADC COUNTRIES: THE CASE
OF SOUTH AFRICA AND ZIMBABWE**

BY

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Abstract

This study sought to analyze and interrogate institutional arrangements for climate change governance in the SADC region with South Africa and Zimbabwe as cases. The researcher engaged 10 key informants; 8 in Zimbabwe and 2 in South Africa as well as 3 in-depth discussions in each of South Africa and Zimbabwe. The researcher used semi-structured interviews for key informants and an interview guide for in-depth discussions. Secondary document review was also done to obtain information which is privy to the research. This was through review of government reports as well as policy and strategy documents. Thematic analysis was used to analyze research results and the researcher used the multi-level governance framework as the conceptual framework. The study found out that both South Africa and Zimbabwe have multi-level climate change governance institutions with South Africa having a three-tier system and Zimbabwe a four-tier system. In addition to that, it was found out that climate change governance institutions in South Africa and Zimbabwe are poorly coordinated horizontally and vertically. The study also found out that for effective governance of climate change, the institutional architecture must not only be well coordinated, but capacitated as in terms of human and material resources. The study recommends the alignment and harmonization of policies and organizations to enhance efficiency and the synchronization of traditional and modern governance systems. Further research has to be done at the same magnitude in other countries to complete the characterization of climate change governance in SADC countries.

Declaration

This Dissertation is my original work except where sources have been acknowledged. The work has never been submitted, nor will it ever be, to another University in the awarding of a degree.

STUDENT DATE

Signature

SUPERVISOR DATE.....

Signature

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A lot of energy and effort has been expended in the compilation of this study. Much of this did not come from me but people who guided me intellectually, morally and spiritually. I wish to acknowledge the assistance received from the following people who made it possible for this document to be put together:

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I accept full responsibility for any errors.

Dedication

This Dissertation is dedicated to my recently departed mother, Lois, who offered an amazing source of inspiration and encouragement throughout her lifetime.

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List of Acronyms

AGRITEX	Department of Agricultural, Technical and Extension Services
CCKN	Climate Change Knowledge Network
CDM	Clean Development Mechanism
COMESA	Common Market for Eastern and Southern Africa
CoP	Conference of the Parties
CPU	Civil Protection Unit
CSO	Civil Society Organizations
CTDO	Community Technology Development Organization
DDC	District Development Committee
EMA	Environmental Management Agency
FAO	Food and Agriculture Organization of the United Nations
GCCC	Government Committee on Climate Change
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
IPRS	Interim Poverty Reduction Strategy
JI	Joint Implementation
MEWC	Ministry of Environment, Water and Climate
NCCC	National Committee on Climate Change
NCCRP	National Climate Change Response Plan
NCCRS	National Climate Change Response Strategy
NCOLP	National Committee for Ozone Layer Protection
NGO	Non-Governmental Organization
RDC	Rural District Council
SADC	Southern African Development Community
SADC RISDIP	Southern African Development Community Regional Indicative Strategic Development Plan
SNV	Netherlands Development Organization
UN	United Nations
UNDP	United Nations Development Programme

UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VIDCO	Village Development Committee
WADCO	Ward Development Committee
ZELA	Zimbabwe Environmental Lawyers Association
ZimASSET	Zimbabwe Agenda for Sustainable Socio-Economic Transformation

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CHAPTER ONE

1.0 Introduction

The observation of data over the past 100 years shows that the earth is slowly warming up and between 1906 and 2005, the global mean temperature rose by 0.74 °C while the Earth's average temperature is estimated to rise by 1.4 to 5.8°C between 1990 and 2100 (SADC, 2013). In all likelihood, climatic changes are attributable to anthropogenic activities and the global warming of the past 50 years is primarily due to human-induced emissions of greenhouse gases. The Southern African region has been identified by the Intergovernmental Panel on Climate Change (IPCC) as being very susceptible to climate change because of reduced coping capacity.

The IPCC (2007) notes that increasing scientific evidence and political recognition of the climate change problem call for not only climate mitigation but also adaptation to the potential impacts. Such adaptation takes place within the local and national social or institutional context (IDGEC 2005). It thus becomes necessary to interrogate the institutional configuration that stimulate the adaptive capacity of society to deal with continuous, uncertain and often unpredictable climatic changes. Dellapenna and Gupta (2008), note that institutions evolve incrementally to deal with social problems, but tend to be reactive and conservative though through history, social systems have reacted to changing circumstances.

1.1 Problem statement

Tackling climate change is an extensive, time-consuming and costly task which is multi-disciplinary in nature and hence, cannot be achieved solely through the policy implementation and regulation from central governments and bodies alone. This therefore, warrants the extreme importance of engaging institutions and organizations from the national, sub-national to the local level in the administration of climate change adaptation and mitigation. It is therefore, critical to improve institutional architecture and the arrangements under which such institutions operate in climate change response. Many institutions at national, sub-national and local level in the SADC region have limited effectiveness owing to ineffective configurations and lack of coordination within and amongst institutions.

1.2 Study objectives

The study aims to:

- Characterize current climate change governance structures in South Africa and Zimbabwe;
- Determine the extent of alignment and harmonization of climate change governance institutions in South Africa and Zimbabwe; focussing on traditional and modern institutions;
- Interrogate possible institutional configurations for effective climate change governance in the SADC region.

1.3 Research questions

- What are the climate change governance models being used in South Africa and Zimbabwe?
- To what extent are traditional and modern climate change governance institutions in South Africa and Zimbabwe aligned and harmonized?
- What possible institutional configurations can be more effective in climate change governance in the SADC region?

1.4 Justification of the study

The findings of the study will assist local level governance structures on how best to organise themselves in dealing with problems associated with climate change. In addition to that, the findings will equally assist government policy makers to make informed decisions regarding possible institutional configurations that can be tested out to improve effectiveness in climate change response.

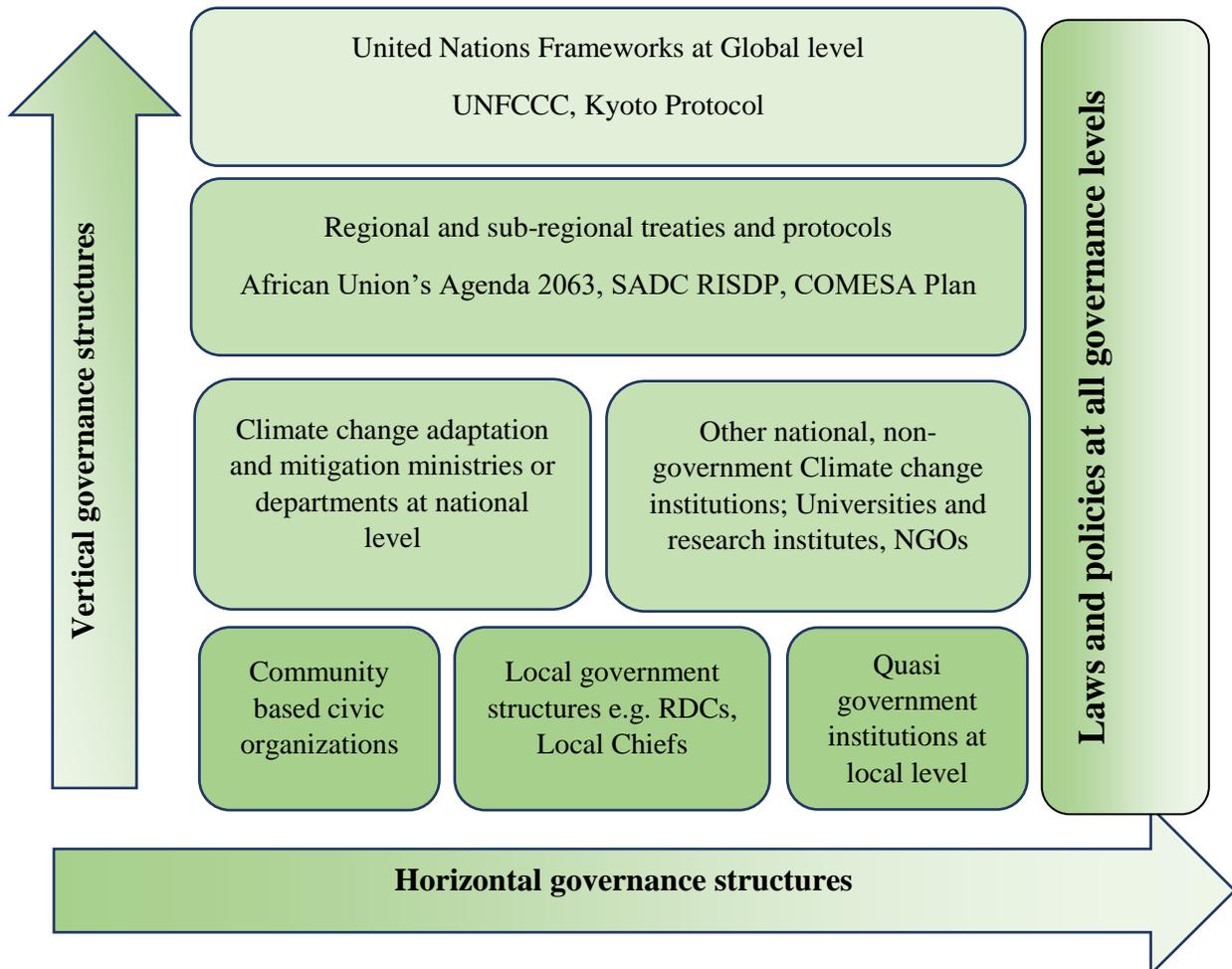
Moreover, the study findings will fill in the academic gap where studies have been done on climate change governance but without much focus on institutional architecture. The study will also add new ideas to the existing body of knowledge on how best governments can align their institutions to adapt and mitigate climate related adversities. The research will also recommend appropriate local and national governance frameworks that could effectively contribute to climate change resiliency and adaptation.

