

CLIMATE CHANGE AND LOCAL INDIGENOUS KNOWLEDGE AND PRACTICES IN
KENYA: AN ANALYSIS OF AGRARIAN COMMUNITY RESPONSES AND THEIR
ROLE IN FORMAL POLICY AND LAW-MAKING.

By

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Abstract

In developing countries, agriculture, while providing livelihoods to communities, is adversely affected by climate change. The communities that depend on this sector of activity respond to these adverse impacts by using their local indigenous knowledge and practices (LIKP) to adapt and survive. National climate change policy and law-making is a new and significant issue for integrating diverse knowledge, including the LIKP of communities severely affected and equally responding in their own ways.

Literature on policy and law-making to address environmental disturbances such as climate change that directly impact local communities has given little attention to how to incorporate their LIKP and the barriers to this. There is also little evidence of comprehensive studies on climate change legislative processes and how diverse actors, including state and non-state actors with competing knowledge and different levels of power, interact and shape the outcome of such processes mediated by the institutional arrangements within the policy space.

This is investigated in this research using Kenya as a case study. Kenya enacted the first climate change law and one of the first laws to protect traditional knowledge and cultural expressions in 2016. This follows processes that began in 2008 and interspersed with a new constitution in 2010 introducing a multi-level governance arrangement. This investigation can shed light on how these multi-actors, multi-sector, and multi-level interactions enhance or constrain the incorporation of diverse knowledge, including the LIKP of agrarian communities active in climate change adaptation.

Informed by literature on knowledge, actors, power dynamics, and institutional arrangements, an innovative framework was developed to guide the data collection and analysis to answer the question, ‘How does policy and law-making on climate change enable or constrain the incorporation of LIKP?’. Qualitative data were collected through remote interviews among policy actors at national and sub-national levels in Kenya. This was in

addition to a review of secondary data from government publications and other published sources.

The findings suggest that control over knowledge is an essential dimension of power. The low concentration of power facilitated by decentralised institutional arrangements in Kenya's climate change policy environment supports vertical and horizontal interactions amongst policy actors and sectors. This results in policy integration across sectors and the incorporation of LIKP. Agrarian communities were influential policy actors who drew their power from their ability to develop and use their LIKP to understand and adapt to the impacts of climate change. Also, their large numbers constitute a source of political capital, which they have used to promote their LIKP. This knowledge is captured through the bottom-up process in nationwide climate hearings and incorporated into climate change policies and laws. Although LIKP is used in combination or in a complementary manner with scientific knowledge, to a greater extent, scientific knowledge is prioritised due to its ability to respond to the magnitude of climate change compared to LIKP. Scientific knowledge is promoted by other policy actors who are more powerful and occupy influential positions in the policy space. This limits the potential for more incorporation of LIKP climate laws and policies.

This thesis offers extended knowledge on policy and law-making in the novel area of climate change regarding the limited attention to the incorporation of LIKP. It contributes to theoretical knowledge on policy and law-making towards the incorporation of LIKP as well as empirical evidence on national policy and law-making to tackle climate change using Kenya as a case study. In addition, the analytical framework developed by the researcher that brings together three interdependent themes (knowledge, actors, and institutional arrangements) wherein only a few literatures address them together is a contribution made by this study. This Framework could serve as a pragmatic guide for evaluating existing climate change policies and laws or developing new policies.

Dedication

To My Mother (RIP)

Acknowledgments

An academic journey is a collective effort involving many people's encouragement, guidance, and assistance. Therefore, I would like to acknowledge the invaluable contributions of some people to the realisation of this thesis.

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List of abbreviations

AAP	Africa Adaptation Programme
AFB	Adaptation Fund Board
AFOLU	Agriculture, Forestry, and Other Land Use
ATAR	Adaptation Technical Analysis Report
ASALs	Arid and Semi-Arid Lands
CA	Climate Act
<i>CASELAP</i>	The Centre for Advanced Studies in Environmental Law and Policy
CH	Climate Hearings
CCCFs	County Climate Change Funds
CCD	Climate Change Directorate
CIDPs	County Integrated Development Plans
CoGs	Council of Governors
CSOs	Civil Society Organisations
DFID	Department for International Development
ECOSOC	Economic and Social Council
EO	Extension Officer
FAN	Forest Action Network
FAO	Food and Agriculture Organisation
FPIC	free, prior, and informed consent
GCF	Green Climate Fund
GCM	Global Climate Modelling
GoK	Government of Kenya
ICT	information communication and technology
IDRC	International Development Research Centre
ILP	Indigenous and Local People
IPBES	Intergovernmental Panel on Biodiversity and Ecosystem Services
IPC	International Patent Classification
JICA	Japan International Co-operation Agency
KARI	Kenya Agricultural Research Institute
KCCWG	Kenya Climate Change Working Group
KCF	Kenya Climate Forum
KCSAS	<i>Kenya Climate Smart Agriculture Strategy</i>
KECOBO	Kenya Copyright Board
KENAFF	Kenya National Farmers' Federation

KENFAP	Kenya National Federation of Agricultural Producers
KES	Kenyan Shilling
KENRIK	Kenya Resource Centre for Indigenous Knowledge
KMD	Kenya Meteorological Department
MDA	Ministerial Departments and Agencies
MLG	Multilevel Governance
MoAI	Ministry of Agriculture and Irrigation
MoEF	Ministry of Environment and Forestry
MoTW	Ministry of Tourism and Wildlife
NAP	National Adaptation Plan
NCCAP	National Climate Change Action Plan
NCCC	National Climate Coordination Council
NCCCK	National Climate Change Consortium of Kenya
NCCRS	National Climate Change Response Strategy
NDC	Nationally Determined Contribution
NDMA	National Drought Management Authority
NEMA	National Environment Management Authority
NIE	National Implementation Entity
NT	National Treasury
NTCFU	National Treasury Climate Finance Unit
ODA	Overseas Development Assistance
PACJA	Pan African Climate Justice Alliance
SAGAs	semi-autonomous Government Agencies
TBI	Tree-based Intercropping
TKDL	Traditional Knowledge Digital Library
TKDR	Traditional Knowledge Digital Repository
UK	United Kingdom
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNECA	UN Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on climate Change
UNHCR	United Nations High Commission for Refugees
UoB	University of Birmingham

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Research Problem

Climate change is a topic of global significance. Evidence of its occurrence is not only scientifically proven, but it is also experienced and recognised by diverse sectors and people at different scales.¹ The impacts of climate change on the global environment through warming temperatures, rising sea levels, wildly unpredictable weather patterns, and biodiversity loss, if left unchecked, are forecast to be particularly devastating for human life. Climate change is also a cross-cutting issue having disproportionate impacts on several socio-economic-related sectors, including agriculture, health, forestry, and energy. For sub-Saharan African countries, agriculture is the mainstay for most of the population and this sector, and those who rely on it, are the most vulnerable to climate change. The sector is dominated by smallholder agriculture households representing 80% of all farms (with sizes of less than or equal to two hectares), contributing up to 90% of food production on the continent.² In addition, agriculture constitutes the backbone of the economy of a significant number of these countries, contributing over 30% of their Gross Domestic Product (GDP) and employing over 70% of citizens.³

Climate change is a multifaceted issue that needs a multidimensional response. The impacts of climate change are multiscale, involving diverse actors and sectors. Some studies

¹ IPCC, Working Group II (WGII) contribution to the Sixth Assessment Report (AR6) (IPCC 2022, pp 7-8) https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_FullReport.pdf accessed 20/07/2022
Dawson and others, 'Modelling impacts of climate change on global food security' [2013] Climatic Change (2016)

² FAO, The special challenge for sub-Saharan Africa, high level expert forum - how to feed the World in 2050 (Issues papers HLEF2050, 2009) https://www.fao.org/fileadmin/templates/wsfs/docs/Issues_papers/HLEF2050_Africa.pdf Accessed 1 August 2019

³ AGRA, "Africa Agriculture Status Report: The Business of Smallholder Agriculture in Sub-Saharan Africa" (Alliance for a Green Revolution in Africa (AGRA) 2017, Issue 5)

have referred to it as a wicked problem, having enormous uncertainties, interdependencies, circularities, and conflicting actors.⁴ A single policy actor or sector nor a specific governance level cannot proffer policy and legal solutions to it alone. Thus, it becomes a significant challenge and an imperative for policymakers to develop policies and laws to address it using a multi-actor, multi-sector, and multi-level approach.⁵ The need to address this is particularly urgent for Official Development Assistance (ODA) recipient countries, particularly those in Africa. The consequences of warming temperatures, rising sea levels, and wildly unpredictable weather patterns – if left unchecked – are forecasted to be particularly devastating. However, tackling climate change through policy and law-making is still an emerging domain.⁶

Climate change has also been recognised globally as a cross-cutting issue and has been progressively addressed through institutions and arrangements such as United Nations Framework Convention on Climate Change (UNFCCC) Conferences of Parties, the development of a convention, protocol, bilateral and multilateral agreements, and financial mechanisms. For example, establishing the Intergovernmental Panel for Climate Change (IPCC) in 1988 was the first global action by nations to raise awareness on matters related to climate change.⁷ Subsequently, much effort has been dedicated to developing various legal instruments to guide the behaviour of participating states. The IPCC's First Assessment Report (FAR) was completed in 1990 and served as the basis of the UNFCCC. The UNFCCC was the first international agreement on climate change, established at the United Nations Conference

⁴ Richard J Lazarus, 'Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future', (2009) 94 Cornell Law Review 1153, 1159

⁵ Kate Urwin & Andrew Jordan 'Does Public Policy Support or Undermine Climate Change Adaptation? Exploring Policy Interplay Across Different Scales of Governance' [2008] *Global environmental change* 18 (1), 180-191

⁶ In 2018, there existed 1500 laws and policies with 106 introduced after the Paris Agreement was reached. See Grantham Research Institute on Climate Change and the Environment and Sabin Center for Climate Change Law Climate Change Laws of the World database (2018) https://climate-laws.org/legislation_and_policies, accessed 23/07/2022; Nachmaany and other, *Global trends in climate change legislation and litigation: 2017 update*. (Grantham Research Institute on Climate Change and the Environment, London, UK 2017)

⁷ *ibid*

on Environment and Development in 1992.⁸ This framework relies on international treaties, notably the Kyoto Protocol and the Paris Agreement, negotiated by state parties.⁹ The Paris Agreement in Article 7(2) noted this multidimensional nature of climate change. It states that:

Parties recognise that adaptation is a global challenge faced by all with local, subnational, national, regional, and international dimensions and that it is a critical component of and contributes to the long-term global response to climate change to protect people, livelihoods, and ecosystems, considering the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change.¹⁰

Related to the above, the International Indigenous Peoples' Forum on Climate Change (IIPFCC) was established in 2008, as the Caucus for Indigenous Peoples participating in the UNFCCC processes.¹¹ The IIPFCC represents the IP Caucus members from seven regions of the world, namely Asia, Asia-Pacific, Africa, the Arctic, Latin America, North America, and Russia, who attend the official UNFCCC COPs and related events. Its mandate is to come into agreement specifically on what IPs will be negotiating for in specific UNFCCC processes. These global initiatives, including the IPCC, endorsed by UN General Assembly in 1988 to assess climate change on a scientific basis from inception, acknowledged the impacts of climate change on local context and communities but were silent on the use of local communities' indigenous knowledge and practices (LIKP) for understanding and responding to climate change. This global body only began to affirm the importance of LIKP

⁸ United Nations Climate Change, 'What is the United Nations Framework Convention on Climate Change?' (UN 2019) <<https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change>> accessed 01/08/2019

⁹ David King and others, International climate change negotiations: Key lessons and next steps (2011, Smith School of Enterprise and the Environment University of Oxford) <https://www.smithschool.ox.ac.uk/publications/reports/climate-negotiations-report_Fina2011.pdf> Accessed 01 August 2019

¹⁰ UNFCCC, Paris Declaration, 2015, <https://unfccc.int/sites/default/files/english_paris_agreement.pdf> accessed 2 August 2019

¹¹ IIPFCC and CIEL, Indigenous Peoples and Traditional Knowledge in the Context of the UN Framework Convention on Climate Change: Compilation of Decisions and Conclusions Adopted by the Parties to the Convention (nd), <https://www.ciel.org/wp-content/uploads/2018/12/Indigenous-Peoples-and-Traditional-Knowledge-in-the-Context-of-the-UNFCCC.pdf>, accessed 01/03/2023

used by vulnerable populations in its 2009 and 2010 sessions.¹² This recognition was made more explicit for the first time in its Fifth Assessment Report (AR5) published in 2014, specifically in the section dedicated to policymakers when it stated that:

Indigenous, local, and traditional knowledge systems and practices, including indigenous peoples' holistic view of community and environment, are a major resource for adapting to climate change, but these have not been used consistently in existing adaptation efforts. Integrating such forms of knowledge with existing practices increases the effectiveness of adaptation.¹³

Specially on agriculture, the IPCC in its 2019 summary report to policy states that:

Agricultural practices that include indigenous and local knowledge can contribute to overcoming the combined challenges of climate change, food security, biodiversity conservation, and combating desertification and land degradation.¹⁴

The IPCC report mentioned above noted that the attention given to LIKP in the global reports had been insignificant.¹⁵ This is because the discourse and authorship of these reports was dominated by those whose training and interest was skewed towards western science. The authors of this reports are cognizant of this gap. Thus, in the concluding sections of the report, they recommend the inclusion of a dedicated chapter on LIKP and a special report on indigenous people and climate change as part of the IPCC AR6 published in 2022.¹⁶ After COP15 in Paris, subsequent COPs have emphasised the importance of local indigenous knowledge and practices for addressing climate change. For example at the COP23 in Bonn Germany, the Local Communities and Indigenous Peoples Platform was initiated.¹⁷ Its aim was

¹² Ford and others. 'Including Indigenous knowledge and experience in IPCC assessment reports' [2016] *Nature Climate Change* 6, 349-353

¹³ IPCC 'Fifth Assessment Report' (IPCC 2014), <https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA_FINAL.pdf> accessed 29 September 2018

¹⁴ IPCC, Summary Report to Policymakers (2019) <https://ipbes.net/sites/default/files/inline-files/ILK_KeyMessages_IPBES_GlobalAssessment_final_ENGLISH_lo-res.pdf> accessed 29 September 2019

¹⁵ James D. Ford & Will Vanderbilt & Lea Berrang-Ford 'Authorship in IPCC AR5 and its implications for content: climate change and Indigenous populations in WGII' [2012] *Climatic Change* 113 (2) 201-213

¹⁶ Ibid

¹⁷UNFCCC, The Local Communities and Indigenous Peoples Platform (2017) <https://www4.unfccc.int/sites/NWPStaging/News/Pages/Indigenous-Peoples-and-Local-Communities-Platform-Update.aspx>

to ensure that Local Communities and Indigenous Peoples further engaged with UNFCCC processes, including sharing their valuable knowledge in the fight against climate change and its impacts.¹⁸ Subsequently, at COP24, the idea of dedicated funding in the amount of EUR 950,000 was agreed to support the implementation of the functions of the Local Communities and Indigenous Peoples Platform. The COP25 in Madrid dealt significantly with the concept of LIKP with a joint event on integrating local and indigenous knowledge in adaptation action on December 4, 2019, where the concept of incorporation of LIKP with scientific knowledge was widely discussed.¹⁹ In line with this, the Chair of the COP25 and Subsidiary Body for Scientific and Technological Advice, which recommends actions to the COPs, noted that:

...to help us improve our understanding and knowledge of climate change in the broadest sense – the causes, the impacts, but also our responses to climate change. This task will continue to be vital, helping us to strengthen our ability to understand, unpack and use best available science to strengthen implementation of action and support and to raise ambition. And we should continue to broaden our notion of knowledge as we have by recognising the importance of traditional knowledge in our work with local communities and indigenous peoples.²⁰

Many international bodies have echoed the relevance of LIKP including the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment, of particular relevance to Indigenous Peoples and Local Communities, which states that:

Recognition of the knowledge, innovations and practices, institutions and values of Indigenous Peoples and Local Communities and their inclusion and participation in environmental governance often enhances their quality of life, as well as nature conservation, restoration and sustainable use.²¹

¹⁸ *ibid*

¹⁹ UNFCCC, A joint event on integrating local and indigenous knowledge and values in adaptation action, <https://unfccc.int/event/a-joint-event-on-integrating-local-and-indigenous-knowledge-and-values-in-adaptation-action>, accessed 28 February 2023.

²⁰ UNFCCC, SBSTA Chair Calls for Rapid Implementation and Climate Ambition at COP25 <https://unfccc.int/sites/default/files/resource/SBSTA51%20reflections%20note.pdf>

²¹ IPBES, Key messages from the IPBES Global Assessment of particular relevance to Indigenous Peoples and Local Communities, (2019), https://ipbes.net/sites/default/files/inline-files/ILK_KeyMessages_IPBES_GlobalAssessment_final_ENGLISH_lo-res.pdf

Similarly, many national governments, particularly in Africa from the 1980s, began taking steps to establish institutions and pass laws that directly protected LIKP.²² This was in addition to integrating LIKP into sector-specific policies at sub-national, national, and regional levels. Such governmental actions supported by scholarly research have challenged past development practices that relegated LIKP in favour of scientific knowledge.²³ These have equally emphasised the need for greater recognition of LIKP as a means of empowerment, inclusion, and participation of LIKP holders in development and decision-making processes. Unfortunately, these positive steps have remained intentional or aspirational without demonstrable actions on the use of LIKP on the ground.

Participants from developed and developing countries are involved in the global forums that develop institutions and regimes to tackle the climate change impacts mentioned above. In these forums, the issue of differential responsibility for the cause and degree of exposure to impacts of climate change globally is topical. Evidence indicates that developed countries are the major drivers of climate change, but the impacts are less severe on these countries compared to those in the Global South.²⁴ Developed countries and donor institutions such as the World Bank and United Nations are urged to provide financial and non-financial support to developing countries for mitigation and adaptation purposes.²⁵ Thus, the role of the international regimes and financial (and non-financial) mechanisms transcend the international jurisdictions to national and sub-national jurisdictions. These are expected to address the impacts of climate change on the vulnerable.

²² Sillitoe and Marzano (n 3) 13

²³ *ibid*

²⁴ D S Ward and N M Mahowald 'Contributions of developed and developing countries to global climate forcing and surface temperature change' [2014] *Environmental Research Letters* 9, 1-10

²⁵ Richard Klein, Emma Schipper & Suraje Dessai, *Integrating Mitigation and Adaptation into Climate and Development Policy: Three Research Questions* (Environmental Science & Policy. Tyndall Centre for Climate Change Research 2005)

Pooling these financial resources from developed countries to support the climate agenda in developing countries has been slow and contested. Even when some of these resources are available, they are disproportionately allocated. Most of them are skewed towards mitigation (emissions reduction) with less support for adaptation measures.²⁶ In addition, even when the resources are allocated specifically for adaptation, they are, again, disproportionately allocated within the policy domain as the different sectors involved are impacted differently. The allocation of substantial funding to specific sectors and actors, especially at central levels of governance, results in silos and a partial response to climate change issues.²⁷ When silos occur, the concerned sectors tend to fight for their sectoral objectives instead of accommodating other sector knowledge and interests. This fragmentation and poor alignment of all concerned sectors could result in limited interactions between governance levels and sectors and limited chances for the incorporation of diverse interests and knowledge, including the LIKP of indigenous and local communities most impacted by climate change.²⁸

Addressing the silo mindset in the context of addressing climate change as an issue that cuts across several sectors, involving actors with diverse knowledge and power, and found at different levels of governance, is important. A silo mindset can potentially hinder the achievement of a unified policy agenda through the incorporation of diverse knowledge. It can result in financial and technical resources remaining at central levels where mitigation is a priority. For sub-Saharan Africa, whose population is predominantly smallholder farmers, this

²⁶ Richard Tol, 'Adaptation and mitigation: trade-offs in substance and methods' [2005] *Environmental Science and Policy* 8 (6) 572-579

²⁷ GoK National Treasury, 'The Landscape of Climate Finance in Kenya On the road to implementing Kenya's NDC' (GoK, 2021), <https://www.climatepolicyinitiative.org/wp-content/uploads/2021/03/The-Landscape-of-Climate-Finance-in-Kenya.pdf>, accessed 14/06/2022

²⁸ Guy Peters, *The Politics of Bureaucracy: An Introduction to Comparative Public Administration* (London, Routledge 2010), Kim Peters and Others, *Communication silos and social identity complexity in organizations. The dynamics of intergroup communication* (Routledge 2012)

implies poor access to the technical and financial support for adaptation and thus a sustained exposure to the impacts of climate change.

The smallholder farmers in most sub-Saharan African countries are not only victims of environmental changes such as climate change. They are also agents of change and have historically developed and used their Local Indigenous Knowledge and Practices (LIKPs) to understand and respond to such changes and manage their natural resources and wellbeing sustainably. These LIKPs are made up of the different ways in which those who developed this knowledge system can use it to cope with challenges they experience in their environment.

For example, they have used this knowledge system for climate resilient seed selection, pest control, healthcare, species selection and conservation, and prediction of weather patterns to develop local early warning and response processes.²⁹ This knowledge is transferred from one generation to another through mutual and collective learning and communities. Eyong posits that the development and use of LIKPs by farming communities in the Central Africa region has fostered relationships amongst groups, creating a complex web of high levels of cooperation, exchange, and support essential for sustained social-ecological systems.³⁰ Furthermore, some studies in East Africa revealed that many households that used LIKPs in combination with other knowledge systems for adaptation purposes coped better and experienced increased environmental wellbeing compared to their counterparts that had neglected this knowledge system or relied solely on external technical and financial support to adapt to the impacts of climate change.³¹

²⁹ Arun Agrawal, 'Indigenous knowledge and the politics of classification' [2002] *International Social Science Journal* 54 (173) 287-297, Asogwa and others, 'Promotion of Indigenous Food Preservation and Processing Knowledge and the Challenge of Food Security in Africa' [2017] *Journal of Food Security* 5(3), 75-87

³⁰ Charles Eyong, *Indigenous Knowledge and Sustainable Development in Africa: Case Study on Central Africa* (Kamla-Raj Enterprises 2007) p12

³¹ Kristjanson and others, 'Are food insecure smallholder households making changes in their farming practices? Evidence from East Africa, in *Food Security, The Science, Sociology, and Economics of Food Production and Access to Food* (2012) 4 *Food Sec.* 381, 388

Since the 1980s, significant work has been done on defining LIKPs and how they are applied to diverse fields and socio-economic sectors.³² A growing amount of scholarly and grey literature links LIKPs and the resilience of local communities, especially in smallholder agriculture systems in developing countries.³³ Some of these publications have highlighted the reciprocal and complementary link between LIKP and scientific knowledge.³⁴ Furthermore, the global regimes on climate change, particularly the Paris Agreement, have also recognised the importance of LIKP and the involvement of those who develop and use this knowledge system in domestic policy and law-making processes on climate change.³⁵ For example, Article 7(5) of the Paris Agreement says:

Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory, and fully transparent approach, taking into consideration vulnerable groups, communities, and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, to integrate adaptation into relevant socio-economic and environmental policies and actions, where appropriate.³⁶

In addition to the view contained in the international agreement above, the contributing authors of the Intergovernmental Panel on Climate Change (IPCC) Assessment Reports call for more

³² Lanre Ajibade, 'A methodology for the collection and evaluation farmers' indigenous environmental knowledge in developing countries' [2003] *Africa Journal of Indigenous Knowledge Systems*, 2 (1), Adeduton Phillips & Sunday Titilola, *Indigenous knowledge systems and practices: case studies from Nigeria* (NISER 1995)

³³ Petzold and others, 'Indigenous knowledge on climate change adaptation: a global evidence map of academic literature' [2020] *Environmental Research Letters*, 15, 1-17, World Bank Discussion Paper, *Using indigenous knowledge in agricultural development*. (World Bank No.127); Andrei Marin, 'Riders Under storms: contributions of nomadic herders' observations to analysing climate change in Mongolia' [2010] *Global Environmental Change* 20 (1) 162-176, UNESCO and UNU, *Weathering Uncertainty: Traditional Knowledge for Climate Change Assessment and Adaptation* (inter-agency partnership, 2012); IS Asogwa, JI Okoye K Oni, 'Promotion of Indigenous Food Preservation and Processing Knowledge and the Challenge of Food Security in Africa' [2017] *Journal of Food Security* 5 (3) 75-87; FAO, 'FAO and Traditional Knowledge: the Linkages with Sustainability, Food Security and Climate Change Impact' (FAO Report 2009), <<http://www.fao.org/3/a-i0841e.pdf>>, accessed 29 October 2018; Mercer and others 'Framework for integrating indigenous and scientific knowledge for disaster risk reduction' [[2010] *Disasters* 34(1) 214-239; MS Reed, AJ Dougill and MJ Taylor, 'Integrating local and scientific knowledge for adaptation to land degradation: Kalahari rangeland management options' [2007] *Land Degradation and Development* 18(3) 249-268

³⁴ Alexander and others, 'Linking Indigenous and Scientific Knowledge of Climate Change,' [2011] *BioScience* 61(6) 477-484

³⁵ Paris Agreement, (Paris, 12 December 2015, in force 4 November 2016), Convention on Biological Diversity (Rio de Janeiro, 5 June 1992, in force 29 December 1993) 1760 UNTS 79 ['CBD'] articles 8 (j) and 10 (c).

³⁶ *ibid*

attention to community LIKP and their consideration in addressing the vulnerabilities of communities and ecosystems to climate change.³⁷ Despite these normative and generic ways in which the importance of LIKP has been emphasised, empirical work that examines how LIKP is incorporated into climate policy and law-making, including the enablers and constraints, is scanty. There is also little evidence of comprehensive studies on climate change legislative processes and how diverse actors, including state and non-state actors with diverse and sometimes competing or complementary knowledge and power levels, interact at different levels of governance, participate, and shape the outcome of such processes.

Local indigenous knowledge and practices as a knowledge system faces several challenges, resulting in its poor recognition and incorporation in the decision, policy, and legislative processes. These include defining what it is, its lack of a defined structure (having an amorphous and heterogenous characteristics), how it is developed, maintained, and shared, and competition with scientific knowledge. Therefore, how this knowledge system could be incorporated into legislative processes and what safeguards could be put in place to ensure success are not clear. Some states, such as Botswana, Kenya, South Africa, and Zimbabwe, have taken initial steps to document and legally protect LIKP for their national development.³⁸ These growing national and other regional processes to protect LIKP have relied on what existing domestic legal mechanisms and instruments say about the knowledge system, including contract law, rights, and intellectual property. Despite these challenges, the strides made to protect LIKP could be viewed as a recognition of this knowledge system. However, studies on how this knowledge system could be used alongside other knowledge systems to

³⁷ James D. Ford & Will Vanderbilt & Lea Berrang-Ford 'Authorship in IPCC AR5 and its implications for content: climate change and Indigenous populations in WGII' [2012] *Climatic Change* 113, 201–213

³⁸ Ayoyemi Arowolo, 'A Continental Approach to Protecting Traditional Knowledge Systems and Related Resources in Africa' (2009) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1313582, accessed 21/06/2022, Loretta Feris, 'Protecting traditional knowledge in Africa: Considering African approaches' [2004] *African Human Rights Law Journal* 4(2) 242-255, David Mosse, 'People's knowledge, participation and patronage: operations and representations in rural development' in Cooke, B. and Kothari, U. (eds), *Participation: the new tyranny?* (Zed Books 2001)

proffer solutions to cross-cutting issues such as climate change through policies and laws, which are equally complex issues, are limited.

Policy and law-making processes are complex issues. This complexity could be exacerbated when a cross-cutting policy issue that involves many sectors, actors, and multi-level governance is concerned. Few studies have focussed on the quality of the policy and law-making process.³⁹ The limited studies that have been conducted on climate change policy-making as a cross-cutting issue still face the challenge of developing objective and widely accepted measures of policy-making quality.⁴⁰ Several of these studies argue that no unique approach to policy-making exists that can be applied across countries as every country has its unique policy space.⁴¹ There is also a strong agreement that formulating and implementing adaptation laws, policies, and strategies should align with domestic legal structures and culture. Regarding climate change, emphasis has been placed on the need for these strategies to support community-based adaptation, building upon existing coping strategies and norms, including indigenous practices.⁴² However, climate change law-making in sub-Saharan Africa is also evolving.⁴³ Therefore beyond the literature that emphasises the need for incorporation of LIKP into adaptation laws, demonstrable examples from sub-Saharan Africa on how this occurs where lessons can be drawn from are scarce. However, advances have been made in this direction particularly in incorporating LIKP in environmental and resource management

³⁹ Michael Zander, *The Law-Making process* (6th Edition, Cambridge University Press 2004); Larry Gerston, *Public Policy Making: Process and Principles* (Routledge 2014)

⁴⁰ Matt Andrews, 'Good Government Means Different Things in Different Countries', (2010) 23 (1) *Governance: An International Journal of Policy, Administration, and Institutions* 1, 7, Robert Gregory and Zsuzsanna Lonti, 'Chasing Shadows? Performance measurement of policy advice in New Zealand Government Departments', (2008) *Public Administration* 86(3) 837-856

⁴¹ *ibid*

⁴² Olivia Rumble, 'Facilitating African Climate Change Adaptation Through Framework Laws' [2019] *Carbon & Climate Law Review* 13 (4) 237-245

⁴³ The exact scope of climate change laws on the African continent is unknown. However, there some resources which have tried to document flagship climate change laws across the globe (see the *Climate Change Laws of the World* (Grantham Research Institute, 17 2019 and *Climate Change Toolkit*, (UN 16 Climate Change Secretariat, 2019)

decision and policy-making in other regions of the world such as the Arctic regions.⁴⁴ These offer examples to draw lessons from.

A major reason for this scarcity could be the limited theoretical knowledge of how the LIKP of communities, in the context of climate change decision-making, is developed, maintained, and used.⁴⁵ Although there is little literature on the incorporation of knowledge in policy-making, literature that addresses the perspectives, theories, and concepts on how law and policy-making happen could give some ideas on how incorporation could be achieved as well as barriers to this. These include rationalism, incrementalism, elitist theory, the garbage can model, pluralism, institutionalism, and policy integration. For example, focussing on pluralism, Surowiecki provides an insightful perspective on how incorporation could occur in a policy and law-making process. In this context, he posits that the presence of many actors with multiple ideas ‘entails a consensual approach framed through orderly discourse between free and equal citizens to distil a multitude of contending perceptions and interests to develop a uniform narrative.’⁴⁶ Similar to pluralism is the garbage can perspective where diverse policy actors, policy problems and solutions interact, the ensuing narrative could reflect the combination of knowledge and interests of the diverse policy actors involved leading to a common policy solution. This is different to the elitist perspective, which emphasises the influential role of dominant policy actors that have access to and control over resources, prioritises their knowledge and interests, and therefore limits the incorporation of knowledge

⁴⁴ Roux and others, ‘Small-scale fisheries in Canada’s Arctic: combining science and fishers’ knowledge towards sustainable management’ [2018] *Mar. Policy*, Vol, 101, 177-186, Mantyka-Pringle, and others, ‘Bridging science and traditional knowledge to assess cumulative impacts of stressors on ecosystem health’ [2017] *Environ. Int.* 102:125-137, Gearheard & others, ‘The Igliniit project: Inuit hunters document life on the trail to map and monitor arctic change’ [2011] *Can. Geogr./Le Géographe canadien*, 55 (1) 42–55; Huntington and others, ‘How small communities respond to environmental change: patterns from tropical to polar ecosystems’ (2017) *Ecol.* (22) 3 1-13, Ford and others, ‘The state of climate change adaptation in the Arctic’ [2014] *Environmental Research Letters* 9(10) 1-9

⁴⁵ Annalisa Savaresi, ‘Traditional Knowledge and Climate Change: A New Legal Frontier?’ (2018) 9 *Journal of Human Rights and the Environment* 32, 36

⁴⁶ James Surowiecki, *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations* (Doubleday, New York 2004)

and interests of less powerful actors.⁴⁷ Other related concepts, such as the multi-level governance (MLG) approach, address the integration of issues that cut across multiple levels of governance where different actors with diverse interests are found.⁴⁸ The subsequent horizontal and vertical, top-down, and bottom-up interactions within and across different governance levels involving diverse actors and sectors at those levels could generate opportunities for incorporating diverse knowledge, including LIKP, on policy-making.

Most studies in Africa on climate change governance are almost silent on the incorporation of LIKP. Some related studies on the role of knowledge in policy processes in a context where there is knowledge pluralism have primarily relied on scientific knowledge, innovations, and technologies with less regard for LIKP.⁴⁹ Scientific knowledge systems are often prioritised by powerful and influential policy actors in the policy-making processes.⁵⁰ This suggests that introducing new knowledge and interests of other (less powerful) policy actors could be difficult, especially when they go against those of powerful elites and bureaucrats. However, studies examining whether other policy actor groups with access to and control of other knowledge, such as LIKP, which is important for climate adaptation and the relationships between them are limited.

Despite these limited theoretical and pragmatic experiences to draw on, individual governments globally are taking steps to enact laws, policies, and actions from sub-national to national levels.⁵¹ These legal instruments emphasise the need to reduce societal vulnerabilities

⁴⁷ Michael Kraft & Scott Furlong *Public Policy: Politics, Analysis, and Alternatives* (SAGE 2012), Michael Hill & Frederic Verone, *The Public Policy Process* (7th Ed, Routledge 2017)

⁴⁸ Simona Piattoni 'Multi-level Governance: A Historical and Conceptual Analysis' (2009) *Journal of European Integration*, 31, Bellali, Johara; Lisa Strauch, Francis Oremo, Benson Ochieng, *Multi-level climate governance in Kenya. Activating mechanisms for climate action* (Berlin: Adelphi/ILEG 2018).

⁴⁹ Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 36; Stephen Ellis, 'Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making' (2005) 58 *Artic* 66, 66&67

⁵⁰ *ibid*

⁵¹ Graham and others, 'Local values and fairness in climate change adaptation: Insights from marginal rural Australian communities' (2018) 108 *World Development*, 332, 332, Graham, S. & Barnett, J. Accounting for justice in local government responses to sea-level rise: Evidence from two local councils in Victoria, Australia" (2017), Lukasiewicz and (Eds.), *Natural Resources and Environmental Justice Australian Perspectives*

to climate change and address entrenched inequalities. However, they are often framed based on scientific and technical evidence.⁵² They usually do not adequately identify and involve those most affected with their cumulative, collective body of knowledge and experiences to understand and respond to changes in their environment.⁵³ More so, it is yet to be demonstrated how legislative processes on climate change incorporate the knowledge, interests, and needs of the vulnerable people, especially at local levels where the impacts of climate change on agriculture are most felt, to reduce these vulnerabilities and not enhance or create new inequalities.

There are some enabling conditions and constraints on incorporating LIKP in policy and law-making on climate change as a cross-cutting issue. Firstly, diverse policy actors have different understandings and perceptions of LIKP. This could influence the level of consideration given to it in decision-making. In addition, the nature of the institutional arrangements in the policy space could be problematic. The impetus for the incorporation of LIKP originates from the domestic legal institutions (laws, constitution) and legal cultures. In developing countries, there are variances in the impacts of climate change. Finding the best institutional arrangements to respond to climate change is challenging for countries that are highly vulnerable to climate change.⁵⁴ This is because these nations must deal with climate change as one of many other pressing issues such as health, education, and poverty in general. Some studies, although focused on environmental policy integration and mainstreaming in countries such as Australia, Sweden and the UK, have highlighted other challenges, such as

(CSIRO Publications, 2017), Kenya Climate Change Act 2016, South Africa Climate Change Bill 2018; Baker and Others, 'Local government response to the impacts of climate change: An evaluation of local climate adaptation plans' [2012] *Landscape and Urban Planning* 107 (2) 127-136, The UNFCCC maintains a running list of all developing nations which have submitted NAPAs at http://unfccc.int/adaptation/workstreams/national_adaptation_programmes_of_action/items/4585.php accessed 05/05/2022

⁵² Robinson, M. and T. Shine, 'Achieving a climate justice pathway to 1.5°C' (2018) 8 *Nature Climate Change*, 564, Sen Amartya *The Idea of Justice*, (Harvard University Press 2009)

⁵³ David Mosse, 'People's knowledge, participation and patronage: operations and representations in rural development' In: Cooke, B. and Kothari, U. (eds), *Participation: the new tyranny?* (Zed Books 2001)

⁵⁴ Held and Others *Climate Governance in the Developing World*, (Cambridge, Polity Press 2013)

funding, in addition to dealing with a variety of actors with different knowledge, sector interests, and goals all found at different scales with different power and influence.⁵⁵ These power dynamics shape the level of coordination and cooperation between the policy actor groups and the incorporation of their knowledge.⁵⁶ Therefore, there are many opportunities and challenges for incorporating LIKP in policy and law-making on climate change. Investigating these challenges and opportunities for incorporation of LIKP in climate change policy and law-making could contribute to the body of knowledge on climate legislative processes.

This research aims to understand how policy and law-making on climate change works, who and what is involved, and the issues and challenges of incorporating LIKP. This research seeks to contribute to this intellectual process by examining Kenya's 2016 Climate Change Act policy-making process.

1.2. Climate change and the climate change law-making process in Kenya: A Background

This section describes the background of the Republic of Kenya with particular emphasis on the scale of climate change in the country and the motivation for a national climate change law. The main features of the Kenya Climate Change Act 2016 process are examined to justify why Kenya was selected for this research as a valuable case study to examine how policy and law-making on climate change enables or constrains the incorporation of LIKP. The features examined include the foundation of the process based on principles and values and shaped by the new governance framework provided by the 2010 constitution, political commitment to tackle climate change through the establishment of a high-level advisory body

⁵⁵ Andrew Jordan & Andrea Lenschow *Innovation in Environmental Policy: Integrating the Environment for Sustainability*, (Cheltenham, Edward Elgar 2008), Fiona Nunan, Adrian Campbell & Emma Foster 'Environmental Mainstreaming: The Organisational Challenges of Policy Integration' (2012) 32 (3) *Public Administration and Development* 262, 267

⁵⁶ Gerald Berger 'Reflections on Governance: Power Relations and Policy Making in Regional Sustainable Development' [2003] *Journal of Environmental Policy & Planning* 5 (3) 219-234

headed by the president, the mainstreaming of climate change across sectors and governance levels, prioritisation of local adaptation response by communities and the role of resources, especially climate finance mobilisation from domestic and international levels.

1.2.1 The scale of climate change in Kenya

Kenya is amongst the sub-Saharan African countries most vulnerable to climate change.⁵⁷ At the continental level, agriculture, livestock, fishery, and forestry sectors are already severely impacted by climate change. A 60% increase in food demand for household consumption, especially by smallholder farmers and subsistence farmers, pastoralists, and fishers who make up over 70% of the continent's population due to climate change, is projected by 2050.⁵⁸

In Kenya, temperature increase has been recorded since the 1960s at an estimated average rate of 0.21°C every decade.⁵⁹ This temperature is projected to rise to 1.7°C annually by the 2050s accompanied by more extreme events such as droughts.⁶⁰ Conversely, Global Climate Modelling (GCM) indicates a possible increase in average rainfall from 2% to 11% by 2060.⁶¹ These changes will significantly negatively impact Kenya's fragile inland and coastal ecosystems. Around 85% of Kenya's land area is a fragile arid and semi-arid ecosystem.⁶²

⁵⁷ Serdeczny and others, 'Climate Change Impacts in Sub-Saharan Africa: From Physical Changes to their Social Repercussions' [2015] Reg Environ Change 17, 1585–1600

⁵⁸ Josef Schmidhuber and Francesco Tubiello, 'Global food security under climate change [2007] PANAS 04 (50) 19703-19708

FAO, Climate Change-Related Disasters a Major Threat to Food Security (FAO 2021) <https://unfccc.int/news/climate-change-related-disasters-a-major-threat-to-food-security-fao#> accessed 29/10/2021,

⁵⁹ MET Office Hadley Centre et al, 'Climate: Observations, Projections and Impacts: Kenya' <https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/climate-science/climate-observations-projections-and-impacts/kenya.pdf> accessed 25 October 2019.

⁶⁰ The World Bank Group, Climate Risk Country Profile: Kenya (The World Bank Group 2021, p.9), https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15724-WB_Kenya%20Country%20Profile-WEB.pdf, accessed 21/07/2022

⁶¹ GOK, Kenya National Adaptation Plan: 2015-2030 (2016, p6), https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf, accessed 20/07/2022

⁶² GoK, National Environment Management Authority, Kenya- Second National Communication to the United National Framework Convention on Climate Change, Executive Summary. (NEMA 2015).

These changes have been accompanied by extended droughts in the arid and semi-arid regions along with floods due to sea-level rise at the coast.⁶³ Floods, droughts, pests, and diseases have been reported to be the leading causes of a yearly decline in the yields of maize and beans, which are important staple crops for the country.⁶⁴ These livelihood and economic losses are estimated at 3% of the national GDP, especially for agriculture, forestry, and fishing, that contribute approximately 34.1% to the national GDP (see Figure 1).⁶⁵

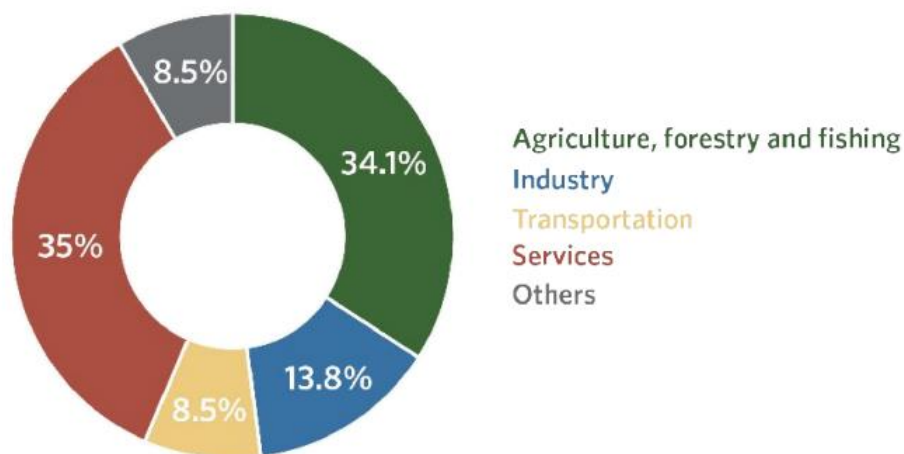


Figure 1: Kenya’s economic sectors’ contribution to the GDP⁶⁶

The resulting inequality and poverty exacerbate climate risk hazards for Kenyans and lessens the nation’s potential of attaining its development goals.⁶⁷ For example, 3.4 million people were severely food insecure, and an estimated 500,000 people were without access to water due to the drought conditions of late 2017 and early 2018.⁶⁸ In addition, over 183 people

https://unfccc.int/sites/default/files/resource/Kenya%20SNC_Executive%20Summary.pdf, accessed 13/06/2022

⁶³ GoK Ministry of Environment and Natural Resources Kenya National Adaptation Plan, 2015–2030. (2016 p.5) https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf

⁶⁴ GoK Ministry of Environment and Natural Resources, Kenya National Adaptation Plan, 2015–2030. (MoENR 2016). https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf, accessed 20/07/2022

⁶⁵ GoK, ‘National Climate Change Action Plan 2018-2022’ (2018) 1.

⁶⁶ Source: National Bureau of Statistics (2018)

⁶⁷ GoK National Environmental Management Authority, Government of Kenya, ‘Kenya Second National Communication to the United Nations Framework Convention on Climate Change’ 23 (NEMA 2015) <https://unfccc.int/resource/docs/natc/kennc2es.pdf>, accessed 22/07/2022.

⁶⁸ GOK, National Climate Change Action Plan 2018-2022. P.6 http://www.environment.go.ke/wp-content/uploads/2020/03/NCCAP_2018-2022_ExecutiveSummary-Compressed-1.pdf, accessed 13/06/2022

died, and more than 225,000 were displaced due to the flooding in early 2018.⁶⁹ As a result, climate change is viewed by the policy stakeholders of Kenya as a major threat to the socio-economic wellbeing of the East African nation, and that the government needs to re-allocate its scarce resources to address these disasters, including developing appropriate policies and laws.

1.2.2 Prioritised local-adaptive responses to climate change by communities in Kenya

The local context is crucial for determining how responsive climate change laws are and is also a determinant of the extent to which the law is implemented. Mitigation and adaptation in Kenya are given similar importance by the government.⁷⁰ However, adaptation is Kenya's priority as attested by its Nationally Determined Contribution (NDC).⁷¹ In the local context, the bulk of the population is agrarian and subject to the negative impact of climate change. However, the local and indigenous communities that make up over 80% of Kenya's population and rely on agriculture understand and respond to climate change in their own ways. They have local indigenous knowledge systems which they have developed and used to manage their natural resources, to understand and respond to changes in their environment including climate change.⁷² As a result of this, Kenya is among the first sub-Saharan African countries to put in place institutions and pass laws to directly protect LIKP for its use in its national policy development and implementation.⁷³ In 1995, the nation established the Kenya Resource Centre

⁶⁹ Ibid, p 6

⁷⁰ GOK, 'Kenya's Intended Nationally Determined Contribution' (2015) S 2.2.

⁷¹ ibid

⁷² L Lucy Kibe. 'The Role of Indigenous Knowledge in Attaining Kenya's Vision 2030: A Literature Review' [2021] *Regional Journal of Information and Knowledge Management* 6 (2) 110-124, Serگون & Others, 'The role of Indigenous knowledge: practices and values in promoting socio-economic well-being and equity among Endorois community of Kenya' [2022] *AlterNative: An International Journal of Indigenous Peoples* 18(1), 37–45

⁷³ GOK, Protection of Traditional Knowledge and Cultural Expressions Act (No. 33 of 2016) (Kenya), Mathilde Pavis, 'Kenyan Reform on Traditional Knowledge and Traditional Cultural Expressions: Two Years On' (The IPKatFebruary 04, 2019) <<http://ipkitten.blogspot.com/2019/02/kenyan-reform-on-traditional-knowledg>

for Indigenous Knowledge (KENRIK) to document, preserve, and disseminate LIKP held by different communities to be used to inform national policy development.⁷⁴ In collaboration with other institutions, including the Kenya National Museums and the County Governments, the Centre contributed to policy formulation on natural resources and conservation within Kenya and the East Africa region.⁷⁵ In addition, LIKP is acknowledged in the 2010 Constitution's Articles 11 and 40, which state that using indigenous technologies and cultural expressions is a cornerstone for Kenya's development, particularly to enhance agriculture and biodiversity conservation.⁷⁶ In 2016, the Traditional Knowledge and Cultural Expressions Act (TKCEA) 2016 and the Climate Change Act (CCA) 2016 were developed and assented to by the President of the Republic of Kenya. The CC Act prescribes for the consideration of scientific and indigenous knowledge, amongst other things.⁷⁷ The TKCEA 2016, which seeks to directly protect LIKP and enhance its use for the development of Kenya, was also enacted.⁷⁸ The Government of Kenya (GoK) is currently developing strategies to ensure the implementation of the TKCE Act 2016, including establishing a Traditional Knowledge Digital Repository (TKDR) through the Kenya Copyright Board (KECOBO).⁷⁹

⁷³ GOK, Protection of Traditional Knowledge and Cultural Expressions Act (No. 33 of 2016) (Kenya), Mathilde Pavis, 'Kenyan Reform on Traditional Knowledge and Traditional Cultural Expressions: Two Years On' [e.html](#)> accessed 1 April 2019; Paul Sillitoe and Mariella Marzano 'Future of indigenous knowledge research in development' (2009) 41 Futures 13, 13

⁷⁴ National Museums Kenya, 'The Kenya Resource Centre for Indigenous Knowledge (KENRIK)', <<https://www.museums.or.ke/kenya-resource-center-for-indigenous-knowledge-kenrik-section/>> Accessed 20 March 2019

⁷⁵ Ibid

⁷⁶ The Constitution of Kenya 2010 (GoK), p. 7. 15 &23

⁷⁷ Under S 13(5) of the CC Act, the Cabinet Secretary is to rely on scientific knowledge about climate change, technology and technological innovations relevant to climate change, economic circumstances, fiscal circumstances in particular, the likely impact of the action plans, strategies and policies on the marginalised and disadvantaged communities, social circumstances in particular, the likely impact of the action plans, strategies and policies on biodiversity and ecosystem services, international law and policy relating to climate change, and indigenous knowledge related to climate change adaptation and mitigation.

⁷⁸ The Protection of Traditional Knowledge and Cultural Expression Act 2016 (KE)

⁷⁹ Mathilde Pavis, 'Kenyan Reform on Traditional Knowledge and Traditional Cultural Expressions: Two Years On' (The IPKatFebruary 04, 2019) <<http://ipkitten.blogspot.com/2019/02/kenyan-reform-on-traditional-knowledge.html>> accessed 1 April 2019.

These two legislations appear to be mutually reinforcing. However, studies are yet to be carried out to establish whether enacting these laws simultaneously was a mere coincidence or whether this was an intentional action by the GoK. There has been growing literature on the use of LIKP to adapt to climate change in Kenya.⁸⁰ However, how the law and policy-making on climate change enhance or constrain the incorporation of LIKP in Kenya is yet to be examined.