1.5 Conceptual framework

Climate change management has become a serious governance issue influencing peace in the post-millennial decades (African Development Forum, 2010). Drexhage (2008) also asserts that climate change poses serious challenges to traditional global environmental governance models and by doing so, demonstrates itself to be a fascinating issue in contemporary governance.

While the natural sciences can predict, within limits, the potential future environmental impacts of various human actions on society, political systems are still caught in four to five year democratic cycles which has a bearing on how institutions are configured and hence, capacitated to respond to changing climate with sustainable solutions. For SADC member states, the priority is on mitigation and also on adapting to increased climate variability and climate change (Lesolle, 2012).

Fig 1.1: Multi-level governance approach to climate change



Source: Author

Understanding the political economy of multi-level governance approaches helps to break down the state centeredness of institutions and improves the characterization of relationships between different actors both horizontally and vertically. The vertical dimension of multi-level governance recognizes that national governments cannot effectively implement national climate adaptation and mitigation strategies without working closely with sub-regional and local governments as the agents of change. These should be aligned to the overall global frameworks that govern climate change at international level including the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. On the other hand, local authorities will also have limited effectiveness if they operate without the assistance and guidance of central governments. Central governments provide the legal and institutional frameworks within which local governments and local authorities will be nested (Hooghe and Marks, 2003).

Horizontal governance ensures that institutions that operate at the same level must have similar objectives as defined by the governing framework even though their working spaces and strategic thrusts may be different. That integration would bring synchrony in the way institutions at regional, national and local level operate.

1.6 Limitations

The study faced some challenges regarding access to data on the area of study. Senior government officials in both Zimbabwe and South Africa were not readily available at the time the researcher wanted to have an audience with them because they were usually busy. The researcher had to book appointments well in advance to fit into the busy schedule of these high-level key informants. Further to this, some informants were reluctant to be engaged in interviews and there was a high rate of non-response. The researcher then had to carefully explain the purpose of the research and the intended use of the findings to enhance chances of obtaining information.

1.7 Delimitation

This research focused on climate change governance in the SADC region with a particular focus on South Africa and Zimbabwe. Examples were drawn from other countries and region but the primary focus of the research remained the two Southern African countries. Moreover,

the study was conceptually delimited to institutions that are responsible for climate change governance. These were identified as laws, policies and organizations that apply or work in the climate change fraternity.

1.8 Summary

This chapter has introduced the discussion on climate change and has analysed its conceptualisation by different academics and other stakeholders. The chapter has also looked at the problem statement, the significance of the study, description of the study countries, the research objectives and questions, the conceptual framework, the delimitation and limitations of the study. The next chapter deals with the literature review.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

The IPCC fourth assessment report of 2007 notes that Climate change is causing wide-ranging impacts that include frequent droughts and dry spells, extreme rainfall, and floods (IPCC, 2007). The severity of climate change is likely to increase in the future if no steps are taken at national and international level to curb the release of greenhouse gases (Hulme, Jenkins, Lu, Turnpenny, Mitchell, Jones, Lowe, Murphy, Hassel, Boorman, McDonald and Hill, 2002). The southern African sub-region comprises the total geographical area occupied by member states of the Southern African Development Community (SADC) which include: Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, South Africa, Zambia and Zimbabwe.

The governance of climate change being both a horizontal and vertical issue requires financial resources and specific competencies, knowledge and skills that may not be readily available especially in developing countries (Willems and Baumert, 2003). Technical challenges encountered by individual countries may be significant, particularly in the strategy formulation and goal setting. Due to the multi-dimensional effect of climate change, climate change policies also need to be multi-sectoral, covering energy, transport, agriculture and forestry in order to effectively address root causes and sustainable solutions. Addressing the challenge of climate change clearly requires more than technical and environmental solutions. The trans boundary nature of the effects of climate change warrants comprehensive strategies based on intense cooperation which link climate change with the broad socio-economic and political development frameworks of SADC member states (SADC-CNGO Regional Policy Paper 7, 2012).

2.1 Institutions and Climate Change governance

IPCC (2007) notes that increasing scientific evidence and political recognition of the climate change problem calls for not only climate mitigation but also adaptation to the potential impacts. Such mitigation and adaptation mechanisms take place within a particular institutional context. It is therefore, necessary to understand the nature and meaning of institutions to stimulate the mitigative and adaptive capacity of society to deal with

continuous, uncertain and often unpredictable weather and climatic changes (IDGEC 1999). Thus, the efficacy of climate change governance is dependent on the quality of institutions that exist at all levels of society.

2.1.1 The meaning of institutions in Climate Change governance

Institutionalism is a polysemic and malleable concept that has attracted scholarly attention for decades. There has however, been an epistemological shift to the conceptualization of institutions with contemporary definitions becoming more encompassing. The International Human Dimensions Programme's Institutions project defines institutions as: "systems of rules, decision-making procedures, and programs that give rise to social practices, assign roles to the participants in these practices, and guide interactions among the occupants of the relevant roles" (IDGEC 1999: 14). Hodgson (2006) defines institutions as systems of established and prevalent social rules that structure social interactions. On the other hand, the World Trade Organization (2004: 176) define institutions as 'formal and informal rules of behaviour, ways and means of enforcing these rules, procedures for mediation of conflicts, sanctions in the case of breach of the rules, and organizations supporting these rules'. Therefore, scholars who have attempted to define institutions stress the importance of rules as the basis for institutionalism.

The rules and roles that form institutions can be formal and informal, visible and latent, conscious and unconscious (Arts, 2006). Sharpf (1997) asserts that institutions both enable and yet restrict the opportunities for actors to respond to changes in the environment. Three important types of institutions as explained by Immergut (2010) are: social institutions, such as kinship, marriage, family and inheritance; economic institutions and political institutions. Institutions evolve incrementally to deal with social problems, but tend to be reactive and conservative (Ibid). Dellapenna and Gupta (2008) assert that institutions and social systems have always reacted to changes in circumstances through history. From a layman's perspective, 'institutions' have become synonymous with formal organizations. However, in this paper, institutions go beyond formal organizations to include rules of conduct as enshrined in written and unwritten laws and policies governing climate change.

2.1.2 The concept of governance in Climate Change

The meaning of governance is as contested as the meaning of Climate change itself. There is no general scholarly agreement as to what governance of climate change means. However,

Chanza and de Witt (2015) assert that climate change governance is a concept that embraces inclusivity in designing mitigation and adaptation strategies by all climate stakeholders, including indigenous communities affected by climate change and it is this conceptual definition which was used in this study. Governance of climate change is multi-faceted and multi-level in nature due to the wide range of causes and consequences of climate change. Pattberg and Stripple (2007) cited in Chanza and de Wit (2016) adopt the term global governance, on the basis that the challenges and cause-effect nature of climate change is global in dimension and cannot be addressed by national or regional interventions alone.

2.1.3 Features of climate change governance

Climate change as a phenomenon has unique features that must be considered when setting up governance systems. These include the cross-boundary, multi-level, and multi-sector requirements; the multi-sector and multi-agency setting and the uncertain nature of long term challenges.

2.1.3.1 Cross-boundary, multi-level and multi-sector requirements

Fröhlich and Knieling (2013) assert that climate change is a trans-boundary issue and hence, makes cross-boundary demands on its governance. Due to the differentiated nature of decision making in political systems, there is need for coordination and harmonization of decisions through multi-level governance. The effects of climate change are also felt across sectors and hence, the demand for a multi-sector approaches to governance.

2.1.3.2 Multi-sector or multi-agency setting

Climate change governance also involves a variety of actors and spheres of activity within which mitigation and adaptation activities are conducted. Nicholson-Cole and O’Riordan (2009) assert that a partnership model of governance combining public, private and civil society into new coordinating arrangements is required to enhance buy-in of strategic frameworks on climate change.

2.1.3.3 Long-term challenges and uncertainty

Climate science is characterized by long periods of time between the origins of anthropogenic climate change, greenhouse gas emissions and actual changes in the climate and their

consequences (Fröhlich and Knieling 2013). Therefore, climate change governance requires long term, cross-generational thinking, which usually surpasses the existing responsibilities and decision periods in policy and planning, and therefore poses a significant challenge (Biermann 2007: 330)

2.2 Institutional arrangements for global Climate Change governance

After years of international cooperation and negotiation, the global community is becoming increasingly prepared for climate change governance as far as institutions, laws and policies are concerned. Various agreements, treaties and institutions have been formed to aide in the governance of climate change. These include the United Nations Framework Convention on Climate Change, the Kyoto Protocol, the Intergovernmental Panel on Climate Change and the Climate Change Knowledge Network. Many other institutions exist at the global level for climate change governance but were outside the scope of this research.

2.2.1 The United Nations Framework Convention on Climate Change (1994)

One of the first conventions signed by many countries, and which has since been ratified by 192 countries, in an effort to deal with climate change, is the United Nations Framework Convention on Climate Change (UNFCCC, 1994). The UK Government (2015), remarks that it was in response to scientific evidence that climate change is happening and mainly due to increasing greenhouse gases emitted as a result of human activity, that the UN negotiated a treaty at its Conference on Environment and Development in 1992 known as the United Nations Framework Convention on Climate Change (UNFCCC). The Convention recognizes that the climate system has no boundaries and that international cooperation is needed to seek solutions to the problems posed by rising greenhouse gases. The convention has provisions to assist countries that are thought to be most vulnerable and least able to adapt.

2.2.2 The Kyoto Protocol (1997)

The Kyoto Protocol of 1997 is the initial effort to curb greenhouse gas production. The Protocol is an amendment to the set legally binding targets for developed countries to reduce their greenhouse gas emissions for the first time. UNFCCC (2009) highlights that mechanisms employed under the Kyoto Protocol are emissions trading (also known as ‘the carbon market’), the Clean Development Mechanism (CDM), and Joint Implementation (JI). The Protocol has however, been heavily criticized for its inadequacies; particularly following

the refusal of the United States to ratify the protocol. Philibert (2004) claims that the real effects of the Kyoto Protocol itself on global are not known with precision, in particular due to the opposite effects of potential leakage and technology spill-overs. However, the Protocol remains an important governance mechanism through which emissions can be reduced sustainably.

2.2.3 Intergovernmental Panel on Climate Change (IPCC)

The IPCC is a body set up to give governments the most up-to-date assessments of the scientific, technical and socio-economic aspects of climate change. The assessments inform domestic climate policy of governments' position in international climate negotiations. The IPCC involves more than 2,500 scientists from more than 130 countries. Its findings have been publicly endorsed by the national academies of science of all G-8 nations, as well as those of China, India and Brazil. There has however, been radical criticism of IPCCs work; which will affect the acceptability of their assessments. Carter (2006) for example, refers to the unaccountability of IPCC science, where some of the methodologies used to gather evidence have not been disclosed nor internationally approved. Carter (Ibid) further highlights deficiencies in the IPCC's peer review mechanism and manipulation of evidence by political forces.

2.2.4 The Climate Change Knowledge Network (CCKN)

The CCKN brings together 14 organizations from developing, transitional and developed countries. It aims to promote a more effective, sustainable and equitable climate change regime through capacity building, research and communications on issues such as the Kyoto mechanisms, adaptation and technology transfer. In Africa, core members are Senegal and Zimbabwe whose organization is the Southern Centre for Energy and Environment Zimbabwe.

2.3 Climate Change governance at SADC Level

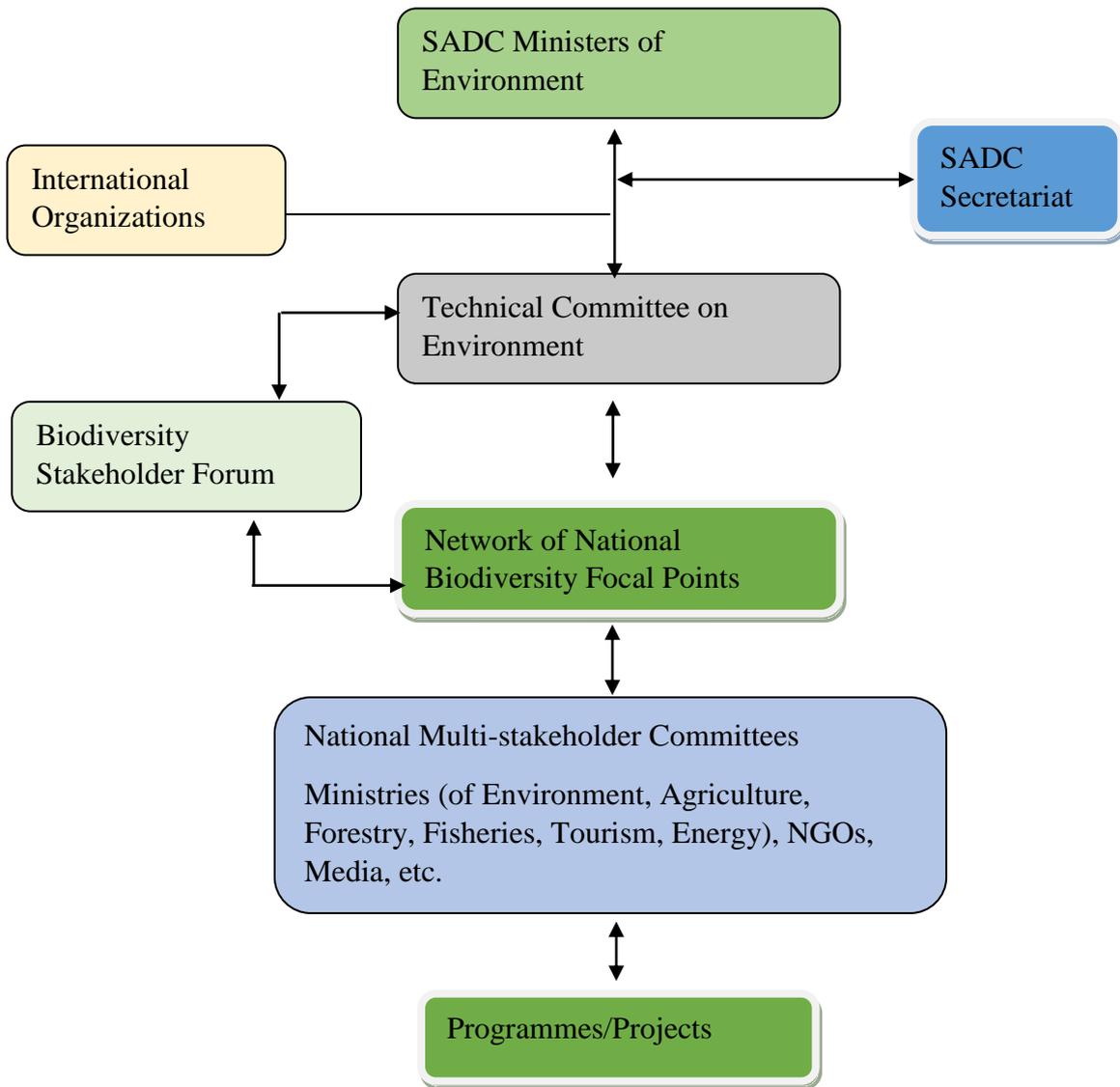
Madzwamuse (2010) and the United Nations Framework Convention on Climate Change (UNFCCC,1994) note that Africa is one of the most vulnerable regions in the world due to widespread poverty, limited coping capacity and its highly variable climate. The SADC region consists of fifteen Member States, namely Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles,

South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. The SADC region in particular is however, among the most-hard hit regions due to a large number of agrarian population and the region's low technology utilization. Therefore, the SADC situation makes it crucial for the region to pursue its own regional climate change initiatives. This calls for an explicit governance structure aimed at adequately addressing climate change adaptation in a comprehensive manner.

Article 5(1)(g) of the SADC Treaty outlines that the environmental mandate of SADC is to 'achieve sustainable utilisation of natural resources and effective protection of the environment'. Libebe (2014) highlights that in order to achieve the objectives of the SADC Treaty on environment, SADC must necessarily develop policies and appropriate institutions for the implementation of programmes. In fulfilment of the SADC Treaty on the environment, various protocols have been legislated or concluded to directly deal with environmental concerns. These include the Protocols on Energy, Fisheries, Forestry, Shared Watercourse Systems, Transport, Communications and Meteorology and the Protocol on Wildlife Conservation and Law Enforcement (Ibid).

Subsequently, organizational institutions have been formed to enforce and ensure implementation of the Protocols. Figure 2.1 shows the Climate Change governance structure at SADC level. The SADC Ministers of Environment head the overall structure and provide the strategic policy direction to the technical secretariat. International organizations including FAO, UNDP, UNEP and other technical research groups offer technical advice to the council of Ministers and the secretariat. The structure cascades down to country level and subsequently to project or programme level.

Fig 2.1: SADC Climate Change governance structure



Source: SADC Regional Climate Change Programme Document (2012)

2.4 Climate change governance institutions in Zimbabwe

In Zimbabwe, Climate Change is one of the cluster outputs for the key result areas on policy and legislation and environmental management in the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimASSET) blueprint. The ZimASSET blueprint recognizes that the agro-economy in Zimbabwe is affected by climate change. In response to that, the government has proposed a Climate Change Governance Framework, which stretches from grassroots to Cabinet level under the Climate Change Response Strategy.