1.2.3 High-level commitments to tackle climate change in Kenya

The GoK has shown a commitment both at the domestic and global levels to address climate change. The progressive development of strategies, policies, and plans at the domestic level and playing a frontline role in international climate change agenda development point towards a strong political will to support climate action. The country is acknowledged to be the first country to develop a law on climate change in sub-Saharan Africa.⁸¹

Rather than establishing new institutions for climate change, it bestows additional climate change responsibilities to institutions already existing.⁸² The exception is the

⁸⁰ Paul Guthiga and Andrew Newsham, 'Meteorologists Meeting Rainmakers: Indigenous Knowledge and Climate Policy Processes in Kenya' [2011] IDS Bulletin 42 (3) 104-109; Susan Mbula Kilonzo, 'Women, indigenous knowledge systems, and climate change in Kenya' in Chitando et al., (eds) *African Perspectives on Religion and Climate Change* (Routledge 2022); Tom Kwanya, 'Mainstreaming Indigenous Knowledge in Climate Change Response: Traditional 'Rainmaking' in Kenya' (The 8th International Knowledge Management in Organisations Conference 2013, p603-615) https://link.springer.com/chapter/10.1007/978-94-007-7287-8_49 accessed 18/10/2019, Muriithi and others, 'Reliability of Indigenous Traditional Knowledge and Conventional Weather Forecasts in the Face of Climate Change and Variability in Baringo County, Kenya' [2018] International Journal of Recent Scientific Research 10 (9)

⁸¹ Clarice Wambua, 'The Kenya Climate Change Act 2016: Emerging Lessons from a Pioneer Law' (2019) 13 Carbon & Climate Law Review 257, 257&258; Olivia Rumble, 'Facilitating African Climate Change Adaptation through Framework Laws' [2019] Carbon & Climate Law Review 13(4) 237-245, Dlamini and Others, 'Legislating the Paris Agreement in Africa Approaches to climate legislation in Eswatini, Kenya, Nigeria, and Uganda' (*European Capacity Building Initiative* 2021), https://ecbi.org/sites/default/files/National%20Climate%20Legislation_0.pdf, accessed 13/06/2022, Kate Symons, 'Anti-politics, Apocalypse and Adaptation in Kenya's National Climate Change Response Strategy' [2014] Scottish Geographical Journal 130(4) 266–278

⁸² Robert Kibugi, 'Governing Climate Change for Sustainable Development: Legal, Institutional and Policy Perspectives in Kenya,' in Patricia Kameri-Mbote and Collins Odote (eds), *Blazing the Trail: Professor Charles Okidi's Enduring Legacy in the Development of Environmental Law* (UoN 2019) 204.

establishment of a high-level advisory body referred to as the National Climate Change Council (NCCC) chaired by Kenya's President.⁸³ The membership of the NCCC represents a wide cross-section of policy actors and is viewed as an intergovernmental and cross-sector platform to strengthen the voice of non-state and sub-national actors in climate governance.⁸⁴ In addition, a Climate Change Directorate was created and serves as the secretariat of the NCCC and technical arm of the government.⁸⁵ The Directorate works with other ministerial departments and agencies (MDAs) through the inter-ministerial committees at the national level and the county governments.⁸⁶ The NCCC also works directly with semi-autonomous agencies, including the National Environmental Management Authority (NEMA) responsible for ensuring compliance of public and private entities on assigned environmental responsibilities

The country has also made significant inroads to mainstream climate change through the development of relevant policies, strategies, and programmes related to climate change. The most important of these is the National Climate Change Adaptation Plan (NCCAP) implemented and reviewed every two years, updated every five years, and gives the measures and mechanisms needed to achieve the CC Act's objectives.⁸⁷ The NCCAP works together with the National Adaptation Plan (NAP) to enhance the implementation of adaptation actions as a priority. Others include the 2010 National Climate Change Response Strategy (NCCRS), the National Climate Change Framework Policy, the Green Economy Strategy, and Implementation Plan, the National Policy on Climate Finance, Climate Change Act, 2016, and the National Vision 2030. These national policies provide a regulatory framework for an

⁸³ The CC Act, S 5

⁸⁴ Martin Oulu, 'Climate Change Governance: Emerging Legal and Institutional Frameworks for Developing Countries' in W Leal Filho (ed.), *Handbook of Climate Change Adaptation* (Springer 2015) 24; Johara Bellali et al, 'Multi-Level Climate Governance in Kenya: Activating Mechanisms for Climate Action' (adelphi/ILEG 2018) 32-33.

⁸⁵ Ibid, S 6

⁸⁶ Ibid S 33(1)

⁸⁷ Climate Change Act 2016S 13(3), GOK, National Climate Change Action Plan (2013-2018)

enhanced response to climate change and mechanisms and measures to achieve low-carbon, climate-resilient development from county to national level.

1.2.4 Formation of county governments

During the same period when policies, programmes, and a law to tackle climate change were being developed, Kenya began the implementation of its 2010 Constitution.⁸⁸ The Constitution introduced a two-tier government system with 47 counties and a national government both having executive and legislative powers. This provided a new institutional arrangement for governance at the national and sub-national levels applicable to climate change governance. The Constitution provides national values and principles to guide the national and sub-national governments in the discharge of their duties. This includes citizens' right to a clean and healthy environment for present and future generations through legislative and other measures. It also emphasised citizens oversight to ensure the integrity and transparency, through Articles 42 and 69-72 which mandate that Parliament enact legislation relating to the environment. The devolution of powers from national to sub-national levels creates opportunities for direct participation and contribution to legislative processes by citizens at different governance levels. Regarding climate change, the national government is in charge of formulating and reviewing climate change policies, strategies, and plans in addition to updating the NCCCAP every five years for approval by the NCCC.⁸⁹ The NCCAP and the CC Act emphasise a strong mainstreaming approach in dealing with climate change across sectors and governance levels.⁹⁰ In this line, the CC Act defines 'mainstreaming' as 'the integration of climate change actions

⁸⁸ GoK, 2010 Constitution, p. 60, https://www.constituteproject.org/constitution/Kenya_2010.pdf, accessed 10/05/2022

⁸⁹ Climate Act S 13(3)

⁹⁰ Martin Oulu, 'Climate Change Governance: Emerging Legal and Institutional Frameworks for Developing Countries' in W Leal Filho (ed.), *Handbook of Climate Change Adaptation* (Springer 2015) 245

into decision-making and implementation of functions by the sector ministries, state corporations, and county governments.’⁹¹

The county government is mainly responsible for mainstreaming climate change actions contained in the CC Act and the NCCAP, particularly through their 10-year County Sectoral Plans (CSP) and their existing 5-year County Integrated Development Plan (CIDP).⁹² This implies that many climate actions happen at the county level. The local context where adaptation action is predominant is crucial as Kenya. Although the state emphasises climate change adaptation and mitigations, adaptation and any mitigation measures with adaptation gains is priority.⁹³ Studies in specific contexts that examine how mainstreaming occurs in the policies and law and how this enhances or constrains the incorporation of LIKP of agrarian communities who make up a majority of the population and engaged in routine climate change adaptation as a priority are limited.

1.2.5 Clarity on climate change finance mobilisation and use in Kenya

The development of policies and laws related to climate change are reliant on the mobilisation of resources, including financial resources. The development of Kenya’s National Policy on Climate Finance and the creation of the National Treasury Climate Change Finance Unit (NTCCFU) are geared towards managing climate finance from international, national, and sub-national levels and other specific Ministerial Departments Agencies (MDAs) dealing with climate change issues. Article 25 of the CC Act 2016 makes provision for developing a regulatory framework that supports the mobilisation of funds from international and domestic

⁹¹ Climate Change Act S 3(2)

⁹² Ibid, S 19(2)

⁹³ Republic of Kenya, ‘Kenya’s Intended Nationally Determined Contribution’ (2015) S 2.2; GoK, ‘National Climate Change Action Plan (2018-2022)’ (2018) 69.

sources with the establishment of the Climate Change Fund (CCF).⁹⁴ These units ensure transparency and accountability of climate funds drawn from various sources and set structures for devolving these funds from the national to the county level. This is through the creation of County Climate Change Funds (CCCFs) and the establishment of an open and transparent dialogue between national, county governments, and other policy actors. There is also a strong intent to create structural linkages between the National Climate Finance Unit and CCCFs and between other policy actors such as business, long-term investors, civil society, microfinance, banking, and development institutions.

Thus, government and non-government entities in Kenya have mobilised domestic and international financing for climate change-related development. For example, between 2005 and 2015, Kenya committed approximately KES 37 billion (USD438 million) while development partners committed KES 194 billion (USD2.29 billion) to programmes deemed to have a significant climate change component.⁹⁵ For 2018 alone, Kenya received KES 243.3 billion (USD 2.4 billion) in public and private capital, with 62.4% channelled through the national budget. The sources of these funds are detailed in Table 1.

⁹⁴ Deborah Murphy and Doreen Chirchir, Kenya County Integrated Development Plans (CIDPs) 2013-2017: Review of Climate Change Mainstreaming (StARCK+ Technical Assistance to the Government of Kenya 2017)

⁹⁵GoK, National Climate Change Action Plan. 2013 – 2017

Table 1: Overview of climate change finance sources in Kenya in 2018⁹⁶

Source	% of Total Finance Tracked	Entities	KES Billion	Amount Channeled through Central Budget
Public Domestic	- 28.3%	SAGAs	33.7	33.7
Public International	- 31.1%	Bilateral development partners	43.5	21.8
		Multilateral development partners	32.1	20.4
Private Domestic	- 14.0%	Kenya Banks	27.46	
		Kenya private sector		
Private International	- 26.7%	Project Development and investors	64.6	
		Philanthropic Foundations	0.3	
Total			243.3	75.9

The provision of financial and non-financial support for tackling climate change channelled through the national budget in a context where significant governance and structural challenges exist could be problematic. This is because, in most contexts, there are many policy challenges and climate change may be considered a lesser priority. This could result in funds destined for addressing climate change being diverted to addressing other pressing policy issues. This, therefore, could contribute to the failure of climate-related technical and financial resources trickling down to where adaptation action is most needed.⁹⁷ This can result in exacerbated impacts on the policy actor groups and individuals already experiencing severe impacts and reduced opportunities for them to contribute to decision-making processes.

⁹⁶ Source: GoK National Treasury analysis on the Landscape of Climate Finance in Kenya, p.22

⁹⁷ Sarah Colenbrander, David Dodman, and Diana Mitlin, D. 'Using climate finance to advance climate justice: the politics and practice of channelling resources to the local level' [2018] Climate Policy 18(7) 902-915

Most studies have highlighted the importance of these mechanisms and the intention of the GoK to address climate change through establishing institutions and attracting resources.⁹⁸ However, there has been less focus on examining how these mechanisms work and how they support the involvement of those directly impacted by climate change and whether these mechanisms have supported incorporation of the knowledge used to understand and respond to climate change.

1.2.6 Setting the boundaries for Kenya's climate change policy and law-making process

Kenya plays a frontline role at the international level on environmental issues including tackling climate change. Concerns about environmental issues became topical from 1999 when the nation enacted its environmental law - the Environmental Management and Coordination Act (EMCA) - and established the National Environmental Management Authority (NEMA). While this earlier engagement signalled some interest by the government on the issues that were calling for global attention, concerted efforts towards tackling the destructive effects of climate change on the country gained impetus in the run-up to Kenya hosting the 2006 twelfth session of the UNFCCC Conference of Parties (COP 12) from the 6 - 17 November 2006. During this conference, major decisions affecting the parties, including accountability, financial mechanisms, and emphasis on domestic actions, were discussed. Its engagement in these international processes shaped the domestic legislative space in diverse ways, as discussed in Chapter 7 of this thesis. As a party to the Protocols agreed during this conference and subsequent regimes, the GoK and other concerned policy actors, especially the civil society, increasingly committed to tackling climate change at the domestic level. This was notable through an engagement to develop a national policy and law on climate change.

⁹⁸ Robert Kibugi, 'Governing Climate Change for Sustainable Development: Legal, Institutional and Policy Perspectives in Kenya', in Patricia Kameri-Mbote and Collins Odote (eds), *Blazing the Trail: Professor Charles Okidi's Enduring Legacy in the Development of Environmental Law*, (UoN 2019) and Johara Bellali et al, *Multi-Level Climate Governance in Kenya: Activating Mechanisms for Climate Action* (adelphi/ILEG 2018).

Locating the precise moment when the Kenya policy and law-making process, which resulted in the 2016 Climate Change Act, started was challenging. Further, the policy-making arena was not only concerned with climate change as an isolated policy issue during this period. Climate change was (and still is) a cross cutting issue linked to other policy concerns. The policy-making space was therefore ‘messy’ involving diverse actors with multiple objectives and power relations, mediated by diverse institutional arrangements at the domestic and international levels. The policy-making space in Kenya was described by Nugroho and others as a complicated web of interaction and without a definite start and end point, as shown in Figure 2.

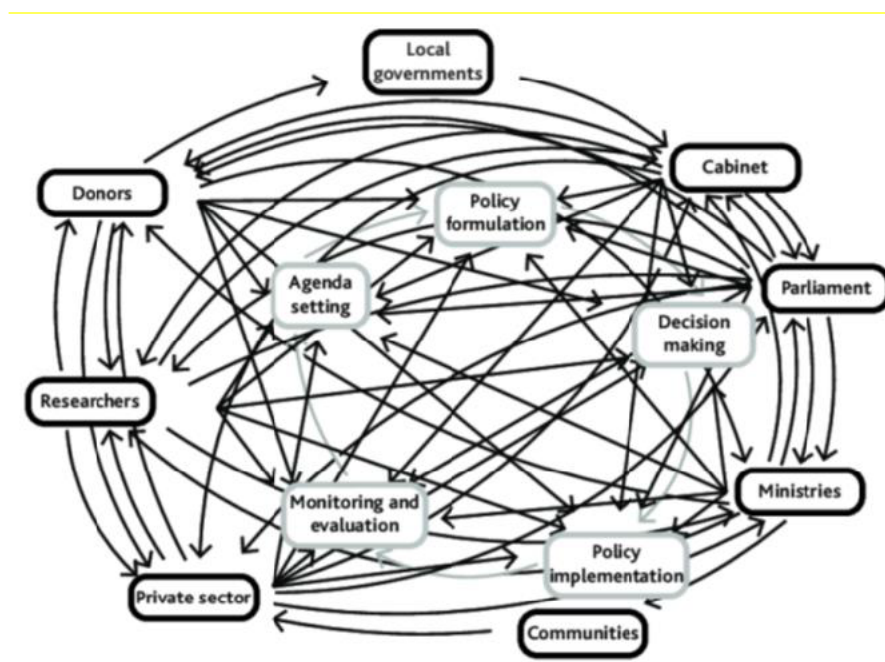


Figure 2: The knowledge-to-policy web⁹⁹

Similarly, Banks describes this knowledge-to-policy process as one through which all forms of knowledge is used to generate data and evidence. Banks also explains the ways in

⁹⁹ Nugroho and others, *Local knowledge matters: Power, context and policy making in Indonesia* (Policy Press, University of Bristol 2018), Gary Banks, ‘Evidence-based policy-making: What is it? How do we get it?’ (ANU Public Lecture Series, Productivity Commission, Canberra, 4 February 2009)

which these knowledge producers present compelling evidence persuasively for it to be captured on the policy agenda stage as well as the final policies, laws, and the implementation of these.¹⁰⁰ Just like Nugroho and others, Banks classifies the knowledge-to-policy space as messy [no definite start nor end] and a maelstrom of political energy, vested interests, diverse knowledge, and lobbying'.¹⁰¹ Despite the messy nature of the climate change policy and law-making space, the process leading up to the enacting of the law was characterised by stages including (i) needs, issues identification, and agenda setting, (ii) policy formulation, and (iii) decision making. However, these stages were overlapping and most often iterative and not as distinct as explained in the literature on policy and law-making, which is summarised in Figure 3.¹⁰²

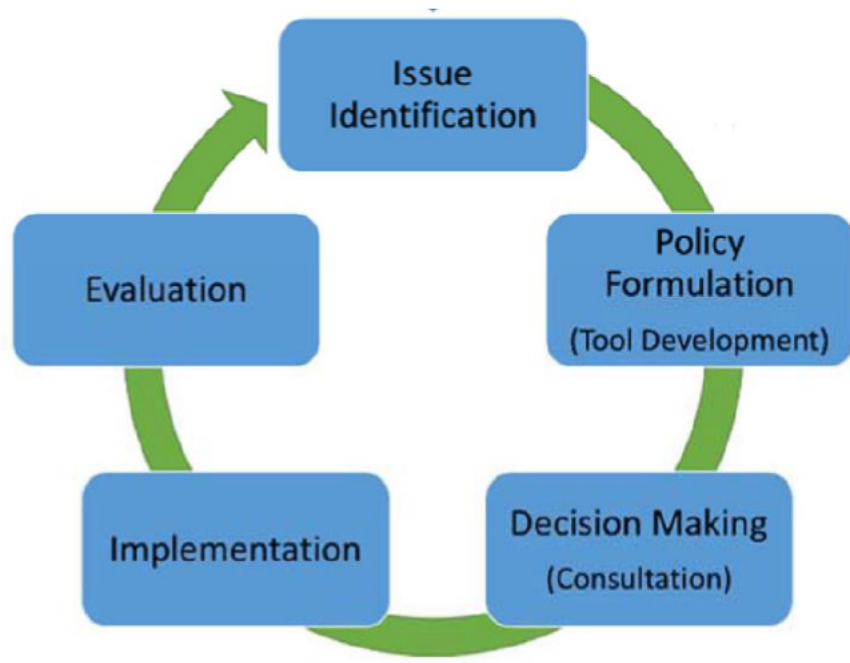


Figure 3: Adapted Policy Cycle ¹⁰³

¹⁰⁰ Gary Banks, 'Evidence-based policy-making: What is it? How do we get it?' (ANU Public Lecture Series, Productivity Commission, Canberra, 4 February 2009) 1-33

¹⁰¹ *ibid*

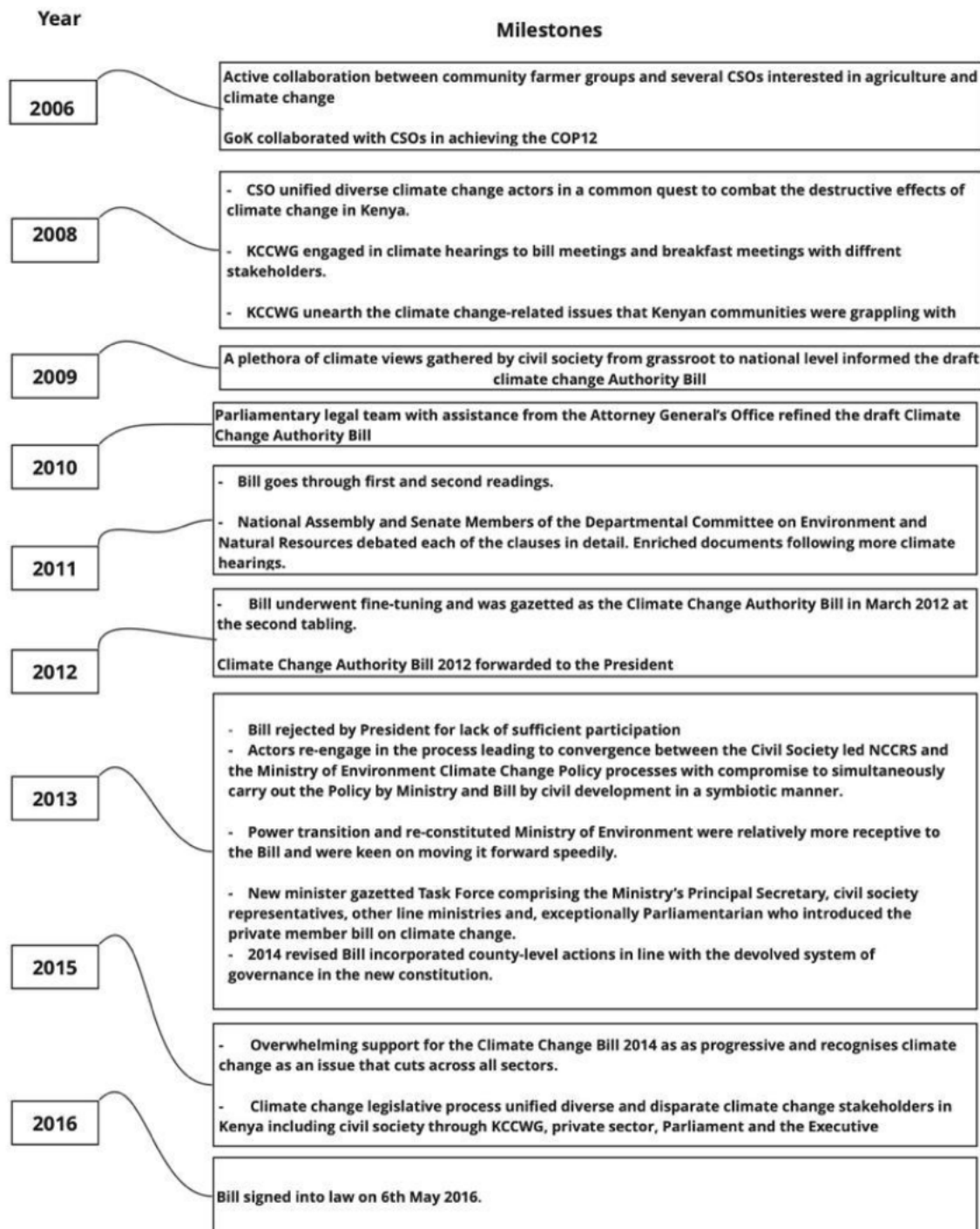
¹⁰² Yannis Karagiannis & Claudio Radaelli, *Policy-making* (OUP 2007), Michael Howlett, Sarah Giest, 'Policy Cycle' James D. Wright (ed) *International Encyclopedia of the Social & Behavioral Sciences* (Elsevier 2015, Second Edition), Michael Zander, *The Law-Making process* (6th Edition, Cambridge University Press 2004)

¹⁰³ Adapted from Zander: *ibid*

The last two stages of these process (policy implementation and evaluation) are not within the scope of this thesis.

In Kenya, the policy actors are diverse, and they prioritise different knowledge systems in the policy making space. As highlighted in section 1.2.2, LIKP was widespread amongst communities in Kenya and was used for diverse purposes. This includes understanding and tackling environmental and resource management challenges. However, how this knowledge system and its developers interact with others, mediated by institutional arrangements, and interactions amongst policy actors begs for examination.

This thesis investigates the climate change policy and law-making process from 2006, when ideas for the development of a domestic climate change policy and the law seemed to be topical, up to the stage when the proposed Climate Change Bill received presidential assent in 2016. Figure 4 presents the milestone events that happened at different stages, who was involved, and what was achieved to set the boundaries for this thesis.



miro

Figure 4: Milestone achievement in Kenya's climate change policy and law-making process between 2006-2016 (developed by the Researcher).

This section of the introduction has highlighted the rationale for the study and the background for the Republic of Kenya as a case study. Climate change is an issue of global concern and climate change policies and laws have proliferated since 1997, but the process has not been easy. Despite the absence of a consensus on the normative content, Kenya has

pioneered the development of the first dedicated framework of climate change laws in sub-Saharan Africa. However, there are limited studies that look at how the processes for the development of the climate change law enable or constrain the incorporation of LIKP used to understand and respond to climate change by smallholder farmers, who are mostly impacted.

1.3 Aims and Objectives of the Study

This study aims to understand how policy and law-making processes on climate change adaptation enhance or constrain the incorporation of LIKP of agrarian communities, using the process of developing Kenya's Climate Change Act 2016 as a case study.

The overall study aim is broken down into three specific objectives as follows:

- i. To understand the meaning of LIKP in agrarian communities within the climate change sector.
- ii. To identify the policy actors of climate change law and policy-making process in Kenya, their sources of power, and how these shape their interactions.
- iii. To examine institutional arrangements in the Kenya policy and law-making space and how these enable or constrain incorporation of different knowledge systems.
- iv. To examine how Kenya's climate change policy and law-making process sits within the wider quest for incorporation of LIKP and other knowledge systems in the development of domestic policies and laws on climate change and in line with Article 7.5 of the Paris agreement.

1.4 Research Questions

The overarching question of this thesis is: How does the policy and law-making process on climate change enable or constrain the incorporation of LIKP?

This main question is broken into the following sub-questions:

- i. How do different knowledge systems, such as LIKP and scientific knowledge, operate in Kenya's climate policy and law-making space?
- ii. How do different categories of policy actors associated with scientific and LIKP knowledge and levels of power engage in climate policy and law-making in Kenya?
- iii. How do the institutional arrangements in the domestic policy space and beyond support the engagement of the policy actors and the incorporation of the knowledge and interest in the policy and law-making process?

1.5 Research Design and Methodology

This section briefly explains the research design and methodology employed throughout the research, including data collection, analysis, and interpretation of findings. More detailed description of the research design and methodology is given in Chapter 4.

To answer the research questions, this research uses an interpretivist qualitative approach. This approach falls in the research tradition that holds that the situation being researched could be understood through the perspective of respondents.¹⁰⁴ The interpretive approach is centred on the social constructivist ontology, which considers reality to be socially constructed and, therefore, seeks the meaning of the phenomenon from respondents' understanding.¹⁰⁵ The epistemology associated with the interpretivist tradition holds that, by paying careful and close attention to respondents' experiences, and perspectives, researchers could understand how law-making on climate change works, who and what is involved, and the issues and challenges of incorporating LIKP in climate change law and policy.

This research uses a case study approach to develop an interpretation of a specific case that represents the whole discussion. The process leading to the passing of Kenya's Climate

¹⁰⁴ Louis Cohen, Lawrence Manion, Keith Morrison, *Research methods in education*. (Routledge 2013)

¹⁰⁵ David Gray, *Doing research in the real world* (Sage 2013)

Change Act 2016 during a period characterised by the introduction of a new Constitution with new institutional arrangements from 1990 and the enacting of TKCE law, was selected as case study for this research. The research questions are worded to ask “how”; thus, a qualitative approach is employed.¹⁰⁶ This qualitative research seeks to understand, explain, and clarify stakeholders' perceptions, attitudes, beliefs, and values.¹⁰⁷

Given that qualitative research relies on words instead of numbers, an interview method is predominantly employed to collect the data in this research. Policy and law-making on climate change in Kenya could not be captured well through a quantitative approach. Policy and law-making is a complex process that relies on immeasurable perceptions and attitudes of diverse actors and institutions, and therefore qualitative data is more apt.

Key informants were purposefully chosen and included people and institutions with relevant knowledge of the research problem and who were involved in the climate change law and policy-making process. The interviewees served as a rich data source, represented different sectors, and came from the sub-national to the national level in Kenya. After the interviews of the first group of interviewees, snowball sampling was used to recruit more respondents. In this sampling technique, the first group of interviewees, after their interviews, provided details of someone they knew whom they considered a good research subject for the study. Even though this research predominantly relied on data collected through semi-structured interviews, published documents on official government sites were consulted to enrich the findings. The details of the respondents and methodology are discussed in Chapter 4.

Data Analysis

¹⁰⁶ Mark Saunders and Others, ‘understanding research philosophy and approaches to theory development’ in Saunders, Mark N. K.; Lewis, Philip and Thornhill, Adrian (eds), *Research Methods for Business Students* (4th edn Pearson Education 2015).

¹⁰⁷ Alan Bryman, *Social Research Methods*, (OUP 2016)

Two analytical approaches were used in this study. First, a theoretical thematic content data analysis was used to extract meaning from the data collected from the semi-structured interviews. Braun and Clarke describe thematic analysis as a flexible method for identifying, analysing, and reporting commonly recurring patterns (themes) within data, and organising and describing research data in rich detail.¹⁰⁸ Boyatzis adds that thematic analysis could further enrich research by interpreting various aspects of the data collected.¹⁰⁹ These authors posit that although the analytical approach is similar to discourse analysis or even content analysis, it is not tied to any pre-existing theoretical framework and can be used within different theoretical frameworks. Miles and Huberman suggest using thematic analysis within a social constructionist epistemology where patterns in data are identified as socially produced through interaction between the participants and the phenomenon.¹¹⁰ The epistemological perspective is constructivist and therefore thematic analysis was chosen as a suitable analysis method to examine respondents' perspectives on how Kenya's climate change policy and law-making process enhanced or constrained the incorporation of LIKP. Meaning was derived from interpreting the realities, meanings, experiences of the subjects, and the arrangements in social context. In this analytical approach, a three-staged process was used to organise the data generated. These were: (i) assembling the data corpus, (ii) extracting the data set from the data corpus, (iii) using data extracts for analysis.

Coding of the collected data was carried out to organise the data in a meaningful way into categories of identified themes and sub-themes for initial analysis and interpretation. The

¹⁰⁸ Virginia Braun & Victoria Clarke, 'Using thematic analysis in psychology', (2006) *Qualitative Research in Psychology* 3(2) 77-101, Anthony Tuckett, 'Applying thematic analysis theory to practice: a researcher's experience' [2005] *Contemporary Nurse* (19) (1-2) 75-87, Ryan, G.W. and Bernard, H.R. 'Data management and analysis methods' Denzin, N.K. and Lincoln, Y.S., (eds) *Handbook of qualitative research*, (Sage 2000, second edition), Attride-Stirling, J. 'Thematic networks: an analytic tool for qualitative research' [2001] *Qualitative Research* 1(3), 385-405

¹⁰⁹ Boyatzis, R.E. 1998: *Transforming qualitative information: thematic analysis and code development*. Sage.

¹¹⁰ Miles, M.B. and Huberman, A.M. *Qualitative Data Analysis: An Expanded Sourcebook* (Second Edition, Sage 1994).

themes identified included: i) existing diverse knowledge in the context of the case study; ii) diverse policy actors; iii) power dynamics; and iv) diverse institutional arrangements. The analysis was carried out across the policy actor groups, governance levels, and sectors, and guided by thematic lenses of the analytical framework linked to the research questions.

Second, the content analysis approach was used to examine documents that were linked to the study. Content analysis is the study of documents and communication pieces, which can include texts of various formats, pictures, audio, or video.¹¹¹ Content analysis is used to examine patterns in communication in a replicable and systematic manner and involves systematic reading or observation of texts. The researcher extracts interesting, meaningful pieces of content and analysis and interprets meanings of relevant texts. The research questions were equally used to guide the content analysis of documents and communications that were developed during the policy and law-making process. The analysis was focussed entirely on what was contained in the documents as well as the use and function of the documents as a resource by policy actors, as emphasised by Prior.¹¹² The documents whose contents were analysed in line with the research aim and questions included: (i) The 2010 Constitution, (ii) National Climate Change Response Strategy (NCCRS), (iii) National Climate Change Action Plan (NCCAP), (iv) 2013 National Environment Policy (NEP), (v) Agriculture, Fisheries And Food Authority Act 2013, (vi) The Climate Change Act 2016, and (viii) Traditional Knowledge and Culture Expression Act 2016.

1.5.1 Changes to data collection related to COVID-19 and setbacks

Initially, the data collection for this research was to be done in-person and with the support of a local institution through the administration of 30 in-person interviews, mostly at

¹¹¹ Alan Bryman, *Business research methods* (3rd ed, OUP 2011)

¹¹² Lindsay Prior, 'Using Documents in Social Research' In SILVERMAN, D. (ed.) *Qualitative Research: Issues of Theory, Method and Practice* (3rd ed, London, SAGE 2011)

the national level, involving government officials (national level), NGOs, research institutions, development agencies, and businesses. The interviews were planned to be conducted simultaneously with four focus group discussions involving groups of 12 farmers in selected agro-ecological zones in Kenya at the sub-national level. However, due to COVID-19 travel restrictions, both in the UK and Kenya, the data collection approach was changed to a virtual qualitative data collection approach.

The researcher initially intended to recruit one research assistant (RA). However, due to the change in family circumstance of the first RA at the recruitment stage it was deemed necessary to recruit a second RA. This process entailed developing a recruitment profile, recruiting and training the two RAs with the support of the local host institution (The Kenya National Farmers Federation (KENAFF)). Both RAs had at least five years of practical experience in qualitative research, gathering, transcribing, and inputting data into databases, community work, and administration. They were equally competent in providing interpretation and translation support in Swahili with interviews that involved respondents who did not speak English. The researcher prepared a training package that included a detailed presentation of the research project, the main concepts, and the methodological approach chosen. The session also included the ethical protocols linked to the information sheets, interviewee consent, confidentiality issues for the RA and the interviewees, right of withdrawal, the anonymity of treatment of data, and arrangements for the purchase of internet bandwidth for interviewees wherever it was needed. While this prepared the RAs to follow these protocols to conduct the interviews, they had a primary role in identifying the interviewees and arranging the logistics for the researcher to interview them on Zoom or by telephone. This was done after the interviewees read and understood participant information sheets and signed the consent forms (the researcher witnessed via zoom), or hard copies signed and collected by the RAs. The RAs only conducted interviews when all local arrangements for the researcher to conduct the

interview directly had failed. A copy of the Research Permit acquired from the Kenya National Commission for Science, Technology & Innovation (NACOSTI) was provided to the RA which was used to show potential interviewees that the GoK had approved the research to be conducted and to facilitate the arrangements for online interviews with these identified interviewees.

The RAs equally faced challenges locally that slowed down the data collection process. Local lockdowns were imposed in Kenya, so they could not travel to remote areas to arrange interviews with most of the interviewees based at the local or county levels. As a result, two community mobilisers were recruited and were taken through the research protocols to facilitate telephone interviews between the researcher and the interviewees based in the agro-ecological zones. All of this put a strain on the time and resources of this research. Interview appointments were either not respected, or there was no electricity to power the phones and laptops, leading to several repeat interviews or cancellations. This impacted on the duration of the data collection.

The researcher and RAs conducted 42 semi-structured interviews with interviewees from national to the sub-national levels, including farmers, central and decentralised government, civil society, universities, research think tanks, and businesses. Although rich data was collected remotely, more data would have been collected through face-to-face interviews, focus group discussions, and directly observing and interpreting participants' feelings and behaviours, which would have further enriched this research¹¹³. Data was collected remotely with careful consideration given to the ethics, accountability, and responsibility in the virtual qualitative data collection processes.¹¹⁴ This ensured that the RAs conduct and interaction with

¹¹³ Lalita Sah, Devendra Singh, Rajeeb Sah, 'Conducting Qualitative Interviews using Virtual Communication Tools amid COVID-19 Pandemic: A Learning Opportunity for Future Research' [2020] JNMA J Nepal Med Assoc 58(232)1103–1106; Audrey Gift, Joan Creasia, Barbara Parker, 'Utilizing research assistants and maintaining research integrity' [1991] Research in Nursing & Health 14(3) 229-33

¹¹⁴ Roberts and others, 'It's more complicated than it seems: Virtual Qualitative Research in the COVID-19 Era' [2021] International Journal of Qualitative Methods 20, 1

the researcher and the participants did not compromise the integrity of the research. After conducting the first set of interviews the researcher and the RAs held a debrief to review the general data collection process given that the researcher was absent.¹¹⁵ This was also to ensure everyone was conversant with the process and the nature of the data that was collected while identifying areas that required further probing for clarification.

1.6 Structure of the thesis

The thesis is divided into eight chapters. Chapter 1 introduces the thesis. This sets the scene and initial thinking of the research topic and, in addition, presents the context of the study, which helps to understand the basis as well as the need for conducting this study. The chapter also explains why Kenya was chosen as the case study, the research questions, the methodological approach, and some changes to the approach because of COVID-19, including the impacts of this changes on the entire research.

Chapter 2 reviews the literature on LIKP as the intellectual starting point of this research. The chapter gives an overview of what LIKP is, how it has been developed, maintained, and used. The chapter concludes with challenges LIKP faces as a knowledge system that constrains its use for decision-making in relation to other knowledge systems.

Chapter 3 reviews the relevant theoretical backgrounds and models of policy and law-making for the study. The chapter discusses how policy and law-making perspectives, in general, address the incorporation of diverse knowledge and the related institutional arrangements in the policy environment. This review is overlaid with the review on LIKP from Chapter 2 and the opportunities and barriers to the incorporation of LIKP are identified, from which an analytical framework is constructed.

¹¹⁵ *ibid*

Chapter 4 sets out the main philosophical thinking from the ontological and epistemological positions that shape the analytical framework of the research. The design of the research and the process of setting up and conducting interviews are explained. The limitations of the research due to COVID-19 and the positionality of the researcher in relation to the research are highlighted in the last part of this chapter.

Chapter 5 presents the findings, analyses of data collected, and structures the analysis. This answers the research sub-question *How do different systems of knowledge, such as LIKP, operate around climate policy and law-making in Kenya?* The chapter discusses the findings from the interview data and from other public sources of evidence related to the knowledge, especially LIKP of local communities, what it means, how it is developed used, and maintained, and the challenges it faces in relation to scientific knowledge in informing the climate legislative process.

Chapter 6 identifies and discusses the findings on actors across sectors and levels of governance, their role, sources of their power, and the power dynamic amongst them as a response to Kenya's climate legislative process. This analysis responds to the sub-question *How do different categories of policy actors associated with different systems of knowledge, and the power they, have engage in the climate policy and law-making in Kenya?* This discussion is done with the view of understanding how the interactions enable or constrain the incorporation of the diverse knowledge, including the LIKP, of local policy actors.

Chapter 7 examines the institutional arrangements in Kenya's policy space including the legal institutions, structures, and culture. These are found to interact with and are influenced by external elements including international laws and financial regimes. The analysis responds to the sub-question *How do the institutional arrangements in the domestic policy space and beyond support, or not, the engagement of the policy actors and the incorporation of the knowledge and interest in the policy and law-making process?*

Chapter 8 brings together the results of the research. The contributions of the research are identified and further suggested areas of research are presented. The supporting documents that were used throughout the research are attached as appendices as they form an integral part of the study.

CHAPTER 2: LOCAL INDIGENOUS KNOWLEDGE AND PRACTICES FOR CLIMATE GOVERNANCE

2.1 Introduction

The first part of the chapter provides an overview of the history of local indigenous knowledge and practices (LIKP).¹ It then examines what LIKP is, how it has been developed, maintained, preserved, and shared, and the challenges it faces as a body of knowledge. Although LIKP lacks a harmonised meaning, it can be packaged, codified, transmitted, and used beyond the context where it is generated. When used with other knowledge systems, particularly scientific knowledge, it can contribute to addressing community challenges, especially where top-down solutions have failed. This assessment is important to establish the link between LIKP and law-making, examined at the end of Chapter 3.

2.2 Overview of the history and growth of LIKP

Communities, especially in the developing world, have, for many centuries, developed and used their LIKP to manage natural resources essential for their survival. This was before ‘western’ scientific knowledge, referred to as one of the legacies of colonisation, became prominent.² LIKP continues to be a source of empowerment and a basis for the participation of primarily poor and under-represented people in decision-making processes.³ These decisions concern food security, natural resource management, health, and the promotion of social cohesion. Despite this importance, it only began gaining recognition in the research arena in

¹ LIKP is used as an umbrella term in this thesis to encompass other terms including ‘traditional knowledge’, ‘local knowledge’, ‘indigenous knowledge’, ‘native science primitive, cultural expressions etc which are knowledge systems embedded in the cultural traditions of local and indigenous communities in contradistinction to ‘Western or Modern or scientific knowledge.

² John Tharakan, ‘Integrating indigenous knowledge into appropriate technology development and implementation’ (2015) 7(5) *African Journal of Science, Technology, Innovation and Development* 364 Shumirai Nyota and Jacob Mapara, *Language as Indigenous Knowledge* (The Centre for Advance Studies of African Society – CASAS Monograph Series No. 69, 2007)

³ Thomas Aneurin Smith ‘Local Knowledge in Development (Geography)’ [2011] *Geography Compass* 5(8) 595-609; Arun Agrawal, ‘Dismantling the Divide Between Indigenous and Scientific Knowledge’ (1995) *Development and Change* 26 (3) 413-439.

the 1980s in diverse fields including development studies, geography, and anthropology.⁴ Before this period, LIKP had been relegated by policy makers and development practitioners with the pretext that it was inferior, obsolete, inefficient, and a hurdle to development and the “modern” way of life.⁵ Coincidentally, during this period of neglect, there was a significant number of failed projects.⁶ This failure was partly blamed on the inadequate or non-inclusion of LIKP and the participation of local people in such projects implemented at community levels.⁷ Indigenous and local communities had and still have a thorough understanding of their local context and conditions. Their LIKP is an important basis for individual and collective decision-making.⁸ This understanding could offer modern society lessons when engaged in diverse development endeavours in different local contexts.

Attention to the importance of LIKP was first drawn in the United Nations Conference on Environment and Development (UNCED) concluding statement in 1992.⁹ It noted that LIKP was threatened with virtual extinction by development projects over which LIKP holders had no control. The report set the stage for more consideration of LIKP and for those who develop and use it to be given a more decisive voice in formulating policies and directly participating in their own decisions. Principle 22 states thus:

Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and

⁴Paul Sillitoe and Mariella Marzano ‘Future of indigenous knowledge research in development’ (2009) 41 *Futures* 13, 13; Robert Chambers, ‘The origins and practice of participatory rural appraisal’ [1994a] *World Development* 22 (7) 953-969 Potter, R. B., Binns, T., Elliot, J. A. and Smith, D. *Geographies of development*, (Pearson Prentice Hall 2003); Semali, Ladislaus M., and Joe Kincheloe ‘Introduction: What is Indigenous Knowledge and Why Should We Study It?’ in Joe Kincheloe and Semali, Ladislaus M (ed), *What Is Indigenous Knowledge? Voices from the Academy* (Routledge 1999)

⁵ Michael Warren ‘Indigenous Knowledge, Biodiversity Conservation and Development’ in Ude V (ed), *Sustainable Development in Third World Countries* (Praeger 1996, p. 81); Samuel Awuah-Nyamekye Indigenous knowledge: A Key Factor Towards Africa’s Sustainable Development in Munyaradzi M, and Awuah-Nyamekye S (eds), *Harnessing Cultural Capital for Sustainability: A Pan Africanist Perspective* (Langaa RPCIG 2015) 233

⁶ Colin McFarlane, ‘Crossing borders: development, learning and the North-South divide’ (2006) 27(8) *Third World Quarterly* 1413

⁷ John Tharakan (n 90) 1

⁸ *Ibid* 2.

⁹ UN, ‘Report of the United Nations Conference on Environment and Development Rio de Janeiro, 3-14 June 1992 Volume I Resolutions Adopted by the Conference, <https://www.un.org/esa/dsd/agenda21/Agenda%2021.pdf>, accessed 22/06/2022

traditional practices. States should recognize and duly support their identity, culture, and interests and enable their effective participation in the achievement of sustainable development.¹⁰

The Earth Summit laid the groundwork for future recognition of LIKP and indigenous and local communities, notably through the Rio Declaration of 1992, the United Nations Framework Convention on Climate Change (UNFCCC) of 1992, the Convention of Biological Diversity of 1992, the Kyoto Protocol of 1997, the Paris Declaration of 2015, and the 2030 Agenda for Sustainable Development (SDGs). There has also been corresponding growth in the literature highlighting the importance of LIKP and those who develop it.¹¹ These works have emphasised the need for the incorporation of LIKP into sector-specific policies at national and regional levels. This implies developing mechanisms for the empowerment, inclusion, and participation of indigenous and local communities who develop and use this knowledge in such processes.

However, this growing and formal recognition by scholars, international bodies, and national governments occurred alongside prolonged and contentious debates surrounding LIKP that contributed to its poor recognition and integration as part of formal law.¹² Some of these areas of contention include (1) what LIKP means, how it is developed and maintained, and (2) the challenges of agreeing on the most appropriate ways and conditions to protect, share, and use it for formal decision-making, especially in low-income countries with their diverse and dynamic national political and governance systems. These challenges partially explain why

¹⁰ Ibid, 7

¹¹ Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 36, Alavi, M. & Leidner, D.E., 'Knowledge management and knowledge management systems: Conceptual foundations and research issues' (2001) 25(1) *MIS Quarterly* 107, 109

¹² Semali, Ladislaus M., and Joe Kincheloe 'Introduction: What is Indigenous Knowledge and Why Should We Study It?' in Joe Kincheloe and Semali, Ladislaus M (ed), *What Is Indigenous Knowledge? Voices from the Academy* (First Published in 1999 Routledge), Aneurin (n 2) 596

research that develops a theoretical foundation for studying LIKP is scanty. These are discussed in the following sections.

2.2 The meaning of LIKP

There exist differing views amongst scholars, practitioners, and institutions about what LIKP means. These views about LIKP being a resource that is communally owned, tacit, shared amongst and between generations, inseparable from the context, and used to make consensus decisions for the common good have been expressed. Examination of these diverse definitions reveals contentions amongst the various positions held by scholars, practitioners, and institutions.

2.2.1 Locally based and contextually inseparable knowledge

Local indigenous knowledge and practices has been defined as locally based knowledge, contextually rooted and inseparable from a particular geographic area.¹³ Explanations using this notion conveys the impression that LIKP would be irrelevant beyond where it is developed and used. Abdullah and Stringer use these notions and define LIKP as what constitutes part of the human consciousness and the community's social life, which could not be understood outside the context in which it was produced.¹⁴ Using the Andean peasants in Peru, they posited that their LIKP was tied to the context and profoundly affected their worldview and knowledge production.¹⁵ They continuously developed their ability to listen to, observe, and experience their social and natural worlds as a basis for survival.¹⁶ Using their

¹³ Roby Zidny, Jesper Sjöström, & Ingo Eilks, 'A Multi-Perspective Reflection on How Indigenous Knowledge and Related Ideas Can Improve Science Education for Sustainability' [2021] *Sci & Educ* 29,145–185, Yacoub Hoda, *Indigenous Knowledge Definitions, Concepts and Applications* (World Bank 1998)

¹⁴ Abdullah and Stringer in Joe Kincheloe (ed) *What Is Indigenous Knowledge?: Voices from the Academy*, (Routledge 1999) 143-156

¹⁵ Ibid

¹⁶ Ibid

LIKPs, they predicted the weather through the location and brightness of the stars, the colour, odour, and frequency of the wind.¹⁷ This explanation is also supported by Waren, Slikkerveer and Brokensha. They stated that indigenous knowledge – the local knowledge unique to a given culture or society – contrasts with the international knowledge system, which is generated through the global network of universities and research institutes.¹⁸ According to these authors, such knowledge lost its relevance once it was removed from the Andean Highlands.

While some research adheres strongly to the view that LIKP is a resource that is inseparable from a given context, some cases have demonstrated a contrary view to this definition. There are numerous examples where LIKP has been taken out of the context where it was developed for application in other, not necessarily similar, contexts. For instance, the San people have lived in the Kalahari Desert for over 40,000 years and are believed to be the oldest in Southern Africa. They developed a long practice of chewing the bitter Hoodia Cactus (*Hoodia gordonii*) to suppress hunger and thirst during their hunting expeditions in the dusty Kalahari. This indigenous knowledge was taken out of the context through patents by American and British Pharmaceutical companies for use as appetite suppressants in the West.¹⁹ Relatedly, India, in the late 1990s and early 2000s, won legal battles to revoke patents related to the Country's LIKP, including Turmeric used for its antiseptic value and the neem used as a pesticide.²⁰ These examples demonstrate that LIKP could be used beyond the context where it is developed through establishing bilateral or multilateral agreements between countries that share common interests. In addition, an agreement to share LIKP within a given jurisdiction could also be established to share LIKP at sub-national levels and between sub-national and

¹⁷ Ibid

¹⁸ Warren, D. M., L. J. Slikkerveer and D. Brokensha (eds). In *the Cultural Dimensions of Development: Indigenous Knowledge Systems*, (Intermediate Technology Publications 1995).

¹⁹ Native healers want drug company cooperation, <https://www.unl.edu/rhames/courses/current/hoodia>. Accessed 22/06/2022

²⁰ WIPO, 'Traditional knowledge: the challenges facing international lawmakers' (WIPO Magazine 2017) https://www.wipo.int/wipo_magazine/en/2017/01/article_0003.html accessed 22/06/2022

national levels. For example, the Makorongo Village Forest Management Bylaw in Tanzania codifies local customary practices for forest management and sustainable harvestings, such as gene pool selection development of traditional beekeeping with associated dual adaptation and mitigation benefits.²¹ The inclusion of beneficial indigenous knowledge systems within local bylaws has been successful due to the active involvement of indigenous community members, awareness of climate change considerations within the local sphere of government, and a willingness to foster such practices.²² This example suggests a high potential for success if replicated in other forest communities in and beyond Tanzania.

2.2.2 LIKP is a collectively owned knowledge system

Another issue that has been a source of contention in the definition of LIKP has been the view that it is a resource that is homogenous, equally, and collectively owned by members of a given society. These explanations assume that in instances where decisions are to be made in a community, every community member has the same level of access to and control over LIKP. Therefore, they would have an equal voice, influence, power, and chance to participate in such decisions that result in a consensus. This position is reflected in the works of Apffel-Marglin and the UN interagency reports on indigenous peoples' issues (UNPFII, WIPO, UNHCR) published in 1995 and 2001, respectively.²³ Both works argue that collective ownership is an inherent part of LIKP and the expectation in any given context is that it will be used responsibly and for the community's common good.²⁴ This position, however, ignores the political and power dimensions resulting from diverse socio-economic and political

²¹ Mwanga, Elia. 'The Role of By-Laws in Enhancing the Integration of Indigenous Knowledge' (2019) *Carbon & Climate Law Review* 13(1) 19-30

²² *ibid*

²³ Frédérique Apffel-Marglin, 'Development or decolonialization in the Andes? Interculture' (1995) 28(1) *International Journal of Intercultural and Transdisciplinary Research* 3; United Nations *Inter-Agency Support Group on Indigenous Peoples' Issues*, (Thematic Paper towards the preparation of the 2014 World Conference on Indigenous Peoples) p. 3; World Bank Group, *Draft Operational Policies* (OP 4.10, 2001)

²⁴ *ibid*

constructs (gender, socio-economic statuses, legal values, location, political affiliation, and ethnicity) that dictate whose voice is heard in decision-making processes. Aneurin aptly highlights this in his examination of LIKP's meaning in the field of development when he stated that LIKP 'is the knowledge that is produced and used in response to a dynamic environment and often entangled in power relations that benefits some at the detriment of others.'²⁵

2.2.3 LIKP is a source of power and local hegemonies

From the preceding discussion, it is apparent that specific individuals or groups in a given society often have access to and control over LIKP and thus exert diverse power and influence in decision-making processes. Such power and influence become more entrenched when LIKP is considered sacred and secret knowledge accessible only to some individuals or groups.²⁶ The individuals or groups who consider themselves 'privileged' use their access to and control over this sacred and secret LIKP to build 'horizontal' and 'bottom-down' hegemonies in each context. This is contrary to the definition of LIKP, as knowledge that is communally owned and used for consensus-based decision-making. Rather, it is used as a tool to further exclude sections of already marginalised individuals and groups. In addition, given that local knowledge holders, in general, are subject to external and often more powerful actors in decision-making processes, it is yet to be determined whether actors rich in LIKP could have more power and influence in decision-making instances where LIKP is at play.