The Zimbabwe Climate Change Response Strategy highlights that climate change has created urgency in the need to promote good governance at national level especially in the context of adaptation and development (Government of Zimbabwe, 2013). This is because climate change goes beyond environmental issues that are at the heart of development discourses. The governance of climate change in Zimbabwe is informed by the principles of decentralization and autonomy; accountability and transparency; responsiveness and flexibility; and participation and inclusion (Ibid). The institutional architecture for climate change governance in Zimbabwe includes the policy and legislative framework as well as various organizations. Policies include the Climate Change Response Strategy, the Zimbabwe Agenda for Sustainable Socio-Economic Transformation, the Draft National Climate Change Policy, the Interim Poverty Reduction Strategy Paper, the Intended Nationally Determined Contribution and the National Adaptation Plan among others.

2.4.1 The Constitution of Zimbabwe

The Constitution of Zimbabwe (2013) is the supreme Law of the Land and it gives every person environmental rights that include the right:

- to an environment that is not harmful to their health or well-being; and
- to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that:
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting economic and social development.

The Constitution of Zimbabwe therefore, gives the legal basis for all environmental legislation through which climate change is governed.

2.4.2 The Climate Change Response Strategy

Government of Zimbabwe (2013) highlights that the country is experiencing more hot and fewer cold days than before as a result of climate change and variability. The country's annual mean surface temperature has warmed by about 0.40C from 1900 to 2000. Moreover, the period from 1980 to date has been the warmest since Zimbabwe started recording its

temperature (Ibid). The obtaining climate situation necessitated the development of Zimbabwe’s Climate Change Response Strategy; which mainstreams climate change through a sectoral approach to ensure that each sector implements mitigation and adaptation actions.

2.4.3 The National Environmental Policy

Zimbabwe’s National Environmental Policy was drafted in 2003 following the promulgation of the EMA (Chapter 20:27) to provide broad specifications on how the environment would be protected (Mangena, 2014). The old constitution had no clause that deals with environmental management and Mangena (Ibid) further opines that the EMA Act was the boldest step taken by the government of Zimbabwe to tackle environmental challenges.

Table 2.1: Additional frameworks for Climate Change governance in Zimbabwe

Policy/strategy/Framework	(Expected) Role in Climate Change governance
The Climate Change Policy	The Climate Change Policy provides the long-term guidance on climate change adaptation and mitigation programming in Zimbabwe in accordance with the Constitution
Zimbabwe’s National Climate Change Response Strategy	Zimbabwe’s National Climate Change Response Strategy mainstreams climate change through a sectoral approach to ensure that each sector implements adaptation and mitigation actions.
Intended Nationally Determined Contributions	The INDCs set the national targets for climate change mitigation and adaptation.
National Climate Change Adaptation and Mitigation Plan	The Mitigation Plan aims to reduce impact on communities in the wake of Climate Change
Zimbabwe Interim Poverty Reduction Strategy	The IPRS’s function fighting poverty in Zimbabwe through climate resiliency and ensure inclusive growth

Source: Compiled from various sources

2.4.4 The National Climate Change Committee

Zimbabwe has a multi-stakeholder committee that deals with climate change issues at the national level. It is composed of 13 members from various government ministries, civil society actors, private sector and academia (UNFCCC, 2017). Represented ministries include MEWC, Ministry of Energy and power development; the Ministry of Agriculture, Mechanization and Irrigation Development and the Ministry of Macroeconomic Planning and Investment Promotion. The National Climate Change Committee coordinates all climate change related activities at the national level (Ibid). Further to that, the committee provides a forum for exchange of views on climate change issues, consensus building on national positions and advice to the ministry when required. Other national institutions, universities, research organisations, industry associations and non-governmental organisations can also provide technical inputs when required.

2.4.5 National Climate Change Management Department

The transformation of the National Climate Change Office into a full-fledged National Climate Change Department in 2013 demonstrates the commitment of the government of Zimbabwe to set up a robust institutional framework for climate change governance. The primary role of the Department is to assist the government in designing climate change policies and coordination of specific national climate change projects such as the compilation of national inventories of greenhouse gases. The Department also coordinates other climate change activities between various ministries and organisations, including the private sector. Chagutah (2010) further notes that the Department functions as the secretariat for the Clean Development Mechanism (CDM) in the country.

2.4.6 Agricultural sector institutions

Agricultural institutions are an integral part of the institutional architecture for climate change governance. The Department of Agricultural, Technical and Extension Services (AGRITEX) is the lead department primarily responsible for increased and sustainable agricultural production and the provision of appropriate technical, professional and other support services to the agricultural industry (Ibid). Further to that, AGRITEX provides regulatory, advisory and technical services, farmer training, food technology and dissemination of technologies. In the process of executing their mandate, AGRITEX staff interacts with various facets of

climate change governance including regulation, communication and training on climate smart technologies.

2.4.7 Disaster management institutions

Extremes of weather conditions due to climate change often result in loss of property or deaths and Zimbabwe has experienced fatal climate related disasters before. The Department of Civil Protection is responsible for the coordination of disaster management activities in Zimbabwe through the Civil Protection Unit (CPU). Although the CPU does not have structures at sub-national level, it has provincial and district civil protection committees with multi-sectoral representation. There are other institutions responsible for disaster management through emergency response and these include the Police and the Army who are usually engaged during times of emergencies.

2.4.8 Non-governmental organisations

Various forms of non-governmental organizations including local and international organizations, participate in climate change governance in a variety of ways. Climate change activities in Zimbabwe are also carried out in close cooperation with a number of research organisations and non-governmental organisations, among them the UN agencies (Chagutah, 2010). Besides UN agencies, some of the prominent NGOs in the climate change governance fraternity include Zimbabwe Environmental Lawyers Association (ZELA), Zero, Care International, World Vision, SNV among others. These organizations are usually active in climate change adaptation activities although they participate in policy-making processes through advocacy initiatives and provision of funding. There has been effective participation of NGOs in the development of climate change policy, and in defining the country's position on climate change in international negotiations. Thus, Zimbabwe's climate change governance architecture has diverse institutions that contribute differently to climate governance.

2.5 Climate change governance in South Africa

The Republic of South Africa has signed and ratified to the UNFCCC and acceded to the Kyoto Protocol. South Africa's climate change policies must therefore, comply with the UNFCCC and the Kyoto Protocol. While South Africa is the most advanced economy in Africa, it has its own share of environmental challenges that call for collective action by a

variety of stakeholders. South Africa's position on climate change governance is reflected in its institutional architecture; particularly laws and policies that are aimed at responding to climate change.

2.5.1 The Constitution

The South African Constitution incorporates an environmental right as a fundamental right in its section 24. Section 24(1) provides that everyone has the right: '(a) to an environment that is not harmful to their health or wellbeing; and (b) to the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

- (i) prevent pollution and ecological degradation;
- (ii) promote conservation; and
- (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development' (Constitution of the Republic of South Africa).

The Constitution is the supreme law and an adaptation approach envisaged in this study is highly necessary for the fulfilment and satisfaction of fundamental rights flowing from the Constitution and natural law. South Africa has multiple statutes and regulations relevant in the context of climate change and these include National Environmental Management Act, the National Water Act; the Disaster Management Act; the National Environmental Management: Biodiversity Act; National Environmental Management: Air Quality Act and the Conservation of Agricultural Resources Act. While some of the mandates of these Acts may in some instances overlap, the whole legislative framework is designed to enhance climate change governance.

2.5.2 The National Climate Change Response White Paper

South Africa crafted a white paper prior to the Durban COP (17) meeting in 2011. The White Paper on Climate Change acknowledges the need to adapt to the inevitable impacts to climate change while simultaneously building and maintaining the country's international competitiveness, social, economic and environmental resilience to the adverse effects of the global climate change (Libebe, 2014). The White Paper notes the risks and challenges posed to various sectors including water, health, human settlements, agriculture, the ecosystems, and disaster risk reduction and management and thereby defining the trajectory for climate

governance in South Africa (Ibid). Adaptation measures are intended to be integrated into sectoral plans and are set out for these various sectors. The White Paper acknowledges the importance of adaptation and that failing to implement adaptation measures could threaten and even reverse many development gains made in South Africa.

2.5.3 The National Climate Change Response Strategy

South Africa's National Climate Change Response Strategy (NCCRS) is one of the most important policy documents that shape climate change governance in the country. The NCCRS, developed in 2004, provides an overall policy framework for climate change adaptation and mitigation at a time the national climate change policy is under preparation. Libebe (2014) asserts that the strategy intends to provide broad support to the policies and principles in other government policies including those relating to energy, water and agriculture. This prompts comprehensive and integrated approaches and progress in policy formulation and implementation. According to the NCCRS, adaptation is essential for South Africa, and could be the mainstay of South Africa's sustainable development. Hence, the objective is to offset South Africa's vulnerability to climate change which is inevitable regardless of greenhouse gas reductions. Libebe (Ibid) argues that the NCCRS has its own weaknesses including its failure to outline adaptation mechanisms for agriculture, rangelands, and forestry practices, and for protecting biodiversity.

2.5.4 The Department of Environmental Affairs

The Department of Environmental Affairs is the face of climate change governance in South Africa. The department has been designated as lead department responsible for the coordination of and implantation of South Africa's commitments under the UNFCCC. The department works with several other institutions within government such as the National Committee on Climate Change (NCCC), the Government Committee on Climate Change (GCCC), the National Committee for Ozone Layer Protection (NCOLP), the Inter-Ministerial Committee on Climate Change and the Inter-Governmental Committee on Climate Change. It is the responsibility of these institutions individually and collectively to ensure policy coherence and coordination for both adaptation and mitigation programmes.

2.6 Conclusions from literature

South Africa and Zimbabwe have demonstrated the desire to deal with climate change by instituting climate governance frameworks that include legal, policy and organizational frameworks. In South Africa, the Department of Environmental Affairs is the lead institution responsible for developing policies to tackle climate change in partnership with other local, regional and international institutions. The effectiveness of the department is however, limited by the challenges posed by the devolution of provincial structures from the national government. The structures in South Africa are also frustrated by poor horizontal coordination between sister departments.

In Zimbabwe, the Department of Climate Change Management under the MEWC is the lead institution in climate change governance in the country. Other government departments and ministries including the Ministry of Agriculture, Ministry of Energy and Power Development and the Ministry of Local Government, Rural and Urban Development. These ministries and departments individually and collectively together with non-state actors and NGOs contribute to climate change adaptation and mitigation programmes in Zimbabwe. However, lack of financial resources and poor coordination limits the effectiveness of the institutional framework.

2.7 Chapter summary

Climate change is a trans-boundary issue that requires regional and international cooperation to mitigate its negative effects. This requires elaborate institutions at various levels within a country's governance structure as well as regional, continental and international institutions. This chapter reviewed literature on the institutional arrangements for the administration of climate change in South Africa, Zimbabwe, SADC as well as at the continental and international levels. The chapter ended with a section on conclusions from literature. The next chapter analyzes the methodology used in gathering and analyzing research data.

CHAPTER THREE: METHODOLOGY

3.0 Introduction

The previous chapter reviewed the theoretical literature from published and grey literature in order to understand the institutional arrangements for climate change governance at the global, continental, SADC and in-country arrangements in South Africa and Zimbabwe. This chapter explains the data collection and analysis methods that were employed in this research. The first section explains the research design, followed by sections describing the population and the sample size used and data analysis methods employed. A section on the sampling framework used follows and then, another on the research techniques used to gather data from respondents. The sections that follow focus on data analysis procedures and the research ethics observed in this study. The chapter closes with a summary.

3.1 Research design

The research design used in this study was qualitative in nature and according to Babbie and Mouton (2009:272) “qualitative research emphasizes on studying human action in its natural setting and through the eyes of the actors themselves, together with an emphasis on detailed description and understanding of phenomena within appropriate context.” Qualitative research enables the researcher to give detailed descriptions of phenomenon through use of descriptive words and phrases. Polit & Beck (2004) asserted that qualitative research emphasises the dynamic, holistic and individual aspects of the human experience, and attempts to capture those experiences in their entirety, within the context of those experiencing them.

3.2 Population and sample

Pilot and Hungler, (1987) define population as the entire set of individuals or objects having a common character and to whom research study will be applicable. In this research, the population included all government ministries, departments and agencies, private sector companies, civil society organizations and research institutions that work in the climate change governance fraternity in both South Africa and Zimbabwe. It was impossibly difficult to determine the actual size of the population due to the large number of institutions involved in climate change governance. To ensure representativeness of the sample, the researcher selected 16 institutions from a diverse set of stakeholders in both South Africa and Zimbabwe

for interviews and discussions. Table 3.1 shows the breakdown of key informant interviews and in-depth discussions.

Table 3.1: Research respondents

	Country			
	South Africa	Designation	Zimbabwe	Designation
In-depth discussions	3	SA-IDI 1-3	3	Z-IDI 1-3
Key informant interviews	2	SA-KII-1-2	8	Z-KII 1-8

Source: Survey Data (2017)

Key to designations

SA-IDI 1-3-South African in-depth interview participants 1 to 3

SA-KII 1-2- South African key informant interview participants 1 and 2

Z-IDI 1-3-Zimbabwean in-depth interview participants 1 to 3

Z-KII 1-8- Zimbabwean informant interview participants 1 to 8

3.3 Sampling techniques

Sampling refers to the process of selecting a portion of the population that is representative of the population to be studied. In this research, the researcher employed multiple sampling techniques that include purposive sampling and snowball sampling. According to Brink (1996:141), purposive sampling requires selecting participants who are knowledgeable about the issue in question, because of their involvement in and experience of the situation. The researcher purposefully selected respondents from critical institutions that are known to be instrumental in climate change governance; particularly government ministries, departments and agencies as well as CSOs and research organizations.

On the other hand, Vogt (1999) defines snowball sampling as a technique for finding research subjects in which one identified subject gives the researcher a name of the next research subject who in turn give a name for the next research subject. In this research, the researcher applied snowball sampling to obtain names of experts who are familiar with climate change governance structures but were unknown to the researcher. As a result, the researcher gained access to a number of experts in the field of climate change governance.

3.4 Data collection methods

The researcher engaged key institutions in South Africa and Zimbabwe that are directly or indirectly involved in climate change governance to obtain information relevant to the study. The researcher obtained primary data through key informant interviews and in-depth discussions with officials from various institutions that are involved in climate change governance in South Africa and Zimbabwe. In order to eliminate bias, the researcher used triangulation with secondary literature to verify authenticity of information and improve reliability of data obtained. Secondary data were obtained from a fusion of early researchers and organizations as well as reports and strategy documents from government departments and agencies; civil society actors and research institutions involved in climate change governance.

3.4.1 Key Informant Interviews

Key informant interviews are a form of interviews held with individuals who are familiar with the subject under study. In this research, the researcher engaged individuals from organizations which deal with climate change; particularly civil society organizations and research institutions. In addition to that, the researcher also interviewed officials from private sector companies and from a faith based organization.

3.4.2 In-depth discussions

Boyce and Neale (2006) define In-depth interviews as a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. The researcher had in-depth discussions with officials from the respective ministries primarily responsible for climate change management in both South Africa and Zimbabwe.

3.4.3 Secondary data

Secondary data are data which were collected and compiled for some purpose other than the present investigation. In this research, secondary data were obtained from a fusion of early researchers and organizations particularly the Ministry responsible for Climate, the Meteorological Services Department and other research institutions. Documentary evidence assists to clarify some information that may not be easily accessible through interviews. Oppenheim, (1992:2) defines documentary research as ‘a systematic analysis of written

records.’ In this study, the researcher also collected data from published books, government reports, strategy documents, policy documents, journal articles, newspaper reports and anecdotal evidence to get a holistic picture of the institutional architecture of climate change governance in South Africa and Zimbabwe.

3.5 Data analysis

The data analysis technique used in this research is thematic analysis and it is a qualitative method of data analysis and validation. Braun and Clarke (2006) assert that thematic analysis is a qualitative analytic method for ‘identifying, analysing and reporting patterns or themes within data and it minimally organises and describes the data set in detail’. Thematic analysis was employed in order to draw conclusions from the primary and secondary data obtained in the research process. The themes which were drawn up from the data enabled the researcher to summarize large amounts of data and that facilitated interpretation and drawing of conclusions.

3.6 Ethical considerations

Strydom, Fouch and Delpont (2005:570) state that ethics refer “to a set of moral principles which is suggested by the individual or group... and which offers rules and behavioural expectations about the most current conduct towards subjects...” The assertion of these authors is that research designs and procedures which fail to meet ethical standards and to treat subjects with respect are likely to result in misleading, inconclusive, and biased results. In view of this, it therefore calls for ethical considerations on the part of the researcher carrying out a study.

The researcher in this study therefore, adhered to and respected the ethical principles of informed consent, anonymity, confidentiality, protection of research participants, honouring trust, non-deception, respect for individual autonomy, avoidance of pressure on subjects to participate and avoidance of undue intrusion. Below is a summary of the ethical issues that, as a researcher in carrying out this study, considered to make sure that the research project met standard academic ethics.

3.6.1 Informed Consent

Informed consent is the process in which a participant consents to participate in a research project after being informed of its procedures, risks, and benefits (Bulger, 2002). Negotiating

consent entails communicating information likely to be material to a person's willingness to participate; such as the purpose of the study, the anticipated consequences of the research, the identity of those behind research, the anticipated uses of the data, possible benefits of the study and possible harm or discomfort that might affect participant, issues relating to data storage and security. The researcher communicated with research participants about his identity and his expectations from the research participants. The participants were also told why they were selected and invited to take part in the interview or discussion.

3.6.2 Maintaining anonymity and confidentiality

Wiles, Crow, Heath and Charles (2006) assert that researchers can overcome the moral obligation of anonymity and confidentiality through non-disclosure of identifiable information about participants. Confidentiality relates to the protection of the data collected. Confidentiality was and will still be guaranteed by assuring the participants that the information given will not be made available to anyone who is not directly involved in the study.