In examining the nature of LIKP as a tool to promote local hegemonies, Agrawal concludes that LIKP is similar to other global knowledge systems where access and control determine the level of power and influence exerted by the holder.²⁷ However, LIKP is unique

²⁵ Aneurin (n 2) 605

²⁶ Ruth L. Okediji *Traditional Knowledge and the Public Domain* (CIGI Papers No. 176 — June 2018)

²⁷ Agrawal (n 2) 290

in that it creates another level of marginalisation amongst those already considered marginalised and underrepresented in decision-making processes.²⁸ Davidson, in his works, also examines this phenomenon of development of local hegemonies as a result of access to and control of LIKP, specifically in Guinea-Bissau.²⁹ In this sub-Saharan African country, elderly women and men maintained control over particular realms of knowledge and myths. Some of this included knowledge of pregnancy, birth, sexual education and cycles, local practices, and myths about control of nature, such as rainmaking, thunderstorms, and lightning strikes. These powerful groups use this privileged position to exclude and maintain power over certain population segments, including women and youths. This adds another layer of hegemonies amongst traditionally disempowered people due to their socio-economic and political status. The ability to access and control LIKP, which are informal, unwritten, and under the influence of existing local social constructs (gender, age, ethnicity, etc.) give certain community members more power.

2.2.4 LIKP is an 'informal' and tacit knowledge system

Local indigenous knowledge and practices has equally been defined as 'informal' and tacit (not written, implicit) knowledge, although defining LIKP this way has been contested. June George, using this notion, stated that LIKP is 'a term that can be used to designate knowledge produced in a specific social context and employed by lay people in their everyday lives.'³⁰ It is typically not guided by a set of specific procedures or rules and is orally passed down from one generation to the next.³¹ June's characterisation closely resembles those proposed by

²⁸ *ibid*

²⁹ Joanna Davidson, 'Cultivating knowledge: development, dissemblance, and discursive contradictions among the Diola of Guinea-Bissau' [2010] *American Ethnologist* 37(2) 212-226, Mike Kesby, 'Participatory diagramming as a means to improve communication about sex in rural Zimbabwe: a pilot study' [2000a] *Social Science and Medicine* 50(12) 1723-1741

³⁰ June George, 'Indigenous Knowledge as a component of the School Curriculum' in Joe Kincheloe (ed) *What Is Indigenous Knowledge? Voices from the Academy*, (Routledge 1999)

³¹ *ibid*

Parrish and the Economic and Social Council (ECOSOC), which all define the concept of LIKP as more ideographic, not based on a set of verifiable scientific laws, but rather a ‘complete knowledge system with its concepts of epistemology, and its own scientific and logical validity’ understood only by its developers and users.³² However, such definitions are limiting and inconsistent with the current national moves to design intellectual property norms, as demonstrated in the case of the Kenyan legislation that protects LIKP and its holders. Local indigenous knowledge and practices is increasingly viewed as a formal system of knowledge and not just part of the public domain open to access and use by anyone. Okediji has argued against the definition of LIKP as unwritten and informal knowledge.³³ Her arguments are based on claims that ‘since the latter part of the twentieth century, because of the importance and value of LIKP, innovative ways and rules to record are growing. For example, there is evidence of its protection through ‘soft’ and ‘hard’ legal instruments.’³⁴ Okediji argues that LIKP needs to be viewed as a knowledge system with systems of understanding similar to ‘Western’ knowledge.³⁵ This, to her, is an essential step to developing strategies to record, package, categorise, and protect LIKP to enhance controlled access. However, while universally defined and accepted procedures, rules, or codes for recording and categorising LIKP are still under development, this implies the knowledge in some contexts largely remains tacit and informal, further fuelling this contentious debate about what it means.

While LIKP has been defined as knowledge that is understood and remains with developers and users, other explanations seem to extend this definition further. These have LIKP brought in the dimension of LIKP as inherently interpersonal, based on intergenerational

³² Anne Parrish, ‘Agricultural Extension Education and the Transfer of Knowledge in an Egyptian Oasis’ in Joe Kincheloe (ed), *What Is Indigenous Knowledge? Voices from the Academy* (Routledge 1999); ECOSOC *Principles and Guidelines for the Protection of the Heritage of Indigenous People. United Nation Sub-Commission on Prevention of Discrimination and Protection of Minorities, Commission on Human Rights* (E/CN.4/Sub.2/1995/26, 1995).

³³ Ruth L. Okediji *Traditional Knowledge and the Public Domain* (CIGI Papers No. 176 — June 2018)

³⁴ *ibid*

³⁵ *ibid*

relations and participation of people. The World Intellectual Property Organization (WIPO) uses these terms to propose the widely used definition of LIKP:

Know-how, skills, innovations, practices, teachings or learnings developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity.³⁶

This WIPO definition is similar to that proposed by the International Council for Science (ICS), which states that it is:

[A] cumulative body of knowledge, know-how, practices, and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations, and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality, and worldview.³⁷

From these definitions, it is plausible to say that the participation of people based on how much LIKP they know is central to these definitions. However, these explanations ignore the inherent challenges in fully understanding the concept of ‘participation’ and what it means for diverse people and groups with diverse interests in each context who are expected to work towards a common good. Mercer demonstrates divergent views about ‘participation’ in community development in his work with local communities in Tanzania.³⁸ He observed that community members define ‘participation’ using their LIKP as an individual strategy to gain access to material and social resources based on the ‘privileged’ position of having access and control of LIKP, as opposed to using it for the collective good.³⁹ This example demonstrates

³⁶ World Intellectual Property Organization (WIPO), Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), *The Protection of Traditional Knowledge: Draft Articles*, 31st Sess, (WIPO/GRTKF/IC/31/4 2016), Annex at 5

³⁷ International Council for Science (ICS), ‘Science and Traditional Knowledge, Report from the ICSU Study Group on Science and Traditional Knowledge’ (27th General Assembly of ICSU, Rio de Janeiro, September 2002) 3

³⁸ Claire Mercer, ‘The discourse of Maendeleo and the politics of women’s participation on Mount Kilimanjaro’ [2002] *Development and Change* 33(1) 101-127, Paul Sillitoe, ‘The Development of Indigenous Knowledge: A New Applied Anthropology’ [1998] *Current Anthropology* 39(2) 223-252

³⁹ *ibid*

the need to examine how communities understand and define participation and related concepts, especially on critical issues like using their LIKP to inform law-making to build community resilience to diverse pressures such as climate change.

The foregoing explanations suggest that, despite an extensive and growing body of knowledge on what LIKP is, there is no universally agreed definition.⁴⁰ This is partly a result of the diversity of fields in which the concept is studied and the purposes for which the institutions and scholars defined LIKP.⁴¹ The World Bank has noted the increasing attention LIKP was receiving within academia and development practice from the 1990s but noted the absence of a unanimous understanding of the concept.⁴² It states that significant overlaps exist in the definitions, and none fundamentally contradicts the other.⁴³ However, it equally notes that the diverse institutions and scholars deal with the same issues but draw different conclusions that more or less overlap.⁴⁴ While it does not attempt to define LIKP, it continues to highlight Ellen and Harris's 1996 definition, which lists characteristics of what LIKP should be, as the most comprehensive.⁴⁵ These authors seemly consolidated the explanations of the other institutions and scholars highlighted above into a ten-point explanation of LIKP.⁴⁶ Some of these include local, orally-transmitted, a result of practical engagement in everyday life, empirical rather than theoretical, repetitive, not static (produced and reproduced) knowledge, and practices that are devolved and fragmented in their distribution.⁴⁷

⁴⁰ Arun Agrawal, 'On Power and Indigenous Knowledge in Darre Possey (ed.), *Cultural and Spiritual Values of Biodiversity* (London: United Nations Environmental Programme Intermediate Technology Publication, 1999) 177. Stephen Brush and Doreen Stabinsky (eds.), *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights* (Washington, DC: Island Press, 1996) 6

⁴¹ Paul Sillitoe, 'Globalising Indigenous Knowledge' in Alan Bicker and others (eds) *Participating in development: approaches to indigenous knowledge* (Routledge 2002)

⁴² > accessed 21 March 2019

⁴³ *ibid*

⁴⁴ *ibid*

⁴⁵ Roy Ellen and Holly Harris, 'Indigenous environmental knowledge and its transformations: Critical Anthropological Perspective in Ellen P. Parkes, R. and Harris, H, (eds) *Studies in Environmental Anthropology* (Harwood Academic Publishers 1996), 4-5; see also, World Bank (n 55) 1

⁴⁶ *ibid*

⁴⁷ *ibid*

This slightly overlaps with the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) definition.⁴⁸ This body defines LIKP within the framework of its mandate to ‘explore ways and means to bring different knowledge systems..., into the science-policy interface.’⁴⁹ In light of this mandate, IPBES relied on Berkes’ definition developed 16 years after the World Bank acclaimed Ellen and Harris’s definition:

a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed through generations by cultural transmission, about the relationship of living beings (including humans) with one another and their environment.⁵⁰

Most of the definitions highlighted above emphasise relationships of knowledge of living components (animals, plants, soil, landscape), knowledge that shapes holders’ perception of their environment, knowledge of resource management, and institutions of knowledge. Savareis points out that the diverse definitions of LIKPs have clarified how international environment and human rights laws in LIKP have evolved and are discretely linked to these specific areas.⁵¹ Informed by these varied views on the meaning of LIKP as examined above, this study adopts a simple definition of LIKP as follows:

A body of knowledge, practices, beliefs on people’s ways of knowing and doing, which is evolving and used for individual and collective decision-making to enhance living within their means.

These definitions focus on explaining the content of LIKP. However, the ways in which LIKP is developed, used, promoted and protected is equally important, and is discussed in the next section.

⁴⁸ The IPBES was established to strengthen the science-policy interface for biodiversity, carry out knowledge generation catalysis, policy support and capacity building – IPBES, Functions, Operating Principles and Institutional Arrangements of IPBES, 21 April 2012, Panama City, Appendix 1, 1.

⁴⁹ IPBES, Consideration of Initial Elements: Recognizing Indigenous and Local Knowledge and Building Synergies with Science, EPIPES/1/INF/5 (2012), 3.

⁵⁰ See F Berkes, *Sacred Ecology* (3rd edition, Routledge, Abingdon 2012) 7.

⁵¹ Savareis (n 92) 37

2.3 Development, maintenance, and transfer of LIKP

As earlier noted, LIKP suffers from definitional challenges and a lack of agreement on what term to use to represent it. These challenges are also reflected in the diverse views on how it is developed, accessed, gathered, organised, evaluated, validated, and shared beyond a given context. Flavier and others, in their attempt to define LIKP, indicate that it is ‘dynamic, continually influenced by internal creativity, experimentation, and contacts with the external world.’⁵² Similarly, the ICS states that it is ‘...know-how, practices, and representations maintained and developed by peoples with extended histories of interaction with the natural environment.’⁵³ These all point to the non-static nature of LIKP as it evolves in response to a constantly changing environment, which is equally highlighted in the above definition developed for this thesis. There exist overlaps in how LIKP is produced, developed, maintained, shared, and preserved. These include experiential, practical, learning-by-doing processes, repeated oral communications and presentation, interpersonal and inter-community exchanges, and interaction with other systems and contexts, often enriching or reproducing LIKP.

2.3.1 LIKP generated through experiential and learning-by-doing actions

A significant amount of LIKP is developed is through experiential, practical, and learning-by-doing processes. When communities face threats to their livelihood systems, they are often motivated by the interest to solve such problems or adapt to them by engaging in trial-and-error practices.⁵⁴ By doing this, they develop innovative solutions to these challenges through repetitive processes. Scoones and others support this by highlighting the Natufian groups of

⁵² *ibid*

⁵³ ICS, p3

⁵⁴ Ann Thrupp, ‘Legitimizing Local Knowledge: “Scientised Packages” or Empowerment for Third World People’, in Warren and others (eds) *Indigenous Knowledge Systems: Implications for Agriculture and International Development, Studies in Technology and Social Change*, (Ames, Iowa 1989) 139

the Palestinian Mediterranean areas whose survival depended on adapting their livelihoods' strategies in response to climate change.⁵⁵ They alternated and tested diverse agricultural production and cultivation practices in response to environmental changes.⁵⁶ These experiments and trial-and-error exercises often resulted in the development of innovative LIKP.⁵⁷ Moyo posits that the predominantly agrarian communities in the Global South are noted to have developed, through experimentation, a wide range of LIKP in response to addressing issues related to yields, pest control, soil enrichment, agro-forestry, multiple cropping patterns, healthcare, food preparation, and preservation in response to development needs and other pressures. Furthermore, some of these communities have evolved their experiential practices to a level where they have set up functional community experiential farms and trial plots.⁵⁸

These communities have used these farms to conduct further experiments using systems and local inputs to determine the suitable soil type and cropping needed.⁵⁹ Similarly, the success of the Australian Aborigines in understanding their world developed through experiential processes as they walked across the land, observing and learning about the landscape and the local flora and fauna it contains.⁶⁰ The development of their knowledge in this way serves as a practical guide to navigating their land.⁶¹ In these processes, recognising the onset of negative changes stimulates the start of decisions to engage in experimentations to adapt or mitigate them. This iterative experiential learning and practice process enhances and develops LIKP over time as new discoveries and inputs are made. Often these experimentations and trial-and-error processes are sustained through oral presentations, and demonstrations,

⁵⁵ Scoones, I., M. Melnyk and J. Pretty, *The Hidden Harvest: Wild Food and Agricultural systems-A Literature Review and Annotated Bibliography* (London 1992) 30

⁵⁶ *ibid*

⁵⁷ *ibid*

⁵⁸ Moyo (n 69), 3-4

⁵⁹ *ibid*

⁶⁰ *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, s 21A.

⁶¹ *ibid*

which equally contribute to the continuous development, enrichment, and preservation of LIKP amongst individuals and groups in each context.

The developers of the experiential knowledge are often without formal education, and their knowledge is not usually written down. Thus, they verbally share their proven ability during practical demonstrations and personal communication (from parents to children, community to community, master to apprentice, older to younger generations). In cases where the elderly men and women have been at the centre of intergenerational sharing processes, Whitts and Castellano have described them as ‘indigenous philosophers.’⁶² In such instances, the older generation engages the younger learners to listen, observe, and learn-while-doing as a strategy to ensure that the LIKP is continuously developed and sustained.⁶³ This view has equally been supported by the Australian Human Rights Commission, which acknowledges that LIKP is often not written but handed down orally from one generation to another. Thus, it is continuously developed, transmitted, and preserved.⁶⁴ The word-of-mouth transmission of the Australian Aborigines Folklore (traditional beliefs, stories, songs, ceremonies, rituals, and customs) is the main route through which they convey information about their landscape.⁶⁵ This is occasionally in addition to drama, dancing, paintings, and drawings, which could only be fully explained orally to others by the artists. The sharing of LIKP is not restricted to the context and amongst individuals and groups where it is developed. Local indigenous knowledge and practices have also been developed, enriched, and sustained through inter-

⁶² Laurelyn Whitt, *Science, Colonisation, and Indigenous Peoples: The Cultural Politics of Law and Knowledge* (Cambridge University Press 2009) 35-38; Marlene Brant Catellano, ‘Updating Aboriginal Traditions of Knowledge’ in George J. Sefa Dei, Budd L. Hall, and Dorothy Goldin Rosenberg (eds.) *Indigenous Knowledge in Global Contexts* (University of Toronto Press, 2000) 26

⁶³ *ibid*

⁶⁴ Australia Human Rights Commission, Native Title Report 2018, 214

⁶⁵ *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, s 21A. See also, Eliane Elisabetsky, ‘Folklore, Tradition, or Know-How?’ [1991] *Cultural Survival Quarterly* 15, <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/folklore-tradition-or-know-how-ethnopharmacological>, accessed 12/3/2018

community exchanges and interactions with other knowledge systems, often with external support.

2.3.2 LIKP developed through exchanges and shared learning

Exchanges of shared learning and transfer of LIKP from one community to another is one of the ways by which LIKP is developed or enhanced, maintained, and scaled up. Sometimes, this occurs informally with groups or communities interested in specific practices from another community, copying and replicating them in their communities. In this way, the ‘communities of practices’ that results from such inter-community exchanges contribute to the re-development or re-packaging, maintenance, and up-scaling of existing LIKP.⁶⁶ However, some of these intercommunity initiatives are often externally driven by development partners with substantial financial and technical support. The World Bank, Food and Agriculture Organisation (FAO), Swiss Agency for Development and Cooperation (SDC), Department for International Development (DFID), International Development Research Centre (IDRC), and the International Fund for Agricultural Development (IFAD) have been at the forefront of supporting inter-community exchanges of LIKPs.⁶⁷ Such exchanges have been characterised by peer-to-peer learning, local promotion events, open days, excursions, and field days.⁶⁸ Such successful exchanges have occurred in Southern Africa’s Trans-Frontier Conservation Areas of Mozambique, South Africa, and Swaziland and exchanges between pastoralists and farmer communities in Kenya.⁶⁹ Informed by existing LIKP structures and institutions, the

⁶⁶ Eric Ngang, *Civil Society Sustainability and Local Capacity Development: A Case Study in Cameroon* (WACSI 2016) 12

⁶⁷ World Bank, ‘Indigenous Knowledge For Development A Framework for Action’ Knowledge and Learning Center Africa Region’(World Bank 1998)

<<http://siteresources.worldbank.org/AFRICAEXT/Resources/ikrept.pdf>> 8-12 Accessed 21/12/2018 FTKCE

⁶⁸ Woytek Reinhard; Prakash Siddhartha, ‘Mainstreaming indigenous knowledge’ (World Bank Working Paper No 121526, 2017), <<http://documents.worldbank.org/curated/en/533991511328711077/Mainstreaming-indigenous-knowledge>> Accessed 08 January 2018

⁶⁹ *ibid*

participating actors have shared improved local conservation practices and social cohesion to address conflicts over land and natural resources.⁷⁰

Although the World Bank acknowledges that LIKP could be readily shared amongst community members with a linguistic and cultural background, the institution also agreed that it is challenging to transfer and exchange it across cultures.⁷¹ To address this gap, it proposes a six-step process essential for exchanging LIKP.⁷² These steps include: recognition and identification; validation; recording and documenting; storage; transfer, exchange, and testing its applicability in a context; and dissemination to a wider audience.⁷³

Part of this support from external partners has been directed towards the recording and documentation of LIKPs and the production of manuals for wide-scale use. The successful recording and documentation of some LIKPs have challenged the notion that it was informal knowledge, static, rooted in experiences and practices understood only by its developers and users. For example, the International Institute of Rural Reconstruction (IIRR) developed a manual with a multitude of approaches to accessing, recording, and documenting LIKPs.⁷⁴ This manual equally contained successful case studies where these approaches have been used to document LIKP including taboos and myths to enhance wider understanding and application.⁷⁵

The issue of documentation of LIKP remains a significant challenge for Kenya. However, there are successful cases of documenting LIKP using information communication and technology (ICT) to ease its protection, which offers learning opportunities for many other countries. For example, India has developed a Traditional Knowledge Digital Library (TKDL),

⁷⁰ *ibid*

⁷¹ World Bank (n 79) 8

⁷² *ibid*

⁷³ *Ibid* 9

⁷⁴ IIRR, *Recording and Using Indigenous Knowledge: A Manual* (IIRR Guides and manuals : Agriculture and natural resource management 2093, 1996), <https://www.participatorymethods.org/resource/recording-and-using-indigenous-knowledge-manual> accessed 28 November 2018

⁷⁵ *ibid*

which relies on computer software that eases the classification of LIKP to enhance its compatibility with International Patent Classification (IPC).⁷⁶ The software handles inherent variations in the type, size, and volume of LIKP amongst holders and across different scales in India.⁷⁷ However, as earlier noted, there are divergent views concerning where such information is kept and who has access to it. Ngulube points out that this challenge could be addressed using innovative ways, including the use of non-written materials such as films, tapes, CDs, recorded drama, theatre arts, demonstration schools, gene banks, and cassettes developed in appropriate formats and languages to ease accessibility.⁷⁸

These initiatives demonstrate the potential of successfully documenting and preserving LIKP for more comprehensive and sustained application beyond its context of origin. This is supported by growing evidence of the transfer of LIKP from developing to developed countries, though it is yet to happen in systematic ways. This is proof that it is an integral part of the global knowledge systems to inform decision-making and build global resilient communities. However, LIKPs face several challenges that lead to its poor recognition.

2.4 Challenges of recognition of LIKPs

Several challenges impede the full recognition of LIKP as a body of knowledge for diverse fields and practices. These include the absence of a harmonised definition, various names, inability to access, store and preserve fully, the insistence (even by its proponents) for LIKP to be evaluated and validated through an objective scientific lens, and the absence of legal protection of LIKP.

⁷⁶ Bharati Sen 'Indigenous knowledge for development: Bringing research and practice together' (2005) 37 *The International Information & Library Review*, 375, 377&378

⁷⁷ *ibid*

⁷⁸ Ngulube P, 'Managing and Preserving Indigenous Knowledge in the Knowledge Management Era: challenges and opportunities for information professionals' (2002) 18 *Information Development* 95, 96

2.4.1 Definitional challenges

There is no single definition of LIKP despite its wide recognition. The diversity of the names used to denote the knowledge system and the numerous reports of what it means are problematic and major contributions to its poor recognition. This diversity in names was highlighted by Desta, who presented a list of 22 names for LIKP compiled from literature published between the 1960s and 2000.⁷⁹ Sillitoe aptly describes the confusion brought by these variations in names with further contentions amongst researchers on what name to best call the knowledge system by stating that '[t]he large number of terms vying for prominence as the more correct to label this field, whatever it is, are symptomatic of the confusion voiced.'⁸⁰ Further, some authors have pointed out that some of the terms used such as 'traditional knowledge,' 'local knowledge,' 'indigenous knowledge,' 'native science,' etc have all contributed to relegating LIKPs as inferior, primitive, static knowledge system, tied to a particular context and isolated from other knowledge systems including scientific knowledge.⁸¹ These scholars concluded that using such terms was misleading and limiting for policies, projects, and development programmes. On the other hand, Warburton and Martin have argued explicitly that the term local knowledge should be used as this seems to include all the other terms.⁸² However, Bryan argues against this position by positing that 'the very concepts used to identify people [such as local, native or traditional knowledge] remain steeped in colonial power relations and portray some subjugation.'⁸³ On the contrary, Turnball saw nothing wrong with using local to describe any knowledge systems as he felt all knowledge: whether western

⁷⁹ Amare Desta, 'Comprehending Indigenous Knowledge: An Ethnographic Study of Knowledge Processes within Natural Resource Management' (DPhil thesis, London School of Economics, 2009)

⁸⁰ Sillitoe (n 3) 108

⁸¹ Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 36; Briggs and others., 'The Nature of Indigenous Environmental Knowledge Production: Evidence from Bedouin Communities in Southern Egypt' (2007) 19 *J. Int. Dev.* 239, 239; Warburton, H. and Martin, A., 'Local people's knowledge in natural resources research. Socio-economic Methodologies for Natural Resources Research' (Chatham, UK: Natural Resources Institute, 1999); Kai Horsthemke 'Indigenous knowledge' – Conceptions and Misconceptions' (2004) 32 *Journal of Education* 3, 33

⁸² Warburton and Martin (94) 1

⁸³ Bryan (36) 24

knowledge or knowledge of communities, was all ‘local’ and developed in a particular context.⁸⁴ Such contentions remain common and constitute some of the major hurdles to fully recognizing LIKP. This is in addition to the challenges of protecting it from being lost and making it accessible to a wider audience.

2.4.2 Access to LIKP and documentation issues

The threat of extinction compounded by the challenges of access, recording, validation, and transfer of LIKP contributes to its poor recognition, and acceptability across disciplines and practice. Overcoming these issues requires developing suitable methods, systems, media, and forms of collection and preservation in line with what is considered appropriate by the developers and those interested in making it accessible widely.⁸⁵ Whether LIKP should be recorded and stored onsite or offsite (in national, regional, and international archives) is contentious.⁸⁶ Although both approaches have their merits and demerits, offsite preservation in national, regional, and international LIKP archives and software have strongly been criticised for the exclusion and marginalisation of certain users.⁸⁷ This is particularly for local communities with limited resources to access and use these LIKP packages in their new forms for daily survival. For example, Ngulube argues that two fundamental issues must be addressed to ensure a balance between onsite and offsite preservation of LIKPs.⁸⁸ First, the significant differences in the value systems of those who develop and use LIKP (same cultural, moral, and common property) and the value system of those who are interested in documenting it for wider use (through intellectual protection, personal creativity, commercial purposes) needs to be

⁸⁴ David Turnbull, ‘Introduction: Futures for Indigenous Knowledges’ (2009) 41 *Futures* 1, 3; World Bank (79) 3-4, also see Rohanna Ulluwishewa, ‘Indigenous Knowledge, National IK Resource Centers and Sustainable Development’ (1993) 3 *Indigenous Knowledge and Development Monitor* 1, 11-13.

⁸⁵ Ngulube (n 91) 96; Also see Kai Horsthemke, p. 33

⁸⁶ *ibid*

⁸⁷ World Bank (n 79) 13; Agrawal (n 2) 431-433

⁸⁸ Ngulube (n 91) 95

examined.⁸⁹ Second, from what or whose perspective would the highly recommended ‘systematic,’ ‘objective’ and ‘scientific’ lenses for the gathering, organisation, evaluation, validation, and dissemination be developed.⁹⁰

2.4.3 Need for validation of LIKP through a scientific lens

The issues raised above are challenging to answer partly due to external agents failing to recognise LIKP as a body of knowledge with its standardised evidence and understanding by those who develop and use it.⁹¹ Rather there has been insistence even by its proponents (who have an ambivalent attitude to it) to validate it through the scientific and objective lens for it to gain recognition and traction as global knowledge.⁹² For example, Sillitoe posits that African officials, on the one hand, seem to be embarrassed about supporting something so ‘unscientific,’ while on the other hand, being proud of their ancestors’ insights and knowledge demonstrates this.⁹³ Similarly, the World Bank’s position does not salvage the situation as it explicitly stated that ‘by recording indigenous knowledge systems they can then be compared and contrasted with the international knowledge system...improved through science-based technologies... testing its validity and cost-effectiveness ... scientifically.’⁹⁴ Such insistence on the scientific and objective methodology of collection, packaging, and validity of LIKP before its recognition only delays the acceptability and use across different disciplines and practices. This situation is made worse by the absence of legal protection for LIKP.

⁸⁹ *ibid*

⁹⁰ *ibid*

⁹¹ Rohana Ulluwishewa, ‘Indigenous knowledge, national resource centres and sustainable development’ (1993) 1 *Indigenous Knowledge and Development Monitor* 11, 11–13; Stephen Tyler, *The said and the unsaid: mind, meaning, and culture* (Academic Press 1978)

⁹² Sillitoe (n 52) 236

⁹³ *ibid*

⁹⁴ Warren (n 8) 2-3

2.4.4 Absence of harmonised legal framework to protect LIKP

The absence of harmonised legal frameworks at the international level and in most nations to promote and protect LIKP also contributes to its poor recognition. Generally, LIKP is connected to various domains of law, including environmental law, agriculture and wildlife laws, and, recently, climate change laws.⁹⁵ Most of these international legal instruments discretely focus on specific knowledge areas, which are central to their mandates and do not promote or protect LIKP.⁹⁶ For example, the Nagoya Protocol to the Convention on Biological Diversity is concerned only with knowledge of non-human genetic resources.⁹⁷ On the other hand, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Convention for Safeguarding of Intangible Cultural Heritage emphasises inventorying LIKP to give it more visibility by state parties.⁹⁸ These international legal instruments seek to protect LIKP from misappropriation as well as promote its diffusion and use for the global public good related to specific issues such as fighting desertification, biodiversity loss, and conservation of gene pools. For example, the United Nations Convention to Combat Desertification (UNCCD) focuses on combating desertification while the Nagoya Protocol targets biodiversity conservation.⁹⁹ In this context, international environmental law sees LIKP as something that should flow into the public domain, be accessible, and not be subjected to copyright or other legal restrictions. This approach by the international environmental treaties is criticised because it takes away the full benefits and credits from local communities and indigenous people as

⁹⁵ Savaresi (n 92) 39 (Australia Human Rights Commission, Native Title Report 2018, p. 214)

⁹⁶ Savaresi (n 92) 37

⁹⁷ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (Nagoya 29 October 2010, in force 12 October 2014) 30619 UNTS 27, especially articles 7 and 12. See eg Aksoy (n 17); Mahinda Guneratne, 'Farmers, Indigenous and Local Communities and Traditional Knowledge', in *Genetic Resources, Equity and International Law* (Edward Elgar Publishing, Cheltenham, UK and Northampton, MA, USA 2012)

⁹⁸ Francesco Francioni, 'Cultural Heritage', in Max Planck Encyclopedia of Public International Law (2013).

⁹⁹ UNCCD, article 18(2)a; Traditional knowledge is widely understood to be a component of intangible cultural heritage. See eg. Human Rights Council, Promotion and Protection of the Rights of Indigenous Peoples with Respect to Their Cultural Heritage. Study by the Expert Mechanism on the Rights of Indigenous Peoples, A/HRC/30/53 (2015), Annex, 1.

inventors.¹⁰⁰ In some instances, LIKP has been patented and commercialised, benefitting national and multinational corporations at the expense of local communities who are originators of the knowledge systems.¹⁰¹ For example, some western pharmaceutical, agricultural, and present-day bioscience industries' success has been attributed to the appropriation, scaling-up, and commercialisation of LIKP that has been tried and proven useful by local communities.¹⁰² Scholars have described this phenomenon in various ways, including 'bio-colonisation,' '(re)colonisation',¹⁰³ and 'Biopiracy' ¹⁰⁴ aided by international and intellectual property laws (such as trademark, copyright or patent laws) that foster social control, exploitation, and appropriation of LIKP knowledge systems and resources by industrial and high-tech nations. However, international law has not remained silent on this.

In response to the above criticism, international biodiversity law contains rules on who can access LIKP and under what conditions and emphasises the need for adequate benefit flow to knowledge holders.¹⁰⁵ The patenting of communities' creative ways of knowing and doing, including their rights to free, prior, and informed consent (FPIC), are some of the ways it is legislated (in both international environmental and human rights law) to support positive forms of LIKP protection.¹⁰⁶ Such rights would enable communities at local, subnational, and national levels to authorise access, development, use, or redeployment of their LIKP by the

¹⁰⁰Lucas Lixinski, *Intangible Cultural Heritage in International Law* (Oxford University Press, Oxford 2013); Grand Council of the Crees (Eeyou Istchee) and others, 'Nagoya Protocol on Access and Benefit Sharing: Substantive and Procedural Injustices relating to Indigenous Peoples' Human Rights' available at: <https://www.cbd.int/abs/doc/protocol/icnp-1/joint-submission-grand-council-and-others-en.pdf> last visited 27 October 2019).

¹⁰¹ Whitt (n 74) 1-2

¹⁰² Whitt (n 74) 1-2, Al Gedick (n 63) 13, Horsthemke (n 19) 33

¹⁰³ Horsthemke (n 19) 33

¹⁰⁴ Shiva Vandana, *Biopiracy: The Plunder of Nature and Knowledge* (South End Press 1997)

¹⁰⁵ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (Nagoya 29 October 2010, in force 12 October 2014) 30619 UNTS 27, especially articles 7 and 12; also see the Pioneer global database and a multilateral benefits scheme developed by International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR), article 11.

¹⁰⁶ Ulia Gosart, 'A Path Forward: Respecting Free, Prior and Informed Consent' (Cultural Survival June 18, 2018) < <https://www.culturalsurvival.org/news/path-forward-respecting-free-prior-and-informed-consent> > accessed 1 April 2019, also see Independent Expert in the Field of Cultural Rights (n 58), 80.

owners or by third parties based on formal agreements for recognition and equitable benefit sharing. This is a position supported by international institutions, such as the UN Economic Commission for Africa (UNECA), which argues that:

[L]ocal communities have the right to ownership and control of their intellectual and cultural property pertaining to their knowledge of flora and fauna, technologies, sciences, seeds, medicines, creativity and forms of expression (oral traditions, designs, songs, art and performances).¹⁰⁷

The position expressed above is in line with discussions at the global level on the protection of LIKP by intellectual property law led by the WIPO.¹⁰⁸

From the preceding discussions, it was observed that international environmental law is yet to develop a consistent approach to preventing the misappropriation and misuse of LIKP or recognition of its holders holistically. Some of these legal instruments emphasise the need to involve communities and holders of LIKP but highlight the inherent challenges of respecting local people's rights and the power imbalances between local communities and those interested in using LIKP for different purposes, including climate adaptation. Conversely, these definitions have focused on explaining what the contents of LIKP are and less on addressing the important question of the role of LIKP in law-making and the constraints of its incorporation. This is equally examined in the next chapter of this thesis.

2.4.5 Over-romanticising of LIKP

Local indigenous knowledge and practices are sometimes overly revered as a panacea to natural resources and environmental issues. In addition, it is generally agreed amongst

¹⁰⁷ Ngulube (n 91) 97

¹⁰⁸ Peter Jaszi, 'Protecting traditional cultural expressions – some questions for lawmakers' (WIPO Magazine August 2017) <https://www.wipo.int/wipo_magazine/en/2017/04/article_0002.html> accessed 1 April 2019

many scholars that the objectives of the use of LIKP are grounded in sustainability.¹⁰⁹ However, like scientific knowledge, these scholars equally highlight that LIKP, too, has its drawbacks.¹¹⁰ It could sometimes be accepted uncritically, particularly with the growing emphasis on nature-based solutions that whatever local and indigenous people do is in harmony with nature. Thrupp sounds a note of caution regarding the idealistic and romanticised views of LIKP and traditional societies.¹¹¹ This is because all environmental degradation is not externally driven. Indigenous and local communities could also cause environmental crimes through their practices, including overgrazing, uncontrolled fires, overhunting, fishing, and the over-cultivation of land. Through their experiential learning and experimentation processes and other actions, indigenous and local communities could use wrong or harmful assumptions and inaccurate information, which could be a barrier to improving their wellbeing and the environment. For example, Ford and others assert that Inuit communities often deny researchers permission to work in specific northern regions if their findings could result in legal limitations to local resource use.¹¹² This could imply that Inuit communities were responsible for endangering polar bear populations by resisting hunting bans.¹¹³ Generally, this could occur when Indigenous and Local Communities (ILC) become over-acquainted with specific adaptation measures which are effective for securing livelihoods but are subjected to rapid changes. This raised questions about the assumption of sustainability in the objectives of LIKP across scholarship. Climate change solutions often entail rapid environmental changes that might go beyond the coping capacity of LIKP and, therefore,

¹⁰⁹ Fulvio Mazzocchi, 'A deeper meaning of sustainability: Insights from indigenous knowledge' (2020) 7(1), 77–93. *The Anthropocene Review* 77, Senanayake, S, 'Indigenous knowledge as a key to sustainable development' (2006) 2(10) *Journal of Agricultural Sciences*

¹¹⁰ *ibid*

¹¹¹ Lori Thrupp, 'Legitimizing local knowledge: from displacement to empowerment for Third World people' [1999] *Agriculture and Human Values* 13(6), 13-17

¹¹² Ford and Others, 'Representation of Indigenous peoples in climate change reporting' (2017) 145 *climatic Change* 57, 63

¹¹³ *ibid*

its use to address climate change broadly can be marginal. This could render the knowledge unsuitable or even dangerous when altered to suit the situation. While studies to establish such occurrences are scanty, it is worth highlighting this.

2.5 Links between LIKP and policy and law-making

Incorporating different sources of knowledge is relevant for decision, policy and law-making in diverse fields.¹¹⁴ Scientific knowledge and LIKP are prominent amongst these knowledge systems but are considered unequally, though this depends on the policy issue and the policy actors involved.¹¹⁵

Often, most decisions, policies, and laws are grounded in conventional scientific knowledge. The perspectives, observations, and adaptation strategies from indigenous groups and local communities, which have historically dealt with ecological changes, are only partially incorporated (if not generally disregarded). Since the 1980s, there has been a growing focus by researchers and institutions on how different knowledge systems, including LIKP, are drawn on in policy-making processes in different disciplines, as highlighted in the introductory section of this thesis. These authors and institutions have posited that the policy and decision-making process is traditionally a domain of government bureaucrats and managers trained in the scientific tradition and relying on scientific ways of knowing. The limited evidence of the incorporation of LIKP in policy and law-making has been associated with the challenges the knowledge system faces, as found in the section 2.4 above. These include: (i) the lack of a

¹¹⁴ Arun Agrawal, Dismantling the divide between indigenous and scientific knowledge [1995] *Development and Change* 26(3) 413-439, Stephen Ellis, Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making (2005) *Arctic* 58(1) 66-77, Purcell, T., and Onjoro, E.A. Indigenous knowledge, power and parity: Models of knowledge integration. In: Sillitoe, P., Bicker, A., and Pottier, J., eds. *Participating in development: Approaches to indigenous knowledge* (Routledge 2002) pp 162-188.

¹¹⁵ *ibid*

harmonised meaning, (ii) how they are developed and used, and (iii) how they are disseminated, and shared in forms accessible to policy-makers.

However, many other scholars and institutions emphasise the intricate link between LIKP and policy and law-making based on several factors.¹¹⁶ These factors are discussed below and include: (i) LIKP as a basis for generating grassroots evidence for developing responsive decisions and laws, (ii) international recognition of the nexus between LIKP and policy-making, (iii) LIKP being essential for co-production as a single knowledge system is inappropriate for developing policy solutions, and (iii) LIKP is often accepted by a large number of people and constitutes power and political capital and capacity to shape the policy and law-making process and outcomes.

2.5.1 Generating grassroots evidence

Local indigenous knowledge and practices is a basis for shared and collective decision-making, and a means of self-determination for ordinary citizens. Those who develop and use LIKP often can provide information on the political, social, economic, and environmental aspects of their context. This knowledge is captured in different forms, including tables of observations, works of art, photographs, local gazetteers, local dictionaries, maps, local weather station data, transcripts, and other linguistic materials.¹¹⁷ These identified local datasets are generated by local communities through monitoring the ecological dynamics of the region and detecting changes and impacts using LIKP. In some cases, these observations are done in collaboration

¹¹⁶ Agrawal (n 111) 420, Pam Colorado, Bridging native and western science [1988] *Convergence* 21, 49-60; Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 36

¹¹⁷ Roux and others, 'Small-scale fisheries in Canada's Arctic: combining science and fishers knowledge towards sustainable management' (2018) 101 *Mar. Policy*, 177, Mantyka-Pringle, and others, 'Bridging science and traditional knowledge to assess cumulative impacts of stressors on ecosystem health' (2017) 102 *Environ. Int.*, 125, Gearheard & others, 'The Igliniit project: inuit hunters document life on the trail to map and monitor arctic change' [2011] *Can. Geogr./Le Géographe canadien* 55 (1), 42-55.

with those who develop and use scientific knowledge. For example, scientific tools like GPS are used, and the analyses generated using these LIKP and scientific tools are used as evidence to inform the policy agenda and the final decisions on environmental changes at community levels. In line with this, Mistry and others find that although there is diversity amongst indigenous and local communities (ILC), the commonalities in the evidence they generate could help identify areas of intervention for a shared and collective narrative from the local level.¹¹⁸ Other researchers, including Radaelli, point out that the evidence held by ordinary citizens has been used as a countervailing force to the gaps in scientific and professional knowledge held by the wealthy elite class.¹¹⁹ Manrique and others also capture this in their work on using LIKP for decision-making on ecological and environmental changes, such as climate-related displacements and relocation of native communities and peoples in the Arctic region.¹²⁰ They found that local communities often have a better understanding of the local context, and engaging them in the policy-making process resulted in better decisions to mitigate the negative impacts of many environmental changes on people and ecosystems. These positions suggest that if well harnessed, the LIKP and evidence of its use in addressing issues at the local level could position ILC to be consulted, actively participate and shape local, national, and international policy-making processes.¹²¹ This also suggests that ordinary citizens could use their knowledge system to position themselves as equally powerful actors in policy and law-making processes.

¹¹⁸ Mistry and others, 'Assessing the state of traditional knowledge at national level' ([2021] *Global Environmental Change* 71, 1-10

¹¹⁹ Radaelli Claudio 'The role of knowledge in the policy process' [1995] *Journal of European Public Policy*, 2(2), 159 – 183

¹²⁰ Manrique and others, 'Climate-related displacements of coastal communities in the Arctic: Engaging traditional knowledge in adaptation strategies and policies' [2018] *Environmental Science and Policy*, 80, 90-101

¹²¹ Radaelli Claudio 'The role of knowledge in the policy process', [1995] *Journal of European Public Policy*, 2, 159 – 183; Barker, A. and Peters, G.B. (eds) *The Politics of Expert Advice. Creating, Using and Manipulating Scientific Knowledge for Public Policy*, Edinburgh: (Edinburgh University Press 1993)

2.5.2 LIKP as a source of power

Indigenous and Local Communities who develop and use their LIKP for decisions are aware that their knowledge defines their power and influence when they work with others. Thus, they and other advocates of LIKP draw on this power when they work with other partners and influence the decision and policy-making processes in significant ways. In the Arctic regions, the consultation of and creation of opportunities for the participation of communities and, more importantly, the incorporation of their LIKP, was a determinant for legitimate and accepted policies and laws. Nugroho and others refer to this as the power dimension of LIKP, which is expressed as a manifestation of an interest group's aspiration.¹²² In this case the power, is derived as a result of the number of people developing and using the knowledge system, and not purely as a result of the technical efficiency of the knowledge system in addressing social and ecological challenges.¹²³ Their work focuses on Indonesia, where LIKP has been used to convince decision-makers to make policies to establish an environmentally friendly city capable of adapting to global climate change.¹²⁴ In this case, ILC and advocates for LIKP relied on the political dimension of LIKP as a manifestation of an interest group's aspiration in the decision making process.¹²⁵ The politicians and bureaucrats became conscious of power from the strength of the numbers of ILCs and their potential influence on policy-making and political processes as result of their numbers and their use of the LIKP to address environmental challenges. Local civil society partners and networks therefore served as main advocates and allies to ILCs. Sometimes they served as proxies representing ILC's interest in policy-making spaces.

¹²² Nugroho and Others (eds), 'Using local knowledge in policy making', *Local Knowledge Matters: Power, Context and Policy Making in Indonesia* (Bristol 2018)

¹²³ *ibid*

¹²⁴ *ibid*

¹²⁵ *ibid*

Two factors contributed to Indonesia's civil society success in facilitating processes for ILCs to make inputs in the Indonesian policy-making process. First, their capacity to identify, produce, and disseminate the knowledge produced by the community. In this case, Ellis posits that institutional arrangements for incorporating LIKP are of little use if LIKP cannot be accessed and is not forthcoming.¹²⁶ Many organisations thus worked with LIKP to increase their capacity to bring LIKP to bear on governance policies and procedures. In the case of Aboriginal Communities of Canada's North-western Territories (NWT), this was enhanced through developing initiatives that increase aboriginal groups' means to participate in environmental decision-making.¹²⁷ These initiatives are typically implemented by providing funds to aboriginal groups to participate in environmental decision-making processes, such as public hearings and environmental assessments. The theory is that increasing the general capacity of indigenous and local community groups to participate in these processes will naturally promote LIKP. The second factor strives to build the indigenous and local community group's political capital to promote their LIKP, ensuring it is available for the purpose. Here, their political capacity is used to identify and explore opportunities in political structures to negotiate and advocate for incorporating their LIKP with other knowledge systems.

2.5.3 LIKP in the co-production of policy

From the preceding paragraph, it is evident that LIKP is a source of power for ILCs and their advocates. However, in the policy space, other knowledge systems and their holders hold significant power. Interactions between these knowledge systems are a characteristic of the

¹²⁶ Ellis (n111) 69

¹²⁷ Ford and others, *The Resilience of Indigenous Peoples to Environmental Change* (2020) 2(6): One Earth 532

policy and law-making process on climate change that requires multiple perspectives. Co-production, co-creation, and co-learning involving different knowledge systems and policy actors have been highlighted in different ways in the literature. Relying on a single knowledge system for policy and law-making is often characterised by significant uncertainties, discrepancies, and shortages.¹²⁸ Focusing on finding policy solutions by relying only on a single source of evidence generated at the community, national level or beyond could also be problematic. For example, focussed on biocultural conservation policies, Wheeler and Root-Bernstein assert that not all ILC cultural practices support biodiversity.¹²⁹ Likewise, not all science-driven conservation interventions have positive biodiversity outcomes or support ILCs. They emphasise that the salience, legitimacy, and credibility of scientific knowledge are probably most apparent to scientists, whilst the salience, legitimacy, and credibility of LIKP are likely most apparent to ILC. Like many other scholars, they conclude that processes bridging together these knowledge systems have value in generating legitimate and responsive policies and laws.¹³⁰ Furthermore, several bodies, such as UNESCO and the Arctic Council, have recommended promoting and incorporating the LIKP in environmental decision-making processes in general and in the Arctic Regions respectively.¹³¹ For example, UNESCO created the Local and Indigenous Knowledge System (LINKS) with the goal to explore the ways that indigenous and local knowledge systems contribute to understanding, mitigating and adapting to climate change, environmental degradation, and biodiversity loss.¹³² This is on the grounds

¹²⁸ Deranger and others (2021, p. 53)

¹²⁹ Helen Wheeler & Meredith Root-Bernstein, 'Informing decision-making with Indigenous and local knowledge and science' [2020] *Journal of Applied Ecology* 59 (7) 1634-1643

¹³⁰ Sheila Jasanoff, *States of Knowledge The co-production of science and social order* (Routledge London 2004), Arun Agrawal, 'Dismantling the divide between indigenous and scientific knowledge' [1995] *Development and Change* 26(3), 413-426, Armitage and others, 'Co-management and the co-production of knowledge: Learning to adapt in Canada's Arctic' [2011] 21(3) *Global Environmental Change* 99, Helen Wheeler & Meredith Root-Bernstein, 'Informing decision-making with Indigenous and local knowledge and science' (2020) 59 (7), *Journal of Applied Ecology* 1634

¹³¹ UNESCO, *Teaching and learning for a sustainable future* (2002). Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000125238_eng> accessed 12/11/2020

¹³² *Ibid*//

that communities are known for their effective stewardship and experience adapting to environmental changes. These bodies recognise the complementarity of science and traditional knowledge to generate new knowledge and inform decision-making and policy development.

These well-intentioned and comparatively progressive positions of UNESCO and the Arctic Council have not been fully backed by universal acceptance and demonstrable methodological approaches on how the incorporation of LIKP happens.¹³³ In other words, how co-production and incorporation of different knowledge systems happen in practice is an area of ongoing policy debate and exploration.¹³⁴ One example of where co-production leading to the generation of new “observation systems” has happened amongst the Inuit of Canada, who make up a majority of the population of the NWT of Canada and Aboriginal People of Australia who maintain close relationships with their traditional land.¹³⁵ Here, GPS technologies have been used to capture real time observations of local users in the course of their understanding and tackling of ecological changes. These data sets have been used by the Aboriginals communities and organisations and other partners and researchers to apply significant pressure upon government and industry. As a result, in their policies, federal and territorial government departments and industrial corporations with environmental interests have officially recognised the importance of traditional knowledge and its incorporation into NWT environmental decision-making and implementation processes.¹³⁶

¹³³ Peter Usher, ‘Traditional and ecological knowledge in assessment and management’ [2000] *Arctic* 53(2) 183-193, Paci & Others, ‘Reconsidering the Canadian Environmental Impact Assessment Act: A place for traditional environmental knowledge’ (2002) 22 *Environmental Impact Assessment Review* 111, 1113

¹³⁴ Frances Abele, ‘Traditional Knowledge in Practice’ [1997] *Archives* 50 (4) 289-298

¹³⁵ Gearheard and others, ‘The Igliniit project: Inuit hunters document life on the trail to map and monitor arctic change’ (2011) 55 (1), *Can. Geogr./Le Géographe canadien* 42, Kumpula, T., Forbes, B.C., Stammer, F., Meschyb, N., ‘Dynamics of a coupled system: multi-resolution remote sensing in assessing social-ecological responses during 25 years of gas field development in Arctic Russia [2012] *Remote Sens.* 4 (4), 1046 1078

¹³⁶ ICC (Inuit Circumpolar Conference), *Recommendations on integrating two ways of knowing: Traditional indigenous knowledge and scientific knowledge* (Seminar on the documentation and application of indigenous knowledge, 15-17 November 1996, Inuvik, NWT, Canada)

In terms of methodological approaches for incorporating LIKP into decision-making, Ellis illustrates these by using the case of Canada's NWT.¹³⁷ Here the governments, industrial corporations, and other organisations have tried many strategies to promote the meaningful consideration of traditional knowledge in environmental decision-making (related to land, water, and wildlife management). He concluded that two interdependent archetypal approaches are used to encourage the incorporation of LIKP in environmental policy-making together with scientific knowledge. First, through a “top-down” approach put in place by institutions of authority with the power to regulate and legislate. The institutional arrangements and governance procedures are often constructed to accommodate LIKP. However, these in themselves do not foster or seek LIKP. The second approach, referred to as the “bottom-up” approach, is characterised by initiatives designed to foster the learning and transmission of LIKP found at the community level. This approach increases the capacity of aboriginal people to bring traditional knowledge to bear on policies and procedures of governance and regulation. These two approaches are not mutually exclusive. In Canada’s NWT, the Indian and Northern Affairs Canada (INAC), the Government of NWT (GNWT), and the federal department with legislative and policy authority over Crown land and natural resources use both approaches by working with communities and their allies. Thus, they ensure that decisions are based on the best available scientific, traditional, and local knowledge in line with its sustainable principles.¹³⁸ This position equally resonates with calls at the international level on the inherent link between LIKP and scientific knowledge in policy-making.

2.5.4 International recognition of the nexus between LIKP and policy-making

¹³⁷ Stephen Ellis, *Meaningful Consideration?* (p 67)

¹³⁸ INAC (Indian And Northern Affairs Canada), *INAC's principles of sustainable development* (INAC 2003), www.ainc-inac.gc.ca/sd/princ_e.html accessed 18/01/2023

International recognition of indigenous and local communities and their LIKP enhances their role and position in policy and law-making. International law recognises the essential nature of ILC consultation, participation, and policy strategies supporting LIKP.¹³⁹ Indigenous and local communities seem to be conscious of the power provided to them by international regimes. For example, LIKP was recognised at the 1992 World Summit in Rio de Janeiro,¹⁴⁰ within the UNFCCC Anchorage Declaration¹⁴¹ and, recently, by the Article 7.5 of the 2015 Paris Agreement. In addition, many scholars and institutions have highlighted the importance of LIKP and communities that develop and use it in different fields.¹⁴² Some have demonstrated that decisions and policies made without the active participation of communities and consideration of their input become controversial and are often rejected during their implementation and vice versa.¹⁴³ However, the recognition by international bodies often seem a lot more speculative and aspirational. For example, Manrique and others assert that many recommendations made from international organisations and institutions on the incorporation of LIKP in policy are too general to accomplish any kind of concrete result or effective incorporation of LIKP into policy-making. They further state that well-meaning intentions and vague proposals lead to the illusion of progress.