3.6.3 Protecting research participants and honouring trust

In this study, the researcher endeavoured to protect the physical, social and psychological well-being of those whom he engaged in the study and respected their rights, interests, sensitivities and privacy. Blaxter, Hughes and Tight (2006) suggest that a common cause of ethical challenge is conflict of interest between the researcher and the researched. As far as privacy is concerned, it refers to people and may involve asking them questions of a personal or sensitive nature, which can give rise to an offence. In this regard therefore, the researcher assured the participants that he would not involve himself in their private affairs.

3.6.4 Deception

Athanassoulis and Wilson (2008) define deception as misleading by intentionally giving false information or withholding information from research participants. It is a problem that affects research since the researcher wishes (frequently) to limit participant understanding of the issue since it could alter their responses and thus detrimentally affect the validity of the research. The researcher in this study, avoided deceiving his participants by carefully selecting wording to be used in the questions.

3.6.5 Respect for individual autonomy

Autonomy means freedom to decide what to do. Participants or subjects being studied were given the latitude and freedom to withdraw from the study at any time without giving reasons and the researcher made this known to research participants. Research participants were also free to decline answering any questions that they felt were not suitable. However, none of the research participants declined to answer any questions because the questions did not intrude into the personal details of the individuals.

3.7 Summary

This chapter focused on the methodology that was employed in this study. The research design used by the researcher included key informant interviews and in-depth discussions as well as secondary documents to come up with primary and secondary data. The researcher also used triangulation in interviews to ensure data validity and reliability and observed ethical issues which were considered during research design and implementation. These include avoiding undue intrusion, telling the participants the truth about the uses of data and not invading into their private space. The following chapter looks at the analyses of data and the interpretation of the research results.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

The previous chapter focused on the methodology that was employed in this study, the research design used and the ethical issues observed during the research exercise. This chapter is going to analyze the collected data and make interpretations out of it. Results are then presented and conclusions will be drawn from the interpretations. The chapter opens up with an introduction and goes on to look at the global and continental level institutions that govern climate change in Africa. The section that follows will focus on climate change governance institutions in Zimbabwe, from the national to the village level. The subsequent section deals with climate change governance institutions in South Africa at the national and provincial levels. A summary discussion of results then follows and the chapter closes with a conclusion.

4.1 Characterization of climate change governance institutions in South Africa and Zimbabwe

The trans-boundary nature of climate change requires an institutional architecture that transcends political and administrative boundaries at national level. The researcher sought to find out the climate governance institutions that operate at global, continental and regional levels with the objective of understanding their alignment and harmonization with lower level institutions.

4.1.1 Global, continental and regional level institutions for climate change governance

Efforts to combat climate change globally have significantly expanded beyond the multilateral response under the United Nations Framework Convention on Climate Change (UNFCCC) to include individual non-state actors such as non-governmental organizations (NGOs), firms, academia, cities, sub-national regions and international organizations; mini-lateral clubs, comprising smaller groups of countries; and, transnational initiatives, where both state and non-state actors collaborate. Thus, global level institutions are those that have trans-continental mandates in their discharge of climate change governance functions.

Research participants identified regional blocs as the first layer towards international cooperation in climate change governance and in the context of South Africa and Zimbabwe, SADC and COMESA are the principal regional blocs. However, as one of the leading nations for the Africa Group, South Africa would often side with the rest of the African countries should a disagreement arise between the G77 and the rest of the African nations (ibid).

4.1.2 Localized climate change governance institutions in South Africa

South Africa has major environmental concerns that make its population particularly vulnerable to the adverse impacts of climate change. This has necessitated the creation of various institutions that respond to the adaptation and mitigation needs. The researcher engaged informed individuals from the Department of Environmental Affairs and other international organizations in in-depth discussions to obtain insight into South Africa's climate change governance framework. Through documented literature and the primary data, the researcher found out that South Africa has public institutions at the national, provincial and local levels as part of the institutional framework. In addition to that, there are other non-state actors and civil society actors in the climate change governance fraternity. This section discusses the findings from the discussions.

4.1.2.1 South Africa's policy and legislative framework for climate change governance

South Africa has a comprehensive policy and legislative framework that enhances the governance of climate change. This includes the national constitution, the National Climate Change White Paper and the National Climate Change Response Strategy. Nevertheless, the application of these legislative frameworks is often hindered by the devolved structure of provincial governments.

The National Climate Change White Paper

The other two spheres of government outside the national sphere have the power and authority to determine priorities at their level of governance. As a result, climate change programmes may not be implemented with the same level of urgency that may be required by the national government. The Department of Public and Administration for example, highlights of provincial governments that:

“In terms of the Constitution, a provincial legislature has the authority to, inter alia: pass its provincial Constitution, pass its

provincial legislation with regard to matters concerning its people, e.g. agriculture, consumer protection, cultural matters environment and health services” (Government of South Africa, 2013).

It is not surprising therefore, that there may be some level of disorientation between the national and lower level spheres of government. One participant of in-depth discussions asserted that ‘there is misalignment of policies because of differences in preferences between local and national governments’ (S-IDI 1).

South Africa’s National Climate Change Response Strategy

South Africa is in the process of crafting a Climate Change Policy but in the process, has produced a National Climate Change White Paper that sets the strategic direction in climate change mitigation and adaptation programmes. Important issues in South Africa’s development are usually dealt with by clusters of Directors General. However, the government of South Africa has not set a dedicated Cluster on Climate change and one participant of in-depth interviews opined that ‘government usually sets up committees at Director General level but there is none for climate change’ (SA-IDI 2). This seems to be supported well by the Climate Change Response White Paper which states that:

“The national climate change response actions shall be guided by strategic leadership of the relevant Forum of South African Directors-General clusters based on their different mandates: the Economic Sectors and Employment Cluster on issues that have a strong bearing of economic growth and employment creation; the Infrastructure cluster on all infrastructure-related aspects of this policy; and the International Cooperation Cluster on international engagements (National Climate Change Response White Paper)”.

While South Africa’s National Climate Change Response White Paper addresses the need to simultaneously addresses South Africa’s over-riding national priorities for sustainable development, job creation, poverty eradication, and social equality; it lacks the requisite institutional support to ensure its effectiveness at all levels of governance.

4.1.2.2 Organizations as climate change governance institutions in South Africa

The researcher also endeavoured to find out the organizational institutions that are responsible for climate change governance in South Africa through both primary and secondary data. While there are public and non-state institutions, this research focussed more on public institutions since their configuration is directly under the control of the government. Public institutions identified include departments, agencies, parastatals and state owned enterprises. However, some institutions were established for better coordination and integration of climate change activities. These include Parliament Portfolio Committee on Environmental Affairs, The Inter-Ministerial Committee on Climate Change, Inter-governmental Committee on Climate Change and the National Climate Change Committee. Table 4.1 presents the main climate change governance institutions in South Africa as synthesized from in-depth interviews.

Table 4.1: National level institutions for Climate Change governance in South Africa

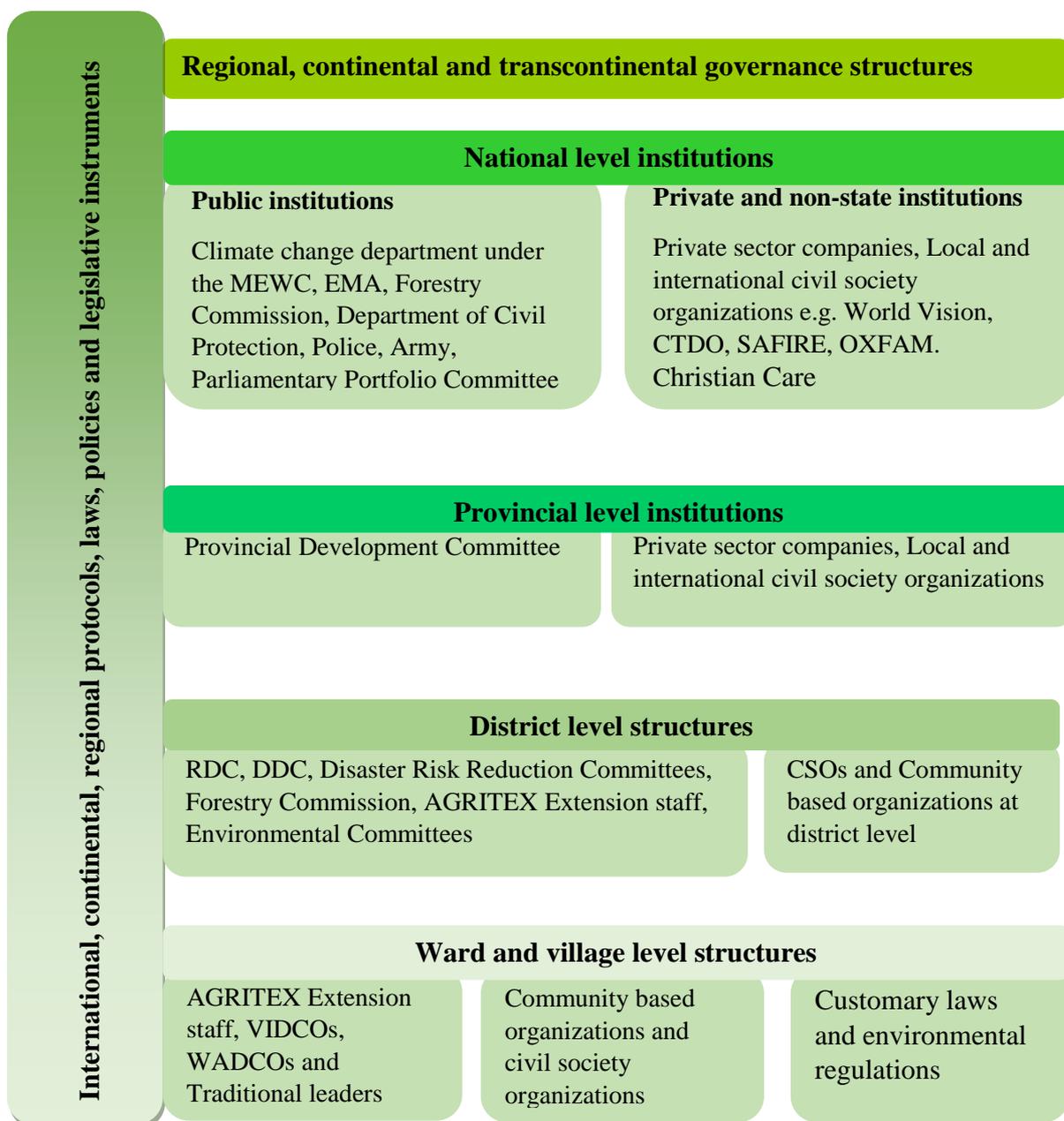
Structure	Function
Parliament Portfolio Committee on Environmental Affairs	Oversees the implementation of the NCCRP and reviews legislation to support the NCCRP.
The Inter-Ministerial Committee on Climate Change	Is an executive (Cabinet)-level committee that coordinates and aligns climate change response actions with national policies and legislation. The committee oversees the implementation of the national climate change response.
Forum of South African Directors-General clusters	South African Directors-General clusters guide national climate change response actions by facilitating engagement on emerging policies and legislation in a way that ensures that mandates of sector departments are given due consideration.
Intergovernmental Committee on Climate Change	The Intergovernmental Committee on Climate Change was established in 2008 to foster information exchange, consultation, agreement and support among the spheres of government on climate change and government's response to climate change. As a high level platform, it brings together representatives from National Treasury and the national departments of environmental affairs; agriculture, forestry and fisheries; energy; health; human settlements; international relations and cooperation; trade and industry; transport; rural development and land reform; science and technology; social development; and water affairs; from provincial environment departments; and from the South African Local Government Association
National Disaster Management Council	Responsible for ensuring that the National Framework for Disaster Risk Management provides clear guidance across all spheres and sectors of government for managing climate change-related risks. The council ensures that an effective communications strategy is in place for early warnings to vulnerable communities.
Ministers and Members of Executive Council and Ministerial Technical Committee	Facilitates policy and strategy coherence among the three spheres of government, and guides climate change work across the three spheres of government.
National Committee on Climate Change	The National Committee on Climate Change advises and consults DEA on matters relating to national responsibilities with respect to implementation of the NCCRP and climate change, and in particular in relation to the UNFCCC and the Kyoto Protocol. It also advises on the implementation of climate change-related activities. The committee is obliged to report on climate change activities every four years through the National Communications to the UNFCCC. It also consults with stakeholders from key sectors that impact on or are impacted by climate change.
National Economic Development and Labour Council	Forum where government comes together with organised business, labour and community groupings at a national level. The council ensures that climate change policy implementation is balanced and meets the needs of all sectors of the economy.

Source: Synthesis from South Africa National Adaptation Strategy 2016 and SA-IDI 1 and 2

4.1.3 Localized climate change governance institutions in Zimbabwe

National level institutions provide the overarching framework through which provincial, district, ward and village level institutions should be built on. Primary research data indicates that the MEWC remains the parent ministry, which handles climate change issues and is primarily responsible for development of climate change policies. Moreover, there are provincial, district, ward and village level structures that are involved directly or indirectly; in the formulation, implementation or regulation of climate related policies and programmes. Figure 4.1 shows a synthesis of the elaborate mechanism for climate change governance in Zimbabwe. The governance structure in Fig 4.1 suggests a multi-level governance approach across all the tiers and levels of government. Institutions involved include written and unwritten policies, laws, legislative instruments and organizations that administer the regulations.

Fig 4.1: Zimbabwe's Climate Change governance structure



Source: Survey Data (2017)

4.1.3.1 Policies and legislative instruments as governance institutions in Zimbabwe

Policies, laws and legislative instruments are some of the national level institutions identified by interview respondents and these include the Constitution of Zimbabwe Amendment No. 20 (2013) and Zimbabwe's Climate Change Policy and Zimbabwe's National Climate Change Response Strategy. Policies and laws provide the framework within which climate change programmes can be formulated and implemented. Thus, all organizations, programmes and

policies instituted to assist in the governance of climate change or execution of any other mandates must be in conformity to the constitution.

In April 2017, the Cabinet Committee Zimbabwe's National Climate Change Policy within which the strategy operates and these together with the constitutional provision, are the overarching frameworks for climate change governance in Zimbabwe. One respondent had this to say on the utility of the strategy in climate change governance:

The Climate Change Response Strategy is the main reference document for those working in the climate change governance fraternity. While the main Policy document is under review awaiting cabinet approval, this strategy document is our main reference document for all programming. (Z-KII 4)

4.1.3.2 Organizations as climate change governance institutions in Zimbabwe

Policies and legislative instruments are however, operationalized within an organizational context and the Department of Climate Change Management in the MEWC was identified as the most important organization. Some of the participants of the interviews had this to say of the role of the department:

The department is responsible for coordination of climate change issues in the country with the objective of establishing a climate resilient Zimbabwe and its role entails formulation and implementation of climate related policies. (Z-IDI 2)

And;

The Climate change department coordinates climate change issues, drives the climate change agenda, coordinates other stakeholders and works closely with NGOs and donors and climate change related process development through summits. (Z-IDI 4)

Although Zimbabwe's empirical governance structure is as shown in Figure 4.1, the National Climate Change Strategy paper suggests a different structure shown in Annex 1. The structure proposed in the Climate Change Response Strategy includes a climate change platform that encompasses all stakeholders in the climate change fraternity at national, provincial and

district level. In addition to that, the structure will also have technical sub-committees at national, provincial and district levels that will have the mandate to deliberate technical climate change issues.

This has however, not been operationalized although the Department of Climate Change in MEWC is working on setting up the necessary structures. These structures include the National Climate change Platform (Multi-stakeholders), the Provincial Climate Change Platform and the Local Urban and Rural (RDC) Authority Climate Change Platform and their relevant sub-committees (Government of Zimbabwe, 2013).

4.1.3.3 Constraints in Zimbabwe's climate change governance framework

Although Zimbabwe has made progress in enhancing climate change governance through an elaborate institutional framework, there remain some constraints and enduring gaps that reduce the effectiveness of such institutions. The researcher sought to find out the constraints that exist in Zimbabwe's institutional framework. Results from primary data indicate that some constraints are inherent from the national to the village level. These include coordination between public and non-state institutions as well as finance and capacity gaps for research and programming. Table 4.1 shows the constraints at each level of governance.

Table 4.2 Constraints in climate change governance in Zimbabwe

Level of governance	Constraints
National	<ul style="list-style-type: none"> • Inadequate financial resources for adaptation and mitigation activities • Human resource constraints fueled by lack of skilled personnel and brain drain • Information asymmetry between and among ministers, departments and institutions • Lack of access to modern technology for climate change forecasting and mitigation • Inadequate material resources for use in governance activities • Poor coordination within and between institutions that are involved in climate change governance.
Provincial	<ul style="list-style-type: none"> • Inadequate financial resources for adaptation and mitigation activities • Inadequate material resources for use in governance activities • Information asymmetry between and among ministers, departments and institutions at provincial level • Poor policy communication and dissemination from the national level institutions • Poor coordination within and between institutions that are involved in climate change governance.
District	<ul style="list-style-type: none"> • Inadequate financial resources for adaptation and mitigation activities • Information asymmetry between and among ministries, departments and institutions at district level • Non-or poor dissemination of policies from higher level institutions • Poor coordination within and between institutions that are involved in climate change governance.
Ward and Village	<ul style="list-style-type: none"> • Information asymmetry between and among institutions working at ward and village level • Technical skills gap that reduces effectiveness of climate governance activities • Poor coordination within and between institutions that are involved in climate change governance.

Source: Survey Data (2017)

As highlighted earlier on in this section, all of the tiers of governance from the national, provincial, district, ward and village levels have coordination and financial capacity constraints and this reduces their effectiveness. Other constraints are however, unique to certain levels of governance. Other than coordination and financial constraints, national level constraints identified include human resources, information, technological and material constraints.

Most of the constraints affecting the national level as a tier of climate change governance also affect the provincial level although respondents identified poor policy communication and dissemination to provinces as a unique constraint. Thus, provincial field administration teams have to work under unclear policy positions because policy documents may not be translated into implementable provincial plans. The district tier of climate change governance share similar constraints with the province and these too; impact on capacity for climate change governance. At the ward level, technical skills gap reduces the effectiveness of climate governance activities at the ward and village levels. This is because at that level, communities mostly apply indigenous knowledge systems without blending them with modern climate science in mitigation and adaptation activities.