Notwithstanding, some ILC and their supporters are aware of this recognition by international regimes and demand for their consultation, participation in, and incorporation of

¹³⁹ The Anchorage Declaration 2009, *Indigenous Peoples Summit on Global Summit on Climate Change* <http://www.indigenoussummit.com/servlet/content/declaration.html> accessed, 10/01/2023, Turnhout and others Conservation policy: Listen to the voices of experience (2012) 488 *Nature* 454, 459

¹⁴⁰ Assembly U.G Rio declaration on environment and development [1992] Agenda 21, 366-368

¹⁴¹ The Anchorage Declaration, 2009 (n 132)

¹⁴² Rachel Gregg, 'Relocating the Village of Kivalina, Alaska Due to Coastal Erosion: Case study on a project of the Kivalina Relocation Planning Committee, (Product of EcoAdapt's State of Adaptation Program 2010). CAKE: <http://www.cakex.org/case-studies/relocating-village-kivalina-alaska-due>, accessed 12/01/2023, Anu Mittal, *Alaska Native Villages: Limited Progress Has Been Made on Relocating Villages Threatened by Flooding and Erosion* (DIANE Publishing 2009).

¹⁴³ Deranger and others, 'Decolonizing Climate Research and Policy: making space to tell our own stories, in our own ways' (2022) 57(1) *Community Development Journal* 52, Peter Penz, Jay Drydk & Pablo Bose, *Displacement by Development: Ethics, Rights and Responsibilities* (CUP 2011)

their LIKP in decision and policy-making processes. For example, the ILC of the Arctic Regions demonstrate this consciousness in decision and policy-making to address ecological challenges.¹⁴⁴ Here, the indigenous representatives have suggested strategies that recognise the relevance of their LIKP systems and have pressed for their effective participation in formulating, implementing, and monitoring of policies they have co-developed.¹⁴⁵ Also, in Indonesia, the Sasi community has been managing fishing activity for decades using their ecological knowledge.¹⁴⁶ They have been instrumental in considering LIKP to develop policies resulting in a stable regulation system for different species in different coastal villages.¹⁴⁷

While these examples and some approaches for incorporation have been highlighted, they have only produced marginally beneficial effects. Demonstrable examples of how co-production using diverse knowledge systems happens and frameworks to guide this bearing in mind the different contexts are yet to be fully developed. As discussed under the section 2.4 on challenges faced by LIKP, barriers need to be overcome to enhance incorporation of LIKP in policy and law-making. These include: (i) communication barriers, arising from the different languages and styles of expression used by traditional knowledge holders, how to transform LIKP into data sets that can be communicated in legalistic forms for capturing in the policy, and law-making; (ii) conceptual barriers, stemming from the organisations' difficulties in comprehending the values, practices, and context underlying traditional knowledge; and (iii) political barriers, resulting from an unwillingness to acknowledge traditional-knowledge

¹⁴⁴ Manrique and others, 'Climate-related displacements of coastal communities in the Arctic: Engaging traditional knowledge in adaptation strategies and policies' [2018] *Environmental Science and Policy* 80, 90-100, McElwee and others, 'Working with Indigenous and local knowledge (ILK) in Large Scale Ecological Assessments: Reviewing the experience of the IPBES Global Assessment' (2020) *Journal of Applied Ecology*, 57(9) 1666-1676

¹⁴⁵ *ibid*

¹⁴⁶ Prayudi Utomo, 'The Role of Traditional Knowledge in Fisheries Management: A Study Case of Panglima Laot (sea Commander) in the Aceh Province of Indonesia' (Dissertation, World Maritime University, 2010)

¹⁴⁷ *ibid*

messages that may conflict with the agendas of government or industry. These barriers help maintain a power imbalance between the practitioners of science and ILC and their traditional knowledge.

2.6 Conclusion

The chapter provided an overview of the relevant literature from multidisciplinary fields that have examined the subject of LIKP. The literature suggests that even though LIKP has been treated in diverse fields, it still lacks a harmonised meaning in addition to how it is developed, used, maintained, and protected. Within the field of legal studies, the importance of LIKP is acknowledged by many international environmental law instruments although it is treated in a rather fragmentary and subject-specific way depending on its relevance in achieving an environmental or commercial objective. Again, with respect to international human rights law, the literature reveals that successful implementation of human rights obligations rests on incorporating LIKP and respecting the rights of local communities and indigenous people. Furthermore, the literature examined indicates that the Paris Agreement adopted in 2015 is the first international climate change agreement that openly acknowledges the importance of LIKP for responsive climate change adaptation law-making. This paved the way for a formal regulatory phase for the recognition and incorporation of LIKP in international policy discourse and actions on climate change. Notably, COP25 in Madrid dealt significantly with the concept of LIKP. At the Conference a joint event on integrating local and indigenous knowledge and scientific knowledge for in adaptation action was widely discussed. These events all boosted the Local Communities and Indigenous Peoples Platform in formed in COP23. Dedicated funding was equally put in place to ensure that Local Communities and Indigenous Peoples engaged more with UNFCCC processes and sharing the knowledge they use to understand and tackle climate change.

This consideration given to LIKP in climate decision-making opens up a new legal frontier in international and national law-making and practice. The importance of LIKP has been highlighted in many international environmental law and international human rights instruments, and responding to the increasing quests for more local, subnational, and national level adaptation legislative processes as demonstrated in the literature. However, LIKP has not been widely utilised in formal climate change adaptation legislative processes. In addition, it is yet to be fully examined in policy research and practice. Various reasons have been proposed for this omission, including the positivistic framing of the IPCC, perceptions of indigenous knowledge as being of lesser value and legitimacy than knowledge derived from dominant societies and cultures. In addition, some of the underlying belief systems and environmental ethics are at odds with capitalist economic systems. A further reason could be the accessibility of indigenous knowledge to scientists and policy-makers involved in generating sub national, national, and international policies and laws to address climate change.

In addition, numerous scholars and institutions have done substantial work to establish the role of LIKP for human and ecosystem well-being. These initiatives appear ad hoc and overly romanticise the knowledge system, with no proper or sustained inventory of these initiatives. Some scholarship posits that LIKP is different from scientific knowledge and suggest that it may be used to proffer solutions to many environmental problems if used in a reciprocal and complementary manner to scientific knowledge. However, the usefulness of LIKP must not be established through a scientific lens. Like scientific knowledge, developers of LIKP have their indigenous protocols through which they develop and establish the success of their knowledge systems. Understanding these indigenous protocols from the perspective of the holders of the knowledge system could generate solid theoretical grounding for it to be studied, understood, and applied widely including in policy and law-making. Despite the challenges LIKP faces, it

is equally a useful as a knowledge system compared to others. Significant scholarship demonstrates that there is a link between LIKP and policy and law-making to address policy issues particularly in environment and resource governance.

Unfortunately, there is a gap in the literature with respect to the incorporation of LIKP into an issue such as climate change, which is a comparatively new discipline in the field of policy and law-making. A few scholarly works and institutional reports that have examined the question of incorporation of LIKP in development processes point to the fact that the approaches have remained largely suggestive of what should be done and have not been examined within the framework of a specific case, as does this study.

CHAPTER 3: LAW AND POLICY-MAKING

3.1 Introduction

This chapter reviews the literature on law and policy-making, including the different perspectives and theories of law and policy-making in general and, specifically, in the emerging area of climate change policy and law-making. This is with the view to examine the opportunities and challenges they present for the incorporation of diverse policy actors' knowledge including LIKP of indigenous and local communities. The themes that emerge from the review is used to construct an informed analytical framework to guide the design and analysis of the data of this study. This chapter is divided into three sections. Section one reviews the literature on what constitutes law and policy-making. Section two reviews literature on the perspectives and approaches to law and policy-making, including rationalist, incrementalism, garbage can, pluralist, institutionalism, and elitist theory. The section equally examines institutional arrangements within the policy space and how they shape the actors' interactions, and knowledge in policy and law-making processes. Section three develops an analytical framework for this research which is informed by themes and concepts emerging from the review in this and the previous chapters.

3.2 What does law and policy-making mean?

There exist diverse views about what law and policy mean in legal studies, political science, and sociology. These varied views focus on drawing a relationship between law and society. The law is referred to as a 'discipline' and 'profession' at the centre of any well-functioning society.¹ It is viewed as the basis for the conduct of most social, political, and economic activities, the protection of rights and enforcing duties.² This common sense view is

¹ Raymond Wacks, *Law: A Very Short Introduction* (Oxford University Press 2008)

² *ibid*

similar to that of Wade and others, who refer to the law as an ideology – ‘manner of thinking, associated with a set of rules characteristic of a society, a class, or an individual’.³ It is equally referred to as a tool for justice, ensuring equality and fairness between individuals when equally enforced.⁴ On the other hand, Harrington and Carter highlight the authoritarian nature of law by mentioning the role of sanctioning of such ideas and opinions by an established authority that oversees the implementation of such laws.⁵ Law, in this context, is defined as ‘the mechanism that controls governmental power given to administrative branches that gives legitimacy and authority to state actions.’⁶ Harrington and Carter link their definition to four sets of laws that govern administrators’ behaviour, including constitutional, regulatory, common or statutory laws.⁷ Thus, depending on who is defining the law and the intended purpose, the views about what the law is are diverse. Wade and others aptly put this by stating that the understanding of the law in each society is based on the perception of the people and this could vary from one society to another.⁸ Thus, these divergent definitions of what the law means, is partly linked to the importance given to the law, how it is developed, and applied to address problems in a given context.

The law is considered an important tool to address disadvantages, inequalities, and injustice in less powerful segments of society. This importance corresponds to the wave of global democratisation that began in the latter part of the late 18th Century.⁹ This new type of government called for recognising and considering the values, voices, interests, and needs of diverse stakeholders and groups at all levels in decision making.¹⁰ This new wave puts to

³ Wade and others., *A Critical Introduction to Law* (first published 1995, Cavendish Publishing Limited 1998)

⁴ *Ibid*, 6

⁵ Christine Harrington. & Leif Carter, *Administrative law and politics: Cases and comments* (4th edn, CQ Press 2009) 217

⁶ *ibid*

⁷ *ibid*

⁸ Wade et al. (n 2)

⁹ Seva Gunitsky, ‘Democratic Waves in Historical Perspective’ [2018] *Perspectives on Politics*, 16, 634 - 651

¹⁰ Graham and others., ‘Local values and fairness in climate change adaptation: Insights from marginal rural Australian communities’ [2017] *World Development*, 108, 332-343

question the very notion of what the law is and how laws are made to address challenging policy issues faced by policy-makers. Some of these challenges include climate change, healthcare, energy, and natural resource management. A key purpose of the law here is to serve as tool to ensure that such policies or decisions and their implementation do not worsen inequalities, injustices and, thereby, increase vulnerability especially of the less powerful in the society. Thus, how the law is made, how it is understood by those it is meant to serve, especially the ordinary citizen, is crucial for it to serve its intended purpose.

However, the law is often presented as a body of rules that are divine and often not easily understood by ordinary citizens in the political and social world. Such perceptions depict the law as protected in ‘books of law’ and accessible only to an exclusive and privileged class.¹¹ This could partly have contributed to the long held mystery about the law, as having an authority and independent existence of its own.¹² Laws are seen in this context as more than simply person-made rules, and separate from the political and social world.¹³ Lowi refers to this as the mystification of the law, to make it sound too official, hierarchical, unilateral, authoritative and authoritarian, legislative ‘must do’ and ‘must not do’ instructions.¹⁴ While laws are depicted as large volumes of objective rules compiled in books, its legal enforcement occurs in the political and social world. The growth of the concept of public policy-making characterised by the expression of public opinion, which was vital for the democratisation process from the 19th Century, challenged the law as an elitist and mystified domain with more references made to public policy.¹⁵

¹¹ Theodore Lowi, ‘Law vs. Public Policy: A Critical Exploration’ (2003) 12 Cornell Journal of Law and Public Policy 493, 498

¹² Harrington and Carter (no 4)

¹³ *ibid* 4

¹⁴ Lowi (no 10) 497-498

¹⁵ Wade et al., (n 2) iv, Lowi (n 10) 494-495

Some attempts have been made to differentiate law from public policy, although they culminate in congruence. Amongst these attempts, is the position held by Lowi and Kiyong, who describe the relationship between law and public policy as a ‘hand in glove.’¹⁶ Similarly, Irma views the law as a subset of public policy, necessary to solve public problems, serve justice, support democratic institutions and processes, and encourage active and empathic citizenship’.¹⁷ By contrast, Wade and others draw a difference between law and policy by positing that policies may be resisted but obeying the law is assumed to be nearly obligatory.¹⁸

This lack of harmony in defining what the law or public policy means is made more complicated by defining who makes laws or public policies. Increasingly, the making of laws is no longer the prerogative of courts, the legislature, or the executive arm of governments.¹⁹ As governments get bigger or adopt federal, state, or decentralised systems of governance with power and authority devolved, increasingly more actors and institutions get involved in development of laws and public policies at these different levels.²⁰ For example, in representative democracies like Kenya and Britain, there are diverse sources, which could be formal or informal, from which laws emanate.²¹ The need for law could originate from individual citizens, special interest groups, political formulations, private sector, professional bodies, and civil society.²² In addition, the origin of the law or policy could be significantly influenced by the political or governance systems (dictatorships, communism, monarchy or republic) of a given context. Even in representative democracies there exist differences in how

¹⁶ Kiyong Kim, ‘The Relationship between the Law and Public Policy: Is it a Chi-Square or Normative Shape for the Policy Makers’ (2014) 3 *Social Sciences* 137, 141.

¹⁷ Irma Wallace, ‘Characteristics of Successful Public Policy’ (Infographic Journal, 9 September 2013) < <https://infographicjournal.com/characteristics-of-successful-public-policy>> accessed 03 March 2019

¹⁸ Wade et al (n 3)

¹⁹ Anthony Kreis and Robert Christensen, ‘Law and Public Policy’, (2013) 41 *The Policy Studies Journal* S38-S52

²⁰ *ibid*

²¹ Olufemi Popoola, ‘Actors in Decision Making and Policy Process’ [2016] GJISS 5; KLRC, A Guide to Law Making in Kenya (Kenya Law Reform Commission 2015) 7, <https://klrc.go.ke/images/images/downloads/klrc-a-guide-to-the-legislative-process-in-kenya.pdf> Accessed 20/05/2019, Michael Zander, *The Law-Making process* (6th Edition, Cambridge University Press 2004)

²² *ibid*

the law and policy are made. For example, in Kenya, the devolved system of governance poses an additional requirement for county level law and policy-making processes.²³ In this case, rather than draft bills produced as in other democracies, draft policies are developed in Kenya which are scrutinised by County Assemblies and local actors before being passed to the president, as in the case of a national policy such as climate change or to the Governor as in the case of County Government Law, for formal endorsement.²⁴ This scenario in Kenya depicts a combination of policy-making and law-making involving diverse stakeholders..

As noted in the preceding paragraph, the law and policy are recognised as important contributors to addressing disadvantages, inequalities, and injustice in society. However, the effectiveness of the laws and policies in responding to these needs depends on where knowledge, interests and ideas for the laws and policies come from, how they are made, and who makes them. The literature on law-making in general is scanty, and views on the origin of laws are diverse. For example, Zander posits that before 2004 even the United Kingdom, one of the oldest representative democracies in the world, had very little written about the processes of preparing legislation from civil service and government perspectives.²⁵ Some younger democracies have only until recently observed this and taken appropriate measures to bridge the gap. For example, Kenya's Attorney-General in 2015 stated that:

It cannot be overemphasised that lack of sufficient public information on the substantive and the procedural aspects of the legislative process coupled with capacity challenges that policy makers, drafters and legislators have had to surmount have greatly hampered the legislative process in the past.²⁶

Notwithstanding, there exists a significant amount of literature on policy-making. As a result, since law and policy seem to be in the same academic discipline, the concepts, themes, and

²³ Nicholas Cheeseman and others, 'Decentralisation in Kenya: the governance of governors' (20[7] JMAS 54(1) 1-35

²⁴ *ibid*

²⁵ Zander (n21) 3

²⁶ KLRC, *A Guide to Law Making in Kenya* (Kenya Law Reform Commission 2015) 7

theories on policy-making will be relevant in informing this investigation of how diverse knowledge, ideas, and interest, including those of agrarian communities, get incorporated or not in the law-making processes on climate change adaptation.

3.2.1 Approaches to policy and climate change law-making

There is currently no agreed upon definition for climate change laws and policies and unique approaches on how these are developed. However, scholars have tended to classify climate change laws in two categories as either ‘framework’ or ‘sectoral’ in nature.²⁷ Framework laws are defined as offering a unifying, comprehensive basis for climate change policy, addressing diverse areas or aspects of climate change adaptation or mitigation (or both) in an overarching and holistic manner.²⁸ Conversely, law and policy-making on climate change could follow a sectoral approach, which entails the grafting of climate related provisions in existing laws (for example, environmental, agriculture, tourism, transport, forest laws etc) to create an aggregate law and policy.²⁹ Despite this dichotomy, some scholars assert that neither approach is exclusive of each other and a state can adopt either a sectoral or framework approach or both.³⁰ On the other hand, others suggest that overarching framework laws and policies play a distinctive and foundational part in setting the agenda, creating institutional groundwork for the passage of subsequent legislation and regulation and thus effective climate

²⁷ Michael Mehling, ‘The Comparative Law of Climate Change: A Research Agenda’, [2015] *Comparative Environmental Law* 24, 341-359, Townshend, T. et al., ‘Legislating Climate Change on a National Level’ [2011] *Environment: Science and Policy for Sustainable Development* 53, 5-15

²⁸ Clare and Others, ‘The national and international drivers of Climate legislation’, in Averchenkova A, Fankhauser S, Nachmany M (eds.) *Trends in Climate Change Legislation*. (Edward Elgar 2017)
Nachmany and Others, *The 2015 Global Climate Legislation Study: A Review of Climate Change Legislation in 99 Countries Summary for Policy-makers*, <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/05/Global_climate_legislation_study_20151.pdf> Accessed 06 February 2020, Nachmany and Others, ‘*Global trends in climate change legislation and litigation: 2017 update*’ (Grantham Research Institute on Climate Change and the Environment, London, UK, 2017) <http://www.lse.ac.uk/GranthamInstitute/publication/global-trends-in-climate-change-legislation-and-litigation-2017-update/> accessed 6 February 2020

²⁹ Olivia Rumble, ‘Facilitating African Climate Change Adaptation Through Framework Laws’ (2019) 13 *Carbon and Climate Law Review* 237, Elizabeth Fisher, Eloise Scotford, Emily Barritt, ‘The Legally Disruptive Nature of Climate Change’ [2017] *Modern Law Review* 80 173-201

³⁰ *ibid*

governance.³¹ This seems to be the main advantage of framework laws over sectoral laws, which predominates climate change laws in Kenya, Mexico, and the United Kingdom and draft bills of South Africa, Uganda, and Nigeria.³²

This research acknowledges the existence of these two typologies with their merits and demerits, the focus will be on how overarching framework laws are developed. This fits the Kenyan climate change law and policy-making case, which is under consideration in this study.³³ The Kenyan policy and law-making process has been described as one that grew from civil society and the later involvement of the government that culminated into a national climate policy and a law.³⁴ However, Clare and others caution that although these existing laws and bills have similarities in their contents, studies on the processes involved in their development are still at an embryonic stage and thus need further qualitative and comparative research.³⁵

3.2.2 Theoretical perspectives on policy and law-making

There are diverse perspectives and approaches on how law and policy-making could be applicable to climate change.³⁶ These perspectives include, firstly, as a rational process of

³¹ Fankhauser and Others, 'The political economy of passing climate change legislation: Evidence from a survey' [2015] *Global Climate Change* 35 52-61, Clare (n 2) 25-28, Townshend and Others (n 3) 6, Knoepfel and others 2007 p24, Thomas Birkland, *An Introduction to Policy Processes, Theories, Concepts and Models of Public Policy Making* (4th Ed, Routledge 2015) 7-11, Christopher Knill & Jale Tosun, *Public Policy: A new Introduction* (Palgrave 2012) 6

³² Clare (n 27) 25-28

³³ Njoroge and Others, 'Climate change policy-making process in Kenya: deliberative inclusionary processes in play', (2017) 9 *International Journal of Climate Change Strategies and Management* 535, 535 & 537
The Climate Act 2016" s V (24)(2), 'National Climate change Response Strategy (2010.) 33
<https://cdkn.org/wp-content/uploads/2012/04/National-Climate-Change-Response-Strategy_April-2010.pdf >
accessed 18 October 2018.

198 & 203, NCCRS 2010

³⁴ *ibid*

³⁵ *ibid*

³⁶ Luigi Curini & Francesco Zucchini, 'Testing the Law-Making Theories in a Parliamentary Democracy: A Roll Call Analysis of the Italian Chamber of Deputies (1988–2008)' [2010] *Reform Processes and Policy Change* 16: 189-211, Thomas Birkland, *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making* (Routledge 2015, 4th Edition)

decision-making which goes through a stepwise or incremental stage. Second, the ‘garbage can’ model, which entails diverse actors setting policy agendas as the basis for policy outcomes. Third, pluralism, with diverse actors, their networks, and institutions directly involved in making the policies and laws. Fourthly, the elite theory perspective, entails more influential and powerful policy actor groups that views and positions itself as the main actor of policy and law-making. Lastly, the institutionalism perspective wherein policy and law-making involves an interaction of institutions, organisations, and networks of individual and interest groups that exist within and beyond the policy-making space in a given jurisdiction. These different perspectives, examined in the following section, often work in combination and can shape the process of policy and law-making and the knowledge that gets incorporated in the final policies and laws.

The rationalist approach holds that policy processes are stepwise or follow a logical sequence of linear rational steps. This perspective depicts policy-making as a cycle made up of a series of activities phased into: intelligence gathering and agenda setting, identification and support of selected alternatives, imposition of binding decisions, prescription of policy enforcement, invocation, abrogation and evaluation of policies against initial objectives and intentions leading to policy change or termination.³⁷ In this incremental process, it is argued that decisions are made in comparatively small increments as opposed to big leaps.³⁸ Policy makers in this approach apply rationality by simplifying the choices available within the limitations of resources such as time and information.³⁹ Incrementalism is a stepwise process similar to the rationalist approach, wherein solutions to the identified policy problem that are easy to access are identified and used as opposed to looking at a comprehensive set of goals

³⁷ Knill and Tosun (n 30) 7

³⁸ Charles Lindblom, ‘The Science of ‘muddling Through’ [1979] *Public Administration Review* 19(2) 79-83

³⁹ Knill and Tosun (n 30), Abdul Rasheed and Nandini Rajagopalan, ‘Incremental Models of Policy Formulation and Non-incremental Changes: Critical Review and Synthesis’ [2005] *British Journal of Management* 6 289-295

and alternative policies.⁴⁰ Incrementalism seems to suggest that because of inadequate or lack of resources and ability to arrive at optimal policy solutions, decision-makers seek to satisfy or act as satisfiers rather than finding the maximum policy options.⁴¹

There have been criticisms of the rational perspective to policy and law-making. These critics see these stepwise and rational approaches that often rely on numerical precision and objectivity as highly appealing to elites, policy-makers and legislators.⁴² The reliance on universal truth, objectivity, and rationality is suggested to be part of the reason for the absence of inclusive law and policy outcomes where the inputs of other interest groups and individuals are limited.⁴³ These scholars suggest that despite the availability and use of largely confirmed and technical solutions, processes that focus on human behaviour, collective and/or individual decision-making could support more responsive policy-making.⁴⁴

Converse to the rational and incrementalism models, which all seem to be linear and stepwise processes, is the third perspective referred to as ‘garbage can’ model, which provides an alternative way of explaining policy-making.⁴⁵ In this model, it is argued that decisions are made from a comparatively isolated stream of events including problems, solutions, and interests of participants.⁴⁶ This results in a policy-making scenario referred to as a ‘garbage can’ of organisational choices. In this model, problems, solutions, and people float about, with problems seeking solutions and vice versa. Thus, as opposed to stepwise problem to solution (often unique solution) approach, this approach involves a multitude of solutions proposed or identified by actors. Sometimes the actors experiencing the problem and involved in the finding

⁴⁰ *ibid*

⁴¹ Michael Hayes, *The Limits of Policy Change: Incrementalism, Worldview, and the Rule of Law* (Washington, DC: Georgetown University Press 2001) 19, Jan Eric, *The public sector: concepts, models and approaches* (Sage 2000)

⁴² *Ibid*, Howlett and others, *Studying Public Policy: Policy Cycles & Policy Subsystems* (New York, Oxford

⁴³ *ibid*

⁴⁴ *Ibd*

⁴⁵ Cohen and Others, ‘A Garbage Can Model for Organisational Choice’ [1972] *Administrative Science Quarterly* 17, 1-18

⁴⁶ *ibid*

of solutions are different from those analysing the policy problem.⁴⁷ This perspective can promote plurality and competition of issues and interests to gain priority on the policy agenda.

Agenda setting is critical to policy and law-making processes. This is because it determines what gets prioritised in the outcome and, therefore, its acceptance or rejection by policy actors. Birkland asserts that agenda setting is important because ‘the definition of alternative issues, problems and solutions is crucial, in establishing which knowledge, interest, issues, problems and solutions will gain attention of the public and decision makers’ and which will not.⁴⁸ This, in turn, is shaped by power as interest groups have to be able to push their issue on the agenda. Thus, it is often a fierce and competitive process as first, participating actors endeavour to make sure that their knowledge, interest, and issues occupy a priority position in relation to those of others that must share limited space on the agenda.⁴⁹ Secondly, actors strive to ensure that once their knowledge, interests, ideas, and issues gain a prominent position on the agenda, it remains at the forefront and ultimately considered as a preference to solving the policy problem. This often happens amidst other groups fighting to keep issues off the agenda.⁵⁰ Such organised group action with an interplay of diverse knowledge and interests supports the pluralism perspective in policy-making, which is the fifth perspective.⁵¹

The pluralism perspective aligns with the democratic and participatory systems that promote an ‘Agenda Universe’ containing all ideas that could possibly be brought up and discussed in a society or a policy space.⁵² Surowiedci supports the notion of pluralism of ideas on the basis that it ‘entails a consensual approach framed through a process of orderly discourse

⁴⁷ *ibid*

⁴⁸ Birkland (n 30) 199

⁴⁹ *Ibid*, 200

⁵⁰ Roger Cobb and Ross Howard, *Cultural Strategies of Denial: Avoidance, Attack, and Redefinition* (University Press Kansas 1997)

⁵¹ *Ibid* 201

⁵² *Ibid* 202

between free and equal citizens including marginalised groups to distil a multitude of contending perceptions and interests into a uniform narrative'.⁵³

The elitist theory perspective, on the other hand, differs from the other perspectives except the rationalist perspective. It suggests that comparatively few people in key positions amongst different stakeholder groups (NGOs, community, industry, academia, media, government etc) can significantly control the process of law-making.⁵⁴ This is often because of their ability to access and control state political and economic resources including knowledge. The elite theory is crucial in law-making as it emphasises the influential roles of dominant groups or interests in the policy-making process, which may limit the incorporation of knowledge and interests of less powerful policy actors and groups in such processes. Thus, introducing new policy interests in a context dominated by powerful and influential elite could be challenging, especially when they go against the interests of the elite and dominant group. The existence of elite and dominant groups in the law and policy-making processes highlights the need for an analysis of power distribution, level of influence, and interaction amongst actors, access and control of resources including knowledge and finances in such processes.⁵⁵

Thus, it seems that the participation of diverse interest groups could contribute to address the challenge mentioned above. In instances where the elite group might have greater power and influence to impose its agenda in law and policy-making, other interest groups might counteract this by proposing alternative agendas. Thus, the resulting policy is seen as an output of competing interest groups and often dominated by influential interest groups rather than as an output of powerful elite interests.⁵⁶ More so, the pluralist view above suggests that instead

⁵³ James Surowiecki, *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations* (Doubleday, New York 2004)

⁵⁴ Michael Kraft & Scott Furlong *Public Policy: Politics, Analysis, and Alternatives* (SAGE 2012), Michael Hill & Frederic Verone, *The Public Policy Process* (7th Ed, Routledge 2017)

⁵⁵ Michael Kraft & Scott Furlong *Public Policy: Politics, Analysis, and Alternatives* (SAGE 2012)

⁵⁶ May-May Meijer & Jan Kleinnijenhuis, 'Issue news and corporate reputation: Applying the theories of agenda setting and issue ownership in the field of business communication' [2006] *Journal of Communication* 56, 543-559, Peter John, *Analyzing public policy* (Routledge 2013)

of letting the elite group control the process in its entirety, the involvement of more groups might give more room for competition of knowledge, interests, and views. Although this might enhance the plurality of ideas, issues, and interests that get on the agenda and possibly inform the final law and policy, there could be huge resources and time required for such processes to be legitimate and acceptable.

Lastly, the institutionalism perspective on policy-making focuses on formal and established arrangements of institutions, organisations and networks that exist within and beyond the policy-making space or context.⁵⁷ Scholars have recognised the importance of ‘institutional and political spaces’ in climate policy at sub-national, national, and international levels in developing laws and policies.⁵⁸ However, there is limited analysis of for whom, why, when, and how they matter in specific settings. Lockwood notes that such analysis of institutions, organisations, and networks will be meaningful if done in relation to a given institutional and political context (including pre-existing political and institutional, and decision making processes).⁵⁹ Such an analysis occurs at different governance levels and these are shaped by a number of factors including: the political system and regime in place, the level and type of decentralisation, the authority and power differences, nature of coalitions, collection of discourses, and narratives on the issue in the context.⁶⁰ Some scholars have situated the institutionalism approach in analysing law and policy-making specifically on

⁵⁷ Charles Cochran & Eloise Malone, *Public Policy: Perspectives and Choices* (Boulder, Colo., Lynne Rienner 2005)

⁵⁸ Naess and Others, ‘Climate Policy Meets National Development Contexts: Insights from Kenya and Mozambique’ (2015) 35 *Journal of Global Environmental Change* 534, 535; Aditya Bahadur & Thomas Tanner, ‘Policy climates and climate policies: Analysing the politics of building urban climate change resilience’ (2014) 7 *Urban Climate* 20, David Dodman & Diana Mitlin, ‘The national and local politics of climate change adaptation in Zimbabwe [2015] *Climate and Development* 223-233, Matthew Lockwood, ‘Climate-Adaptation Policy in Sub-Saharan Africa Learn from Research on Governance and Politics?’ [2013] *Development Policy Review* 1, 647-662

⁵⁹ Lockwood (n 34), Naes and Others (n 34) 535-536

⁶⁰ Di Gregorio and Others, ‘Multi-level Governance and Power in Climate Policy Networks’ [(2019) *Global Climate Change* 54, 64-75

climate change into apolitical economy of climate change.⁶¹ Within this lens, they define it as ‘the process through which ideas, power, resources are conceptualised, negotiated and implemented by different groups at different scales (in and outside of where law-making is taking place)’.⁶² These positions are seemingly viewed from a pluralism perspective as they suggest the importance of institutional, organisational, and network factors within and beyond the policy space and how they shape the policy and law-making process.

The reason why the above-mentioned perspectives are important in relation to analysing the opportunities and limitations of incorporation of diverse knowledge, ideas, and interests is because they give different views on how law and policy-making occurs. These reviews could facilitate the identification of themes, concepts, and factors that may or may not enhance the incorporation of diverse views and interests in law and policy-making on climate change adaptation. For example, rationalism sees policy-making as a simplified process as opposed to a complex situation as it obtains in reality where policy issues are often diverse and isolated. In this perspective, law and policy-making is explained as a problem-solving process that is a step-by-step process involving objective-oriented policy makers capable of providing optimal solutions to policy problems.⁶³ Such a simplification has significant impacts on how policy-making occurs and thus the outcome. Objective-oriented actors often tend to put their objectives and interests as a priority. Thus, any objectives that go contrary to theirs are often opposed and unlikely to get onto the agenda and, therefore, the final policy or law. Generally, the rationalist perspective could pose as a barrier to the incorporation of diverse views and interests in the policy-making process.

⁶¹ Thomas Tanner & Jeremy Allouche, ‘Towards a New Political Economy of Climate Change and Development’ [2011] IDS Bulletin Volume 421-14, <https://bulletin.ids.ac.uk/index.php/idsbo/article/view/406>. Accessed 18/10/2019

⁶² *ibid*

⁶³ Knill and Tosun (n 30) 7

Along the same line, from the elite theory perspective, introducing new issues and interests in a policy process might be difficult especially when they go against those of elites in the policy space. Where powerful and domineering elites exist, there may be little room for the incorporation of knowledge, ideas, and issues from less domineering actors. However, in instances where less powerful groups hold knowledge that is important for law and policy-making, such as LIKP, for climate change adaptation law-making, it is yet to be determined whether such actors and groups exert their power and influence on such processes by virtue of the knowledge system as power and source of power.⁶⁴

The garbage can perspective, on the other hand, is different from the rational, incrementalism, and elite theory perspectives in that it emphasises that policy-making processes are not stepwise or follow a particular order. Rather, it suggests that problems, solutions, and policy actors are not connected, and it also depicts policy-making as not having identifiable or orderly stages. Karangiannis and Radaelli support this demarcation of the garbage can perspective from the others by stating that, in the real world, the stages of policy-making may not be as neatly ordered as the rational or incrementalism perspectives depict.⁶⁵

The garbage can perspective seems to align with the pluralism and the intuitionism perspectives, which suggests participation of diverse actors, interest groups, and organisations in policy-making. In this, case outcomes are endorsed through competitive processes often involving unequal interest groups. Interest groups in the policy-making process always seek to promote their agenda amidst dealing with acceptance or rejection from other interest groups. The resulting policy could be an output of competing interests of diverse groups rather than that of powerful elites and rational policy-makers. Dhal's work on 'organisational pluralism',

⁶⁴ Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 32 & 36, Evert Maijers & Dominic Stead, *Policy Integration: what does it mean and how can it be achieved? A multidisciplinary review* (Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies-Interlinkages and Policy Integration 2004)

⁶⁵ Yannis Karangiannis & Claudio Radaelli, *Policy-making* (OUP 2007) 8-10

in some way, supports the link between the garbage can, pluralism, and institutionalism perspectives.⁶⁶ He points out four interdependent factors to explain the organisational pluralism within a political system or a country including: the amount of conflictive pluralism (conflicts amongst a given collection of people shaped by their knowledge, interests and views); the socio-economic order; the nature of the political regime and power relationships; and the concrete structure of the political institutions (centralised, decentralised and democracy nature).⁶⁷ These perspectives suggest that instead of letting the elite group or political class control the process in its entirety, the involvement of more groups might give more room for competition of interests and views. As a result, the chance for more actors to promote their agenda and engage in the process of finding solutions to identified problems is enhanced. However, the participation of many actors, interest groups and the nature of the political and organisations arrangements in a policy-making environment might have advantages and disadvantages for incorporation of diverse views and interests. Deciding on thresholds (how much, what kinds, the trade-offs between the different individuals and groups knowledge, interests, and issues in the law-making process acceptable or unacceptable) is still a challenge.⁶⁸

From the discussion above on law and policy-making perspectives, it is observed that the different perspectives might suggest both merits and demerits if used to examine how the law and policy-making on climate change occurs and if such processes enhance the incorporation, or not, of different knowledge, interests, and issues. Four recurrent themes emerge from the review including: diversity in knowledge, interests and issues, power relationships and participation of actors, and nature of the policy environment, which are discussed in the next sections.

⁶⁶ Robert Dahl, 'Pluralism Revisited' (1978) 10 *Comparative Politics*, 191, 192

⁶⁷ *Ibid*

⁶⁸ *Ibid* 203

3.3 Influence of actors, knowledge, interest in policy and law-making

From the previous section, law and policy-making are processes often characterised by different actors who have diverse knowledge which shapes their interests. Each policy actor has their vested interest, which is shaped by the power and influence they exert on the process. This power and influence are mediated by the resources, including knowledge, they have access to and control of. These actors are not only elected officials (legislative and executive) and state agents with statutory powers. Non-state actors include civil society organisations, private sector, public, economic interest groups, think tanks, and the public at large. Each of these actors or groups, therefore, is keen to have their interests and issues become part of the agenda and inform the outcome of law and policy-making.⁶⁹ Thus, the law and policy-making process is often made up of these policy issues and interests that crowd the policy space. The crowding of the policy space with diverse interests and issues could generate, in some instances, competition amongst the policy actors to see which becomes a priority in the policy outcome. In such an instance, policy actors engage in negotiations, and sometimes compromises, resulting in positions that could satisfy most actors. While actors and groups might have competing interests, it does not preclude the fact that some might have complementing interests and issues. However, whether the actors with diverse interests and issues compete or complement each other, the aim is to get a policy solution that addresses a given policy issue.

The level of knowledge of policy actors on the policy issue shape their interests and how they articulate them in the policy-making space. This is in addition to how they apply pressure to the process for consideration of their knowledge and interests as priority on the policy agenda, and potentially the policy outcome, amidst competing knowledge and interests. How the stories about the policy issues and interests are narrated differs for each policy actor. The policy actors either as individuals, different pressure groups, and institutions constitute

⁶⁹ Birkland (n 30) 155

sources of narratives and often have different levels of knowledge, understanding, experiences and associate differently to the policy problem. This could include technocrats detached from the policy problem and those experiencing the problem at the grassroots level. Wolmer and others highlight the importance of knowledge held by policy actors as key to supporting their narratives and whether that gets prioritised during the agenda setting process.⁷⁰ However, they equally point out that, in some instances, alternative narratives could emerge where there is a weakness in the articulation of the dominant narratives. When this occurs, policy actors often identify spaces to network, form coalitions or identify key actors who could be enrolled into an alternative network that develops a winning narrative. Therefore, as opposed to the linear rational, incrementalism and elite theory approach to policy-making, the policy space is characterised by competing knowledge and interests. This aligns with the garbage can, pluralism, and intuitionism perspectives on law and policy-making.

From the above, climate change, which is a cross-cutting policy issue, often engenders strong views with powerful vested interests. This is because it touches on many other policy areas such as agriculture, energy, deforestation, transport, infrastructure, etc.⁷¹ Therefore, getting a harmonised law on climate change entails framing the problem and navigating through these diverse and competing interest groups aligned to these sectors. Often, government as a policy-maker in such instances is responsible for protecting national interests, while at the same time ensuring that there is domestic ownership of law and policy outcomes.⁷² Sen, in support of this position, asserts that unlike the traditional top-down approach of communication used by government to make policies and laws, some governments are changing towards a pluralistic approach with greater involvement of diverse citizens in such

⁷⁰ Wolmer and others, *Understanding policy processes - A review of IDS research on the environment*, (Brighton, Knowledge, Technology and Society Team (KNOTS), Institute of Development Studies, Brighton 2006), 14

⁷¹ Janelle Knox-Hayes, 'Negotiating climate legislation: Policy path dependence and coalition stabilization' [2012] *Regulation & Governance* 6 (4) 545-560

⁷² Birkland (n 31) 199

processes.⁷³ These citizens' contribution to the law and policy-making processes are shaped by diverse interests, which are often linked to their daily lives such as social, economic, livelihood and welfare status, amongst others.⁷⁴ In this case, governments become pluralistic, more open and responsive to political, economic and social interests and priorities of groups to inform the policy agenda and potentially the policy outcomes. However, how opportunities for marginalised and underrepresented groups are created to enable them to incorporate their knowledge, interests and issues are not explicit.

3.3.1 Policy actor involvement and participation

As highlighted in the previous section, there are different policy actors that have diverse knowledge and interests who interact with each other in different ways in the policy and law-making process. The participation or involvement of these actors is important to enable the individuals, interest or pressure groups to identify their different objectives, problems, solutions and who prioritises these relative to other stakeholders.⁷⁵ Participation or involvement of stakeholders requesting that their interests be considered in policy-making can enhance the development of more realistic and effective policies and laws. One reason for this is that the information from and experience of stakeholders are increasingly being brought on board. In addition, it builds political support and minimises opposition to policy proposals as the actors' knowledge, interests, and issues are incorporated.

The description above is a rather simplistic view of what participation is. The reason and interests behind the involvement or participation of actors in policy and law-making

⁷³ Sen Sevaly, 'Involving stakeholders in aquaculture policy-making, planning and management in R.P. Subasinghe, and Others, eds. *Aquaculture in the Third Millennium. Technical Proceedings of the Conference on Aquaculture in the Third Millennium, Bangkok, Thailand, 20-25 February 2000* (Rome 2001) pp.83-93.

⁷⁴ *ibid*

⁷⁵ *ibid* 84

processes differ. Most often, the assumption is that the participation of diverse actors with different, unequal views and capacities in law and policy-making processes would result in a representative position of most of the actors, which then goes on to inform the final outcome of such processes. The World Bank aptly includes this in the 2017 World Development Report by positing that the participation of diverse actors in law-making is geared towards coordinated efforts to achieve socially desirable goals for the common good.⁷⁶ However, there are contrary views to this rather simplistic and straightforward perspective on participation.

Some scholars have acknowledged the popularity of the term ‘participation’ but assert that it remains an elusive one with different meanings.⁷⁷ For example, some actors understand participation as a means to gain sufficiency and autonomy as opposed to contributing to a collective effort towards the common good.⁷⁸ Although this aligns with the pluralist perspective on policy and law-making where diverse actors have different views and interests in such processes, Dahl draws a distinction by introducing the notion of ‘conflictive pluralism’.⁷⁹ In such a scenario where the intentions of stakeholders are diverse, for acceptable policy outcomes to be achieved depends on stakeholders’ willingness to compromise their desired outcome (policy favourable to them), form a ‘winning coalition’ or push for a win-win scenario where all actors are happy with the policy outcome.⁸⁰ However, how genuine participation happens in practice, especially for processes aimed at developing overarching national laws and policies, is unclear.

⁷⁶ World Bank, *World Development Report 2017: Governance and the Law* (World Bank, 2017). <<https://www.worldbank.org/en/publication/wdr2017>> accessed 05 January 2019

⁷⁷ Andrea Cornwall, ‘Unpacking ‘Participation’: models, meanings and practices’ (2008) 43(3), *Community Development Journal* 269-283, Claire Mercer, ‘The discourse of Maendeleo and the politics of women’s participation on Mount Kilimanjaro’ [2002] *Development and Change* 33 (1) 101-115

⁷⁸ *ibid*

⁷⁹ Dahl, (n 66) 192

⁸⁰ Vel and others, ‘Law-making as a strategy change: Indonesia’s New Village Law [2017] *Asian Journal of Law and Society*, 4 (2) 447-465, Veerman, Gert-Jan, & Simone Hendriks-de Lange, *About Legislation: Principles, Paradoxes and Practical Reflections* (SDU publishers 2009)

Mercer provides a three-step approach for ensuring the participation or involvement of diverse actors with different views and interests led by states.⁸¹ This is classified into instructive, consultative, or cooperative. In the instructive approach, the government makes all the policy decisions but puts in place a mechanism for information exchange with stakeholders. On the other hand, it can be through consultations where the government is the decision-maker but actors have a degree of influence on the process and outcomes. Lastly, the participation of actors could be seen as a cooperative process where actors act as partners with governments in the policy-making process. While none of these are mutually exclusive, the use of this three-step approach by states has some weaknesses and strengths.

One potential weakness of such a state-led approach to law and policy-making is that it appears top-down and makes participation more symbolic. This is opposed to getting diverse actors shaping the processes, participating, and incorporating their interests and views at all stages of the process. In addition, the processes described above seem to support the linear, incrementalism, and elite theory perspective on law and policy-making. This is because it is based on the premise that the law and policy-making processes are resource intensive, time consuming and thus favours bureaucracies with few interests selected, consulted or cooperated with. Zander seems to support this linear-rational and state-led approach by stating that engaging in genuine consultations could take up to a third of the total time required to draft and approve a law and, therefore, suggests other shortened forms of consultations and cooperation.⁸² However, other shortened forms of consultations run the risk of not yielding the desired results or have jeopardised the credibility of such processes. For example, the use of surveys, polls, and papers targeting a selected audience would be less resource dependent, but ‘...breeds bureaucracy’ and provokes negative reaction of those excluded.⁸³ This is because

⁸¹ Mercer (n 76) 89

⁸² Zander (n 14) 473

⁸³ *ibid*

those consulted are often made up of a select group, committee members, elites, those in executive positions in participating institutions with the capacity, resources, and infrastructure support to respond to this. Often the views they generate may not mirror those of the wider public.⁸⁴

Lastly, this approach to participation of stakeholders in law and policy-making also puts into question the legitimacy (extent to which principles and rules around such processes are consistent and respect existing values and norms) of such processes. Putting in place procedures for the participation of actors might not achieve the desired objective and, if they do, there may be no guarantee that the contribution of actors will be meaningful or of value. The success of this will depend on whether there are legitimate processes for stakeholders to organise themselves to participate (organisational legitimacy) and if the law and policy-making processes themselves are legitimate (process legitimacy).

Organisational legitimacy is a crucial element for stakeholder involvement and participation in policy-making. It defines the ability of stakeholders to organise themselves and have a specific policy position. The strength in numbers resulting from stakeholders organising themselves into specific groups that push for specific interests and issues could be an important step towards resisting opposition from other stakeholder groups, including government bureaucrats. The success of stakeholders to have all or most of their views taken on board in law and policy-making can depend on the size of the organisation. However, when organisations become larger, the democratic process of collating and finding a consensus in different issues and views through a higher or representative body within the organisation becomes challenging.⁸⁵ In this instance, members can become focussed towards getting their

⁸⁴ Cretney Stephen, 'The Politics of Law Reform' (1985) 48 *Modern Law Review*, 493, 505

⁸⁵ Svein Jentoft and Bonnie McCay 'User participation in fisheries management: lessons drawn from international experience' [1995] *Mar. Policy* 19(3) 227-238

personal issues and interests to the front rather than a collective one.⁸⁶ In addition, issues and interests presented by a proxy designated might not be representative of the wider group.⁸⁷ This could be different for smaller organisations where members consider that their issues and interests are represented in the dialogue process, which is necessary to reach the position held by the group.⁸⁸

On the other hand, legitimacy of the law and policy-making process is also a key determinant to whether stakeholders participate, and their views and interests are incorporated into the final policies and laws. There are several factors that could enhance legitimacy of the process. Some of these include clarifying policy-making objectives by making them less complex and achievable and establishing the rules at the start of the process. This, in turn, depends on how these procedures are respected, including involving stakeholders throughout the policy-making process and at the appropriate levels. The ‘appropriateness’ of the level at which stakeholders should be involved in policy-making has not been clearly defined. However, Sen suggests that decisions that affect stakeholders’ lives should be taken at the lowest possible social organisations (community level) and acknowledges that some tasks of policy-making can occur at council, regional, or national levels.⁸⁹

Such steps identified in the preceding paragraph might contribute to addressing several challenges with stakeholder involvement and participation in the policy-making process. First it could help enhance stakeholder trust in the process as they not only see their participation as symbolic but are confident that their participation is meaningful and their interests and views will be taken into consideration.⁹⁰ Secondly, it helps to clarify the objectives and involvement of stakeholders early on and in all stages of the process. This might enhance the understanding

⁸⁶ Deirdre Ahern and Karen Maher, ‘The Continuing Evolution of Proxy Representation’ [2011] *The Journal of Business Law* Issue 1, 125-135

⁸⁷ *ibid*

⁸⁸ *ibid*

⁸⁹ Sen (n 73) 91

⁹⁰ *ibid* 89

of the objectives and build their confidence to actively participate and contribute to such processes.⁹¹ However, participation of stakeholders at all levels of policy-making may be a challenge where stakeholders are not organised, they are highly diverse, or they are resource-limited (including capacity and knowledge). In such instances, policy actors could be tempted to use the incrementalism approach to policy-making, highlighted in Section 3.2.2, which seems to suggest that, because of inadequate or lack of resources policy-makers resort to easy policy solutions and actions

However, alternative arrangements to aid stakeholder participation do exist. This may be through involvement or participation of stakeholders by ‘proxy’ organisations such as federations, NGOs, and community-based organisations capable of fairly representing the issues and interests of diverse stakeholders. This alternative also has its shortcomings, including weakening stakeholder involvement, being less representative, or high consultation costs to get harmonised viewpoints. These levels of stakeholder participation and involvement seem to be linked to how enabling the legal and institutional environment is where policy-making occurs, discussed later in this chapter. In addition, when resource gaps are covered by funding from other sources, including economic interest groups, these other sources may exert significant power, influence, and control over such processes. The more powerful actors, in such cases, could end up driving the process to the detriment of genuine participation of diverse actors and incorporation of diverse views and interests.

⁹¹ *ibid*

3.3.2 Influence of power distribution in the policy and law-making process

When policy actors to participate in the law and policy-making process and incorporate their knowledge, interests, and issues through agenda setting, the final outcomes are shaped by the level of power they exercise over the process. Each policy actor exerts some degree of power and influence in the policy-making process.⁹² However, some actors and groups are more powerful than others.⁹³ The more powerful stakeholders can influence the policy-making process and, therefore, the outcomes of policy-making. Power differentiation is most noticeable in the agenda setting stage where an interplay between knowledge, interests, and issues inform the different narratives and determine what gets prioritised on the agenda. Here, those who have access to resources, including financial, technical, and knowledge of the policy issue, often exercise more control, power, and promote issues of interest to them. If such resources (power, knowledge, and finances) are in the hands of few goal-oriented actors, they tend to make rational decisions that are in their self-interest and, therefore, win the competition amongst the diverse actors in the policy space.⁹⁴ Femia aptly captures this by referring to the work of Marx (and Engel) who argued thus:

In every epoch the ideas of the ruling class are the ruling ideas, that is, the class that is the ruling material power of society is at the same time its ruling intellectual power. The class having the means of material production, has also control over the means of intellectual production, so that it also controls, generally speaking, the ideas of those who lack the means of intellectual production.⁹⁵

The view above reiterates the important place of technical and financial resources which contribute to the level of power exercised over the process. It also highlights the place of the ruling class and bureaucrats and aligns with the elite theory perspective on policy and law-

⁹² Lars Naess and Others 'Climate Change Policy meets national development Contexts: Insights from Kenya and Mozambique' [2015] *Journal of Global Environmental Change* 7 534-560

⁹³ *ibid*

⁹⁴ Hill (n 15)

⁹⁵ Femia, J.V., *Gramsci's Political Thought: Hegemony, Consciousness, and the Revolutionary Process* (Oxford: Clarendon 1981) p32

making with a dominance of this small but powerful and influential policy actor group on the process. Their knowledge, interests, and narratives become dominant even when these differ from those of the majority.⁹⁶ Birkland suggests that one way to counteract this small elite group dominance is through power magnification by the formation of bigger interest groups, as opposed to individual policy actors pressuring for consideration of their issues and interests.⁹⁷ All other things being equal, bigger groups can be expected to be taken more seriously in law and policy-making.⁹⁸ This includes business or economic interest groups that have more money to hire specialised staff and champions, to fund political campaigns, and have candidates who will support their agendas. Even when more groups are formed that bring together individuals, organisations, and institutions that were excluded and the process takes a pluralist form, ‘counter-elites’ often emerge within the excluded groups and networks. The elites, again, find ways to negotiate and engage with these counter-elites. The process thus boils down to a power play between elites and counter-elites. As a result of the elites having access to and control of resources (information, knowledge, finances), they co-opt the counter-elites and thus push forward their agenda.