4.2 Alignment and harmonization of Climate Change governance institutions in South Africa and Zimbabwe

Alignment and harmonization of policies is an important precondition for effective policy formulation and implementation. The researcher sought to find out expert opinion on the cross-sectoral alignment and harmonization of climate change institutions. As highlighted by Conway et al., (2015) and Nilsson et al., (2016), the complexities associated with sectoral approaches to policy-making calls for coherence in the policy and institutional framework in addressing crosscutting challenges. Achievement of development objectives also require climate change mainstreaming across the social and economic subsectors as a crosscutting challenge.

Moreover, Cochrane et al., (2017) highlight that ensuring improved links between international climate policy and national sectoral policy development are essential for achieving development objectives. Research data gathered by the researcher however, shows divided opinions with regard to the alignment of harmonization of climate change institutions in Zimbabwe. One of the respondents for example, claimed that harmonization is there “to a limited extent since climate change is a new baby and efforts are being made regarding mainstreaming it in a coherent and coordinated manner” (Z-IDI 5). Thus, the respondent cites the relative newness of the discipline in mainstream policy making as the reason for low levels of harmonization.

Other respondents however, regarded climate change as largely harmonized. The justification cited includes the frequent synchronization of climate change programmes between ministries. One respondent was quoted saying;

To a larger extent, there is coordination and coherence in the governance of climate change. Agriculture for example, does some components like research on drought resistant crops or seed varieties.... (Z-IDI 2)

And another was quoted saying;

Climate change institutions are harmonized to a lesser extent and there has not been much strides done to streamline the climate change discourse in the various subsectors.....there are stills gaps in harmonization and research that needs to be done. (Z-IDI 6)

However, some respondents were of the view that the Climate Change Management Department has done a lot to achieve harmonization and alignment across sector ministries.

There is strong harmonization and coherence in climate change governance. There are climate change focal persons in all government institutions and climate change issues have been incorporated into the new educational curriculum. The Department of Climate Change Management also works with AGRITEX to disseminate climate change information to farmers. (Z-IDI 1)

Thus, there is divided opinion over the coherence and coordination of climate change governance institutions in Zimbabwe. However, literature has it that Zimbabwe's institutional landscape for climate change governance is fragmented and poorly coordinated. Mtisi and Prowse in the Baseline Economic Development and Climate Change (2012) highlight that there is a coordination disjuncture between national and local level institutions. The Climate Change Management Department, the report asserts, has structures at the national level and village level climate change programming and governance is done by AGRITEX; which does not report to the Climate Change Management Department.

UNDP (2011) also asserts that Zimbabwe's efforts to address climate change are constrained by many factors including inter and intra-sector coordination. Therefore, indications are that whilst the Government of Zimbabwe through the Climate Change Management Department has increased its efforts to enhance coordination, there remain some potential for increased coordination.

These constraints have implications in the nature of institutions that need to be established in South Africa, Zimbabwe and the rest of the SADC countries. Firstly, SADC countries need to ensure that their institutions are staffed enough to execute their governance duties. This entails sufficient numbers of staff with adequate skill sets needed to execute their mandate. In addition to that, institutions need sufficient material and financial resources to run efficiently and complete tasks at hand. Institutions for climate change governance also need to be harmonized and well-coordinated to ensure efficiency and effectiveness.

4.3 Chapter summary

This chapter analyzed and interpreted research data by drawing themes on those data to enable the researcher to draw some conclusions. The first section characterised the institutional configurations in for climate change governance in South Africa and Zimbabwe; by taking a look at global, continental, regional and then country-specific institutions. The section gave an outline of the policies and organizations dealing with climate change within their borders and outside. The section that followed analyzed the institutions' alignment and harmonization for effective governance of climate change. The last sub-section proposed the institutional configurations that will enhance climate change governance in South Africa, Zimbabwe and the greater SADC region and ended with a conclusion. The next chapter focuses on recommendations to the governments of South Africa, Zimbabwe and the SADC secretariat to enhance climate change governance.

4.4 Conclusion

Climate change governance is a complex process that encompasses multiple actors and institutions at various levels. It has been established that both South Africa and Zimbabwe have elaborate structures for climate change governance and in both cases, there is a stand-alone department responsible for climate change. South Africa's climate change governance challenges are mainly due to the devolved nature of its sub-national structures; with the

provincial and local levels spheres of governance retaining some level of autonomy in policy making. In Zimbabwe, the major challenges lie in the poor horizontal coordination mechanisms within and amongst institutions at the same level of governance. Zimbabwean provincial and district structures are subordinates of the national structure with insignificantly low levels of autonomy and hence, eliminating coordination challenges. However, plans are often inconsistent with local needs due to centralized policy making. On the basis of best practices, climate change governance structures in South Africa and Zimbabwe must ensure both horizontal and vertical coordination while at the same time, giving autonomy to lower levels to decide their policy trajectories.

CHAPTER 5

SUMMARY RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter looks at the conclusions drawn from the study and the possible recommendations to enhance adaptation to climate change in Zimbabwe's communal lands. The chapter opens with an introduction and goes on to give a brief summary of the results obtained from the study. The next section looks at recommendations to the government of Zimbabwe to ensure that households remain resilient to changing climate by improving their adaptive capacity. The section that follows highlights the recommendations to development partners and civil society actors working in the spaces of climate change and livelihoods. Another section on recommendations to members of the public and farmers to ensure that they adapt to changing climate follows. The chapter closes with a conclusion and a highlight of the areas for further study under similar or related research topics.

5.1 Summary discussion of results and conclusion

This study was an analysis of the institutional arrangements for climate change governance in the SADC region through an analysis of South Africa and Zimbabwe as cases. The specific objectives of the research were to characterize current climate change governance structures in South Africa and Zimbabwe; to determine the extent of alignment and harmonization of climate change governance institutions in South Africa and Zimbabwe; focussing on traditional and modern institutions and to interrogate possible institutional configurations for effective climate change governance in the SADC region.

The study found out that both South Africa and Zimbabwe have multi-level approaches to climate change governance. In south Africa, there are three spheres of climate change governance which comprises the national level, the provincial and the local level. The national level institutions

5.2 Recommendations to the government of South Africa

Based on the findings from the study the researcher recommends the following actions to the government of South Africa:

- The alignment of the constitution in a way that will harmonize policy making at national, provincial and local levels. Currently, provincial and local level governments can make their own plans that are semi-detached from national policies.
- There is need for the 3 tiers of government to develop integrated development plans, in which climate change programming is an integral part. This will reduce the friction which characterizes the relationship between the national, provincial and local governments.
- The need for harmonization of traditional leadership and municipalities in the administration of climate change activities in a way that enhances cooperation. The findings of the research suggest that elected officials tend to deplete the de facto traditional authority
- There is need to mainstream climate change issues across all the sectors of the economy to reduce the financial and logistical implementation burden on the national government. Financial and human resources have been noted as key capacity constraints for adaptation and mitigation activities at a local level and inclusion of private sector players in implementation could lessen the burden.

5.3 Recommendations to the government of Zimbabwe

Zimbabwe has its unique circumstances in its climate change governance architecture that calls for specific recommendations. It is therefore, recommended from the study findings that:

- The government of Zimbabwe must prioritize resource mobilization to enhance the financial, technical and human resource capacity of its public climate change governance architecture.
- The government of Zimbabwe must harmonize policies by ensuring that national level adaptation and mitigation policies (as contained in the National Climate Change Response Strategy and the recently adopted National Climate Change Policy) are translated into provincial, district and local level plans for field administration and implementation.
- Climate change adaptation and mitigation activities must be streamlined across the economic sub-sectors to enhance the participation of private sector players and civil society actors that work in the climate change fraternity.
- Innovative financing mechanisms need to be developed to ensure that climate change governance functions are well funded and resources.

- More effort and resources should be channeled towards horizontal coordination of climate change governance institutions including grassroots institutions.

5.4 Recommendations to the SADC Secretariat

The SADC secretariat as the executive arm of the SADC retains the mandate to formulate policies and hence, governance oversight in SADC countries. The success of climate change programmes therefore, hinges on how well the secretariat sets up policies and institutions. It is therefore, recommended that the SADC must:

- Effectively communicate the common SADC position on climate change governance including the response strategy to member countries;
- ensure the monitoring of climate and ecosystems across the SADC region to
- Continue to offer support for the continuing development of scientific knowledge and evidence about the climate system and the potential impacts of climate change, especially on regional dimensions and ecosystem in the SADC region.
- develop a common climate change and development agenda, supported by the science and the region could attract development partners and investment and resources to address the adverse impacts of climate change.

5.5 Areas for further study

This research was aimed at analyzing the institutional configurations for climate change governance in SADC countries with South Africa and Zimbabwe as the cases. The researcher recommends further studies in other SADC countries where institutional arrangements may be different and with different bundles of resources.

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Annex 1: Proposed Climate Change Governance Structure