Thus, groups excluded from power do often find alternative ways to build a power base to counter the elites’ power. Pooling existing capacity and knowledge and building the required networks is worth examining in policy and law-making on climate change. Ramesh and Perl state that one valuable resource that interest groups can deploy is knowledge and information that might be unavailable or less available to others.⁹⁹ Thus, groups that have such knowledge

⁹⁶ Donald Baumer & Carl Van Horn, *Politics and Public Policy: Strategic Actors and Policy Domains* (CQ Press 2014), Thomas Dye, *Understanding Public Policy* (Pearson 2013), James Anderson, *Public policymaking* (Cengage Learning 2014), Gabriele Abels, ‘Citizen involvement in public policy-making: Does it improve democratic legitimacy and accountability? The case of pTA’ [2007] *Interdisciplinary Information Sciences* 103-117

⁹⁷ Birkland (n 30) 160

⁹⁸ *Ibid*

⁹⁹ Howlett and Others (n 24) 69

and information at their disposal and are capable of channelling it to legislators and bureaucrats, could have the power to significantly influence the policy-making process as the definition of problems, types of possible solutions could be shaped by such knowledge and information.

To buttress the above-mentioned point, scholars have attempted to identify different typologies of power and how power influences the policy and law-making process. Bachrach and Baratz identify two faces of power in the context of law and policy-making.¹⁰⁰ The first is referred to as coercion, typical in authoritarian regimes, where the government and its supporters make and impose policies on their people, against their interests, without their inputs or even approval. This happens even if there are mechanisms in place for consultation or cooperation with other actors with most of the processes tending to be instructive. The second face of power, referred to as ‘blocking power’, occurs when some actors prevent the issues and interests of other actors from getting on the agenda or becoming policy solutions even when the latter is keen on having this issue raised. These typologies of power align with the three-step process of stakeholder involvement and participation used mostly by states, discussed in the Section 4.3.2. This favours the linear, incrementalism, and elite theory perspectives in law and policy-making processes.

Other scholars have suggested a third face of power which is different from the first two, referred to as the ‘quiescent’ or passive power.¹⁰¹ They indicate that, in a given context, some groups might claim this power on the grounds that they are disadvantaged. However, they remain passive and do not make any effort to exert any influence on decision-making processes that concern them. Such policy actors and groups remain ‘quiescent’ due to their

¹⁰⁰ Peter Bachrach and Baratz Morton, ‘The Two Faces of Power’ (1962) 56 *American Political Science Review* 947, 952-957

¹⁰¹ John Gaventa, *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley* (UIP 1980) Birkland (n 30) 211

poor access to resources, low level of education, poverty in the face of a minority but dominant policy actor group.

Another group of scholars have put forward slightly different views on power distribution and how this influences the law and policy-making from what is presented above. For example, Kriesi classifies power as where it resides.¹⁰² In their classification, power could be concentrated or fragmented (distributed) amongst different, actors, groups, networks, and coalitions organised into policy networks. The concept of a policy network refers to a set of formal and informal interactions involving diverse collectives of public (state and international governmental organisations) and private actors, who have different but interdependent interests.¹⁰³ This concept has been captured in various ways to highlight the changing patterns of power distribution between state and non-state actors including ‘corporate pluralism’ and ‘policy communities’.¹⁰⁴ This concept of policy networks emerged in response to the changes in the nature of governance in many democratic states. In these contexts, the state was no longer viewed as the utmost authority in decision-making. Formal organisations emerged at different levels of society and their strengthened position in decision-making, resulting in the fragmentation of power.¹⁰⁵ This fragmentation of power took away the role of the state as being the sole entity capable of organising society. The spreading of expertise and competence among public and private actors; the inclusion of different levels of decision-making from the local to the supranational; and a multiplication of channels for mediation and agreement emerged.¹⁰⁶ Therefore, public policy emerged from strategic interactions among several policy actors, with diverse understandings of the problem and with their individual or institutional self-interests.¹⁰⁷

¹⁰² Kriesi and Others, ‘Comparative analysis of policy networks in Western Europe (2006) 13(3) Journal of European Public Policy 341

¹⁰³ William Coleman, *Policy Networks* (Elsevier 2015)

¹⁰⁴ *ibid*

¹⁰⁵ Bernard Jouve, *Public Policy Networks: Debates on Policy Networks* (L’Harmattan, Paris 1995)

¹⁰⁶ *ibid*

¹⁰⁷ Fritz Scharpf, *Games Real Actors Play: Actor-Centered Institutionalism in Policy Research* (Westview Press, Boulder, CO 1997).

Thus, in the policy process, interactions between actors could either be cooperative or conflictual or present a balanced mix of both after going through a process of bargaining. When power is concentrated, it is in the hands of dominant actors, for example a national or international actor. In such instances, the national actors, sometimes in collaboration with international actors, take charge of such processes driven by national objectives and motivations and linked to existing policies.¹⁰⁸ Although such processes are often claimed to be nationally owned, they do not give room for diverse stakeholder participation and integration of their interests. Often the dominant international actors significantly shape and influence such national processes in favour of their interest, as they often provide the needed technical and financial resources.¹⁰⁹

Conversely, when power is fragmented or distributed, actors try to influence policy-making in line with their knowledge, interests, ideas, and beliefs.¹¹⁰ This dominant type aligns with the garbage can, pluralism, and institutionalism perspectives on law and policy-making. In this dimension, actors' behaviour in the policy domain is shaped by their interactions with others and the formation of policy networks or coalitions. Actors either cooperate, bargain, or disagree with each other on a specific policy issue. They use available resources (access, information, power) to bond with each other. As a result, groupings, or coalitions around similar patterns of cooperation or conflict, emerge. Such patterns of cooperation, bargaining, or conflict co-exist among state actors, non-state actors, interest groups, resulting in six types of power structures depending on the dominant type of interaction as presented in Table 2 below.¹¹¹

¹⁰⁸ *ibid*

¹⁰⁹ Anthony Giddens, *The politics of climate change* (Polity, Cambridge 2009),

¹¹⁰ Paul Sabatier and Hank Jenkins-Smith, *Policy change and learning: an advocacy coalition approach* (Westview, Boulder, Colorado, USA editors. 1993)

¹¹¹ Brockhaus and Di Gregorio 2014: 5, adapted from Kriesi and others 2006: 343)

Table 2: Conceptual framework: typology of power structures

Type of interaction \ Distribution of power	Conflict	Bargaining (conflictual cooperation)	Cooperation
Fragmentation	Challenge	Symmetric bargaining	Inclusive participation
Concentration	Dominance	Asymmetric bargaining	Formal consultation

Source: Brockhaus and Di Gregorio 2014

Where there is high fragmentation or less concentration of power among policy actors, a situation of cooperation occurs, resulting in inclusive participation. On the other hand, when power is highly concentrated (not fragmented) in the hands of a few, a situation of dominance emerges, and interactions are mostly conflictual. In such instances, the most powerful actors can impose their ideas and interests on others. This supports the elitist theory perspective.

When there is low fragmentation of power, a “symmetric bargaining” situation occurs. This results in a balance between conflict and cooperation. Likewise, when power concentration is low and bargaining is the main type of interaction, “asymmetric bargaining” occurs. In this instance, less powerful actors have minimal influence, and the extent and participation in the policy process is defined solely by most powerful actors.

Lastly, Kriesi and others suggest that when cooperation dominates interactions, the distribution of power becomes irrelevant. Brockhaus and Di Gregorio hold a contrary view to

Kriesi and others on cooperation when it comes to climate change law and policy-making.¹¹² They posit that in the climate change policy area, cooperation within highly concentrated power structures leads to a situation of formal consultation.¹¹³ On the other hand, inclusive participation results when power is more evenly distributed (fragmented). Furthermore, they argue that the policy domain can shift from one typology of power structure to another at different stages of the policy-making process.¹¹⁴ However, they are quick to point out that this would depend on the environment where law and policy occurs.

Thus, irrespective of what form of power structure exists, it seems to be more of a function of the nature and rules of the policy-making process and environment, and less about the function of the particular attributes of the actors, groups, issues, or interests themselves. Schattschneider aptly captured this when he stated that:

[A]ll forms of political organisations have a bias in favour of the exploitation of some kinds of conflict and suppression of others because organisation is the mobilisation of bias. Some issues are organised into politics while others are organised out.¹¹⁵

In other words, some issues and interests reach the policy agenda because the political system in place is positively biased towards them and allow them to be raised.

3.3.3 Policy environment

In the previous sections, the diverse actors, the knowledge and interests, the power dynamics and how this influences what gets incorporated in the law and policy-making has been examined. These interrelated elements (actors, knowledge, power) do not operate in a vacuum. The surrounding political and governance context also plays an important role in

¹¹² Maria Brockhaus, M., and Monica Di Gregorio, 'National REDD+ policy networks: from cooperation to conflict' (2014) 19 *Ecology and Society* 1, 5

¹¹³ *ibid*

¹¹⁴ *ibid*

¹¹⁵ Elmer Schattschneider, *The Semisovereign People* (The Dryden Press 1975)

shaping the outcome of policies and laws. The intersection of these factors generates the ‘policy space or universe’ of policy-making. The works of Wolmer and others¹¹⁶ align to this. They emphasise the intersection of three influences on policy-making: politics and interests (power dynamics amongst actors with diverse interests, knowledge, and capacities); narratives and discourses (how policy ideas develop, why some ideas get to the agenda and others disappear), actors; and institutions (who is involved and how are they connected), shown in Figure 5.

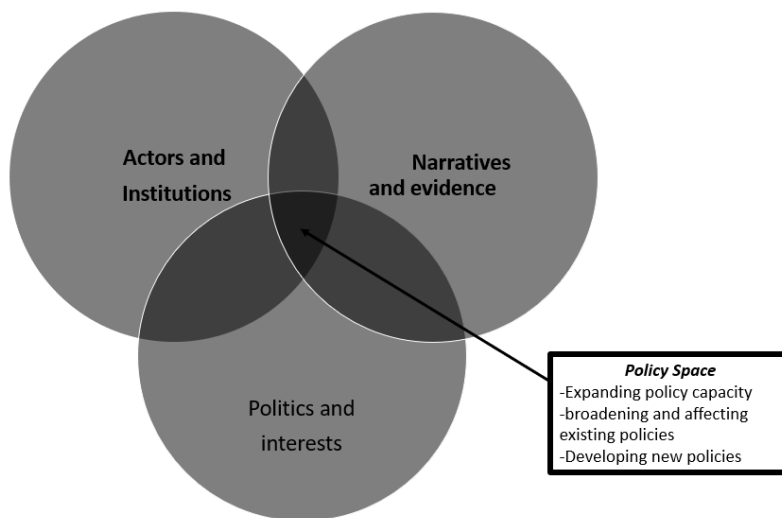


Figure 5: Influences on policy-making (Source: Wolmer and others 2006)

This ‘policy space or universe’ is defined by scholars of public policy as ‘opportunities, moments and channels where citizens can act to potentially affect policies, discourse and decisions and relationships that affect their lives and interests’.¹¹⁷ These spaces are made up of laws, regulations and cultural norms, and the influences of externally imposed rules.¹¹⁸ These organisational or institutional rules define the constellations of actors, the permitted modes of

¹¹⁶ Wolmer and Others, *Understanding policy processes - A review of IDS research on the environment*, (Brighton, Knowledge, Technology and Society Team (KNOTS), Institute of Development Studies, Brighton 2006), 11

¹¹⁷ John Gaventa, ‘Finding the Spaces for Change: A Power Analysis’ (*IDS Bulletin* 2016) 37, <https://bulletin.ids.ac.uk/index.php/idsbo/article/view/898>, accessed 12/09/2020; Lars Naess and Others, *Climate Change Policy meets national development Contexts: Insights from Kenya and Mozambique*, (2015) 35 *Journal of Global Environmental Change* 534, 536, Howlett and Others (n 97), Peter John, *Analyzing Public Policy* (Routledge 2012)

¹¹⁸ Fritz Scharpf, ‘Institutions in Comparative Policy Research’ (2000) 33 *Comparative Political Studies*, 762, 770.

interactions in the policy-making process. Different modes of interactions have been identified in the literature on policy-making and political science, including hierarchical direction, negotiated agreement, mutual adjustment, or voting.¹¹⁹ Thus, the interaction of diverse actors, interests, institutions within and beyond the policy-making context takes different forms.

In the hierarchical direction, even when multi-actor interactions exist, the political institutions treat any major policy problem in a single-actor constellation. Here, a single action centre determines policy choices based on their preferences and perceptions. This is the case with the Westminster Model found in Britain and New Zealand. In the negotiation, mutual adjustment modes, the outcomes are defined by individual and collective interests of actors involved in the policy process. Here, the outcomes of policy result from cooperation or conflicts between the different actors' constellations, as discussed above. The multi-actor systems seem to depict the non-linearity of policy-making. In other words, it is not a process based on technical knowledge of a select group of policy-makers who define policy solutions following clearly defined and incremental steps. Rather, it aligns with the 'garbage can', pluralism, and intuitionism perspectives on law and policy-making, discussed in Section 3.2 above.

However, the effective utility of the policy space depends on whether policy actors understand these spaces and can participate in the processes taking place in these spaces. This is in addition, to how they organised themselves, get involved in the spaces, and their ability to overcome the existing power asymmetries to incorporate their issues and interests. These all depend on the existence of an enabling policy environment shaped by the nature of governance (legal and institutional arrangements). The governance and institutional arrangements

¹¹⁹ *ibid*

determine whether or not actors and social interests interact to produce solutions to policy problems.¹²⁰

A favourable legal and regulatory environment that enables diverse actors to freely voice their interests which is informed by their knowledge and how they participate is arguably critical for effective policy-making. The UNDP posits that three elements are important for this to happen.¹²¹ These are political structures encouraging participation; regulatory and legislative frameworks guaranteeing the right to association; and mechanisms allowing actors and their organisations to participate in all the stages of policy-making.¹²² In addition to the domestic governance context, the policy space is equally moulded by forces beyond the context including relevant international regimes and influence of external policy actors.

Within the framework of climate change law and policy-making, irrespective of whether a country adopts a sectoral or framework approach, the regulatory framework of each country is an important consideration.¹²³ This is important because, for climate change laws and policies to be responsive, they need to align with the established legal system of each country which defines social norms.¹²⁴ This situates climate change legislation within existing legislation and other factors in the context such as political and governance framework, national administrative culture, social and economic realities, and cross-jurisdictional practices.¹²⁵ Climate change law-making is novel and unlike other sector-specific laws, it is a cross-cutting, multi-actor and cross-jurisdictional challenge that requires different perspectives from the mainstream to address it.

¹²⁰ Mark Bevir, *The SAGE Handbook of Governance* (Sage 2011)

¹²¹ UNDP, 'UNDP and Governance: Experiences and Lessons Learned, Management Development and Governance Division' (UNDP Lessons-Learned Series No. 1 1999)

¹²² *ibid*

¹²³ Eloise Scotford & Stephen Minas, 'Probing the hidden depths of climate law: Analysing national climate change legislation' (2018) 28 (1) *RECIEL* 67, 69

¹²⁴ *ibid*

¹²⁵ *ibid*

3.4 Defining climate change as a cross-cutting policy issues

The term cross-cutting issues, used interchangeably with cross-sector issues, has been examined in different literature and studies. Still, its understanding varies. In the context of this thesis, climate change relates to a number of understandings of cross-cutting issues that have been defined in the literature and studies. Climate change is an concern that touches on various sectors, across different political issues, and is involved at multiple levels of governance. Thus, effectively addressing climate change through legislation entails a complex process of interaction between actors with their sectoral interests, shaped by the arrangements in the policy space or governance context. These cross-cutting issues are understood as issues that intersect with more than one sector and therefore need a multi-sector approach to address them.¹²⁶ These sectors and policy actors are often implicated in a multiple and sometimes complex levels of governance arrangements.¹²⁷

With respect to the governance environment, growing literature highlights the central role of government in dealing with cross-cutting issues such as poverty and national security.¹²⁸ Cross-cutting policy development requires integration across and within policy sectors, involving diverse actors found at different levels of governance. With respect to this, two approaches to ease integration of cross-cutting policy that could be applicable to incorporation of knowledge into policy have been adopted, and these include the vertical and horizontal approaches.¹²⁹

¹²⁶ Evert Meijers, Dominic Stead 'Policy Integration: what does it mean and how can it be achieved? A multidisciplinary review' 2004 (Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies-Interlinkages and Policy Integration), http://userpage.fu-berlin.de/ffu/akumwelt/bc2004/download/meijers_stead_f.pdf, accessed 20/10/2020

¹²⁷ Derrick Brinkerhoff, 'Rebuilding governance in failed states and post-conflict societies: core concepts and cross-cutting themes' (2005) *Public administration and development* 325(1), 3-14

¹²⁸ Ibid, Craig Parsons & Till Weber 'Cross-cutting issues and party strategy in the European Union' (2011) 44 *Comparative Political Studies* 383, 386

¹²⁹ Andy Jordan & Andrew Lenschow, *Innovation in Environmental Policy?: Integrating the Environment for Sustainability* (Cheltenham, Edward Elgar 2008)

Vertical arrangements occur when there is a hierarchy (a central and local) in the policy-making space with diverse actors and knowledge systems. This arrangement depicts different levels of governance with similar policy directions. It equally suggests an interplay between the top-down and bottom-up interactions. In the top-down processes, the policy direction is set by the central government (sometimes in collaboration with international partners) and is later cascaded to local context.¹³⁰ The policy solutions and interests of these often more powerful and influential actors are sometimes in conflict with or contradict the bottom-up solutions generated by the less influential actors found mostly at the local level, but who experience the policy challenges. Hogl and others suggest that for effective policy development to occur, a coordinated effort that minimises these contradictions needs to be developed.¹³¹

On the other hand, horizontal arrangements involve the incorporation of policy issues across sectors and actor groups, especially when it is a cross-cutting policy issue. Addressing a cross-cutting issue, such as climate change, and arriving at a common goal amongst these governance levels, sectors, and actors (government, international organisations, CSOs, research and policy think tanks, private sector, and local communities) requires connectivity between the horizontal and vertical arrangements. In addition, this cannot be achieved by a single sector. These horizontal and vertical approaches have been identified by Nunan and others as key to facilitating the integration of policy.¹³² Although these organisational arrangements are used to explain policy integration or mainstreaming within and across sectors, they could be applicable to the incorporation of knowledge in climate change legislative

¹³⁰ Guy Peters, 'Managing Horizontal Government: The Politics of Co-Ordination' [1998] *Public Administration* 76(2) 295-311

¹³¹ Karl Hogl, Daniela Kleinschmit & Jeremy Rayner, 'Achieving policy integration across fragmented policy domains: Forests, agriculture, climate and energy' (2016) 34(3) *Environment and Planning C: Government and Policy*, 399

¹³² Nunan, F., Campbell, A. & Foster, E. 'Environmental Mainstreaming: The Organisational Challenges of Policy Integration' (2012) *Public Administration and Development* 32(30) 262-277

processes. This is because it involves different sectors in need of integration of sector specific policies to arrive at a policy decision that addresses the cross-cutting issue of climate change.

3.5 Institutional arrangements for policy spaces

Institutional arrangements have been discussed in various ways in literature and studies associated with states, organisations, or corporate entities. They have been referred to as ‘rules of the game in a society’, constraints that shape human interaction and the evolution of the society in question over time¹³³. The UNDP defines institutions as ‘policies, systems, and processes that organizations use to legislate, plan and manage their activities efficiently and to effectively coordinate with others in order to fulfil their mandate’¹³⁴. Other definitions include:

formal government organizational structures as well as informal norms which are in place in a country for arranging and undertaking its policy work. These arrangements are crucial as they provide the government at all levels (federal, provincial, and local) with the framework within which to formulate and implement policies. Informal institutional structures include the public, nongovernment organizations and private sector groups that are not on-state.¹³⁵

These definitions, though varied, suggest the existence of rules and interactions between diverse actors, with different mandates, either found at different governance levels.

¹³³ Douglass North, *Institutions, Institutional Change, and Economic Performance* (CUP online 2012) 3

¹³⁴ UNDP, Definition of National Institutional Arrangements (UNDP 2010), https://ggim.un.org/ggim_20171012/docs/meetings/4th%20HLF/DEFINITION%20FOR%20NATIONAL%20INSTITUTIONAL%20ARRANGEMENTS.pdf, accessed 14/07/2022

¹³⁵ *ibid*

3.6 How does incorporation happen?

In dealing with policy issues that involve various forms of knowledge, actors, and institutions (state, society and international system), the incorporation of diverse knowledge and interest could happen horizontally or vertically or a through a combination of both.

The relationship between the horizontal and vertical approaches is depicted in Figure 6.

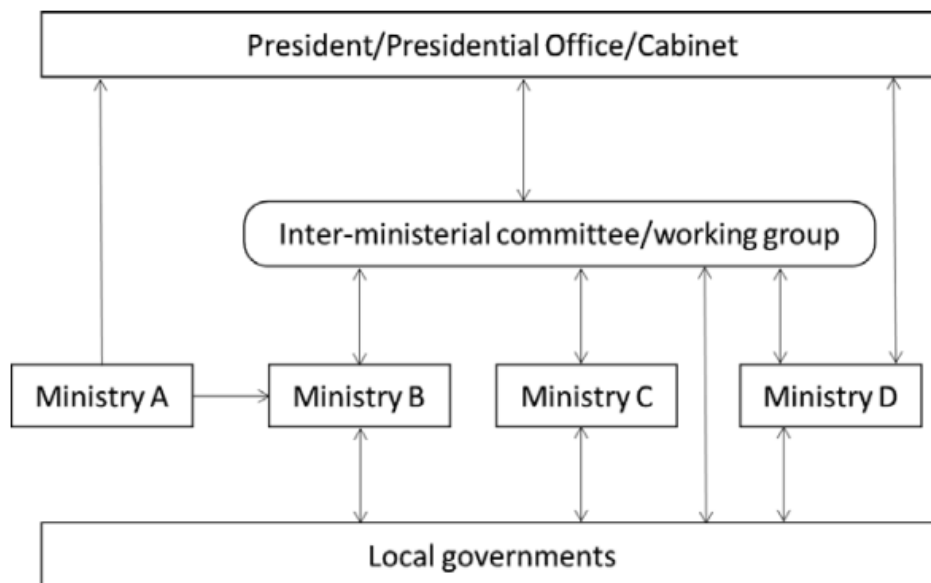


Figure 6: Combined model of vertical and horizontal approaches to the integration of policy across governance levels.¹³⁶

From the illustration above, when policy guidance comes from the central government (president's or cabinet office), a vertical approach is most likely. However, Ministry A (Figure 6) could also play a coordinating role for other ministries pushing for inter-ministerial cooperation. For this to be effective, with the Ministry A playing its role of influencing other ministries towards a common agenda, a powerful and reputable authority needs to be established. In this case, both horizontal and vertical approaches occur simultaneously. In this case, the authority within the Ministry A reports vertically to the central authority and also

¹³⁶ Nunan et al. (2012:271)

plays the coordination role amongst the other ministries, fostering horizontal interactions between Ministries B, C and D, and reports to the inter-ministerial body.

Organisational arrangements also take place beyond the ministerial level. In this case, the separate agencies are established beyond the ministry. The ministry then serves as the superior body assigning tasks to be executed by the subordinate agency.¹³⁷ The creation of agencies within the ministry has been referred to as ‘agentification’. Van Thiel and others define ‘agentification’ as ‘the creation of (semi-)autonomous organisations established to carry out public tasks (regulation, service delivery, policy implementation) and very close to the government.’¹³⁸ These bodies have less hierarchy and political influence on their routine operations and are relatively autonomous.¹³⁹ As result of the autonomy they enjoy, these agencies often appear as different and independent from the parent ministry although they are all parts of the government’s institutions.

The illustration above also highlights those other organisational arrangements that could happen beyond the government mechanisms in the given context of policy-making. The involvement of non-state actors, including CSO, and the private sector, generate different dynamics around horizontal and vertical interactions. This could take place between these non-state actors and beyond this stakeholder group. For example, the vertical interaction between CSOs and parliament or sector ministries following horizontal engagements amongst CSOs that generates evidence for policy-making. This is particularly relevant for cross-cutting issues in the policy-making context.

¹³⁷ Donald Kettl, *Politics of the Administrative Process* (8th ed Cq Press 2020)

¹³⁸ Sandra Van Thiel & others, ‘The rise of executive agencies: comparing the agencification of 25 tasks in 21 countries’ (EGPA conference, 2009) 2-5,

<https://www.utwente.nl/en/nig/research/archive/2009/Papers/panel13papervanThiel.pdf>, accessed 14/07/2020

¹³⁹ *ibid*

Climate change is an issue that cuts across and has impacts on several sectors needing multi-level governance or organisational arrangements to address it. Firstly, there is a national level arrangement involving government departments and institutions addressing critical issues of national concern, such as defence and security, and others responsible for performing basic service and functions of the state often contained in the constitutions.¹⁴⁰

Secondly, decentralisation is another governance arrangement which seeks to bring government nearer to local people beyond the central level. Decentralisation facilitates the flow of resources including knowledge from the central level to the local level and vice versa. This is important for tackling climate change and developing policies and laws that respond to climate change adaptation, whose impacts are predominantly felt at local levels. It promotes and accelerates nationwide development in addition to making public services closer to local people.¹⁴¹ The collaboration between the central and decentralised governance arrangements is vertical and is not void of challenges. There is often confusion over power and authority, human and material capacity required to execute new duties. These issues are major impediments to an effective implementation of decentralisation. However, according to the World Bank, governments' poor political will to implement the concept is the major challenge.¹⁴²

The two governance arrangements between central and decentralised governments reflect a vertical approach to incorporation of views and interest in the process. Climate change is a cross-cutting issue that draws attention beyond the national context. The national arrangements are often connected with arrangements beyond the national context, including international regimes.

¹⁴⁰ Simon Butt, Rosemary Lyster, & Tim Stephens, *Climate Change and Forest Governance: Lessons from Indonesia* (Routledge 2015)

¹⁴¹ Paul Smoke, 'Decentralisation in Africa: goals, dimensions, myths and challenges' [2003] *Public Administration and Development* 23(1) 7–16

¹⁴² World Bank, *East Asia Decentralises: Making Local Government Work* (Washington, D.C., World Bank, 2005) <https://openknowledge.worldbank.org/handle/10986/7492>, accessed 14/07/2022

These factors in the domestic policy environment shaping the passing of laws and policy are often not independent of the international legal and policy environment. Depending on the policy issue, there could be important interactions between local, regional, national, and global policy spaces. A combination of both domestic and international factors and actors shapes the passing of laws and policies. A number of scholars point out that, in the context of laws related to an issue such as climate change, the interest of domestic actors, interest groups and political institutions with differing levels of power shaping climate change legislation.¹⁴³ This is in addition to the influences of international corporations and state treaty obligations.¹⁴⁴ The intention to make domestic laws and policies in response to climate change is often shaped by a combination of domestic drivers, including the extent of the impact of climate change and external drivers including availability of technical and financial support. For example, policy actors in domestic climate law and policy-making have been categorised into three groups in the literature.¹⁴⁵ The first group, referred to as “growth first stonewallers”, supports the traditional foreign policy position in favour of climate change and as an issue to be dealt with by developed countries. This seems to adopt the rationalist and incrementalism approaches to domestic policy-making. The second group, referred to as “progressive realists”, supports co-beneficial approaches through domestic actions with a clear distinction between domestic and global positions and actions. While the third group, referred to as “progressive internationalists”, supports co-benefits through progressive linkages of domestic and international positions and actions. The last two groups seem to support an adoption of the pluralist, garbage can, and institutionalism approaches to policy-making, with an interaction of

¹⁴³ Fankhauser and Others (n 7) 319, Babette Never, ‘Who drives change? Comparing the evolution of domestic climate governance in India and South Africa’ [2012] *Journal of Environment and Development* 21 (3) 362-387
Dubash and Others, ‘Developments in national climate change mitigation legislation and strategy (2013) *Climate Policy* 1(6), 649-664

¹⁴⁴ Ibid

¹⁴⁵ ibid

diverse actors and problems to find a common solution in a non-linear and non-objective process.

3.7 The Analytical Framework

From the literature review presented above, the Researcher developed an analytical framework that provides a practical tool to guide the research in structuring the findings in relation to the research questions, as well as designing and conducting the analysis. A number of theories and perspectives on policy-making that are also relevant to law-making have been reviewed to identify how law and policy-making may enhance or constrain the incorporation of diverse views. These theories and perspectives include rationalism, incrementalism, elite theory, garbage can, pluralism, and institutionalism.

The framework (Figure 7) shows three lenses and areas for examining how law and policy-making enhances or constrains the incorporation of diverse views. These lenses and areas include knowledge actors, power dynamics, and institutional arrangements. A further review of these areas reveals the mutual interrelations between the three. The following illustration shows the areas of relevance for investigation in relation to research question.

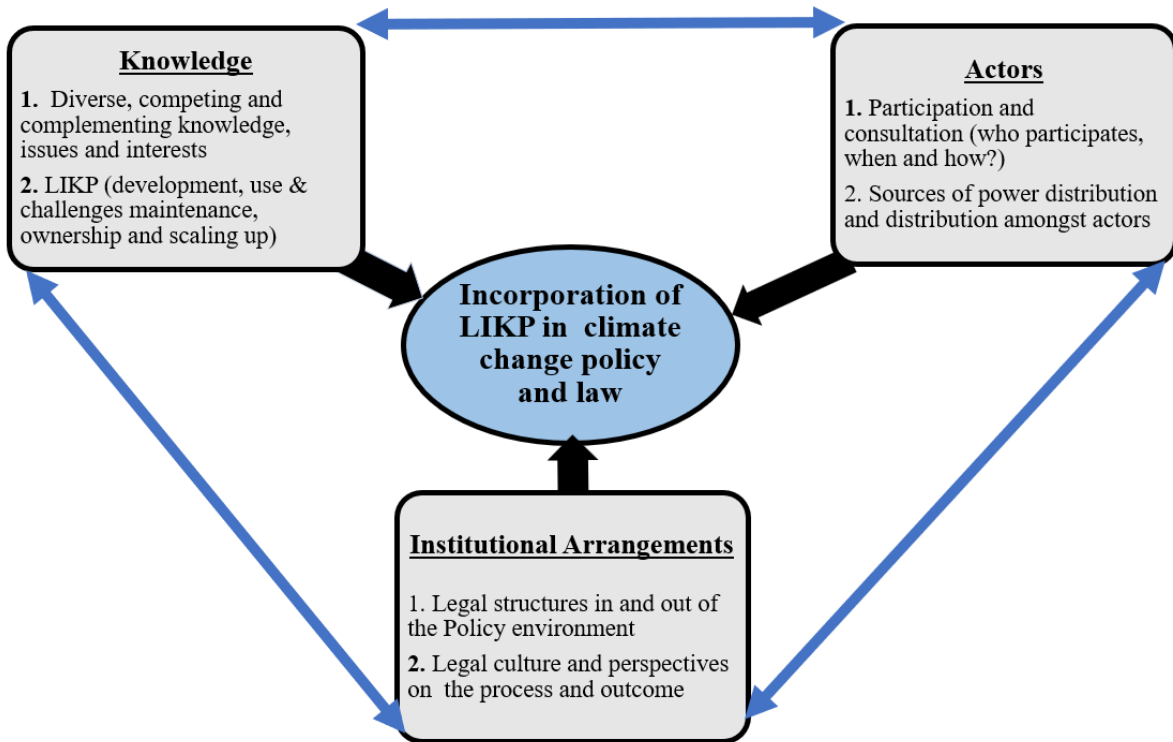


Figure 7: Analytical framework (Source: developed by the researcher)

The first perspective, Knowledge, looks at climate change policy and law-making as one that involves diverse knowledge. The knowledge is used by policy actors to understand and to respond to the policy issue and how this is incorporated in the laws and policies. These knowledge systems could either compete or complement each other. The theme of LIKP is examined through the lenses of development, use, and maintenance in relation to scientific knowledge. The diversity of knowledge and interests also suggest a non-homogeneity of the policy space. Chapter 5 and parts of Chapter 6 engage with this perspective.

The second area, Actors, looks at the policy actors found at the different governance levels central to promoting incorporation of knowledge. There are three themes i.e., who the policy actors are, where they draw their power from, and what is the power distribution amongst them. This links back, again, to the knowledge and interests of the policy actors on the policy issue. Different interactions and power relations emerge amongst policy actors,

including instructive, consultative, cooperative, fragmented, concentrated, and distributed power, shaping incorporation of knowledge in different ways; discussed in Chapter 6.

Lastly, the role of the institutional arrangements in the policy-making space shapes the extent and nature of the incorporation of knowledge. Two themes are examined, first are the legal structures in the policy environment or space, including agreed legal norms, institutions and rules that guide policy and law-making processes. Second is the legal culture, which is an approach to the study of law in society beyond doctrinal and, more generally, in relation to other social constructs. Some of these include the patterns of legally oriented social behaviours and attitudes, and the nature of the organisation and interactions between individuals, groups, institutions, organisations, power and trust in the climate change policy and law-making process.¹⁴⁶ The distinction by nation states of their legal cultures such as the ‘Dutch Legal Culture’,¹⁴⁷ ‘French Criminal System’¹⁴⁸ or the ‘English Legal System’¹⁴⁹ presupposes the existence of distinct national cultures with the difference between them is linked to the existing governance and political boundaries. These domestic and international legal cultures are not independent of the international institutional arrangements. Merry suggest ‘four dimensions’ of legal culture: (i) the practices and ideologies within the legal system, (ii) the public’s attitude toward the law and the process of making the law, (iii) the question of legal mobilisation which looks at how readily people define their problems in legal terms, when they engage in the process of law-making process or turn to the law for help, and (iv) legal consciousness, the extent to which an individual sees himself or herself as embedded in the law and entitled to its protection. As such, the legal culture is not just about what the policy actors are doing and who

¹⁴⁶ David Nelken, Sociology of legal culture in Jiri Priban (ed), *Research Handbook on the Sociology of Law* (Edward Elgar Publishing Limited 2010) 136–149

¹⁴⁷ Blankenburg, Erhard and Frank Bruinsma, *Dutch Legal Culture* (Alphenaan den Rijn: Kluwer Law International 1991)

¹⁴⁸ Hodgson Jacqueline, *French Criminal Justice: A Comparative Account of the Investigation and Prosecution of Crime in France* (Oxford: Hart . 2005)

¹⁴⁹ Gary Slapper & Kelly David, *The English Legal System*. London, (England: Routledge 2017).

they are. It also includes their ideas, values, and mentalities. As a result, the policy-making process could be seen as one either led by ‘growth first stonewallers’ or ‘progressive and internationalists’. These have implications for the level and nature of incorporation of knowledge into the final law. A number of arrangements across sectors, actors, governance levels shape incorporation in the policy-making process, including horizontal, vertical, or mixed arrangements; silos mindset; inter-ministerial committees/agencies; devolution that have informed the responses to climate change as a cross-cutting issue. These are explored in Chapter 7.

3.9 Conclusion

Theories on law-making and what enhances or constrains the incorporation of diverse views in such a process is limited. However, law and policy-making often share the same academic discipline. A review of the literature on law and policy-making generates a number of perspectives, theories, and approaches on how law and policy-making happens including rationalist, incrementalism, elitist theory, garbage can, pluralism, and institutionalism. A discussion of these perspectives, theories and approaches reveals that each has their merits and demerits in studying how the law and policy-making enhances or constrains the incorporation of diverse views.

Three recurrent and interrelated themes emerge from the discussion, including diverse knowledge, actors, and power dynamics and institutional arrangements. Used in combination, this offers an analytical lens to examine how law and policy-making enhances or limits incorporation of diverse views occurs.

Examining how a diversity of knowledge and interests on a policy issue develops and is discussed amongst policy actors depends on how the policy actors understand the policy issue, are able to use their knowledge to understand and respond to the policy problem while

competing or complementing with others who have similar or dissimilar knowledge and interests.

In relation to the actor and power dynamics, climate change is a policy issue that affects diverse policy actors in different ways. These actors are found at different levels of governance (local, sub national, national, and international). These actors draw power from different sources, including the relevant knowledge, for use in response to climate change, access and control of technical and financial resources, and statutory power offered by the institutional arrangements of the policy space. This also depends on where power lies, whether it is concentrated in the hands of a few or fragmented amongst policy actors or a combination of both. Whether power is fragmented or concentrated, it shapes in different ways the interaction amongst policy actors, participation and incorporation of their knowledge and interests across actor groups, sectors, or governance levels in the process.

The incorporation of diverse views in the policy-making process largely depends on the institutional arrangement in the policy-making context. This defines what systems, mechanisms, and spaces are in place for actors to participate and incorporate their views in such processes. These actors operate in different sectors, are found at different levels of governance, and interact horizontally and vertically.

Finally, barriers and challenges to the incorporation of diverse knowledge can be level of access and control of resources including time, knowledge, capacity, and finances by the different policy actors. This has direct implications for the level of power they exercise, their level of influence of the process, participation, and relation within and outside of the policy-making environment.

The findings of the literature review on LIKP in Chapter 2 and this chapter are used to develop an analytical framework with three lenses (knowledge, actors and power dynamics and institutional arrangements) to guide the data collection and inform the analysis.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter presents the research philosophy followed by the research design, sampling approach, methods, and participant recruitment procedures. The next section describes the instruments and procedures used for data collection followed by the data analysis procedures and ethical considerations of this research. The last section presents the positionality of the researcher to the research.

4.2 The Research Paradigm

This research is socio-legal in nature and seeks to examine how the law is made in a given social context.¹ It seeks to enhance understanding about the political, social, and economic processes that lead to the generation of the law, who is involved and how and what shapes its content and form as opposed to the fundamental value of its content and the extent of its enforcement. Thus, the theoretical perspectives on policy and law-making processes are applied to conduct a detailed examination and discussion of the social, economic, and political past of the context and its inhabitants to understand the present situation of law-making on climate change. The focus is on how diverse views, interests, and narratives of different actors (including the LIKP of agrarian communities) and institutions inform climate adaptation law. It draws on a range of theoretical perspectives within and across disciplinary boundaries.

This distinction in the focus of this research, which could be described as policy research, will be helpful in what philosophical approach to adopt.² Determining the philosophical position depends on choosing the ontological and epistemological assumptions

¹ Brigitte Hutter, *A reader in Environmental Law* in BM Hutter (ed) title of the book? (Oxford 1993) 3-4

² Paul Sabatier *Theories of the Policy Process*, (Westview Press 2009)

that underpin the entire research from the outset.³ Saunders and others posit that these assumptions inevitably shape the understanding of research questions, the methodological choice and data collection techniques, and how the findings are analysed and interpreted.⁴ This section discusses the epistemological and ontological assumptions as a basis for making a decision on the philosophical position throughout the research, particularly in determining the research design and method, and ensuring that the different elements of this research fit together.

4.2.1 Ontology

Ontology broadly refers to the set of assumptions about nature of reality. It shapes the way the researcher sees and studies the research objects, the kind of social phenomena that could exist, conditions under which they exist, and relationships between them.⁵ It is concerned with whether there exists a social reality which is independent of human conceptions and interpretations. This is in addition to whether this social reality is shared or is tied to a specific context.⁶ Bryman deviates from this broad definition by introducing the concept of ‘Social Ontology’ defined as a ‘philosophical consideration in research which concerns the nature of social entities’⁷ Bryman, in this orientation, raises the question of whether these social entities are or can be objective entities which exist independently from social actors or rather whether they are social constructions in themselves built from the perceptions, actions and interpretations of individuals in society.⁸ It is about the researcher’s beliefs regarding the kind

³ Alan Bryman, *Social Research Methods* (Oxford University Press 2012) 19-34.

⁴ Mark Saunders, Philip Lewis and Adrian Thornhill, *Research Methods for Business Students* (Seventh edition Pearson Education 2016) 124-125

⁵ Saunders and others (n 3) 127, Gibson Burrell and Gureth Morgan, *Sociological Paradigms and Organisational Analysis* (First Published 1979, Ashgate Publishing Limited 2005) 1-2

⁶ Ormstom and others, ‘The foundations of Qualitative Research’ in Ritchie and others (eds) *Qualitative Research Practice: A guide for Social Science Students and Researchers* (Sage 2014)

⁷ Bryman (n 2) 32

⁸ Ibid

and nature of reality and what exists in the social world. Gaining an understanding of the ontological distinction is important from the onset of research as it helps the researcher to decide what approach to adopt to reveal social truth based on his or her perception of human nature.⁹

Two contrasting ontological positions have been identified: objectivism (which embraces realism) and subjectivism (which embraces nominalism as an extreme form and social constructionism as a less extreme form).¹⁰ The objectivist ontological positions holds that meaning and meaningful realities are inherent in objects in the social world awaiting discovery and are independent of the researcher and others' (social actors) experiences and perceptions.¹¹ In other words, this philosophical assumption holds that truth is static and inbuilt in objects (including humans) around us and existing meanings are simply discovered by the researcher.¹² In this case, methodology and methods of data collection and interpretations are similar to those applied in the natural sciences ('scientific method') such as hypothesis testing, modelling, and causal relations.¹³ Through measuring and observing a given phenomenon, the objectivist generates measurable and quantifiable data considered to be objective that is used to establish causal relationships and to create law-like generalisations.¹⁴ In this case, an objectivist or realist holds that there is only one true social reality experienced by all social actors. This is clearly antithetical to subjectivist researchers.

The subjectivist ontological philosophy assumes that social reality is generated from the perceptions and action of people in a context. These researchers hold the view that people perceive and interpret the world around them in different ways. Thus, in addition to their lived

⁹ Matthew David and Carole Sutton, *Social research: The basics* (Sage 2004)

¹⁰ Saunders and others (n 3) 128-131; Burrell and Morgan (n 4)

¹¹ Crotty (n 8)

¹² *ibid*

¹³ Saunders and others (n 3), 136

¹⁴ Jerry Wellington, *Educational Research: Contemporary issues and practical approaches* (second ed, Bloomsbury Academic 2015)

experiences, knowledge of the world is based on peoples' 'understanding' arising from their reflections on events they are subjected to.¹⁵ In this case, multiple realities could be created through the use of perceptions and consequent actions, language, and conceptual categories as a result of individual experiences in the social world.¹⁶ The subjective ontological philosophy encompasses the nominalism, which is more extreme and holds that there is no underlying reality to the social world beyond what social actors attribute to it. This results in multiple realities. This is in addition to less extreme social constructionism which holds that reality is a product of social interaction involving social actors who create partially shared meanings and realities in an environment that is in a constant state of flux and revision.¹⁷ Therefore, for researchers to understand what is being studied or how the subjects being studied experience reality, they need to study a situation, social actors, and their social context in detail, including the socio-cultural, historical, and geographical context. In this case, the subjectivist researcher is not detached from the research but openly acknowledges the influence of their own values and experiences and reflects on how to incorporate them as part of the research outcomes. The research findings are inevitably influenced by the researcher's perspectives and values.

There are, therefore, clear contrasts between the two ontological approaches. Unlike the objectivist philosophy, the subjective philosophy assumes that knowledge is a product of exploration and understanding (not a discovery) of the social world and the social actors in a particular context. In addition, as opposed to the previous traditions where the researcher is independent of research processes and research findings, the subjectivist ontological philosophy assumes that the researcher is involved in constructing meanings and interpretations in relation to those being researched.

¹⁵ Ormston and others (n 5)

¹⁶ Burrell and Morgan (n 8)

¹⁷ Saunders and others (n 3) 130

In addition, while objectivist researchers are focused on discovering universal laws and facts governing social behaviour, the subjectivist researcher is keen on generating different diverse opinions and narratives that can help to explain the different social realities of diverse social actors. This implies that social actors cannot be separated from social events and their presence influences the way they understand the social phenomena surrounding them. Studies utilising this ontological position are widely found in social research involving the study of meaning and usually seeks information on the quality and depth of something, rather than a logical causal relationship.¹⁸ Thus, the methods used in studying natural sciences cannot be suitably applied in the study of the social world given that the different perceptions and understandings of social reality cannot be captured accurately using the ‘scientific methods.’¹⁹

Based on the discussion of the two contrasting ontologies, it is observed that both ontologies present different ways of understanding how researchers can create, modify, and interpret the world in which they find themselves (social reality). However, for this research, the subjective (social constructionism) ontological philosophy is appropriate for a number of reasons.

Firstly, this research aims to develop a deeper understanding of how law-making on climate change works, who and what is involved, and what the issues and challenges are for incorporating LIKP in climate change law and policy, using Kenya as a case study.

Secondly, the law-making process is understood through individual experiences and perceptions and is seen through the lens of social interactions, narratives, and experiences. What is taken up in this process is influenced by people’s beliefs and views and the different ways in which they interpret this reality. This, in turn, makes knowledge subjective as it is

¹⁸ Perri 6 & Christine Bellamy, *Principles of Methodology: Research Design in Social Science* (London, SAGE 2012) 30.

¹⁹ Louis Cohen, Lawrence Manion and Kate Morrison, *Research Methods in Education* (Sixth edn Routledge 2007)

influenced by different personal and context-specific factors and experiences. Engaging in processes that result in the putting in place of adaptation laws that address vulnerabilities of communities are socially constructed and such processes do not exist independently of social actors, interactions amongst these actors and their social world.

Thirdly, the research seeks to identify and explore the concepts, factors, institutional arrangements, and processes that enable or constrain the incorporation of LIKP in the Kenyan climate change law-making process. From the literature review, this is clearly not a stand-alone process and can only be achieved by obtaining relevant information directly from the various social actors for analysis. Cohen and others aptly put this by positing that ‘the social world can be understood only from the standpoint of individuals who are part of the ongoing actions being investigated’.²⁰ This philosophical approach supports this research with a socio-legal focus (the study of law-making in the social context) as it allows for a detailed examination and discussion of the social, economic, and political past of Kenya and its inhabitants to understand the present situation of law-making on climate change. In this research, the social actors in this particular context include legislators, farmers, local and international non-governmental organisations (NGOs), universities, research institutes, businesses relying on agricultural productivity, and community members involved in and using their knowledge in the climate change policy and law-making process in Kenya.

Lastly, to fully understand the nature of the knowledge in a specific context and how it is acquired, the interpretivist view emphasises a close interaction between the social actors and their social world and researchers. This is opposed to the researcher being a distant and independent observer, as advocated by the objectivists.²¹ Therefore, in this study, data was generated by the researcher while interacting with the social actors and attempting to explore,

²⁰ Ibid 19

²¹ Sarah Tracy, *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*, (John Wiley & Sons 2012)

understand, and make sense of their lived experiences. This will be in addition to examining the social context of the law-making processes and what influences the incorporation of diverse views in such processes. This can only be done by having the researcher and the researched on the same platform engaged in a process aimed at reproducing and constructing reality.

4.2.2 Epistemology

Epistemology considers assumptions about knowledge, what constitutes valid and legitimate knowledge, and how it is communicated.²² It is about looking at the world and making sense of it.²³ In attempting to contrast the way the natural and social worlds should be studied, Bryman defines it as ‘an issue that concerns the question of what is (or should be) regarded as acceptable knowledge in a discipline’.²⁴ The fundamental importance of how the kind of epistemological assumptions which researchers hold about knowledge significantly affect how they go about uncovering knowledge of social behaviour. Therefore, the decision about the epistemological assumption will influence the decision about the method(s) used in the research. In this light, if knowledge is considered as tangible, hard, and objective, it is incumbent on the researcher to play the role of an observer while at the same time sticking to the methods of natural science, including testing and measuring. Conversely, if the knowledge is assumed to be subjective and personal, the researcher is obliged to engage, interact, and communicate with the research subjects to draw meaning from their beliefs, perspectives, and lived experiences in the social world. Therefore, the ontological stance taken, influences the epistemological approach to be adopted for any given research.

²² Burrell and Morgan (n 8) 2

²³ Crotty and others, *The foundations of Social Research: Meaning and Perspective in the Research Process* (Sage 1998)

²⁴ Bryman (n 2) 27

There are variations in epistemological positions in viewing and interpreting the social world and social actors.²⁵ However, one scholar suggests that these positions have been polarised into two contrasting positions, positivism and interpretivism.²⁶ While others point out the epistemological divide as being between positivism and hermeneutics (concerned with the theory and method of the interpretation of human action).²⁷

Focusing on the positivism and interpretivism divide, the positivist researcher seeks to discover universal laws and facts governing social behaviour by seeing the world and people as being objective. Studies utilising this epistemological position are mostly used in studying natural sciences where data is accurately captured using the 'scientific methods' that focus on establishing causal relationships in data generated.²⁸ This epistemology ties with objectivism where the researcher is independent of the researched. Saunders posits that it is plausible for the positivists to maintain this detachment from the research and data because the data collected is often measurable and quantifiable and, therefore, the researcher cannot alter the substance of such data.²⁹

Conversely, interpretivism, as opposed to positivism, is based on a subjective perspective that seeks to understand the meaning of social actions.³⁰ Interpretivists hold that reality is not inherent in physical phenomenon waiting to be identified, described, and explained, as in the natural sciences. Rather, they argue that social actors and their social worlds are characterised by different cultural backgrounds, influenced by differing conditions and timeframes, thus resulting in different experiences, interpretations, and meanings assigned to

²⁵ John Gill and Phil Johnson, *Research Methods for Managers* (London: Sage 2010, 4th edn), Gibson Burrell and Gureth Morgan, *Sociological Paradigms and Organisational Analysis* (Ashgate Publishing Company 1982), Saunders (n 3) 135-137

²⁶ Bryman (n 2) 27-28

²⁷ Von Wright, G. H *Explanation and Understanding* (London: Routledge 971)

²⁸ Louis Cohen, Lawrence Manion and Kate Morrison, *Research Methods in Education* (6th edn Routledge 2007)

²⁹ Saunders and others (n 2) 137

³⁰ *ibid* (n 2) 140-141; Bryman (n3)

their social realities.³¹ Researchers holding this philosophical viewpoint believe that basing their judgements on a series of law-like generalisations loses the rich insights of the social phenomenon being studied and the interactions of social actors and the social worlds. Interpretivism recognises the role of the researcher in interpreting the research materials and data which is often qualitative and, at the same time, recognises the influences of their own values and beliefs on the research. The interpretivist researcher and the researched are intertwined in the process of constructing and reproducing reality, as opposed to being independent of each other.³²

Considering the above discussion, the researcher chose subjectivism as the ontological position and interpretivism as the epistemological position that informs the entire research.

4.3 Research Design

After exploring the ontological and epistemological positions supporting the research, the next step is to define the design that is the most appropriate to answer the research question and meet the research objective.³³ Often, less focus is placed on the determination of research design in law or legal studies as a discipline compared to other social sciences and humanities disciplines.³⁴ However, the same rules apply for research design employed to answer socio-legal questions or research described as problem, policy, and law reform research.

The research design is the general plan of how the research question will be answered. Gorard posits that research design is ‘a way of organizing a research project or programme from its inception in order to maximise the likelihood of generating evidence that provides a

³¹ Saunders (n 2) 141

³² Sarah Tracy, *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (John Wiley & Sons 2012)

³³ Lisa Webley ‘Qualitative Approaches to Empirical Legal Research’, in Peter Cane and Herbert Kritzer (eds) *Oxford Handbook of Empirical Legal Research* (Oxford University Press 2012) 928-929

³⁴ Ian Dobinson and Francis Johns, ‘Legal Research as Qualitative research’ in Mike McConville and Wing Hong Chui (eds), *Research methods for law* (2nd edn, Edinburgh University Press 2017)

convincing answer to the research questions for a given level of resource'.³⁵ Meanwhile, Saunders and others in a later explanation of what research design is, indicated that it presents a logical sequence to be followed for specific data to be collected, how the data will be collected and analysed within constraints that might include limited access to data, time, ethical issues, and location.³⁶

Deciding on an appropriate design to use in research will achieve two functions. First of all, it gives a clear idea of the procedures and accompanying logistical requirements with valid reasons for a chosen research design decision.³⁷ Secondly, it provides indicators for judging the quality of how the chosen design advances the research by enabling the collection of data that is dependable, credible and transferable, as used in qualitative research³⁸ or reliability, validity and generalisability, as used in quantitative research.³⁹ The use of the notion of transferability and generalisability in either quantitative or qualitative research has been a subject of controversy amongst scholars. For instance, Lincoln and Guba, in emphasising the reconceptualization of generalisation to talk about transferability, they caution that 'the degree of transferability is a direct function of the similarity (fittingness, congruence) between two contexts...'.⁴⁰ Donmoyer holds a contrary view to the use of context as a basis for the transferability or generalisability of findings.⁴¹ Rather, he posits that in instances where meaning and perspectives have been determined and the interest is in getting an aggregate position, particularly by policy-makers, generalisability is acceptable.⁴² However, for practitioners in fields such as social sciences and education where questions of individual

³⁵ Stephen Gorard, *Research Design: Creating Robust Approaches for the Social Sciences*, (London, Sage 2013).

³⁶ Saunders and others (n 2) 164

³⁷ Ibid 164-165

³⁸ David Buchanan, 'Case Studies in Organizational Research' in Symon G and Cassell C (eds) *Qualitative Organisational Research Core Methods and Current Challenges* (London: Sage 2012) 101

³⁹ Saunders and Others (n 4) 202-205, Alan Bryman, *Social Research Methods* (Oxford University Press 2012).

⁴⁰ Lincoln and Guba, *Naturalistic Inquiry* (sage 1985) 124

⁴¹ Robert Donmoyer, Generalisability and the Single-Case Study in Elliot Eisner and Alan Peshkin (eds) *Qualitative Inquiry in Education: The continuing Debate* (Teachers College Press 1990)

⁴² ibid 197

meaning and perspectives are crucial and less about aggregation, transferability of findings is an alternative concept to generalisation.⁴³ All these considerations are key determinants of the research design, which is necessary to respond to the research question and meet the research objective.

Engaging in a rigorous description of the research design, contexts and the in-depth nature of the methods may enhance the reliability or validity of the research and enable others to replicate similar studies, generalise or transfer the research findings across other settings with similar characteristics.

4.3.1 Choosing the Research Design

There exist different research designs that could be classified into three groups namely qualitative, quantitative, and mixed designs.⁴⁴

The quantitative research design approach is focused on the generation and analysis of numeric data by the researcher. This can be further divided into two strands: non-experimental or experimental.⁴⁵ The non-experimental design entails analysis of quantitative or numeric data generated from the control of certain factors in the research environment. For example, it could provide numeric description of views held by a population, their attitudes, and particular trends in the context.⁴⁶ The experimental design, on the other hand, entails analysis of numeric data generated by completely controlling the research environment mostly in a laboratory.⁴⁷

⁴³ *ibid*

⁴⁴ Saunders and Others (n 2) 165-168; Alan Bryman, 'Paradigm Peace and the Implications for Quality' (2006) 9 *International Journal of Social Research Methodology* 111, 111-112; John Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches* (Sage publications 2014); Juliette Corbin and Anselm Strauss, *Basic of Qualitative Research* (3rd Edition London: Sage 2008); Stephen Gorard, *Research Design: Creating Robust Approaches for the Social Sciences* (London, SAGE 2013).

⁴⁵ *ibid*

⁴⁶ *ibid*

⁴⁷ *ibid*

Contrasting this, the qualitative approach provides in-depth meaning and interpretation of non-numerical data generated through interactions with the research subjects in a given context.

Kirk and Milner suggest that qualitative research:

[F]undamentally depends on watching people in their own territory and interacting with them in their own terms. As identified with sociology, cultural anthropology, and political science, among other disciplines, qualitative research has been seen to be ‘naturalistic’, ethnographic’ and ‘participatory’.⁴⁸

As depicted above, there exists different categories within the qualitative research approach including case studies, grounded theory, ethnographies, narrative research, and phenomenology designs.⁴⁹ Ethnography places emphasis on the quality and the depth of data. In this case, the researcher lives amongst those being studied for extended lengths of time, observing, and talking to them with the aim of producing detailed cultural accounts of people’s shared behaviours, beliefs, interactions, rituals, and events shaping their lives.⁵⁰ In some way, grounded theory is like ethnography in that it seeks to generate explanations or theory grounded in data produced from the accounts of those researched. In both designs, it is at the discretion of the researcher to decide what to include in the explanations based on analysis of data generated and how to tell the story and it requires a significant amount of time to do this.

In the narrative design, research participants are invited to give a complete account of their experiences. The narrative researcher focuses on the collection and analysis of the complete stories of the experiences of participants, which serves as data for analysis.⁵¹ This is opposed to the collection of bits of data from specific sets of interviews involving different respondents, which are later fragmented during analysis.⁵² The narrative design is sometimes

⁴⁸ Jerome Kirk and Mark Miller, *Reliability and validity in qualitative research* (Sage Publications 1986) 9

⁴⁹ Creswell (n 26)

⁵⁰ Ann Cunliffe, ‘Retelling tales of the field: In search of organizational ethnography 20 years on’ [2010] *Organisational Research Methods* 13 (2) 224-239.

⁵¹ Susan Chase ‘Narrative Inquiry: Still a field in the making’ in N.K. Denzin and Y.S. Lincoln (eds) *The Sage Handbook of Qualitative Research* (4th edn London: Sage) 421-34

⁵² *ibid*

used in conjunction with grounded theory in cases where there is a need to preserve sequential connections and the chronology of events told by an interviewee.⁵³ Such inquiries support the analysis of linkages, relations, and socially constructed explanations occurring naturally in narrative accounts to ease the understanding of the different processes which individuals use to make sense of their realities.⁵⁴ Phenomenological research design, on the other hand, is a strand of interpretivism that focuses on participants' recollections and interpretations of their lived experiences about a given phenomenon, particularly utilised in the fields of philosophy and psychology.⁵⁵ Lastly, the case study research design provides a detailed analysis of a specific case or activity within a given timeframe. Donmoyer suggests that a single-case study, as opposed to focusing on representative sampling and establishing statistical significance, provides more useful information about a unique phenomenon or process than has been traditionally thought.⁵⁶ For this research, the case study design answers the research questions effectively; this is further explained in the subsequent sections.

Another study design to consider is the mixed methods research design, which combines the use of qualitative and quantitative data collection and analysis. Combining these two designs implies the accommodation of the realist ontology and interpretivist epistemology.⁵⁷ However, choosing to use mixed methods will depend on the particular nature of the research and how easy it will be to blend the ontological and epistemological philosophical perspectives.⁵⁸ Capstic and Pidgeon argue that mixed methods research design used in a single research study could give a wider understanding of the research problem, the

⁵³ Gill Musson, 'Life histories' in Catherine Cassel and Gillian Symon (eds) *Essential Guide to Qualitative Methods in Organisational Research* (London: Sage 2004) 42.

⁵⁴ *ibid*

⁵⁵ Giogri Amedeo, *The descriptive phenomenological method in psychology: A modified Husserlian approach*, (Duchesne University Press A. 2009), Saunders and Others (n 2) 141

⁵⁶ Donmoyer (n 27) 176

⁵⁷ Abbas Tashakkori and Charles Teddlie (eds), *The Sage Handbook of Mixed Methods in Social and Behavioural Research* (2nd edn Thousand Oaks, CA: Sage 2010)

⁵⁸ Laura Beth, 'The need for multi-method approaches in empirical legal research' in Peter Cane and Herbert Kritzer (eds) *Oxford Handbook of Empirical Legal Research* (Oxford University Press 2012)

research question, and the practical outcomes.⁵⁹ However, both qualitative and quantitative research have their merits and demerits.⁶⁰ Some scholars suggest that the strength of mixed methods research lies in the fact that the weaknesses of a qualitative approach can be offset by the strength of the quantitative approach and vice versa.⁶¹ In other words, this implies words can add meaning to and further explain numbers, and numbers can add precision to words.

Mixed methods research seems to be the most appropriate research design adopted by pragmatists who assert that research should be geared towards offering a practical solution to inform future practice.⁶² They recognise that there are varied ways of interpreting the world with a potential for multiple realities existing.⁶³ Thus, to them, no single view is definite and therefore they see the mixed methods design as appropriate for any research.⁶⁴ However, once a mixed methods research design is adopted, questions on whether to begin with qualitative or quantitative or vice versa still remain contested. Kritzer posits that it may be useful to undertake qualitative research followed by quantitative research so as to examine the nuances and mechanisms underlying themes emerging during the quantitative phase in more detail.⁶⁵ On the contrary, Genn suggests a combination of qualitative exploratory work followed by a quantitative survey and then, later on, accompanied by follow-up in-depth interviews.⁶⁶ Although the mixed methods research seems to be valuable in giving comprehensive insights on any research, challenges of time constraints, resource implications, and deciding the

⁵⁹ Stuart Capstick and Nicholas Pidgeon 'What *is* climate change scepticism? Examination of the concept using a mixed methods study of the UK public' (2014) 24 *Global environmental Change* 389, 390&391

⁶⁰ *ibid*

⁶¹ Bryman, *Social Research Methods* (n 3); Pamela Atieno 'An Analysis of the Strengths and Limitation of Qualitative and Quantitative Research Paradigms' [2009] *Problems of Education in the 21st Century* 13, 1-6

⁶² Natasia and Others, 'An inclusive framework for conceptualising mixed methods typologies', in Tashakkori A and Teddlie C (eds) *The Sage handbook of Mixed Methods in Social and Behavioural Research* (2nd edn, Thousand Oaks, CA: Sage 2010); Bryman (n 43) 114

⁶³ *ibid*

⁶⁴ *ibid*

⁶⁵ Herbert Kritzer, 'Research is a Messy Business: An Archeology of the Craft of Socio-Legal Research' in Simon Halliday and Patrick Schmidt (eds) *Conducting Law and Society Research* (Cambridge University Press 2009) 272

⁶⁶ Hazel Genn, 'Hazel Genn and Paths to Justice' in Halliday and Patrick Schmidt (eds) *Conducting Law and Society Research* (Cambridge University Press 2009) 23

sequence of its application makes it not appropriate for this research. Notwithstanding, scholars in the field of law assert that regardless of whether empirical researchers are addressing legal questions or any other, they follow the same rules.⁶⁷ These rules ultimately seek to enable them to draw inferences from the data they have collected. They emphasise that empirical research in law has methodological concerns that are overlapping with those of political science, psychology, sociology, biology, and medicine and that legal researchers can adopt research design from these disciplines to suit their own purpose.⁶⁸

In this study, the research questions are best answered by a qualitative research approach, as opposed to a quantitative approach. This research which could be described as problem, policy, and law reform research⁶⁹ seeking to examine how the law-making process is understood through individual experiences and perception. Thus, a wealth of data for analysis to answer the research questions and meet the research objectives can be generated by obtaining relevant information directly from stakeholders involved in social interactions, subjective narratives and experiences in relation to their social world. This rich data cannot be fully generated using a quantitative research approach. Furthermore, this research aligns with Hutter's emphasis on socio-legal research which focuses on the study of the law in each social context.⁷⁰ In this regard, the socio-legal approach, therefore, allows for a detailed discussion (excursus) into the social, economic, and political past of Kenya and its inhabitants to understand the influences of law-making on climate change in the context. Chui aptly supports this position by positing that the study of environmental law, which is the broad field in which

⁶⁷Webley (n 19), Lee Epstein and Andrew Martin, 'Quantitative Approaches to Empirical Legal Research' in Peter Cane and Herbert Kritzer (eds) *Oxford Handbook of Empirical Legal Research* (Oxford University Press 2012)

⁶⁸ *ibid*, 902

⁶⁹ Ian Dobinson and Francis Johns, 'Legal Research as Qualitative research' in Mike McConville and Wing Hong Chui (eds), *Research methods for law* (2nd ed, Edinburgh University Press 2017)

⁷⁰ Brigitte Hutter, *A Reader Environmental Law* in BM Hutter (ed) (Oxford 1993)]

this research is situated, can be enhanced by using qualitative socio-legal perspectives.⁷¹ This he argues, is opposed to quantitative legal research, strongly linked to criminal law, corporate law, and family law.⁷² In addition to using a qualitative research approach, a case study strategy is suitable to generate the type data needed for this research.

4.3.2 Case study design for this study

As discussed in the preceding section, the case study is classified as a qualitative approach. A case study can provide insights about a unique, interesting, or special event in relation to individuals, processes, programmes, organisations, institutions, neighbourhoods, or sometimes events.⁷³ Eisenhardt and Stake emphasise the setting of a given case by stating that ‘case study is a research strategy which focuses on understanding the dynamics present within single settings, preserving its wholeness, unity and integrity’.⁷⁴

Different criteria can motivate the selection of a case to be studied. This can be as a result of the case study being representative, being highly effective, not effective, or atypical of cases of a given type, therefore serving as a unit of analysis.⁷⁵ The study of the case might provide insight into situations or events prevailing in the entire group.⁷⁶ A case study gives more context behind the achievement of a result, highlighting the success factors or particular challenges encountered in the process.⁷⁷ Yin describes case study research design as ‘an empirical study that investigates a contemporary phenomenon within its real life context

⁷¹ Wing Hong Chui, ‘Qualitative Legal Research’ in Mike McConville and Wing Hong Chui (eds), *Research methods for law* (2nd edn, Edinburgh University Press 2017)

⁷² Ibid

⁷³ Robert Yin, *Case Study Research Design and Methods* (Sage 2003)

⁷⁴ Kathleen Eisenhardt and Melissa Graebner, ‘Theory building from cases: opportunities and challenges’, (2007). *50 Academy of Management Journal* 25, 27, Robert Stake ‘Qualitative case studies’ in N. K. Denzin and Y. S. Lincoln (eds), *The Sage Handbook of Qualitative Research*, (3rd edn, Sage 2005) 443–465.

⁷⁵ Ranjit Kumar *Research Methodology: A Step-by-Step Guide for Beginners* (SAGE 2011)

⁷⁶ Ibid

⁷⁷ Neale and others, *Preparing a Case Study: A guide for Designing and Conducting a Case Study for Evaluation Input* (Pathfinder International Tool Series, 2006)

especially when boundaries between the phenomenon and the context are not clearly evident.⁷⁸ Thus an in-depth case study is useful to answer the question “how” and “why” with respect to the interaction between a phenomenon, its context and actors.

Although the case study strategy has been used extensively, it is not without its critics. Firstly, there is the “misunderstanding” about its ability to produce generalisable contributions to knowledge.⁷⁹ This criticism often comes from positivists who do not support the use of small samples to make inferences and, more generally, about the use of interpretive epistemology and qualitative data in the case study strategy.⁸⁰ Secondly, the case study design is regarded as less valuable in producing theoretical contributions to knowledge.⁸¹ Thirdly, it is considered less reliable as it is often biased and difficult to verify given its detailed focus on a given situation rather than its attempt to provide findings for generalisation to other situations, as obtained in quantitative-based research.⁸²

Despite the criticisms mentioned above, case study design offers comparative advantages to other research methods. Firstly, the case study design can be used in exploratory or descriptive research to generate a richly detailed description and meaning from a particular case.⁸³ Therefore, as opposed to focusing on a cause-effect relationship using a set of predetermined variables, a case study provides an in-depth analysis of a particular case. Such in-depth details given by the interpretivist researcher enables the establishment of links to theory.⁸⁴ It also allows for data analysis, the identification of themes and patterns in the data, and, at some point, seeking complementarities or dissimilarities in existing theories from

⁷⁸ Robert Yin, *Case Study Research: Design and Method* (5th edn, Sage 2014) 13

⁷⁹ Bent Flyvberg, ‘Case Study’ in Denzin N and Lincoln Y Bryman (eds), *The Sage Handbook of Qualitative Research* (4th edn, Sage 2011)

⁸⁰ Saunders, 185

⁸¹ Ibid 311-314

⁸² Ibid 311-314

⁸³ Ridder and others, ‘Entering a dialogue: Positioning case study findings towards theory’ [2014] *British Journal of Management* 25 (2) 373-387

⁸⁴ Ibid; Perri 6 and Christian Bellamy, *Principles of Methodology: Research Design in Social Science* (SAGE 2012)

literature.⁸⁵ Furthermore, the case study design could be used to refine, extend, or generate new theory

Criticisms, such as their inability to produce generalisable contributions, have been countered. For example, Ridder and others posit that it may be possible to reach a general conclusion by testing the findings of one case study by undertaking another study under similar circumstances in another context.⁸⁶ Lincoln and Guba also support this position by emphasising the need to replace the use of generalisation with transferability by stating that ‘the degree of transferability is a direct function of the similarity (fittingness, congruence) between two contexts....’⁸⁷ Furthermore, Donmoyer suggests that the use of generalisation or transferability depends on the case under consideration.⁸⁸ He posits that, in instances where meaning and perspectives have been determined and the interest is in getting aggregates based on sampling and statistical significance particularly by policy makers, generalisability is acceptable.⁸⁹ On the other hand, for practitioners in fields such as social sciences and education who use a single-case strategy and are more concerned by questions of individual meaning and perspectives and less about aggregates, transferability of findings is an alternative concept to generalisation.⁹⁰ These different views expressed here are in support of qualitative research approaches based on a case study strategy without discrediting the use of a quantitative or a mixed methods approach to study the particular case.⁹¹

In this study, the researcher chose Kenya, located in the Eastern part of Africa, as a suitable case for several reasons. Firstly, Kenya has pioneered the process of developing laws

⁸⁵ Ridder and others (n 78) 381-382

⁸⁶ Ridder and others (n 78) 378-380, Robert Yin *Case Study Research Design and Methods* (2nd edn, Sage Publishing 1994)

⁸⁷ Lincoln and Guba, *Naturalistic Inquiry* (Sage 1985) 124

⁸⁸ Robert Donmoyer, Generalisability and the Single-Case Study in Elliot Eisner and Alan Peshkin (eds) *Qualitative Inquiry in Education: The continuing Debate* (Teachers College Press 1990)

⁸⁹ Ibid 197

⁹⁰ Ibid 176, 197

⁹¹ Flyvberg (n 60), Buchanan *Case Studies in Organisational Research* (n 24)

on climate change adaptation⁹² in sub-Saharan Africa. This process seems to have originated from local communities with diverse views and perspectives, informing what became the national climate law.⁹³ This case offers a suitable context to examine how and what factors shape the incorporation of diverse stakeholders' views and whether these become part of the outcome of the law-making processes.

Secondly, the focus of this research is about understanding how LIKP is incorporated in climate change law-making. Kenya, as a case study, is equally suitable in that the country has also pioneered the enactment of a law to protect LIKP⁹⁴, the first of its kind in the Global South. The local communities in Kenya rely on their rich LIKP for decision-making on issues, including sustainable management of natural resources, and to enhance their wellbeing. The researcher will obtain views directly from these communities on how these views were incorporated into the climate law-making process.

Thirdly, agriculture is key to Kenya's economy with over 70% of the population being smallholder farmers spread across its six agro-ecological and climatic zones.⁹⁵ This sector in Kenya, like its counterpart nations in the East Africa region, is severely threatened by climate change.⁹⁶ Addressing climate change impacts and adaptation is a national concern in Kenya.⁹⁷ Thus, by engaging with the actors in the sector, the researcher will generate rich information on how the views of those in this sector are incorporated in the law-making process. There is

⁹² The Climate Act 2016 (KE)

⁹³ Joseph M. Njoroge, Beate M.W. Ratter and Lucy Atieno, 'Climate change policy-making process in Kenya: deliberative inclusionary processes in play [2017] *International Journal of Climate Change Strategies and Management* 9 (4) 535-554, Kenya Climate Change Working Group (KCCWG), Climate Change Legislation In Kenya: 2008-2016, < <https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>> accessed 16 July 2019.

⁹⁴ The Promotion of Traditional Knowledge and Cultural Expression Act 2016 (KE)

⁹⁵ Kenya National Environment Management Authority (NEMA) <http://meas.nema.go.ke/cbdchm/status-of-biodiversity/> Accessed 01/03/2010

⁹⁶ ISS 2018, Food security under threat in Kenya <https://issafrica.org/iss-today/food-security-under-threat-in-kenya>

⁹⁷ Ibid

an opportunity to replicate this research in a further study by focusing on other sectors such as tourism, transport, and energy, thus further strengthening the research.

Lastly, Kenya as a case study is also suitable in that the country has undergone significant political and governance changes. Powers were devolved to the decentralised levels with the creation of 47 counties with a main aim of enabling people at the local level to directly participate in decision-making, in line with the country's 2010 constitutional reform.⁹⁸ The agriculture sector was one of the fully devolved sectors, underscoring the importance of County Governments and local peoples' participation in decision-making. Thus, a case study strategy focused on the agrarian sector can enhance the depth of analysis and in scope and by time and space. This case study approach, thus, seeks to understand a unit of the study as a whole, the law-making process, and what the incorporation of diverse views means to participants.⁹⁹

4.4 Data Collection

Data collection was carried out through remote interviews and document reviews for approximately seven months between March and September 2021. Due to the COVID-19 pandemic travel restrictions, the researcher was unable to travel to Kenya for in-person interviews and focus group discussions, as was initially planned. Thus, the data collection process and ethical requirements changed significantly. This impacted the quality of data collected and depth of analysis, as explained under the limitations Section 4.7.

4.4.1 Interviews

⁹⁸ The Constitution of Kenya 2010 (KE), GoK "National Climate change Response Strategy 2010" Online <https://cdkn.org/wp-content/uploads/2012/04/National-Climate-Change-Response-Strategy_April-2010.pdf > NCCRS Chapter 1, Sect1, Chap 2: 10,2a) Accessed On 18 October 2018, Kenya Law Reform Commission Guide to the Legislative Process in Kenya (2015) p. 24, <<http://klrc.go.ke/images/download/klrc-a-guide-to-the-legislative-process-in-kenya.pdf> > Accessed 18/10/2018

⁹⁹ David De Vaus, *Research Design in Social Research*, (SAGE 2001) 220
Gerard Guthrie, *Basic Research Methods: An Entry to Social Science Research*, (SAGE 2010) 66

Interviewing is a flexible technique suitable for diverse research purposes. Interviews entail ‘asking purposeful questions and carefully listening to the answers to be able to explore these further.’¹⁰⁰ Interviews are extremely effective in putting together data on individuals’ perceptions or views and on the reasoning underlying the responses.¹⁰¹

The two opposing views about the nature of reality discussed above, including the objective and subjective perspectives, equally influenced the approaches to interviewing.¹⁰² The objective approach aims to get responses from social actors who are treated as witnesses to a reality that is independent of them and their social world. This is opposed to the subjective perspective that goes beyond gathering data to attempt to comprehend the views of social actors who are interacting, creating, and interpreting their social world. In the subjective perspective, the interviewer is engaged in asking questions, responding to participant’s views, interpreting, reflecting, and constructing meaning from the data generated.¹⁰³ As previously indicated, this study used a subjective approach with interviews as the main instrument for data collection, consistent with the research question and objectives.

There exist different types of interviews including semi-structured, in-depth and focus group interviews, and structured interviews (interviewer-completed questionnaires).¹⁰⁴ Semi-structured interviews were used as the primary data collection method. Semi-structured interviews are “non-standardised’ and more flexible with the views of the interviewee being the focus.¹⁰⁵

The researcher developed an interview schedule that contained a list of prompts to open discussions, which closely aligned to the analytic framework. Some of the prompts included:

¹⁰⁰ Saunders (n 3)388

¹⁰¹ Lisa Webley, *Qualitative Approaches to Empirical Legal Research* (n 19)

¹⁰² *ibid*

¹⁰³ David Silverman, *Qualitative research: issues of theory, method and practice*, (SAGE 2011), Norman Denzin, ‘The reflective interview and a performative social science’ (2001) 1 *Qualitative Research* 23, 28

¹⁰⁴ Saunders (n 3) 390-428

¹⁰⁵ Saunders (n 3) 391, Bryman (n 2) 470.

(i) What were the sources and types of knowledge systems and how were they developed? (ii) Who were the actors in the climate change policy and law-making process, their sources of power, and the nature of interactions among them? (iii) What existing institutional arrangements mediated interactions between policy actors, the incorporation of knowledge, especially the LIKP of actors, at sub-national levels, and (iv) how was the interaction between the domestic institutional arrangements and those promoted from outside by other policy actors and institutions beyond the Kenya policy environment? (See Appendix 1). In doing this, the researcher was flexible in accommodating follow-up questions that further elaborated or clarified responses prompted during the interviews and discussions. The questions were formulated to probe interviewees to share their perspectives aimed at generating data whose analysis will respond to the research questions and achieve the research objectives. Thus, the prompts were aligned to the analytical framework developed for this study. A dynamic interaction between the researcher and participants resulted in the capturing of experiences, knowledge, and perceptions on how the climate change policy and law-making happens in Kenya and how the process enhances or constrains the incorporation of LIKP. The semi-structured interviews allowed interviewees the freedom to express their views in their own terms. The interview schedules and list prompts were similar for each policy actor group. Thus, the information generated supported some level of comparative analysis of views on Kenya's climate change policy and law-making process from the different groups.

4.4.2. Online interviews and group discussions

Online interviewing, as opposed to in-person interviewing, is a flexible approach to gather research data particularly where challenges related to travel to research sites and logistics exist. Throughout this research, data was collected remotely with the researcher based in Birmingham and the interviewees based in Kenya. The use of online interviews has

advantages and disadvantages related to methodological and ethical issues when compared to in-person interviews.

Firstly, some of these advantages include its flexibility as participants can arrange the interviews around other commitments.¹⁰⁶ Secondly, its limited ecological footprint as the researcher or interviewees do not need to travel to interview.¹⁰⁷ Travelling contributes to the carbon emissions and the climate change challenge. Thirdly, the reduced time commitment due to the elimination of travel by the researcher to the project site.¹⁰⁸ This time could be dedicated to other research activities. Fourthly, it is convenient and cost effective as advancement in technology makes it easier.¹⁰⁹ Conversely, this interview technique has some demerits. Some of these include the requirement for high-speed internet connectivity and computer literate participants;¹¹⁰ time lags sometimes resulting in the loss of data during interview;¹¹¹ the displacement of the “site” of the research and the “sight” between the researcher and the researched and, thus, an inability to pick up non-verbal clues, which is an important part of the data and subsequent analysis;¹¹² and issues of confidentiality and safeguarding of information.¹¹³

The methodological and ethical issues mentioned above, including the researcher having no full control over the safety and confidentiality of information shared and the privacy

¹⁰⁶ Chimento and Others, ‘Online interviewing with interpreters in humanitarian contexts’ [2018] *International Journal of Qualitative Studies on Health and Well-being* 13 (1), 1-9

¹⁰⁷ Paul Hanna, ‘Using internet technologies (such as Skype) as a research medium: A research note’ (2012) (12) (2) *Qualitative Research* 239

¹⁰⁸ Hannah Deakin & Kelly Wakefield, ‘Skype interviewing: Reflections of two PhD researchers’ [2014] *Qualitative Research* 14(5), 603–616

¹⁰⁹ Lalita Sah, Devendra Singh, Rajeeb Sah, ‘Conducting Qualitative Interviews using Virtual Communication Tools amid COVID-19 Pandemic: A Learning Opportunity for Future Research’. [2020] *JNMA J Nepal Med Assoc.* 58(232): 1103–1106, Audrey Gift, Joan Creasia, Barbara Parker, ‘Utilizing research assistants and maintaining research integrity’ (1991) *Research in Nursing & Health* 14(3) 229–233, Jessica Sullivan, ‘Skype: An appropriate method of data collection for qualitative interviews?’ [2012] *The Hilltop Review* 6, 54–60.

¹¹⁰ Roksana Janghorban, Robab Roudsari, & Ali Taghipour, ‘Skype interviewing: The new generation of online synchronous interview in qualitative research’ (2014) 9 *International Journal of Qualitative Studies on Health and Well-Being* 1, 1–3.

¹¹¹ Sullivan (n 9)

¹¹² Nalita James & Hugh Busher, *Online interviewing* (Sage 2009)

¹¹³ *ibid*

of conversations, needed to be minimised. Chiumento and others suggest that ‘conducting interviews online means adapting the researcher’s ethical obligations towards their participants’.¹¹⁴ Their justification for this shift is that, in remote interviews, the researcher no longer has control over location from where participants are interviewed nor over the functionality of internet platforms used.¹¹⁵ To overcome these challenges, the development and use of “safe” and password-protected online environments, such as Adobe Connect, to encourage participant disclosure during interviews has been suggested.¹¹⁶ The technical requirements for setting up and using such internet platforms seem to add another layer of challenge to those highlighted above. In this research, the researcher was familiar with the features of internet platforms, including Zoom and Skype, and used these to conduct the online interviews.

To minimise some of the methodological and ethical challenges, the researcher carried out some actions prior to commencing the data collection using these platforms. Firstly, the researcher recruited, and trained two research assistants (RAs) based in Kenya. Secondly, the researcher and the assistants performed interview role plays to check availability and reliability of the online platforms to conduct the interviews. This enabled the researcher to rehearse strategies to deal with potential differences and challenges in the online interviews¹¹⁷. It equally enabled the researcher to avoid imposing standards of in-person interviews on the remote interviews.¹¹⁸ Thirdly, the researcher collaborated with the RAs to check interviewees’ access to the online platform prior to commencing interviews. This included introducing the participants to use of Zoom and Skype platforms in instances where they had not used them or had challenges using them. In proposing the platforms to be used, the agency of the participant

¹¹⁴ Chiumento and Others, ‘Online interviewing with interpreters in humanitarian contexts’ (2018) *International Journal of Qualitative Studies on Health and Well-being?* 13, 1-10

¹¹⁵ *ibid*

¹¹⁶ *ibid*

¹¹⁷ Janet Salmons, *Qualitative online interviews: Strategies, design and skills* (2nd ed. Sage 2015).

¹¹⁸ Christine Hine, *The internet: Understanding qualitative research* (OUP 2012).

to make an informed choice about the level of privacy they deemed comfortable was discussed. Lastly, prior to commencing every interview, the researcher and the RAs introduced the participants' information sheet (see Appendix 2) and informed consent (see Appendix 3). Their consent was sought. In addition, confidentiality and safety of the data collected was explained to participants and any concerns they raised were clarified. The researcher witnessed the signature by the interviewees of the participant information sheets and consent forms in the online platform before any interview was conducted. Also, signed and scanned consent forms were sent to the researcher by the RAs. Participants were informed of their right to withdraw their data up to 12 weeks after the interview.

During the online interviews, the researcher double recorded each interview on the internet. After the interviews, the recordings were transferred to the secure laptop dedicated for the research and were transcribed and analysed. The transcriptions were done by the researcher making sure the data was cleaned and to correct transcription errors. Prior to this, careful attention was paid to identifying the sample for this study.

4.4.3 Sampling technique

Semi-structured interviews

As highlighted in the previous sections, qualitative researchers give less focus on defining a sample when compared to quantitative researchers. Patton supports this view by positing that the quality of the findings and the meanings that the researcher develops depend more on the data collection and analysis than to the size of the sample.¹¹⁹ However, Saunders and others suggest that, for semi-structured interviews, an overall sample size of 5-25 is appropriate.¹²⁰ They further suggest that irrespective of this suggested numerical sample size,

¹¹⁹ Michael Patton, *Qualitative Research and Evaluation Methods* (3rd edn Sage 2002)

¹²⁰ Saunders and others (n 3) 297

researchers should continue to collect data until a point of data saturation was reached (point where no new knowledge is generated from interview).¹²¹ This study recruited interviewees and collected the required data until a point of saturation was reached.

The researcher gained access to the sample population in different ways. Firstly, the researcher purposefully sought out key people through established professional networks and contacts in Kenya who served as a rich source information or data. Secondly, the researcher used the snowball sampling technique, which entailed beginning with the group of respondents previously identified and interviewed. Each of these participants then provided contact information for another person they considered to be a good research subject, thus slowly building up a large sample of participants.¹²² Lastly, to gain access, the researcher acquired endorsement letters from the sponsors, the University of Birmingham, the Murang'a University of Technology in Kenya, Kenya National Farmers' Federation (KENAFF), and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). The researcher, together with the RAs, followed all the protocol in Kenya to make official requests for interviews with policy actors from the different actor groups. The researcher produced a map of potential interviewees from different policy actor groups, shown in Table 3.

Table 3: Spread of participants for semi structured interviews amongst identified stakeholder groups

No	Policy Actor Group	Potential Interviewee	Number interviewed
1.	Central/ devolved Government level	<ul style="list-style-type: none"> ➤ Head of Compliance National Environmental Management Authority (NEMA) ➤ Coordinator of National Climate Change Coordination Unit ➤ Head of Climate Change Unit, Ministry of Environment and Forestry ➤ Head of Climate Change Unit, Ministry of Agriculture 	13

¹²¹ *ibid*

¹²² Michael Patton, *Qualitative Research and Evaluation Methods* (3rd edn London Sage 2002)

		<ul style="list-style-type: none"> ➤ Agriculture Extension Officers ➤ AFOLU ➤ Kenya Meteorological agency 	
2.	Farmers	Sub national and national level	11
3.	NGOs/CSOs	Kenya National Farmers' Federation (KENAFF)/Kenya Climate Change Working Group (KCCWG) The Pan African Climate Justice Alliance (PACJA)/Climate Network Africa UNEP, CIDAR, IFORD, INADES	9
4.	Researchers working on law-making and climate change	Institute of Climate Change/The Centre for Advanced Studies in Environmental Law and Policy (<i>CASELAP</i>), University of Nairobi Kenya Agricultural Research Institute (KARI) Murang'a University	7
5.	Businesses that rely on Agriculture productivity for their operations	Association of Professional Societies of East Africa (East African Breweries Ltd/ Unga Group)	2
Total number of interviews			42

4.4.3 Policy document review

To strengthen the data and validate information generated from the interviews, the researcher collected and reviewed official laws, acts, regulations, policies and strategies, and the constitution. The document review was done simultaneously with the interview data analysis.

The researcher was aware that official documents related to climate change would be an important source of data for the research. However, accessing these documents, even from its main sources, could have been a challenge. This was not the case in Kenya. The researcher accessed these policy documents easily through online sources. Many interviewees referred to some of these policy documents and mentioned the official sites used to access them during the interviews. The researcher used these official sites to ensure the reliability of the documents

being reviewed. Many publicly accessible repositories of official documents, including the Kenya Law, the Kenya Law Reform Commission, and the Kenya e-Repository (Repository of Kenya Government Documents) were regularly consulted by the researcher. Such official documents included:

1. The 2010 Constitution
2. National Climate Change Response Strategy (NCCRS)
3. National Climate Change Action Plan (NCCAP)
4. National Environment Policy
5. Agricultural Sector Development Strategy (ASDS) and Agriculture Act, Cap. 318
6. The Climate Act 2016
7. Traditional Knowledge and Culture Expression Act 2016

4.5 Data Analysis

Quantitative data collection, followed by analysis, presents a ‘thin’ abstraction of facts. Meanwhile, analysis of qualitative data rather gives a ‘thorough’ abstraction and an exploration of a subject in its entirety.¹²³ Conversely, in qualitative research, meanings are derived from words which are often unclear, thus needing caution by the researcher in exploring, clarifying, and interpreting them. The success of this relates to how the data collection process links with the data analysis process. Data analysis entails a process of exploration, analysing, synthesising, and transforming voluminous data, which is often complex in nature with the purpose of addressing the research objectives and question.¹²⁴ Thus, before embarking on analysis, it is important to decide on the approach and purpose of the qualitative analysis.¹²⁵

¹²³ Wayne Brekhus and others, ‘The need for thin description’ (2005) *Qualitative Inquiry* 11, 861–879, Ian Dey *Qualitative Data Analysis* (Routledge 1993)

¹²⁴ Saunders and others (n 3) 568

¹²⁵ *ibid*

Firstly, there exist two purposes of analysing data: the context, and the concept.¹²⁶ When data analysis is focused on describing facts pertaining to a situation or an event, it is a step towards recognising the context or social world from which the data was generated. This in turn will enhance the classification and interpretation of the data to develop or generate meanings (develop concepts and theories). In this case, Saunders and others emphasise the capturing participant's tone, non-verbal communication enables the capturing of useful incidents that affect the conduct of the interviews and the interpretations of the data collected.¹²⁷

Secondly, two approaches to data analysis have been highlighted by different scholars, the deductive and inductive approaches.¹²⁸ In the deductive approach, the researcher uses an existing theory, or a mixture of theories derived from literature, the researcher's experiences, and expectations to build a descriptive or explanatory framework (theoretical or conceptual), which is used to start and direct the data analysis process. The advantage of this approach is that it links the research with the existing body of knowledge in the discipline. Conversely, a shortcoming of this approach is that the framework developed might be restrictive with respect to the revelations from the data, thus limiting the exploration of meanings expressed by the participants fully. On the other hand, in the inductive approach, also referred to as the grounded approach, the researcher collects data and simultaneously analyses them to discover themes and issues that arise to develop a conceptual framework that guides subsequent work. In this approach, theory develops throughout the process of collection, analysis, and interpretation of the data. An advantage of this approach is that the researcher avoids using existing theoretical constructs but, instead, relies on the newly developed theory which is based on an understanding of the perceptions of social actors and the social world, comparing the new

¹²⁶ Corbin and Strauss, *Basic of Qualitative Research* (n 30)

¹²⁷ Saunders and others (n 3) 572

¹²⁸ Saunders and others (n 3) 569, Bryman (n 2), Silverman (n 82), Yin (n 61)

theory with that contained in existing literature. A shortcoming of this approach is that it requires a long time for simultaneous collection and analysis of data to get the desired results. Saunders and others, however, note that, irrespective of what approach a researcher chooses, the research in practice is enriched as some combination of elements of the two approaches are likely to occur as the researcher engages to identify ‘themes, patterns, and relationships’ from the process of data collection and analysis, and makes sense of them in relation to what other researchers posit in literature.¹²⁹

4.5.1 The data analysis approach used in the study

Following the discussion above, the researcher used theoretical thematic content data analysis to extract meaning from the data collected from the semi-structured interviews and focus group discussions. Braun and Clarke describe thematic analysis as a flexible method for identifying, analysing, and reporting commonly recurring patterns (themes) within data, and organising and describing research data in rich detail.¹³⁰ Boyatzis adds that thematic analysis could further enrich research by interpreting various aspects of the data collected.¹³¹ These authors posit that this analytical approach is not tied to any pre-existing theoretical framework and can be used within different theoretical frameworks. It is best suited for this constructionist research, which examined events leading to the development of Kenya’s climate change policy and law. Meaning was derived from interpreting the realities, meanings, experiences of the subjects, and the arrangements in social context.

¹²⁹ *ibid*

¹³⁰ Virginia Braun & Victoria Clarke, ‘Using thematic analysis in psychology’ [2006] *Qualitative Research in Psychology* 3(2) 77-101, Anthony Tuckett, ‘Applying thematic analysis theory to practice: a researcher’s experience’ [2005] *Contemporary Nurse* 19, 75-87. Ryan, G.W. and Bernard, H.R. ‘Data management and analysis methods’ Denzin, N.K. and Lincoln, Y.S., (eds) *Handbook of qualitative research*, (Sage 2000, second edition), Attride-Stirling, J. ‘Thematic networks: an analytic tool for qualitative research’ [2001] *Qualitative Research* 1(3) 385–405

¹³¹ Boyatzis, R.E. *Transforming qualitative information: thematic analysis and code development* (Sage1998).

This analytical approach is like discourse analysis or even content analysis. Miles and Huberman suggest using thematic analysis within a social constructionist epistemology where patterns in data are identified as socially produced.¹³²

A three-staged process was used to organise the data in this thesis:

A. Assembling the data corpus

Firstly, as highlighted in Section 4.4.1 above, the research sub-questions were used as prompts for the semi-structured interviews with the different policy actor groups. This was in order to respond to the main research question of *how the policy and law-making process enhances or constrain the incorporation of LIKP*. The sub-questions were narrow in nature and only served as overarching guides. Many follow-up probes accompanied them to generate specific data from the respondent.

These questions were equally used to extract data from the policy documents reviewed, including the KCCWG reports, NCCRS, NAP, and 2010 Constitution. Parliamentary Factsheets and other reports published by national and international organisations such as TI, UN, FAO, and WB were also used. The data from each interview was put together to make up the data corpus. The questions also helped guide the coding and analysis of the data.

B. Extracting the data set from the data corpus

The analytical framework developed from the literature review with three recurrent themes: i) knowledge, ii) actors and power relations, and iii) institutional arrangements was used to guide the analytic interest in the data corpus. The following steps were undertaken:

¹³² Miles, M.B. and Huberman, A.M. *Qualitative data analysis: an expanded sourcebook* (second edition Sage 1994)

1. Transcription of verbal data

The recorded interviews were transcribed, ensuring that it was ‘true’ to their original nature. Although writing, reading, and re-reading were time-consuming, it proved to be a crucial step to start the data familiarizing process and to begin to glean meaning.¹³³ The RAs transcribed ten out of the forty-three interviews. The entire transcripts were cross-checked against the original audio recordings for accuracy.

Ten semi-structured interviews were conducted in Kiswahili and were transcribed and translated into English by the RAs. This transcribed and translated data was crosschecked and was found to be consistent and accurate. Crosschecks were done by the Policy Officer of the KENAFF, the local host organisation in Kenya. These were confirmed to match the original transcriptions done by the researcher and RAs. Once all the data was cross checked by the researcher, it was re-read with notes made on what was interesting, unusual, or significant. Phrases or words without an English equivalent or were problematic to translate were left in the local language. The data was then manually classified, sorted, arranged and then relationships in the data were examined and recorded.

2. Generating initial codes

Codes were then generated by identifying features of the data that shed light on the local knowledge, actor interactions, and institutional arrangements in the knowledge-to-climate change policy and law-making process in Kenya. These initial codes did not differ significantly from the broader themes contained in the analytic framework, which were units of analysis of

¹³³ Bird, C.M. ‘How I stopped dreading and learned to love transcription’ (2005) *Qualitative Inquiry* 11(2), 226–248.

this thesis. The coding was done manually and shaped by the specific (sub) questions developed for this thesis to identify features of the data set. The data patterns, linkages, and contradictions were noted at this stage.

3. Searching for and reviewing the themes

The codes were then sorted and combined to form overarching sub-themes. The three overarching sub-themes were developed following the literature review and were contained in the analytical framework that guided the sorting of the codes. This was an iterative process, first to ensure that the collated extracts presented a coherent pattern, and second to consider the validity of individual themes in relation to the data set and the meaning they reflected, in line with the analytic approach (see Table 4). In this iterative process, some new themes emerged that were interesting, such as political transitions in Kenya, ethnic cleavages, effectiveness of the law, but they did not add anything substantial or were not within the scope of the study. As such, these were excluded.

Table 4: Summaries of themes derived from the data

Sub questions	Themes and sub-themes from the data corpus
What knowledge in policy and law-making on climate change	<p>Two Main Knowledge systems</p> <p>Two main knowledge systems (LIKP and scientific) in law-making</p> <p>Knowledge shapes interests which in turn define the power of actors</p> <p>Both knowledge competition and complementarity exist</p> <p>Blending, co-production, cross-fertilization of scientific knowledge and LIKP, especially used in weather forecasting and early warning</p> <p>Different considerations are given to the knowledge systems</p> <p>Farmers predominantly use LIKP to understand and respond to environmental changes, including climate change</p> <p>Premium on scientific knowledge over LIKP by those out of community</p> <p>Tokenistic consideration of LIKP in the decision-making process</p> <p>Low level of adoption of LIKP</p> <p>Scientists and experts try to downplay LIKP</p> <p>Source of quiescent power</p> <p>Strong political will in support of LIKP</p>

	<p>LIKP is articulated in policy documents There is a buy-in for LIKP by political elites</p> <p>LIKP faces significant challenges LIKP faces challenges, including development, storing, and sharing Unclear process of how LIKP are captured in the law Farmers sceptical about sharing their LIKP</p>
<p>Who are policy actors, and how do power dynamics amongst them shape the involvement and influence through the stages of policy-making</p>	<p>Diverse Actors</p> <ul style="list-style-type: none"> - Local indigenous communities are mostly found at the sub-national level - Government (at central and decentralised levels, including their proxy representatives such as EOs) - Active parliament and senate involved in lobbying - Civil society organisations, including local, national, and international NGOs CSO main knowledge and evidence generators/gatherers - Private sector groups <p>Conflicts of interest/Silo mindset</p> <ul style="list-style-type: none"> - CSO-parliament interactions - Parliament -Senate interactions - Executive-legislature interactions - Local elite-local communities' interactions - Silo mentality among some MDAs <p>A mix of interest and power</p> <ul style="list-style-type: none"> - Diverse interests and policy actor groups are active in agenda setting - Conflicts of interests, leader, and representation between policy actors - Differential access to and control of resources, socio-economic status - Power asymmetries - Proxy representations - Poor representations and participation of actors, especially those at subnational levels - Fragmented/Unconcentrated power <p>Influence of external actors</p> <ul style="list-style-type: none"> - Provision of technical, financial, and material support

<p>How do institutional arrangements in the policy space mediate between actors' knowledge and relationships?</p>	<p>Devolved governance arrangement in the 2010 Constitution</p> <ul style="list-style-type: none"> - Balance of power between the National Assembly and the Senate - The strong connection between national and sub-national governance levels - Multi-level governance arrangements - Horizontal, vertical interactions across sector and policy actor groups - Inter-ministerial committee <p>Legal context and culture that supports participation.</p> <ul style="list-style-type: none"> - Legal culture and context support inclusive participation and deliberation among policy actors. - Domestic versus externally driven process - Participation as a Constitutional requirement - A mix of top-down and bottom-up approaches - Multi-level governance interactions (horizontally and vertically) <p>Challenges of inclusion</p> <ul style="list-style-type: none"> - Communication channels and tools sometimes exclusive of sub-national policy actors - Poor understanding of participation - Self-interest over collective interest by some policy actors - Places where decision-making happens shape the level of participation and input to the process <p>External influence of external institutional arrangements</p> <ul style="list-style-type: none"> - International regimes - Financial mechanisms
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4. Using data as building blocks to guide the analysis

Extracts of the collated data for each theme were re-visited and used to construct a narrative in the analysis. The analysis was done to get meaning beyond the surface of semantic or surface analysis. Data analysis did not stop at what participants said or what was written in the documents consulted. Using the thematic analysis approach, the researcher engaged in the analysis of the data at a more latent level. This involved identifying the underlying ideas, assumptions, conceptualisations, and ideologies, and constructing meaning out of what was articulated in the data. An interpretative analytic approach was used to tell the story behind the themes and sub-themes. The researcher engaged with the dialogue's themes and concepts by seeking to find complementarities and/or dissimilarities between what emerged from the data analysis, interpretation and explanation, drawing upon the analytical framework generated from the literature review. The researcher demonstrated how well grounded the analytical

framework is, based on inference made from the case study. In addition, the researcher made suggestions for modification or refinement of the analytical framework, highlighting an aspect of an inductive approach which was not previewed.

5. Other analysis

Relevant policy documents were identified and analysed in line with the two types of document analyses proposed by Prior.¹³⁴ Firstly, the content approach focused entirely on what was contained in the documents.¹³⁵ Second, the use and function of the documents focused on how the documents were utilised as a resource by actors for purposeful ends.¹³⁶

4.5 Ethical considerations

Ethical clearance was obtained from the Ethical Review Committee of the University of Birmingham (Ethical Review ERN_19-0828) prior to the commencement of the interviews. Every interviewee was asked to read the information sheet for participants, or this was read to them, and they were asked to give their consent by signing the consent form (see Appendix 2 and Appendix 3) if they agreed to participate in the research. The researcher sought to obtain a thorough analysis of how policy and law-making on climate change enhanced or constrained the incorporation of LIKP. This was considered a sensitive topic and, thus, it was evident some data was not disclosed by some policy actors, especially those at the national level.

The researcher assured the interviewees about the use the data solely for academic purposes and that it had nothing do with the performance of the state institutions and their

¹³⁴ Lindsay Prior, *Using Documents in Social Research* In Silverman, D. (ed.) *Qualitative Research: Issues of Theory, Method and Practice* (London SAGE 2011, 3rd ed.)

¹³⁵ *ibid*

¹³⁶ *ibid*

credibility. In addition, the interviewees were assured that data collected was going to be anonymised, and that all the data generated from the research was managed in accordance with the University of Birmingham's Policy on Data Protection and the UK and Kenya Data Protection legislation. This enabled the researcher to obtain information considered as sensitive for public disclosure. The building of trust between the researcher, the RAs, and the interviewees was important, and participants were assured of confidentiality of the data collected for the study. Thus, position titles and not names were used in the results, findings, and analysis chapters. Access to the research data will only be for persons authorised by the University of Birmingham ethics committee. In addition, the researcher shall use the UBIRA eData, the University of Birmingham Institutional Research Archive, to store all the data from this study.

Although this study was conducted ethically, some limitations were experienced. The following section presents research limitations and positionality of the researcher to the research.

4.6 Limitations and impacts on the research quality

In carrying out this study, the researcher encountered several setbacks. Firstly, the richness of this research depended on getting quality data by directly engaging stakeholders through in-person, semi-structured interviews and focus group discussions at the central and county levels in Kenya. Unfortunately, the researcher could not travel to Kenya for nearly two years because of COVID-19 lockdowns and restrictions. During the early months of the lockdown, the researcher anticipated being able to conduct the in-person interviews within a few months. While waiting, the researcher considered different ways to enrich this study. The researcher conducted ten interviews with international researchers, including an IPCC Lead Author (LA), Least Development Country (LDC) climate negotiators, and heads of

international climate think tanks the researcher met at conferences, including the 2019 Transformations Conference in India, the 2020 Adaptation Conference in Chile about LIKP and Climate change Adaptation. While their insights revealed the broad nature of the study, they also provided useful insights used by the researcher to refine the interview guides. As the COVID-19 lockdown and travel restrictions persisted both in the UK and Kenya, the researcher realised there was a need to devise alternative strategies to get the data.

Thus, after 18 months of waiting and hoping, the researcher changed the research approach from in-person to remote interviews to collect data for this study. This entailed revising the Application for Ethical Review and getting another approval based on the change to collect the data from in-person to remotely. Secondly, the researcher had to go through the long process of re-applying for a Research Permit from the Government of Kenya following the expiration of the first license. This entailed waiting several months before the Kenyan authorities could issue the license. Applying for a second licence did not only entail additional expenses but it left the researcher with limited time for data collection. Thirdly, in addition to the remote interviews, the researcher decided to complement the interview findings by examining official reports, policy documents, and other related sources from government on policy and law-making. While the researcher obtained rich information through online searches, the initial plans were to visit the different policy actors and institutions to directly discuss the contents of the documents and reports produced by these actors and institutions. Gathering this data online removed the direct and intimate research-participant relationship and observations during the interviews that would have constituted rich data for analysis and interpretation, which the researcher had envisaged at the start of this research. Therefore, some of the findings and analyses reported in this research would have been enriched if the researcher had face-to-face interactions with the respondents to probe more responses and develop meaning from the interactions.

4.6.1 Limitations of the framework

The framework was useful in guiding how the research was conducted. Therefore, it gave a predetermined frame to design the approach and to write the analysis, broken up into three parts i.e., knowledge, actors and power relationships, and institutional arrangements. However, this could be considered biased as the results are constrained by the design. The other missing part of the framework is the place of international institutions and mechanisms. Climate change is global in scope and no jurisdiction can proffer solutions to it alone. The framework was initially developed with a focus on the domestic context. However, as the research progressed, it was found that the domestic institutional arrangements were connected and influenced by international institutions (regimes and financial mechanisms). The influence of international institutions shapes the culture in the policy space and policy actors' perceptions of the policy and law-making process and its outcomes. In the literature review in Chapter 3 and the analysis in Chapter 6, based on the perceptions of the policy and law-making on climate change in Kenya, the policy actors are classified into two groups. The 'growth first stonewallers' or 'progressive realists or internationalists'. The perceptions they held about the process was examined. However, this did not necessitate changing the framework as these actor perceptions were reflected throughout the themes covered by the framework.

4.7 Positionality of the researcher to the research

Away from the academic justification for picking Kenya as a case study, the researcher has profound interest in the subject of climate change, which has influenced positionality to this study. The impact of the researcher's positionality, whether in qualitative or quantitative

research, has been a longstanding debate.¹³⁷ The researcher's life experiences, education, and professional background have influenced on the research. Especially on how people, especially in low-income countries like Cameroon, where the researcher comes from, are affected by negative environmental changes such as climate change. However, these people do not remain victims. They can pool their resources, including their knowledge, to co-produce solutions that can be used to improve their wellbeing and that of their environment in general.

The researcher was born in Mankon, a small village in the North-Western Highlands of Cameroon. The major source of livelihood of his community depended on the cultivation of food crops for domestic consumption and local trading. Their survival was directly linked to how much community members cared for and lived in harmony with the environment. While growing, up the researcher observed and participated in some of the practices his parents carried out while they cultivated the soils including seed selection, planting, pest control, controlled burning, and soil regeneration. However, over time, the local community experienced rapid changes in the social, environmental, and climatic conditions as the population grew and new cultures and ways of doing were embraced. The harmony that existed between the community and the environment was slowly broken. Climate change had the most significant impact on the people as it directly affected agriculture, their main source of livelihood. Some community members began seeking alternative ways to grow food, including the use of inorganic fertilisers and pesticides to heal the soils. Other community members including his parents relied more on the local indigenous knowledge and practices. The researcher found that those who relied on the LIKPs produced healthier foods, lived healthier lives, and at the same time, maintained soil health. Thus, overtime, they continued to produce

¹³⁷ Corbin Dwyer, & JL Buckle, 'The space between: On being an Insider-Outsider in qualitative research' [2009] *International Journal of Qualitative Methods* 8(1), 54–63.

food on these healthy soils compared to those that relied on other knowledge systems and inputs.

However, despite the significant and rich knowledge and practices to enhance community and environmental resilience, it was not considered one of the government priorities to value and promote this knowledge system alongside others for wider application. Instead, the local and national authorities focused on actions and priorities that were external, foreign, expensive, and less relevant to building community adaptation and resilience. In addition, the responses to address these pressures from decision-makers were often inappropriate to the context and took time to be understood by the communities.

The experiences and exposure to LIKP in Cameroon have motivated the researcher's interest in understanding how communities could be organised and empowered to make valuable contributions based on their inherent knowledge and practices to address these global challenges, despite little external support. The focus has been on whether decision-making processes offer opportunities for incorporating these community contributions alongside other knowledge to understand the world and respond to its changes. The researcher realised that he could contribute, through this research, to the international, national, and sub-national drive towards the development of domestic policy and laws that respond to the needs of those most vulnerable to climate change. This is focused on studying the mechanisms by which communities respond to climate change and how their LIKP could be used alongside scientific knowledge as reciprocal and complementary knowledge systems to generate climate decisions that are responsive to the needs of those most impacted. Kenya has advanced, compared to other countries like Cameroon, through the development of its 2016 Climate Change and 2016 Traditional Knowledge and Cultural Expression Acts, which is a valid reason for the researcher to explore this question. However, not being a Kenyan was valuable and at the same time had challenges, as highlighted in the next paragraph.

The insider-outsider position of the researcher had implications (benefits and challenges) for a study that examined a national policy process which was considered a sensitive issue according to some respondents. Hellowell suggests that a balance between insider-outsider or ‘involvement and estrangement’ benefits research as the research exhibits both familiarity and empathy in combination with a sense of alienation or distancing, which gives an ideal atmosphere for the researcher to engage with the researched.¹³⁸ The researcher is a non-Kenyan but has worked on projects in Kenya and had some inside perspective about Kenya. With the outsider perspective, the researcher acknowledges the inherent biases and, in engaging with the research, including ensuring a diversity of the interviewees, which might have been compromised if the researcher was an insider and inclined towards choosing participants like the researcher. The researcher had worked on some projects in Kenya with the people of Kenya, sharing some similar characteristics with the people of Cameroon. Thus, the researcher could frame the research questions with an understanding of the subtleties in Kenya and, therefore, encourage the interviewees to tell their stories. However, as an outsider, the researcher still had to be thoroughly familiar with the participant’s norms and build the needed rapport with some interviewees to fully identify the honesty in their responses even though they were willing to share their perspectives on the research. In cases where the researcher had difficulties accessing interviewees as an outsider, the snowballing technique for identifying interviewees helped, in addition to the role of RAs based in Kenya.

4.8 Importance of the study

This research is important for several reasons. First, the lessons generated will be very important for low-income countries, like Cameroon, which are currently considering developing climate change laws with the view of incorporating the knowledge of those directly

¹³⁸ David Hellowell, ‘Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research [2006] *Teaching in Higher Education* 11(4) 483-494

impacted. Secondly, policy and law-making on an issue, such as climate change, is a new and growing area of research. This study will be a springboard for future research in this area. In addition, the findings of the research will be beneficial to Kenya as it is still in the early stage of implementing this law and developing accompanying regulations and norms. The lessons could support these processes. Thirdly, this research will have a policy influencing role. The contributing authors to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) recommended greater recognition of LIKP in policy-making on climate change, beginning with the Sixth Assessment Report to be published in 2022. The findings of this research could contribute to this global policy quest.

4.8 Conclusion

This chapter has discussed the philosophical stance as the foundation for the research, the methods, and methodological approach. Kenya was chosen as a case study as the government has shown a strong commitment to addressing climate change and the protection of LIKP through policy and law-making in these sectors. This case offers the opportunity to understand how this legislative process works, who are those involved, and what opportunities and constraints there are for incorporation of LIKP. A qualitative approach and a case study strategy was used. Data was collected through semi-structured interviews involving key informants from government's ministries, legislators, NGOs, research institutes, and businesses and farmers in the different agro-ecological regions of Kenya.

CHAPTER 5: KNOWLEDGE IN CLIMATE LAW AND POLICY-MAKING

5.1 Introduction

This chapter presents and discusses the findings from the data generated from interviews and other sources of evidence on the extent to which knowledge is used to inform the policy and law on climate adaptation in Kenya. Knowledge is identified as a critical element in the policy and law-making process. What this knowledge is, how it is developed, how it is used, and the challenges for its incorporation are examined. This is done to respond to the research sub-question of *how different knowledge systems, such as scientific and LIKP, operate and what factors enhance or constrain their incorporation, particularly LIKP of agrarian communities in law and policy-making on climate change adaptation in Kenya* (Objective 1). The interview questions were focused on the role of knowledge in general and, later, the LIKP of agrarian communities in Kenya's climate change legislative process.

The findings and analysis are reported and discussed in three sections based on the analytical framework. The first section explores the role of knowledge in legislative processes and the sources of this knowledge. The findings revealed that although scientific and LIKP knowledge systems were used in Kenya's adaptation policy and law-making, LIKP was used less than scientific knowledge. The second section focuses on the LIKP of agrarian communities, whose engagement was more extensive in the adaptation policy domain, and why their knowledge was used to a lesser extent in adaptation policy. Local indigenous knowledge and practices was given a simplistic representation compared to scientific knowledge systems, mainly by higher level and intermediary bureaucrats in the policy and law-making process. The findings revealed that LIKP in Kenya is extensive and used mainly by agrarian communities for decision-making on environmental and natural resource management challenges. The last section examines the respondents' perspectives and evidence from other sources on the factors

and issues that enhance or constrain the incorporation of farmers' LIKP. Documentary sources examined include climate change policy documents that were developed and implemented at the same period when the Climate Change Act was produced from 2008 to 2016. The findings from these sources are compared, together with stakeholders' perceptions generated from the interviews.

5.2 Sources of knowledge for climate adaptation policy and law-making

This section identifies the role and extent of knowledge used in Kenya's policy and law-making process on climate change. The process involved many stakeholders ranging from central bureaucrats to populations at the community level. Knowledge was considered a vital part of Kenya's law and policy-making.

When the interviewees were asked about their perspective on the role of knowledge in policy and law-making, they unanimously agreed that knowledge is necessary. For example, this view on knowledge was backed by a civil society respondent who was part of the Kenya Climate Change Working Group (KCCWG) that initiated the climate change policy and law-making process in Kenya who stated that 'For me, knowledge was one of the most important things in the process, and this shaped how our interests were articulated in the process' (CSR 2, 2021). Birkland asserts that the type of knowledge, who held the knowledge, how the knowledge was developed, maintained, and used determined what and whose interest got into the policy and law-making agenda and the final policy and law.¹

While the diverse actors all agreed that knowledge was important in policy and law-making, they had different views about what it was, its sources, and how it shaped the policy

¹ Thomas Birkland, *An Introduction to Policy Processes, Theories, Concepts and Models of Public Policy Making* (4th edn, Routledge 2015) 7-11

and law-making process. These divergent views about knowledge are discussed in the next section.

5.2.1 Two predominant knowledge systems in Kenya

Climate change in Kenya is a multi-sectoral or cross-cutting issue affecting diverse actors and sectors rather than as a single sector or actor issue. Addressing such a policy issue implies engagement and interaction between these actors who bring on board their knowledge to proffer solutions. The policy space in Kenya's climate change policy and law-making is characterised by two predominant knowledge systems. Interviewees were aware of scientific knowledge, which they also referred to as expert or technological knowledge. They were also aware of LIKP, what LIKP meant and referred to it in diverse ways. These all aligned to the finding in the literature review in Chapter 2. These two knowledge systems were prioritised differently by the policy actors when tackling climate change although the laws in Kenya seem to give equal weight to both knowledge systems. In relation to this, an Officer at the Kenya National Environmental Management Authority (NEMA), who also in an interview stated that:

...concerning climate change, Kenya recognises the role of scientific and traditional knowledge LIKP in managing the environment. Thus, scientific, and traditional knowledge is embedded within the laws and is recognised in our constitution. From the inception of the climate legislative process in 2008, a climate information services centre was set up to gather both scientific and traditional knowledge for adaptation and mitigation. This is the first point of access of information related to climate change. In addition, from the inception of the Kenya Meteorological Department (KMD), there has always been a collaboration with indigenous knowledge developers, especially on climate predictions. KMD has a community radio network station called the RANET, which establishes partnerships with various communities to downscale climate information generated using scientific tools to particular regions and also capture the LIKP used by communities to understand and respond to climate change. In this process, scientific knowledge is equally merged with traditional knowledge from communities to develop climate information for early warning and disaster risk reduction. (GO25, 2021).

Furthermore, this informant, considered by most respondents as a critical figure on climate change in Kenya, believed that LIKP and scientific knowledge were vital even outside climate change conversations.

Respondents from a range of backgrounds and positions supported this view. For example, one researcher reported thus:

...well, if I am asked what knowledge was used to develop the climate change law in Kenya, the answer is scientific knowledge from those who have formal education and traditional knowledge from those at community level. Traditional knowledge used for weather forecasting from communities was used to increase the accuracy of weather forecasts instead of relying on science alone. A good example is a Nganyi community in western Kenya where the KMD RANET centre integrated indigenous knowledge with scientific predictions to give the community more accurate forecasts (RR10).

Documentary evidence reveals that the Kenya Meteorological Department (KMD), through its Radio Network (RANET) initiative, has established five community radio stations in different corners of Kenya that are impacted or prone to climate change in different ways. These radio stations seek to disseminate weather and climate information across all counties to enable the communities to build resilience. One farmer revealed that she is a faithful listener of the Anyole Radio, one of the KMD RANET Community Radio Station in Nganyi, Western Kenya. She revealed that during each radio episode of the “Ombogo’s” show, the presenter read out the weather forecast for the week from data generated by KMD using local Luhya dialect called “Olunyole”. This was followed by a presentation of the forecasts generated using LIKP for the same week by one of the many renowned rainmakers of Nganyi community the in Vihiga County. This farmer indicated that, sometimes, their traditional methods of weather forecasts were more precise than those of the KMD stations. Therefore, the community has tended to generate more reliable forecast by blending the traditional and KMD forecasts with the support of KMD.

The views expressed by the respondents above align with legislative provisions on knowledge in policy development in Kenya. Firstly, Article 11(2)(b) of the Kenyan

Constitution provided that the ‘State shall recognize the role of science and indigenous technologies in the development of the nation’². Further, Article 69(1)(c) also stated that ‘The State shall protect and enhance intellectual property, and indigenous knowledge of, biodiversity and the genetic resources of the communities.’³ A widely respected senior officer at the National Environmental Management Authority (NEMA) stressed that the constitutional provision on knowledge was always at the back of the mind in any policy and law-making process in Kenya – ‘having this in mind was important when we were developing the Climate Change Act’ (GO29, 2021).

Secondly, the Climate Change Act 2016 revealed a strong emphasis on the two knowledge systems for climate adaptation and mitigation in Kenya. Expressly, it is stated in section 13(5) that ‘the Cabinet Secretary shall rely on scientific knowledge about climate change, technology and technological innovations relevant to climate change ... and indigenous knowledge related to climate change adaptation and mitigation’.⁴

Thirdly, around the same time when the Climate Change Act was passed, the Traditional Knowledge and Cultural Expressions Act 2016 was also enacted.⁵ Articles 40 and 69(L)(c) of this Act provided a framework for protecting and promoting traditional knowledge. This Act focussed on incorporating knowledge relating to the environment and agriculture and cultural expressions in policies and development processes in Kenya. Before enacting the two Acts mentioned above, Kenya had also signed and ratified the Paris Agreement, which recognises the importance of LIKP. Article 7(5) states that:

Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory, and fully transparent approach, taking into consideration vulnerable groups, communities, and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge ...

² Republic of Kenya, 2010 Constitution

³ *ibid*

⁴ Republic of Kenya, Climate Change Act (No 11 of 2016).

⁵ Republic of Kenya, Traditional Knowledge and Cultural Expressions Act (2016)

and local knowledge systems, to integrate adaptation into relevant socio-economic and environmental policies and actions, where applicable.⁶

The references to different knowledge systems as crucial to Kenya's development in the 2010 Constitution and the 2016 statutes imply a recognition of the existence of these knowledge systems. The constitution does not explicitly discuss the importance of diverse knowledge systems in law and policy but uses the term "development" vaguely. Notwithstanding, climate change is a threat to Kenya's national development and, therefore, policy and law-making on climate change is an inherent part of this national quest.

Generally, the respondents agreed that there were two types of knowledge systems, including scientific and LIKP in Kenya. The findings also revealed that the views about these knowledge systems and their sources were different, as discussed in the section below. In addition, it was found that the actors were inclined to promote either or both knowledge systems, and this interest was aligned to their sectoral interest. This resulted in either knowledge competition or complementarity effort between LIKP and scientific knowledge systems, which is discussed in the subsequent sections of this thesis.

5.3 Scientific knowledge for climate change policy-making and its source

Scientific knowledge or expert knowledge was an essential part of the knowledge used to develop Kenya's climate change adaptation policy and law. The findings revealed that the informants had two views about the source of scientific knowledge used in climate adaptation policy and law-making. Most respondents believed that the climate change policy and law-making process was informed by scientific knowledge generated from within Kenya as well as outside of Kenya, while others felt the process was informed mainly by climate change scientific evidence developed outside of Kenya. These mixed views about the source of

⁶ Paris Agreement 2015

scientific evidence for the process shaped the way respondents regarded the outcome of the law. Some felt it was mainly to meet the interest and schedule of the elites as opposed to genuinely addressing the impacts of climate change on the predominantly agrarian communities severely impacted by climate change in Kenya. When probed on why they felt this way, some of them indicated that the interest in developing the law was partly to address the impacts of climate change on communities. It was also in the interest of politicians and bureaucrats to control the funding it attracted to address climate change in Kenya

5.3.1 Scientific knowledge generated outside of Kenya

Based on the views expressed by respondents, Kenya's policy and law-making process was primarily shaped by scientific knowledge on climate change that was developed beyond the Kenyan context. This view held that such knowledge was developed by experts using complex computer models to forecast or establish the impacts of climate change in different contexts across the globe. One group of respondents thought that the scientific knowledge emanated from the evidence presented globally on the science of climate change and how it affected sub-Saharan countries like Kenya. Some respondents at community levels felt that some of these forecasts and predictions did not tie with what they were experiencing regarding climate change. The influence of what was happening at the international level on the domestic process was backed by a member of the KCCWG who indicated that 'we gained inspiration following our participation in IPCC conferences conventions and using the knowledge generated by the scientists in the reports that were presented as a basis to start the legislative process in Kenya' (RR1, 2021). In addition, a legal practitioner (LP21, 2021) stated that climate change was recognised and conceived as a problem in the West. Thus, nations of the West began taking steps in finding a solution based on scientific evidence they generated. The international response, including the development of international climate change regimes such

as the Paris Agreement, became more intense and aggressive with calls to scale the laws to the national level at conferences and summits. Kenya was among the first nations to sign onto the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and hosted the Twelfth Conference of Parties (COP 12) in 2006. Thus, it had an obligation to domesticate these laws by passing a national climate change law and related policies. The climate change policy and the law were developed to recognise climate change as an issue in Kenya. The legal practitioner also indicated that there was already a framework in which these debates on climate change laws took place internationally. According to him, Kenya aligned more with these international regimes rather than engaging with policy actors at the sub-national and national levels to generate evidence needed to tackle climate change domestically. He felt that there was a need to ask Kenyans ‘how they were affected and how they were responding to it?’. He concluded that the Kenyan process was to pass a national law to demonstrate Kenya’s acceptance of the problem based on scientific evidence generated from the West.

These findings concur with a study of Kenya's climate adaptation policy by Symons who posited that the political elite in Kenya, in developing the law, were more concerned about meeting their international commitments. This was opposed to having meaningful engagements with diverse stakeholders, including local communities, to generate scientific evidence on the impacts of climate change in Kenya and how to respond to it.⁷ Njoroge, in another study on policy-making in Kenya, states that the ‘lack of basic knowledge and information about climate change impacts, risks, and vulnerability or opportunities in Kenya led to the advancement of speculative and unsubstantiated discourses about climate change amongst the policy actors.’⁸ These views expressed by the respondents highlight that there is

⁷ Kate Symons, ‘Anti-politics, Apocalypse and Adaptation in Kenya's National Climate Change Response Strategy’ [2014] *Scottish Geographical Journal* 130(4) 266-278

⁸ Njoroge and Others, ‘Climate change policy-making process in Kenya: deliberative inclusionary processes in play’ (2017) 9(4) *International Journal of Climate Change Strategies and Management* 535, 537

scientific knowledge within Kenya but that it was used to a lesser extent in Kenya’s climate policy and law-making process on climate change.

5.3.2 Scientific knowledge generated from within Kenya

Scientific knowledge used in the policy and law-making process on climate change was developed using national expertise that existed within Kenya. At the inception of the law-making process by the KCCWG in 2008, an inclusive platform of non-state actors, including international development partners based in Kenya, led the process of generating scientific evidence through its thematic sector groups. The scientific evidence generated by the KCCWG was complemented by scientific evidence contained in expert reports generated by consultants recruited by the government as reported by an officer of the National Environmental Management Authority (NEMA, GO 25 2021).

The KCCWG understood from the start that it needed to build the Climate Change Bill development process on a scientifically credible foundation. This was done through research conducted by thematic groups, including agriculture, infrastructure, energy, water, and health, which were later harmonised (RR 1 2021). In addition, the working group contracted a legal team from the Kenya Law Review Commission (KLRC) to prepare a pre-draft document based on the findings and reports of KCCWG’s thematic groups.⁹

Further scientific evidence and LIKP were gathered beyond the KCCWG membership through direct engagement by the KCCWG with communities in different agro-ecological zones in Kenya. One mechanism used to compile this evidence was the use of “climate hearings” targeting farmers (RR 1 2021). The concept of climate hearings, first brought forward

⁹ KCCWG, ‘Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016’, (2016 Kenya Climate Change Working Group) <https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>, accessed 22 February 2022

by Oxfam in 2005¹⁰, was a way of reaching out to communities on a two-sided journey: to raise awareness about the Climate Change Bill process but also gather community stories on the impacts of climate change and their indigenous adaptation strategies. This provided invaluable input into the Bill development process from 2018. The climate hearings were built on the belief that even though scientific consensus on the causes and consequences of climate change had already been reached, the diverse impacts of climate change on communities remain hazy. In essence, these hearings brought down the climate change discussions to the community level, where people were most vulnerable. In this regard, they innovatively unearthed the hidden impacts of climate change on communities.

The climate hearings during the climate policy and law-making process were executed in three integrated stages: planning, local organising committee action, and execution and integration.¹¹ The planning stage started with the identification of the target regions depending on the presence of members in the areas and exposure of the places to climate change impacts, based on the reports and observations given by these members at the planning meetings. Once identified, reconnaissance visits were made to prepare the ground. The second stage was the setting up local organising committees to ensure local ownership of the process. These committees were made up of all relevant stakeholders, including government officials, community leaders, faith-based institutions, and private sector groups. The KCCWG report indicates that these stakeholders greatly assisted in mobilising local people and articulating local issues.¹² The KCCWG thematic group representatives assisted local organising committees to develop presentations on prevailing climate issues and impacts in the area. Identified cases were used to inform Hearing themes. During this process, a vernacular language, with interpretation was used where necessary, to explain the specific impacts of

¹⁰ OXFAM International, Climate Hearings (OXFAM 2009), <https://www.oxfam.org/en/tags/climate-hearings>, accessed 19/03/2022

¹¹ *ibid*

¹² *ibid*

climate change within the communities' contexts. This stage also involved the integration of all the outcomes of climate hearings into the Climate Change Bill development process. Although the third stage integration of indigenous knowledge is mentioned as the last stage in the climate change hearing process, integration happens throughout the different stages. For example, the civil society worked in collaboration with the Kenya Meteorological Department (KMD) and information and data from the meteorological stations were compared and complemented with what was generated from the communities based on their LIKP (RR 1 2021). A researcher was further asked about how integration occurred, and he indicated that LIKP and scientific knowledge used to understand and respond were put side-by-side and, in some instances, LIKP offered reliable solutions and vice versa. This complemented and combined knowledge system was then communicated to senators and parliamentarians who were champions of the course of communities during the Climate Change Bill making process and parliamentary readings.

The respondents were probed about how the climate hearings were conducted and if they met their expectations. Most of them felt that the climate hearings were an opportunity for local communities, especially farmers, to contribute to the process using LIKP. However, this expectation was not fully met first because some of those invited to the hearings were not directly involved in the development and use of LIKP to understand and respond to climate change. Thus, they could not fully articulate evidence of LIKP for its incorporation. For example, a farmer respondent noted that,

I participated in the process because I was one of the few farmers invited by the government to participate. The rest of the people were not farmers and did not understand the needs of community members and how they were suffering from climate change. We were presented with what had been discussed and our contributions did not mean much. At the end we were paid food and transport money (FR4, 2021).

Many other respondents from the indigenous and local community group, made up mostly of farmers, held contrary views to that expressed by the farmer above with respect to how much room was given for local communities, including farmers, in the different agro-ecological zones to make contributions to the process. According to them, the climate hearings were the first time there was genuine engagement on climate change and a collection of their views and how they responded to the impacts of climate change. For example, one reported that at the village level, the different actors collaborated and were cooperative in bringing on board the existing knowledge systems (FR 14 2021). However, these hearings have been criticised by some as not meeting the expectation of gathering communities' knowledge for understanding and responding to climate change to inform the national climate change agenda. For example, a legal practitioner equated the public hearing events to a public bazar, which entailed organising one or two forums involving mounting a tent somewhere in the community with a few chairs, and anyone could walk in with any suggestions. Such events were advertised in the newspapers (LP27, 2021).

Conversely, a report published by the KCCWG in 2016 described how the climate hearings that were conducted led to the capture of both scientific knowledge and LIKP and their incorporation in the process.¹³ This differed from the views expressed by the respondents above. The KCCWG report described the climate hearings as a means to reach out to communities on a two-sided journey. First, it raised awareness about the Climate Change Bill process. Second, it facilitated the gathering of community stories on the impacts of climate change and their indigenous adaptation strategies.¹⁴ The report posited that climate hearings were built on the belief that even though scientific consensus on the causes and consequences of climate change had already been reached, the diverse impacts of climate change on

¹³ KCCWG, 'Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016' (2016 Kenya Climate Change Working Group)

¹⁴ *ibid*

communities remained unclear. Thus, the hearings brought the climate change discussions to the community level, where people are most vulnerable. It is worth noting that while the Climate Hearings were hailed as successful to promote top-down and bottom-up interactions between policy actors at different levels, they took an exceptionally long period between the years 2009 and 2014 to organise. A prominent civil society activist and founding member of the KCCWG felt that the long period was needed for several reasons as highlighted in the following statement:

The Climate Change Act was unique. It was relatively new and most people, including academia did not have sufficient knowledge to inform its development. Many countries were still confused and unsure of its content and Kenya was one of the pioneers in Africa with little experience to tap from elsewhere. There was so much reliance on science. Even the IPCC reports were still not popular among many people. And this could explain its slow development and approval process (CSR10, 2021).

Despite these mixed views, the Climate Hearings appeared to be a useful way to get policy actors, especially at the sub-national, level to directly participate and contribute to the policy and law-making process.

5.4. LIKP in Kenya

This section examines what LIKP means in Kenya, how it is generated, and the extent to which it is incorporated in policy and law-making on climate change. Local indigenous knowledge and practices is an important knowledge system in Kenya. However, there are diverse views on what it is, how it was developed and how it was presented in legal forms for uptake in the climate change policy and law-making process. These findings align with the literature review of Chapter 2 on LIKP. These differing views about LIKP contributed to some of the challenges of incorporating it in climate change legislative process. This, in turn, influenced the level of consideration given to it in the policy and law-making on climate change. These points are examined in the section below.

5.4.1 What does LIKP mean in Kenya?

Local indigenous knowledge and practices is widely used in Kenya, especially by indigenous and local communities who are mostly agrarian. This knowledge system was sometimes referred to using different names by respondents of this study. Traditional knowledge is predominantly used interchangeably with indigenous knowledge. Other respondents refer to it as indigenous technical knowledge or ecological knowledge. The Traditional Knowledge and Cultural Expressions Act 2016 provides a framework for protecting and promoting traditional knowledge and cultural expressions. It refers to the knowledge system as ‘traditional knowledge and cultural expressions.’ The Act defines this knowledge system as knowledge:

originating from an individual, local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices, and learning, embodied in the traditional lifestyle of a community; or contained in the codified knowledge systems passed on from one generation to another including agricultural, environmental or medical knowledge, knowledge associated with genetic resources or other components of biological diversity, and know-how of traditional architecture, construction technologies, designs, marks, and indications.¹⁵

The definition of LIKP by different respondents aligns with the definition above. For farmers, LIKP is defined mainly by reference to the relevance of the knowledge system to their daily lives. This is because the development and use of LIKP was directly linked to agriculture which is their main livelihood activity. For example, a farmer respondent said that it was knowledge owned by the locals that helped them to be autonomous. He equally felt that accessing and using such knowledge system was the most appropriate entry point for any planned decision-making on local resources (FR8, 2021).

¹⁵ GoK, Protection of Traditional Knowledge and Cultural Expression Act 2016, p 7
<https://www.museums.or.ke/wp-content/uploads/2022/05/TK-TCE-Act-No.33-2016-Revised-Edition-2018.pdf>

Respondents from a range of backgrounds and positions supported this view. For example, an extension worker emphasised this link between LIKP and livelihoods of communities and noted that:

... well the farmers I work with value and respect their local and traditional knowledge, especially those severely affected by environmental challenges such as climate change. If these farmers who operated in very remote areas could have access to government services, they could add this to what they are already doing using their LIKP. For example, local communities could complement their forecast with that from Meteorological Stations to generate more information to develop early-warning systems, selecting some crops that could do well in unfavorable weather and climates and to protect these germ plasms from disappearing. I have personally worked with farmers in Nyeri on seed selection to ensure drought-resistant germ plasm is not destroyed over time. We usually take this LIKP on board in our extension work before other knowledge systems external to the community are incorporated (EO15).

The view expressed by the officer above suggests that the driver for the reliance on LIKP is because these communities live in remote areas with no access to government services. While remoteness may be a factor in the use of LIKP, the findings also reveal that irrespective of whether government and other external support is available, the farmers will still develop and use their LIKP. For example, a Senior Officer of Kenya's Ministry of Agriculture Livestock Fisheries and Cooperatives reported that despite the introduction of high-yielding maize varieties, some communities continued to select and propagate specific local maize called "Nyamilambo" which was tolerant to drought, even though not high yielding like the hybrid less drought tolerant species provided through extension services. In addition, the farmers have developed and are using traditional log hives despite the introduction of the modern hives. The traditional log hives regulate the temperature naturally and enhance honey production (SO22. 21).

Other farmer respondents reported that their LIKP had been in existence, successfully used, and passed from one generation to another. That they were equally keen to pass this knowledge onto future generations. This was irrespective of government or other external

support and the existence of other knowledge systems in their context. For example, one farmer stated that:

Personally, our local and traditional knowledge is what will potentially save us and the planet. But people tend to think that local knowledge is outdated and tend to be more biased towards other knowledge, new technologies and practices that are introduced. It is unfortunate to see that people have even cleared indigenous trees. Some people appreciate LIKP, but others do not. Many of those who do not could probably due to peer pressure lack of awareness. I can say that we as farmers from our area we have a way of weather forecasting, by observing wind direction, movement of the clouds and bird migration patterns. When we see a particular pattern, we know exactly when rains are due and when to plant our crops. For example, by observing the wind direction (for example during the planting season if the wind blows northwards we understand that almost rain is going to fall and if opposite then no rain). Our forecasting is not always very different from what the government is doing and so we work hand-in-hand (FR8, 2021).

This informant, in line with their colleagues also interviewed, believed that LIKP was important for decision-making. The interview results confirmed that LIKP was defined in various ways and generally viewed as knowledge that is an inherent part of indigenous and local communities.

5.4.2 How is LIKP in Kenya developed?

Local indigenous knowledge and practices generally originates from trial and error, experience sharing, and experimentation with outcomes passed from one generation to another. This finding is backed by interviews and evidence from the Traditional Knowledge and Cultural Expressions Act 2016 in Kenya. The majority of the respondents reported that their understanding of LIKP was that it is knowledge that was passed from one generation to another. For example, a farmer noted that they acquired knowledge from their forefathers and this has been passed from generation to generation. In addition, she noted that this knowledge was equally improved as they were engaged in a continuous process of innovations and experimentation (FR15, 2021). The LIKP acquired by farmers from past generations was re-developed through on-farm trial and error and experimentation to respond to new challenges.

In relation to this, Awuah-Nyamekye highlights the fact that through experiential learning farmers, in Central Africa revealed that they could determine which crop will thrive in each soil type by dipping their finger and testing the soil acidity or alkalinity with reliable results, which were found to be similar to the results generated using laboratory technology.¹⁶

Other sources of LIKP reported by interviewees included copying LIKP that was developed and successfully used by neighbouring communities. A farmer (FR 13, 2021) respondent stated that ‘when you go to farm and you do farming using LIKP and your crops flourish in the farm, some of the surrounding farmers will always observe and have a positive mindset toward the traditional farming practice you use. Some of them have approached me to learn about my LIKP’. The Protection of Traditional Knowledge and Cultural Expression (TKCE) Act 2016 recognised the existence of LIKP that could be developed in one community and become relevant beyond the community of origin. The recognition that LIKP can be developed in one context and copied by another is captured in Part II (11) of the TKCE which states that:

A person who uses traditional knowledge or cultural expressions that is developed beyond its traditional context shall acknowledge the owner of the knowledge, indicate the source of the knowledge or expression and where possible, the origin of the knowledge or expression, and use such knowledge or expression in a manner that respects the cultural values of the holders.¹⁷

Another farmer revealed that while most of the traditional knowledge was transferred from their parents, they also adopted it from elsewhere to improve what they had locally. For example, he was the coordinator of *Nyumba Kumi* and was required to know everything that was happening within his circle. This is something he learned on a visit to Israel. Through

¹⁶ Samuel Awuah-Nyamekye 'Indigenous knowledge: A Key Factor Towards Africa's Sustainable Development in Munyaradzi Mawere, and Samuel Awuah-Nyamekye (eds), *Harnessing Cultural Capital for Sustainability: A Pan Africanist Perspective* (Langaa RPCIG 2015).

¹⁷ *ibid*

Nyumba Kumi, he has engaged with the communities to reinforce some of the climate response measures such as, for example, helping members make terraces and planting trees. Awareness creation and sensitisation on climate action are critical elements of *Nyumba Kumi*.

One other farmer reported that being a Kalenjin man, it was an honour and prestige to have sheep and cattle and to take care of them. The success of this activity relied on their LIKP. For example, during his childhood, he learned from his parents how to cut lamb tails to ensure that they grew and reproduced well. Also, how to feed the cattle to ensure that they produce dung that was used for heating their homes and for cooking. They engaged in the planning of pasture fields. This knowledge was passed on from the elders and it became a way of life in the community.

This evidence suggests that the bulk of LIKP is developed through trial and error, experimentation, and experience sharing from one generation to another. Also, this knowledge system is often tied to the opportunities and challenges found in the agroecological context where it is developed. When probed about whether the LIKP copied from one context and applied in another remains unchanged, most of the respondents indicated that they engage in further trial and error and experimentations which leads to redevelopment and innovations of the knowledge systems to suit their context. Thus, there are different sources of LIKP in Kenya which are often embedded in a mix of cultural values tied to the socio-economic and environmental realities of the context where those who develop and use it are found.

5.4.3 Examples of LIKP and their relevance to climate change adaptation

There are wide variety of LIKP relevant to climate change adaptation in the different agroecological zones in Kenya. This is particularly the case among farmers. For example, a farmer from Rongo District of the Migori County uses her knowledge on mixed cropping on the same piece of land as her mother and fallow farming learned from her grandmother.

Planting peanuts, beans, and pumpkins beneath coffee and avocados that acted as shade crop and impeded weeds and, at the same time, controlled soil temperature and erosion during the dry and rainy seasons respectively, was knowledge passed to her. She said, together with other community members, they had continuously shared this knowledge among them and as time went on, they redeveloped and improved this knowledge in response to the changing times. For example, to address the changing pest and parasite attacks on crops and livestock, they used a combination of natural herbs including the neem plant. She indicated that this knowledge has helped her to be disaster-proof as she managed to grow many food and cash crops on the same plot of land. (FR 41, 2021).

A farmer based at Nyeri County shared that most often, they would plant during the long rains from April until June and July in order to make use of their long rains. And then when it comes to the short rains, from October to December, they would leave the land to fallow and thus rejuvenate itself. A combination of other practices, such as the burning of cow dung and the planting of specific trees to chase away pests from their farms, were used. Furthermore, they collected and saved seeds of indigenous nutritious vegetables such as black night shade, which were shared amongst themselves and with others across the river.

A farmer from the Mount Elgon area shared the Shamba-System, as a traditional system where communities that live close to nature, especially forested areas, benefit from the ecosystem services provided by the natural forest. In turn, they protect the forest resources through their agroforestry practices, which was something they valued and practiced over many generations.

Lastly, one farmer reported that they have a method for weather forecasting that involves observing wind direction, sky patterns, and bird migration. When they saw a particular pattern in the sky or a particular caterpillar larva, they were sure of the weather changes to expect. For example, during the planting season if the wind blew northwards, they understood

that almost certainly, the rain was going to fall and vice versa. This enabled them to know what to do next, including what to plant and the appropriate timing. The knowledge was acquired from their parents, and it has been passed from generation to generation. For example, A farmer (FR 15 2022) in Koiya Laikipia North reported that when they saw the larvae of the caterpillar *Gonimbrasua cocauli* (Figure 8) spreading in the community, they would expect abundant rains.



Figure 8: Larvae of *Gonimbrasua cocauli* considered a sign for coming rains when seen by the community in Koiya Laikipia North Kenya (Source: Ambrose Letoluai 2022)

He emphasised that their forecasting is not always very different from the government's forecast and, therefore, they have worked together with the government agencies to merge these two.

Another farmer who cited Nyanza County as an example, where they engage in aquaculture and rice, sweet potatoes, and fruits are cultivated, indicated that they had been

more successful when their knowledge intersected with the knowledge brought by agriculture Extension Officers (EOs). These actors have been referred to as interface bureaucrats, playing an intermediary role between local communities and the state.¹⁸ In the agriculture sector the EOs support farmers in their routine decision-making on natural resource and environmental management at the same time expanding state control over people and resources.¹⁹ However, the majority of respondents indicated that there was a reduction (or complete breakdown) in the interactions between extension workers and local communities. In the past, they played an active role as intermediaries of the state at the local level, particularly in scaling-down government policies and actions in the agriculture and related sectors. With respect to climate change policy and law-making, the EOs did not play a significant role as would have been expected. For example, one respondent indicated that in the past, the EOs were more active in the field, engaging in field demonstrations and exchanges that resulted in the cross-fertilisation between the knowledge they brought from outside and that of communities. However, farmers now must go to offices where the officers are to consult with them (FR14, 2021).

Notwithstanding, some exchanges have been occurring with at intersection between the LIKP of communities and knowledge brought from outside through these limited interactions. Such exchanges, for example, included knowledge of weather observations, knowing what kind of crops will thrive at a particular time or in a particular area. Community members knew the soil structure and how to improve the soil quality using manure from cattle in combination with other plant-based materials. A respondent stated that the farm was considered a living entity that needed to be nurtured and given some time to rest so that it does not to lose its value.

¹⁸ Funder Mikkel, *The State as a Person: The role of interface bureaucrats in everyday natural resource governance* in Fiona Nunan (ed), *Governing Renewable Natural Resources, Theories and Frameworks* (Routledge 2019)

¹⁹ *ibid*

Therefore, after a period of cultivation, the farms were left uncultivated to fallow and regain their fertility. These coordinated activities and established rules based on the use of LIKP by communities contradict the belief by many people who come from outside to work with them that LIKP development and use is a process of guesswork. The respondent also noted that this knowledge is very diverse across the different agro-ecological zones of Kenya. For example, LIKP that might work in coastal Kenya might be different from what might work in Northern Arid regions. Also, what works in one Zone might also be applicable in another. This view expressed by this farmer aligns with the finding in the literature review of Chapter 2. The emphasis here is that LIKP is developed with the context in mind. This implied a LIKP could be developed in one context, transferred, and applied to another context with similar characteristics to that where it originated.

An interesting, but not surprising discovery, from the examples above was that in Kenya, there was considerable evidence of LIKP (re)development and use by farmers. And that the knowledge system was diverse, non-homogenous, and extensive in nature. Some of these LIKP were achieved through intergenerational exchanges and through individual trial and error and continuous engagement with the local land and climate. In this context, the knowledge system was developed and sustained through traditional education, local dialogue between farmers, and via formal and informal groupings. Works by Wane looking at Embu women's indigenous understandings and knowledge production in Eastern Region of Kenya suggests that the process of knowledge development and transmission amongst communities in Kenya happens within the context of family, community, clan, and cultural age groups.²⁰ This demonstrates evidence of the existence of local socialisation inherent in LIKP development and use. In addition, it speaks to the contention raised in the literature on whether

²⁰ Njoki Wane, [Re]Claiming my Indigenous knowledge: Challenges, resistance, and opportunities, [2013] *Decolonization: Indigeneity, Education & Society* 2(1) 93-107

LIKP is homogenous, equally, and collectively owned by members of a given society. These explanations of LIKP assume that, in instances where decisions are to be made in a community, every community member has the same level of access and control of LIKP. Therefore, they would have an equal voice, influence and power, and a chance to participate in making decisions that results to a consensus. This thesis does not examine whether local communities use of their LIKP is consensual and in a homogeneous fashion. However, the fact that this knowledge is diverse and sporadic in nature implies the emergence of conflicts amongst the users when deciding what LIKP should be used to respond to a given issue. However, such conflicts were minimised by the passing into law of the TKCE Act in 2016 followed by the establishment of a Traditional Digital Repository (TKDR) through the Kenya Copyright Board (KECOBOD) which progressively identified and gathered and protected this knowledge system for Kenya's development. This existing, but often neglected, power dimension in the development and use of LIKP enhanced by existing gender and socio-economic disparities dictate whose voice gets heard when communities are given the opportunity participate in the policy and law-making processes, discussed in Chapter 6.

Another interesting finding was that LIKP was not tied to a particular context in Kenya. It could be developed successfully in one area and transferred to another area. A community-based researcher noted that in their community of Cheptais, a sub-county of Bungoma County, they had been severely affected by climate change. The LIKP passed to them by the forefathers contributed to saving them from famine. For example, the burning of cow dung to chase away pests and the saving and distribution of seeds of indigenous nutritious vegetables, such as black night shade, which they shared with neighbouring communities including Kimilili Community of Bungoma (RR 20, 2021). This movement of LIKP across community boundaries demonstrates that LIKP could potentially be transferred and used beyond the context in which it was developed.

5.5. LIKP in policies and laws in Kenya

This section explains and analyses the consideration given to LIKP in existing policies and laws related to climate change in Kenya. From the previous section, LIKP for climate adaptation is abundant in local and indigenous communities in Kenya. The findings from the interviews and evidence from relevant policies and laws recognised LIKP for Kenya's development. Some of these laws and policies examined for this thesis included the 2010 Constitution, the Climate Change Act 2016, Kenya 2015-2030 National Adaptation Plan (NAP) the National Climate Strategy, and The Protection of Traditional Knowledge and Cultural Expressions Act 2016. This recognition implied that those who develop and use LIKP, including farmers, were potential co-producers of adaptation solutions. These processes led to the development of the laws and policies mentioned and emphasised the importance of LIKPs. These processes also demonstrated that various stakeholders, including farmers, who developed and used this knowledge system as co-producers of the climate change solution were either consulted or involved in the process. However, the specific examples of LIKP used for climate adaptation and that were incorporated into the climate policy and law in Kenya and other related policies were not very explicit. Therefore, although the policy and law emphasised the incorporation of LIKP and scientific knowledge for domestic policy and law-making on climate change, in line with Article 7.5 of the Paris Agreement, the statements can be viewed as expressions of intentions and aspirations of policy actors. How effective incorporation happens depends on moving implementing the policy and law in practice.

5.5.1 LIKP in Kenya's national policies, programmes, strategies, and plans.

Local indigenous knowledge and practices and its relevance to tackling climate change are highlighted in different policies, strategies, and plans that are the foundation for the development and implementation of the Climate Change Act 2016. For example, Chapter 4 of the 2015 to 2030 Kenya National Adaptation Plan was dedicated to adaptation actions.²¹ This section contained priority actions in the agriculture, environment, sustainable livelihoods, livestock, water, energy infrastructure, and tourism sectors.²² This policy document emphasised the need for the use of LIKP in adaptation actions for the country's climate resilience goals by 2030. However, these predominantly intentional statements were backed by limited and not very explicit examples of LIKP used in adaptation. A few short- and medium-term actions were mentioned in the policy document including the agriculture and livestock development, and environmental sectors policies. For example, the Adaptation Technical Analysis Report (ATAR) that is used as the foundation for the adaptation policy processes states thus:

In response to climate change, the promoting of indigenous knowledge on crops, promotion and bulking of drought tolerant traditional high value crops; breeding of animals from various agroecological zones that adapt well to climatic variances are important. These are in addition, to agro-forestry; and integrated soil fertility management; promotion of economic livelihood diversification, including cultivation of indigenous and drought-tolerant as well as early maturing food crops such as millet, cassava, pigeon pea, sweet potato and bee-keeping for honey production.²³

In addition, the various policies equally envisaged long-term actions such as the promotion and implementation of climate smart agriculture practices; the promotion of agroforestry especially

²¹ GoK, National Climate Change Response Strategy: Executive Brief, 2010, <http://www.environment.go.ke/wp-content/documents/complete%20nccrs%20executive%20brief.pdf>, p21-42 accessed 17 March 2022

²² The priority adaptation actions presented in this chapter are based on the vulnerabilities. Stakeholders prioritised adaptation actions for the different sectors during the NCCAP process. The Adaptation Technical Analysis Report (ATAR) proposed long lists of priority actions and the NCCAP prioritised actions in the agriculture, livestock, water, environment, infrastructure, sustainable livelihoods, energy infrastructure and tourism sectors. https://issuu.com/boonigor/docs/atar_final_august_24_2020, accessed 21/02/2022

²³ *ibid*

tree-based intercropping (TBI); enhanced selection; breeding and management of animals to adapt to climate change, strengthening integrated and environmentally friendly pest management systems to cope with increased threats from insects, pathogens and weeds.

Similarly, the Kenya's National Climate Change Response Strategy equally mentioned elements of LIKP thus:

Inventorying indigenous knowledge that has conventionally been used by local communities to cope with erratic climate, e.g., on rainfall prediction and use of conventional medicine in treatment of animal diseases, as well as supporting the improvement and dissemination of such technologies. These inventories are important elements for planning as they provide efficient, appropriate and time-tested ways of advising communities affected by climate change.²⁴

The strategy outlines specific adaptation and mitigation measures including the provision of downscaled weather information and farm inputs; water harvesting e.g., building of sand dams for irrigation; protection of natural resource base (soil and water conservation techniques); and research and dissemination of superior (drought tolerant, salt-tolerant, pest and disease resistant) crops.²⁵

Some of these actions contained in these policy documents aligned with the examples of LIKP used for climate adaptation purposes shared by the interviewees, as highlighted in Section 5.4.3. However, it is worth noting that a clear distinction between the scientific adaptation actions and LIKP actions cannot be drawn from the policy statements and planned actions to address climate change. In addition, it is observed that the intention to incorporate scientific adaptation actions and traditional adaptation actions are largely aspirational and how effective this can be assessed depends on how the law is implemented.

²⁴ GoK, National Climate Change Response Strategy: Executive Brief, 2010, <http://www.environment.go.ke/wp-content/documents/complete%20nccrs%20executive%20brief.pdf>

²⁵ *ibid*

5.5.2 LIKP in the Climate Change Act 2016

The Climate Change Act 2016 recognises LIKP in climate change adaptation and mitigation in Kenya. The Act sought to ‘provide for a regulatory framework for enhanced response to climate change; to provide for mechanisms and measures to achieve low carbon climate development, and for connected purposes’.²⁶ The Act establishes the enabling governance structures for the implementation of the Kenya National Adaptation Plan (NAP), including the National Climate Change Council (NCCC) chaired by the President of Kenya leading climate action at the national level in and delivered by the Climate Change Directorate (CCD).²⁷ The Council ensures, among other duties, the mainstreaming of climate change functions by the national and county governments. As of November 2021, 32 out of 49 counties had enacted climate change policy and legal frameworks and appointed committees, including representatives of indigenous and local communities, as part of the mitigation and adaptation measures aimed at addressing climate-related challenges in the country.

Part II of the Act states that NCCC from inception shall be composed of nine members including (i) Cabinet Secretary (CS) responsible for environment and climate change affairs; (ii) CS responsible for the National Treasury and Planning; (iii) CS responsible for economic planning; (iv) CS responsible for energy; (v) Chairperson of the Council of Government (CoG); (vi) A representative of the private sector; (vii) A representative of civil society; (viii) A representative of marginalised communities; and (ix) A representative from academia. Regarding the representative of the marginalised communities, Article 260 of the Kenyan Constitution defines this person to represent marginalised communities as someone who has knowledge and experience in matters relating to indigenous knowledge.²⁸ According to an

²⁶ GoK, Climate Change Act, 2016

²⁷ Ibid II 5 (1), 6 (b)

²⁸ Ibid II, 7 (h)

environmental lawyer and lecturer at the University of Nairobi who participated in the drafting of the law, while this structure had been agreed on paper, there has not been a consensus on the nomination of the members (RR 16 2022). A major contestation was about the appointed members of the Council, particularly from civil society, including the representative from marginalised communities. For example, on the 13 of February 2023 the President of Kenya nominated four members to the NCCC including Emily Mwenda Waita, John Kioli, George Odera Outa, and Umar Omar (a humanitarian and community conservation strategist purported to be the representative of marginalised communities). They were to be vetted by relevant committees of both Houses of Parliament before they are approved.²⁹ Seven days after, the High Court suspended the President's nomination of the Climate Council Members following a petition by Mt Kenya Network Forum and Indigenous People National Steering Committee on Climate Change (IPNSCCC).³⁰ The petitioners claimed that the said nominations failed to meet to the required legal threshold on transparency, competitiveness, merits, and public participation. They also contended that the civil society organisations were excluded in the selection of the members of the council, as seen in newspaper clipping on Figure 9.³¹

²⁹ Felix Kipkemoi, President Ruto nominates four to Climate Change Council (Star Newspaper Kenya, 2023)

³⁰ Joseph Wangui, Court suspends Ruto's nomination of climate council members (Nation, February 20, 2023 <https://nation.africa/kenya/news/court-suspends-ruto-s-nomination-of-climate-council-members-4130384> accessed 21/02/2023

³¹ *ibid*

Ruto nomination of climate council members suspended

BY JOSEPH WANGUI

The High Court has suspended President William Ruto's decision to nominate Emily Mwende Waita, John Kioli, Umar Omar and George Odera Outa as members of the National Climate Change Council (NCCC).

The interim order issued by Justice Mugure Thande also bars the nominees from being appointed, gazetted or holding offices as members of NCCC pending the hearing of a petition challenging their recruitment process.

The petition, which was filed at the High Court in Milimani, Nairobi, is questioning the criteria used by the President in picking the four nominees.

The petitioners are Mt Kenya Network Forum and Indigenous People National Steering Committee on climate change.

According to the petitioners, the selection process for the four nominees was not participatory yet there are several civil society organisations working on climate change in Kenya.

The order came on the day the National Assembly and Senate invited public views on the suitability of the four nominees.

The National Assembly's Departmental Committee on Environment and the Senate's Standing Committee on Lands placed an advert yesterday urging the public to forward their opinions on the nominees' capability.

The petitioners claim that the nominations by President Ruto failed to meet the required legal threshold on transparency, competitiveness, merit and public participation. They also contend that civil society organisations working on climate change and marginalised communities were excluded in the selection of the members of the council.

"It is not clear who among the nominees is the representative of the largest civil society organisation working on climate change as it is envisaged in the Council Act or what process was used to select the representative for the civil society as required by the law and the Con-

stitution and whether there was any form of public participation in the selection of the said individuals in accordance with the Public Participation Act," reads the court papers.

The petitioners also said the positions were not advertised as required by law.

"There was no public participation by stakeholders in the recruitment process. Names of shortlisted candidates and interview dates and venue were not published for the public to provide information on the shortlisted candidates," say the petitioners.

Another contention is that the nominations failed to fulfill the provisions of Article 7(h) of the National Climate Change Act. It provides that the council should have "a representative of the marginalised community within the meaning of Article 260 of the Constitution, who has knowledge and experience in matters relating to indigenous knowledge (on climate)".

The case will be mentioned on April 17 for directions.

Figure 9: Newspaper clipping on the Kenya High Court suspension of the nomination of climate council members³²

Thus, the NCCC is yet to be operational six years after the Act was enacted. The petition brought by a group of civil society organisations including the umbrella network of indigenous people demonstrates the keenness of this policy actor group to ensure the knowledge and interests are not only considered during the development of the law but also at the implementation stage of the law. When respondents were probed on the impacts of a non-functional NCCC, they were adamant that the role of the NCCC was to lead all climate actions

³² *ibid*

in Kenya after the law was enacted. However, they reiterated that they were keen to see that the NCCC is very inclusive to ensure that what was contained in the law is implemented fully.

5.5.3 Degree of incorporation of LIKP in climate policies and laws in Kenya

Most informants, from a range of backgrounds and positions, supported the above view that the laws, policies, and plans examined above did not clearly demonstrate the LIKP that were incorporated. While the laws recognise the importance of LIKP, these appear to be vaguely stated as aspirational statements. In relation to this, a Senior Policy Researcher who has been dealing with the issue of climate change policy-making in Kenya noted:

It was trendy to talk about co-producers and partners in climate adaptation decision-making when communities, especially farmers, are involved. Unfortunately, the farmers and their knowledge are often overlooked in the processes of knowledge generation despite the potential contribution of this knowledge for climate adaptation. Local communities who are mostly farmers had vital knowledge in tacit forms which they have shared for long periods of time and that had enhanced their adaptive capacity to environmental challenges. However, some high-level and intermediary bureaucrats side-line and fail to promote this knowledge system. (RR35, 2021)

Furthermore, this informant believed that the farmers and those external to their context had different objectives with respect to knowledge development and use. Most scientists or experts, high level and intermediary bureaucrats, extension officers, and some NGOs were keen to extend the influence of the state at the community level. Also, they sought to test solutions with the aim of acquiring personal benefits such as recognition, scientific benefits, financial and technical resources, and votes. On the other hand, farmers were more concerned with adapting and building resilience to climate change through processes of experimentation, and trial and error. Although they constituted an influential power base by virtue of their numbers compared to the other policy actor groups, their limited capacity to articulate their knowledge and interest in legal forms affected their access to the spaces and opportunities to exercise their power and influence the process. This issue of power asymmetries is examined in Chapter 6.

It is worthy of note that the views of the policy actors who dismiss the potential of LIKP to proffer solutions to the climate change challenges corroborates with that in literature, which argues that there are limits to LIKP under climate change.³³ In this literature, the scholars posit that although LIKP is crucial for grass root community's adaptation to climate change contributing significantly to soil, water and land management practices, they tend to be marginal, rather than transformational.³⁴ They call for a need for this knowledge system to be harnessed and scaled up and integrated in policy development and implementation on climate change mitigation and adaptation, as highlighted in the literature review.³⁵

Contrary to the views expressed by most government officials, a farmer and many others in the indigenous and local communities' policy actor group posited that the level of interaction and interest in their LIKP is proof of the recognition of this knowledge system:

I interacted with researchers/scientists coming here from local universities trying to understand the impacts of climate change and how locals are responding to them. I therefore think that there is good appreciation of the role of indigenous knowledge and practices in climate adaptation (FR4, 2021).

A similar comment was made by a farmer who acknowledged the examples of LIKP used for climate adaptation although these were vaguely stated in the policies and laws thus:

LIKP was very important and given deserving place. For example, there was much talk about conservation agriculture in response to climate change. Conservation agriculture aligned very well with and depended on use of LIKPs in agriculture such as use of manure, minimum tillage, planting trees to replace those cut down. Most of the practices being promoted today as climate smart³⁶ were basically what our forefathers used packaged in different ways. However, I think that the problem

³³ Terry Williams & Preston Hardison, Culture, law, risk and governance: contexts of traditional knowledge in climate change adaptation (2013) 120 *Climatic Change* 120, pages531–544, Brugnach and others, Including indigenous peoples in climate change mitigation: addressing issues of scale, knowledge and power (2013)140 *Climatic Change* 140, pages19–32, Kristjanson and others, 'Are food insecure smallholder households making changes in their farming practices? Evidence from East Africa' [2012] *Food Security* 381

³⁴ *ibid*

³⁵ *Ibid*, Savaresi, Annalisa, Traditional Knowledge and Climate Change: A New Legal Frontier (2018) *Journal of Human Rights and the Environment* 9(1) 32–50

³⁶ GoK, KNAP 2015-2030, https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf accessed 17 March 2022

was how this knowledge was packaged and presented in the laws and policies (FR40, 2021).

His belief was also echoed by a climate policy researcher, who underlined that while the LIKP of indigenous and local communities were captured in the law and policies, they were crafted using a language that was not understood even by those who shared their knowledge and experiences as stressed below:

Experts from the commission on law reform took the feedback from the consultations with the communities and crafted the draft policies using legal language. When I look at the Climate Act, even when elements of LIKP are mentioned, I do not think they are well articulated and this is indicative of gaps that need to be addressed (RR11, 2021).

These viewpoints highlight the differences in perspectives about LIKP and what contributions it can make for climate adaptation. Defining what LIKP are and how they are developed and used remain challenging. These issues have implications for the consideration and level at which LIKP are incorporated into climate change legislative processes. Some of these challenges are examined in subsequent sections of this chapter.

5.6. Point of convergence: LIKP and Scientific Knowledge

The development and use of scientific knowledge and LIKP for climate decision-making was recognised in Kenya. Based on actor and sector interests, the more powerful actors in the policy and law-making process were found beyond the local community level and were those who had received formal and western education and, therefore, were often in favour of scientific knowledge over LIKP for adaptation decision-making. However, the findings from the interviews and documentary evidence indicate that, by virtue of their numbers and directly responding to the impacts of climate change daily, communities develop the political capital and capability to influence decision-making. Thus, other policy actors rely on this political capital and capability for decision-making and to build their legitimacy at the grassroots level.

These interactions between policy actors at different levels and working in different sectors created opportunities for the use of LIKP and the scientific knowledge in the climate change policy and law-making process. The evidence from the interviews shows that most senior and intermediary government officials and actors with high social status found that scientific or expert knowledge was more relevant in relation to LIKP knowledge systems. However, a few respondents from this group and all other respondents were of the view that blending the two knowledge systems can result in better decision-making. Some complementing efforts between scientific knowledge and LIKP were reported in the Kenya climate change policy and law-making process. In line with this, an official of the Kenya Meteorological Department stated that ‘knowledge, views and interests of communities was important in our climate decisions. We merged forecasts based on LIKP from communities with scientific knowledge generated from meteorological stations to generate more reliable forecasts’ (GO 18, 2021).

In line with the opinions above, the evidence from NCCRS equally shows that the two knowledge systems are used in a complementary manner in Kenya’s adaptation and mitigation and decision-making.³⁷ Specifically for the agriculture sector, the strategy states that proposed mitigation measures include appropriate use of biotechnologies which increase food production per unit area while simultaneously limiting GHG emissions; proper management of agricultural waste e.g., using manure to produce biogas; and promotion of agroforestry, especially tree-based intercropping, using communities’ approaches to select climate resilient seeds livestock and propagating these. However, these two knowledge systems were not weighted the same. Compared to LIKP, scientific knowledge about climate change and how to respond to it was better promoted in Kenya. As shown in Figure 10, the two knowledge systems were used in the co-production of policy and law to tackle climate change in Kenya. However, scientific

³⁷ GoK NCCRS, (p16) <http://www.environment.go.ke/wp-content/documents/complete%20nccrs%20executive%20brief.pdf>, accessed 25/03/2022

knowledge was more prominent given that it was prioritised by more powerful and influential actors in the policy space.

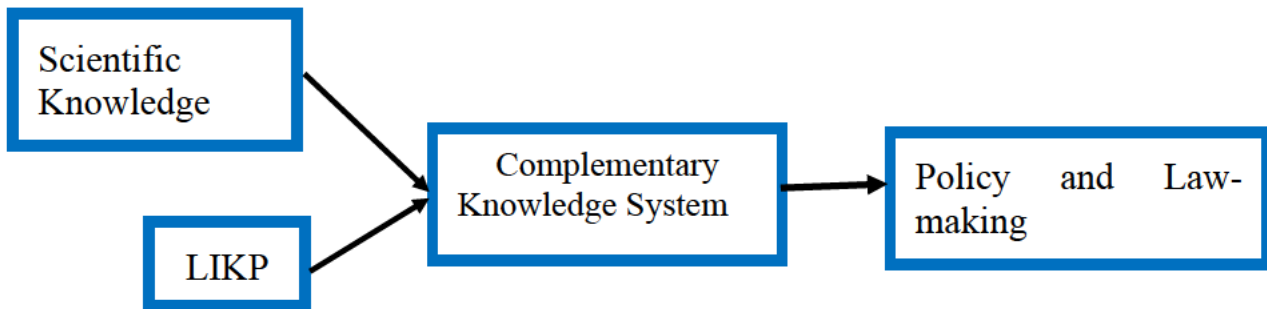


Figure 10: Combined framework for LIKP and Scientific knowledge in the climate change policy and law-making process (Source: author)

This finding in Kenya aligns with that of Manrique and others who posit that LIKP is only sometimes valued as an equal source of knowledge by some important scientific bodies.³⁸ They further argue that the representation of those who develop and use LIKP in international governance arrangements does not guarantee that their knowledge system is fully engaged in evidence-based policy-making. Generally, the findings suggest that co-production of policies and laws to address climate change using scientific knowledge and LIKP are more speculative, aspirational, and are too general to accomplish any kind of concrete result or effective incorporation of LIKP into policy-making in practice. This problem is not only at the national levels, but it also occurs in the development of international climate change regimes. Some lead authors of Intergovernmental Panel on Climate Change (IPCC) Assessment Reports, which provide global policy directions to tackle climate change, assert that the importance of LIKP in adaptation and resilience is indisputable.³⁹ However, they assert that there is little

³⁸ Manrique and others, Climate-related displacements of coastal communities in the Arctic: Engaging traditional knowledge in adaptation strategies and policies [2018] *Environmental Science and Policy* 80, 90-100

³⁹ Ford, J., Cameron, L., Rubis, J. and others. Including indigenous knowledge and experience in IPCC assessment reports [2016] *Nature Clim Change* 6, 349–353, Orlove and others, ICSM CHC White Paper I: Intangible Cultural Heritage, Diverse Knowledge Systems and Climate Change. Contribution of Knowledge Systems Group I to the International Co-Sponsored Meeting on Culture, Heritage and Climate Change. Charenton-le-Pont & Paris, (France: ICOMOS & ICSM CHC, 2022)

critical engagement with traditional indigenous knowledge systems compared to scientific knowledge. Also, the historical and contextual complexities of indigenous experiences are largely overlooked in the design and assessment processes of the international climate regimes. Notwithstanding, the findings show that agricultural researchers, policy-makers and development agencies are gradually realising that it is possible to synthesise traditional and modern insights and practices, rather than viewing them as inherently contradictory.⁴⁰ Despite the strong emphasis on the use of both scientific knowledge and LIKP for policy and law-making in Kenya, there exists challenges in realising this. In addition, LIKP faces several challenges that constrain its incorporation in policy and law-making, discussed in next section.

5.7 Challenges of incorporating LIKP

This section identifies and analyses the challenges of incorporating LIKP into the climate change legislative process. As a result of this analysis, it was found that the processes that led to the development of the climate change law and policy and the consideration given to LIKP by high-level policy actors were a major impediment to the involvement of local communities, especially farmers, and the incorporation of their LIKP. The analysis and discussion of some of these issues related to the process are presented in the sections below.

5.7.1 Tokenistic and symbolic consideration of LIKP

The drive for the development of the Kenyan policy and law on climate change was partly due to the need to align with occurrences at the international level. The international law-making process gives a tokenistic and symbolic consideration of LIKP. In relation to this, Ford and others, contributing authors to the Intergovernmental Panel on Climate Change (IPCC)

⁴⁰ Jeffrey Bentley, 'What farmers don't know can't help them: The strengths and weaknesses of indigenous knowledge in Honduras', [1989] *Agriculture and Human Values* 25

Assessment Reports, recommended greater recognition of LIKP in policy-making on climate change in the Sixth Assessment Report to be finalised in 2022.⁴¹ Therefore, by aligning with international processes that did not incorporate LIKP, the Kenyan process might not have offered enough opportunities for the incorporation of LIKP. This point is backed by most farmers and some community-based civil society organisations. For example, a farmer reported that:

We were an afterthought. Our ideas were sought as a symbolic gesture to show that we were part of the process and I think the content of the Law was already decided even before we small scale farmers, or people in the rural areas were being consulted. Even when they purported to consult us, our knowledge ideas were not valued (FR13, 2021).

This interviewee equally highlighted that when their views on the incorporation of LIKP were sought, it was recognised that the farmers and other community members had demonstrable experience using their LIKP for adaptation purposes. However, they were not considered as active contributors and, therefore, their local indigenous knowledge and practices were not included in the final policies and laws. This point is supported by the views expressed by a representative of a community based civil society group thus:

Often the experts came to the community with fixed ideas and only wanted people to participate for symbolic reasons. Most often experts came from outside the community to lead these processes. At the end of the sessions, people may say it was very beautiful, it was very successful and yes people came but did they bring their knowledge and ideas on board ... knowledge of elites and technical experts were at the centre stage, and we were an afterthought. Our ideas were sought, and we were involved in the process as a symbolic gesture to show that we were part of the process, to show that it was a citizen-wide action (CSR 25, 2021).

The feelings expressed by the respondents above, that their knowledge appears to be seen as a tokenistic, symbolic afterthought, is linked to the way the knowledge and interests of diverse actors was gathered and how that informed the policy-making agenda. As described in Section

⁴¹ Ford and others, 'Including Indigenous knowledge and experience in IPCC assessment reports' [2016] *Nature Climate Change* 6, 349-353

6.2, the climate change law-making process initiated by the member of the KCCWG first began with the identification of sector specific-interest groups. The second step was the formation of civil society leads for each thematic area. And the last step being engagement with other policy actors, such as indigenous and local communities, to gather evidence to be included in the draft developed by the working group. This appeared to be a top-down approach where communities were not involved in all the stages of evidence generation to inform the agenda. A similar process has been highlighted by Rajkumari in his work that examined the issues of the land rights of indigenous people in Bangladesh.⁴² He found that most decisions were made by government officials, scientists, and economists, and were done occasionally in the presence of a few (not often genuine), or the complete absence of, representatives from local and vulnerable groups or their organised associations and civil society groups.⁴³ This deliberately rendered the marginalised groups comparatively powerless in such processes. Bodansky, therefore, posits that for an effective national climate change legislative process to happen, how vulnerable groups, including farmers, influence such processes at different levels in relation to other actors across different ranges of scales (global, national, local scales public, private and CSOs) must be clearly defined.⁴⁴ This is in addition to dealing with conflicting views on what participation in such a process should be.

5.7.2 Where policy-making consultation and participation takes place

Where policy and law-making takes place may have a profound effect on the degree to which various actors influence this process using their knowledge. These actors understand, experience, and relate to climate change in diverse ways. The actors include the technocrats,

⁴² Roy, Rajkumari, 'Land Rights of the Indigenous Peoples of the Chittagong Hill Tracts, Bangladesh. *IWGIA Document No. 99*. Copenhagen, Denmark: International Work Group for Indigenous Affairs

⁴³ibid

⁴⁴ Daniel Bodansky, *The History of the Global Climate Change Regime* (MIT Press 2001).

bureaucrats, and elites detached from the problem and also those experiencing the problem at the grassroots level, especially the farmers. These local level actors were often invited out of the context where they experienced the problem to engage in the legislative process. These new spaces in themselves are disempowering and limit the potential for such actors to make meaningful and substantial contributions. On the other hand, engaging with these stakeholders in familiar settings could enable them to contribute more. In line with this a farmer said:

I only participated in the process because I was one of the few farmers invited by the government to participate. We were taken to a hotel away from the community and were given papers to sign and this was assumed to be our public participation in decisions. At the end we were given food and transport money. At the centre of everything is a hidden agenda even when they engage indigenous people and farmers in decision making. The aim is not to support us to overcome the challenges we face. Our signoff is required to gain funding support from external sources (FR15, 2021).

Furthermore, the respondent above said they followed their own way of gathering information and that external actors in need of such knowledge should narrow down and receive information from all corners of the community, especially farmers who have a wealth of relevant LIKP. He concluded that the government data collectors needed to engage with them where they live and work. This was because when they were taken out of the community to spaces unfamiliar to them, their confidence was reduced which affected their ability to fully participate. As discussed in Section 5.7.2 of the literature review on where policy-making consultation and participation takes place, taking community members away from familiar spaces (to unfamiliar spaces) during the policy-making process takes away their power, ability to contribute, and their confidence in such processes.⁴⁵

⁴⁵ Di Gregorio and others, Multi-level Governance and Power in Climate Policy Networks [2019] *Global Climate Change* 54, 64-77, Thomas Birkland, *An Introduction to Policy Processes, Theories, Concepts and Models of Public Policy Making* (4th Ed, Routledge 2015) 7-11, John Gaventa, Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley (UIP 1980), John Gaventa, 'Finding the Spaces for Change: A Power Analysis' (IDS Bulletin 2016) 37, <https://bulletin.ids.ac.uk/index.php/idsbo/article/view/898>, accessed 12/09/2020.

5.8 Conclusion

Two knowledge systems exist and were predominantly used in Kenya. Local indigenous knowledge and practices was widely used by communities who are mostly farmers at sub-national level and relied on the environment and natural resources for their survival. This knowledge is typically passed from generation to generation. However, they were actively innovating this knowledge through processes of knowledge (re)development and transfer and use to tackle emerging challenges. In this process, they interacted with those who developed and used scientific knowledge, which was the dominant knowledge system. These interactions resulted in the intersection of scientific and LIKP.

These two knowledge systems were found to be important for tackling climate change which is a cross cutting and multi-level governance issue. The different policy actors have different perspectives on the level of incorporation of LIKP vis-à-vis scientific knowledge. While the policies and laws are quite explicit on the importance of merging LIKP and scientific knowledge to understand and respond to the impacts of climate change, scientific knowledge is prioritised in the process.

In the process of developing the law, the efforts made by the KMD, through its network of community radios, and the KCCWG, through the thematic working groups and climate hearings, to directly engage with local communities, enabled interaction and intersection between these two knowledge systems in the national process. During these interactions, the local communities shared their knowledge on the decisions they made on what and when to plant, to breed, harvest and store their produce in order to build their resilience to the impacts of climate change. Therefore, policies and strategies associated with the Climate Change Act 2016, such as the National Climate Change Response Strategy (NCCRS) developed in 2010, highlighted the various measures for adaptation and mitigation to the impacts of climate change in the different sectors of the economy. For example, in agriculture, the strategy proposes the

application of a range of innovative technologies such as irrigation, early maturing and high yielding crop varieties, drought and pest-resistant crop varieties, and disease-resistant livestock. The NCCRS also advocated for the diversification of livelihoods, adaptation of agricultural technologies from analogue environments, and enhancing early warning systems with drought monitoring and seasonal forecasts for better food security. However, there is a divide between policy and practice. The statements about the use of LIKP approaches to tackle climate change in the policies and Climate Change Act are aspirational and intentional. To assess or evaluate the extent of the incorporation of LIKP and scientific knowledge to address the impacts of climate change in Kenya depends on the implementation of the law and its accompanying implementation policies, strategies, and actions into practice. This is an area for future research as it is beyond the scope of this study that focussed on the process leading up to the development of the law, covered in Chapter 1 of this study.

CHAPTER 6: ACTORS, SOURCES OF POWER, AND POWER DYNAMICS IN POLICY AND LAW-MAKING

6.1 Introduction

This chapter identifies and analyses the actors, their roles, sources of their power, and the power dynamics amongst them in the climate change legislative process. It discusses how these actors, including those from the government directly responsible for making policies and laws, and indirect actors, including civil society, international development partners, the private sector, and indigenous and local communities, interact with each other in this process. This analysis responds to the research question. *How do different categories of policy actors associated with scientific and LIKP knowledge and levels of power engage in climate policy and law-making in Kenya?*

This chapter links to Chapter 5, which analysed and discussed the findings on the role of knowledge and the extent to which LIKP and scientific knowledge were incorporated into the law. Knowledge is found to be a source of power. Different policy actors used this power to influence policy and law-making agendas and the final laws enacted.

The findings and analysis are reported and discussed in three sections and are aligned to the second part of the analytical framework developed at the end of Chapter 3. The first section explores the policy actors involved in the law-making process. The section reveals that Kenya's climate change legislative process involves multiple policy actors, either playing a direct or indirect role in the process. These actors are found at different levels of governance, including the national and decentralised county levels, with varying levels of influence on climate legislative processes. The second section explores the theme of power, focusing on sources of power and where power resides, the power dynamics, and how these shape the interaction amongst actors. The section reveals that the major sources of power include statutory powers to make laws, the knowledge and capacity to generate evidence on the policy issue, access, control of resources, and the socio-economic status of actors. An important

finding is that there is low concentration of power amongst the direct and indirect actors of climate change law-making in Kenya. However, most power is concentrated in the hands of parliament and, to a lesser extent, the ministerial departments, and agencies (MDAs). This power distribution significantly influenced how the different actors participated in the process. This low fragmentation of power resulted in conflictual cooperation (bargaining) between these actors. This has created a policy space where diverse policy actors from different sectors interacted to shape content of the policy and climate change law that was enacted.

6.2 Policy actors of the Kenya climate change law-making

The climate change policy and law-making process in Kenya involves diverse policy actors and actor groups. These actors are found at different levels of government including local, county, and national levels. These actors draw their power from different sources and relate with each other in different ways. This section sets out to understand the position and role of the major actors that influenced the climate change legislative process in Kenya. The discussion includes the analysis of the various sources from where they draw their power.

As found in the literature review in Chapter 3, there are various classifications of policy actors in the policy space. These can be broadly classified as domestic and international policy actors. The domestic policy actors can again be classified into government, locally-based international organisations, CSOs/NGOS, research and policy think tanks, the private sector, and the public. The understanding of those who were actors in the climate change legislative process in Kenya was different among the informants. They all categorise these actors into three main groups: The government, the private sector, and civil society (including the public).

The opinions of the informants depict an easy categorisation of actors into distinct groups. In this categorisation, the government was seen as having the utmost responsibility in line with its statutory obligation to protect the national interest through the making of laws,

often with marginal inputs from the other policy actors. However, the analysis of the findings of this study reveals that the distinction between some of these policy actor groups in the climate change law-making process was hard to define. This could be because the issue of climate change is seen as a novel, cross-cutting issue, understood and responded to differently by the policy actors including those at the local level. Thus, it required combining the different knowledge and interests of the different actors to shape the policy and law-making process. This process, as described by the participants, include three stages: (i) the issues and needs identification, (ii) policy/bill formulation, and (iii) consultation and decision-making, which is described in Section 1.2.6 that sets the boundaries for this study.

The views of participants corroborated what was found in the literature (Section 3.3) on law and policy-making - that the stages in these processes were not neatly ordered but, instead, were overlapping and iterative.⁴⁶ Civil society organisations (grouped under the Kenya Climate Change Working Group (KCCWG)) engaged with citizens and special interest groups found at different levels of governance to gather evidence. This evidence, including LIKP and scientific knowledge related to climate change, was used to develop the draft climate policy before it was taken up by authorities with statutory obligations to make policies and laws. The interaction of domestic policy actors was influenced by international policy actors based in and out of Kenya, including bilateral and multilateral development partners such as UNEP, USAID, CIDAR, INADES, and some diplomatic missions through the provision of technical and financial support to the climate legislative process.

The interviews and document review revealed that local communities were implementing ecosystem-based adaptations using LIKP to understand and respond to the climate change. As opposed to being victims, they were keen to continuously use their LIKP and other knowledge systems to build their resilience to climate change. This finding indicated a strong agreement

⁴⁶ Yannis karangiannis & Claudio Radaelli, *Policy-making* (OUP 2007) 8&10

that developing responsive and sustained laws that enhance the adaptive capacity of communities requires indigenous and local communities to be frontline policy actors participating in and consulted through all the stages of the policy and law-making process, as found in Section 2.5 on the link between LIKP and policy and law-making in Chapter 2 of this thesis. In addition, many scholars point to a need to consider the local as well as the national level actors in the process of designing climate change policy and law.⁴⁷ Based on this rationale, the policy actors of the Kenyan legislative process were identified and grouped as follows:

- i) Indigenous and local communities (ILC),
- ii) Civil society, private sector, researchers and research institutions, extension workers, and local and international development partners
- iii) high-level bureaucrats or government officials (parliament, and ministerial departments, agencies, and authorities - MDAs)

This clustering remained unchanged throughout the interviews, analysis, and discussions in this thesis. These actor clusters above played major roles and significantly influenced Kenya's climate change policy and law-making process in different ways. In the sections that follow, the characteristics and role of each of these actors and clusters are described and analysed.

6.2.1 Indigenous and local communities (ILC) and their sources of power

This group is made up of individual farmers, farming families, community-based groups and cooperatives, and individual community members involved in small entrepreneurial ventures. Most of these actors have lived in an (agroecological zone) area for several

⁴⁷ Elia Mwanga, 'The Role of By-Laws in Enhancing the Integration of Indigenous Knowledge' [2019] *Carbon & Climate Law Review* 13(1), 19-30, Nelson Chanza and Anton de Wit, 'Enhancing climate governance through indigenous knowledge: Case in sustainability Science (2016) 112(3) *South African Journal of Science* 35, 39 Cuthbert Makondo and David Thomas, 'Climate change adaptation: Linking indigenous knowledge with western science for effective adaptation' (2018) 88 *Environmental Science & Policy* 83, 88

generations. While engagement in agriculture was a unique characteristic in this cluster, this did not imply homogeneity. The data revealed the existence of two sub-group of actors in this cluster. The first sub-group included those found at the 'centre' having more power and influence on decision-making. Some of these actors included traditional village chiefs and elders, religious leaders, traditional healers, heads of community-based groups, retired civil servants, teachers, and heads of local cooperatives. This group developed power based on roles they played at the community level.

On the other hand, those found at the 'periphery' were less powerful and less influential in the decision-making processes in general. This sub-group was made up of marginalised and minority groups who were relatively poor compared to the previous group. Generally, the members of this group depended on the natural environment, particularly the fertile soils, for agriculture which was the primary source of livelihood. In relation to this, an informant reported that most of Kenya's population was found in this sub-group:

I can say more than 70% of Kenya's population are farmers and depend on farms sizes of less than or up to two hectares. They are found mostly in remote areas with limited support, access to information, and little or no formal education. They often rely on their traditional knowledge for decision-making. On the other hand, there is a small group in the community who are in less remote areas and have access to better services such as education, knowledge, and information. This small group of community members is more powerful in decision-making processes. (LR27, 2021).

The view expressed by this respondent indicates that even though a majority of the indigenous and local people rely on agriculture and other micro-livelihood activities, they are not a homogenous group. There are differences among them including where they draw their power from and how they use this power.

6.2.1.1 Sources of power amongst ILC

This section examined where the ILC drew its power from. Some of them drew their power from their knowledge (to contribute to addressing a policy issue), from proxy representation due to social status, and their ability to form local networks with some emerging as ‘counter-elites’ with the ability to access and control resources. It was found that some of these sources were connected to each other. For example, those with high socio-economic status was able to form networks at the local level and beyond. These people had better access to and control of resources and therefore exercised more power in decision-making. These sources of power are examined in the next sections.

Power from their numbers and social networks

Over 70% of Kenya’s population is agrarian and mostly live in the surrounding areas. These numbers constitute a significant lobby and advocacy force to press for local interests in policy and law-making. However, this potential is underutilised. Although they form social and solidarity networks, these are largely to meet the needs associated with their livelihoods, especially in times of crisis. In addition, there is diversity in the socio-economic status amongst this policy actor group that generates local power asymmetries. Some community members draw their power from their social and economic status. They acquire this status because of formal education and engagement in other economic activities beyond agriculture. They often form networks amongst themselves and with others beyond the community. With this acquired status, they position themselves at the centre of decision-making in the community.

In line with this, a farmer resident in Wajir, a remote village in North East Kenya, which had experienced several episodes of droughts especially from 2011, noted that:

Some community members, especially the teachers, business owners, and retired officials who had returned from the cities, were more educated and had more knowledge and awareness about the drought issue in Wajir. They positioned

themselves as the lead persons in the community to gather community views and were therefore responsible for presenting these views in the climate decision-making process. For example, these people called the attention of the regional authorities to the impacts on the community. This resulted in more food aid being delivered to the community to alleviate the difficulty of accessing food (FR 22, 2021).

Closely related to the view expressed above, is that expressed by another farmer who felt that when there was need for the participation of marginalised and excluded actors, the interaction was seen as one between external elites and elites amongst the ILC policy actor group. Therefore, the external elites co-opted these 'counter-elites' found at the community level in the process. The farmer stated that:

We have this problem where only the elites are heard from in the decision-making on issues that affect us. By the elite, I mean only those people who are powerful amongst us. We call them "brokers" back home. They use most of these public participation schemes for personal gain and political mileage. This is a big concern for public participation. The government officers only hear from the elites rather than hearing more from us who face environmental problems and are solving them in our ways (FR14, 2021).

The view about influential policy actors taking forward the community's plight depicted these actors as assuming a higher status than the rest of the community. These influential actors often took on the role of patrons when resources were mobilised and viewed the rest of the community during their interactions as clients. These clients in return, supported these patrons to maintain their influence during the decision-making process. The examination of patron-client relationships emanating from unequal status, wealth, and power between the two parties was beyond the scope of this study. However, Nunan and others have examined this issue in the fisheries sector looking at the relationship between boat owners and fisherfolk and concluded that this relationship of dependence of fishers on boat owners results in power imbalances, with patrons exhibiting power and control over the fishing decision.⁴⁸ At the same

⁴⁸ Fiona Nunan and others, 'Big fish, small fries? The fluidity of power in patron-client relations of Lake Victoria fisheries' [2020] *Journal of Rural Studies* 79 246-253

time, the fishermen showed a degree of power because they were directly responsible for the daily fish catch on which their boat owners relied.⁴⁹ They equally drew power from their capacity to organise themselves into groups to oppose unfavourable conditions imposed by the patrons and to influence the nature of their relationships. This example shows how local communities used their numbers to build political capital and capacity.⁵⁰ This was used to promote LIKP in the decision-making process on climate change that involved more powerful and influential actors. This strength from political capital and the capacity of communities and other interest groups in relation to LIKP and policy-making on climate change is highlighted in Section 2.5. In this case, politicians and bureaucrats became conscious of the power from the strength of the numbers of ILCs and their potential influence on policy-making and political processes. Therefore, they engaged with these policy actors in the climate change policy and law-making process in Kenya. It can be concluded from this that the legitimacy of their decisions and actions depended on building legitimacy amongst the ILC.

Local civil society partners and networks, such as the KCCWG, served as main advocates and allies of ILC, building their capacity to articulate their knowledge and interests while sometimes serving as proxies representing ILC's interest in policy-making spaces. This role played by KCCWG was similar to the role played by the CSOs of Indonesia during its climate and forestry policy-making process. They worked with communities to identify, produce, and disseminate the knowledge, making it accessible to other policy actors. The Indonesian civil society worked with local communities to increase their capacity to bring their LIKP to bear on governance policies and procedures. Also, in the case of Aboriginal Communities of Canada's Northwest Territories (NWT), CSOs enhanced the Aboriginal Communities' capacity through developing initiatives that increased aboriginal groups' means

⁴⁹ *ibid*

⁵⁰ Nugroho and Others, 'Using local knowledge in policy making' in Nugroho and Others (eds) *Local Knowledge Matters: Power, Context and Policy Making in Indonesia* (Bristol, 2018)

to participate in environmental decision-making. These initiatives were typically implemented by providing funds to aboriginal groups to participate in environmental decision-making processes, such as public hearings and environmental assessments. The theory was that building on and increasing the general capacity of indigenous and local community groups to participate in the decision-making processes naturally promoted the uptake of their LIKP. The civil society in the NWT also worked with local communities to build their political capital to promote their LIKP, ensuring it was available for the purpose. Here, their political capacity was used to identify and explore opportunities in political structures to negotiate and advocate for incorporating their LIKP with other knowledge systems. Thus, even though they remained less coordinated, power from political capital and capacity amongst ILC was magnified by the number of ILC developing and using their LIKP.

Power from development and use of LIKP

As noted above, some members of the ILC cluster recognise their LIKP as a source of power. The use of this power enables them to actively contribute to climate change decision-making. However, in some instances, the use of this power is limited. The findings reveal that their socio-economic status and inability to bypass the influential ‘counter-elites’ who impose themselves as representatives of communities and their views limited the use of their power. Thus, though available to this group, this power remained quiescent and, therefore, limited their ability to have their views included in the final climate change policy and law.

When one respondent (FR 22, 2021) was asked about the nature of the community’s views gathered from the influential elite, he indicated that these views were mainly about what assistance they needed in terms of food aid for immediate survival during long droughts and how it was distributed. This respondent considered the distribution of food aid as a temporary solution. According to him, the solution to the drought problem was not sustainable. This was

because they were not given the opportunity to contribute to the knowledge on how they understood and responded to such environmental challenges. This respondent acknowledged the existence of LIKPs for drought response, which constituted a source of power necessary for decision-making related to the droughts caused by climate change.

This analysis aligns with the findings in Chapter 4 about the importance of LIKP of ILC as a source of their power to shape climate change legislation. However, because these actors are poorly organised in making claims based on their interest, their power remains quiescent. Also, because these people lack the capacity and are often concerned about their survival after environmental shocks, this discourages the emergence of overt participation and the expression of strong rural voices in the climate change legislative process. These findings concur with the study that examined the existence, nature, and maintenance of such power in explaining the strange co-existence of massive natural wealth (land and coal) with pervasive poverty in the case of the Clear Fork Valley Community in Central Appalachia.⁵¹ In this context, the communities had abundant knowledge and experiences to regenerate the land but were poorly organised to channel this knowledge through the policy-making process regarding extraction of the resources and preservation of the environment amidst external and more powerful actors.

However, in the context of Kenya, in addition to the role of civil society working with communities to build political capital and capacity of communities to take advantage of their numbers, many legal instruments and policies have boosted the development and use of LIKP. Some of these instruments that recognise the power of LIKP and those who develop and use this knowledge were discussed in Section 5.5 of Chapter 5 on LIKPs in laws and policies in Kenya. These instruments, such as the Traditional Knowledge and Cultural Expressions Act 2016, NCCAP, and NCCRS, emphasise measures to counteract influential forces that could

⁵¹ John Gaventa, *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley* (UIP 1980)

potentially limit the direct involvement and contribution of communities. In line with this finding, a civil society activist indicated that ‘The National Climate Act created pathways and mechanisms for communities to hold those impairing climate change progress accountable’ (CSR 37, 2021). When probed about these pathways and mechanisms, the respondents cited a multi-level governance structure, improved accountability and participation in line with Article 10 of the Constitution, and the devolution structure in Kenya. These governance arrangements are examined in Chapter 7 of this thesis.

6.2.2 High-level bureaucrats

This section examines the role of high-level bureaucrats, including the parliament and the Ministerial Departments and Agencies (MDAs), and the Extension Officers (EOs) representing the states interests at local level. These policy actors drew their power from different sources, including the statutory authority, to make laws, policies, norms and rules, and powers they acquired when representing state interest at different levels of governance.

6.2.2.1 Central and County Government

Legislative processes occur both at the national government and county levels, and this aligns with the devolved government system of the country. The central and devolved governments are the actors directly responsible for legislating in Kenya. This direct responsibility is to make laws that are initially voted as Bills in Parliament and assented to by the President as provided for in Article 94 of the Kenya Constitution.⁵² The role of parliament is equally highlighted in the institutional coordination structures at the national and devolved levels as shown in Figure 11.

⁵² GoK, 2010 Constitution

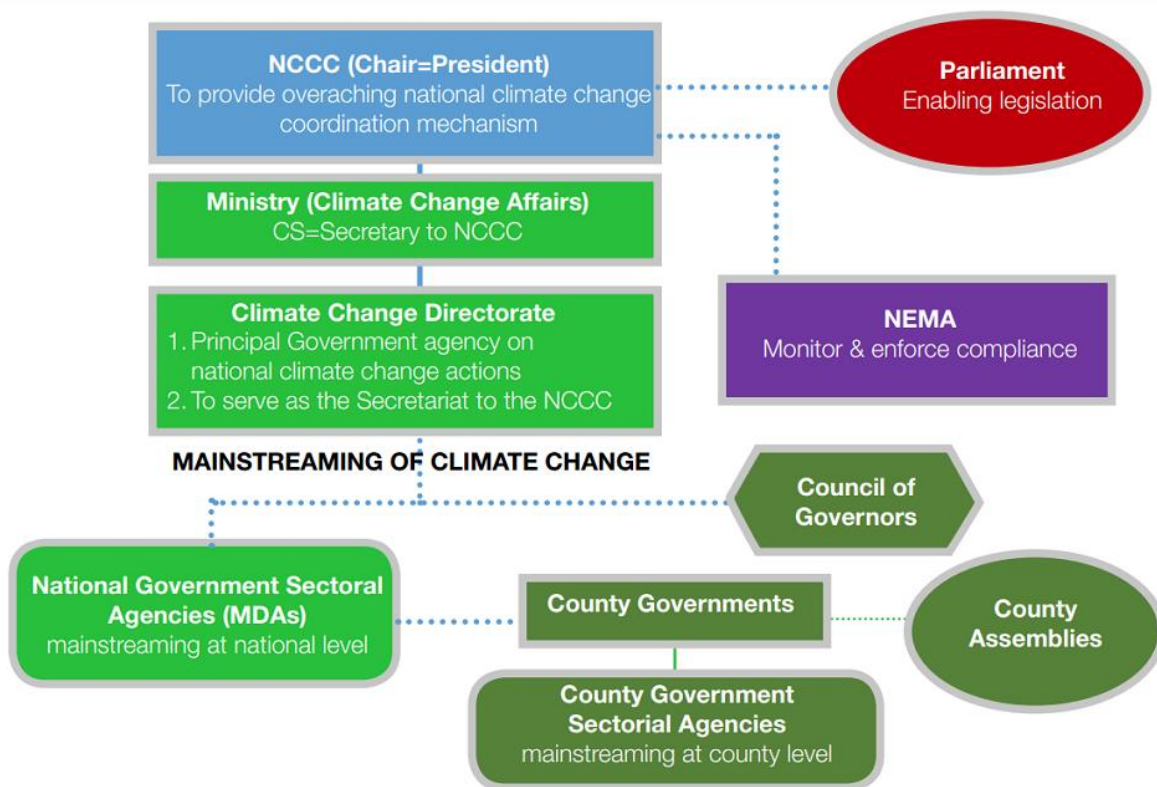


Figure 11: Climate change institutional coordination structures in the Climate Change Act 2016⁵³

The coordination mechanism gives the utmost power to parliament to create enabling climate change legislation.

According to the Kenya National Adaptation Plan, the initial drive for the law came from Honourable Franklin Bett, Member of Parliament (MP) for Bureti Constituency in the Great Rift Valley.⁵⁴ He became concerned about the erratic rainfall, regular floods, and extended droughts experienced by his constituents and other citizens of Kenya. He observed that agriculture, the mainstay of Kenya’s economy, was most impacted by climate change. In 2008, the MP started working on a Global Warming Bill that would protect vulnerable Kenyans from climate change. In November 2008, he first tabled the Private Member’s Motion on Climate Change and Greenhouse Reductions. The Bill sought to provide a framework for the

⁵³ Kenya National Adaptation Plan 2015-2030, page 10.

⁵⁴ KCCWG, ‘Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016’, (2016 Kenya Climate Change Working Group) <https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>, accessed 22 February 2022

implementation of critical activities that would enable Kenya to meet its obligations under the global climate change frameworks. Hon. Bett was later appointed as the Minister for Roads. He transferred parliamentary responsibilities for the motion to Hon. Shebesh, then a nominated Member of Parliament and thereafter to Hon. Otichillo, the Member of Parliament for Emuhaya Constituency in Western Kenya. He led the process to completion following a series of challenges, including rejection by the President for it not meeting the threshold for public participation.

There are contrary views about the origin of the climate change legislative process in Kenya. About this, the Compliance and Enforcement Officer at the Kenya National Environmental Management Authority (NEMA), who also coordinates climate change activities, noted:

The initial drive for a climate change law began from the civil society organisations (CSOs) and was later introduced as a private member's bill to the national assembly. After a series of consultations in Parliament, the bill was presented to the President. The president rejected it for not meeting the threshold for stakeholder engagement or what we call public participation in the constitution. This process was later picked up by the Ministry of Environment and Forest, and it moved from a Private Member Bill to a National Government bill. More CSOs were involved in this process, and the bill was subjected to extensive stakeholder engagement. Together with civil society, we went around all the counties. We engaged with the County Governments and existing networks of extension officers to gather stakeholder views. As a result, we achieved the threshold for stakeholder engagement (GO25, 2021).

The view expressed by the senior government official highlights the role of CSOs and EOs in the process. He viewed these actors, particularly civil society, as the initiator of the climate change legislative process. However, through their KCCWG Report, civil society downplayed its frontline role. The finding reveals that this was a deliberate attempt to avoid a power struggle over the leadership of the process, which is discussed in the later part of this chapter.

The sections above indicate that the powers to make laws are explicit in the statutory provisions of Kenya. However, the climate change legislative process was unique. This was

because there was a power tussle between these different government entities and institutions on who had the power to lead the development of the law. According to a legal practitioner from the Kenya Law Commission who the KCCWG contracted to work on the legal aspect of the Climate Change Bill before submission to the Parliamentarian:

The Climate Change Bill process started off well with effective collaboration between different actors of the process. However, in 2011, the Executive arm of government felt that it should be the driver of such a crucial Bill and looked unfavourably at the Legislature's lead role in the Bill. There was a resultant push and pull between these two arms of government that stalled the process. In addition to the leadership and procedural differences that weighed on the climate change Bill process, there were contestations as to where the Climate Change Authority would be hosted. Whether in a ministry or Office of the President? (LP38, 2021).

The Authority for the management of climate change issues was hosted by the Office of the President. While these different power dynamics existed in this process, they offered fertile grounds for debates on the enrichment of the Climate Change Act 2016. The difference that would have been made should a Ministry have hosted the Council, or an independent body is beyond the scope of this thesis. The MDAs, services and the devolved county governments play an active role in the climate change legislative process. Their role entails capturing and integrating the sectoral strategies and policies on climate change, as depicted in Figure 11 above.

6.2.2.2 Ministerial Departments and Agencies (MDAs)

These ministerial departments include the Ministry of Environment and Forestry, Ministry of Agriculture, Livestock and Fisheries, Ministry of Devolution and Planning, and The National Treasury, which is the National Designated Authority for Kenya's Green Climate Fund (GCF). The government agencies involved in the process include the National Environmental Management Authority (NEMA), National Disaster Management Authority

(NDMA), Tana & Athi River Development Authority (TARDA), Lake Basin Development Authority (LBDA), and Kenya Wildlife Service (KWS).⁵⁵

The National Climate Change Framework Policy points out the role of these MDAs as follows:

The Government of Kenya, led by the Ministry of Environment and Forestry, worked with stakeholders from civil society, the private sector, and national and county governments to develop this climate change legislation. The Act adopts a mainstreaming approach that includes integrating climate change considerations into all sectors and in County Integrated Development Plans. It also establishes the National Climate Change Council, chaired by His Excellency the President, which is responsible for overall coordination and advisory functions.⁵⁶

The statement above contradicts the view that the Kenyan Parliament played the leading role in the legislative process. These differences in view depict the different interpretations amongst actors of the process. However, these interpretations can also be linked to power dynamics and interests by different policy actors who appear to be leading such an important process. These different interpretations and interests to demonstrate a powerful and leadership role in the process and their implications for the climate change policy and law-making process is discussed later in this chapter. The findings, in addition to the statement above, reveal that the government collaborated with other actors, including civil society and state agents at a decentralised level that position themselves as ‘interface bureaucrats.’ The role of these interface bureaucrats is examined below. How these institutional coordination structures shape the law-making process and incorporation of knowledge will be examined in Chapter 7 of this thesis.

⁵⁵ GoK NCCRS, GOK NAP (p13)

⁵⁶ National Climate Change Framework Policy, November 2014, page 8.; Government of the Republic of Kenya, National Climate Change Action Plan 2018-2022 (Ministry of Environment and Forestry, Nairobi 2018) page 4.

6.2.2.3 Extension officers (EOs)

In the policy and law-making process on climate change in Kenya, the views from the different policy actors on the influence and role of EOs were diverse. Some, especially from the civil society and higher-level policy actor groups, opined that EOs acted as interface bureaucrats playing an intermediary role between local communities, county, and central governments legitimising state powers at that governance level. The views from this policy actor group suggest that, generally, the EOs from the agriculture, fishery, livestock, and forestry sectors operated as facilitators and communicators, and continued in their role of helping farmers in their routine decision-making on natural resources and environmental management. However, this was different for the climate change policy and law-making. Often, solutions were readymade and proposals that were sometimes not easy to be understood or adopted by communities were presented. However, in some rare occasions where the EOs were involved, the EOs exercised control over the process and made important decisions. For example, in the issue identification stage of the climate change law-making process, the few who were involved decided which stakeholders got to participate and what knowledge was necessary or relevant.

As one of the interviewees reported:

I was invited as one of the few farmers by the government EO to find which crops are adapted to climate change conditions, especially droughts, during the County Level consultations on climate change law-making. While I made my suggestions, I was presented with solutions made by the government especially the use of a new variety of seeds and where to find them (FR4, 2021).

This view expressed above seems to point to the fact that the interface bureaucrats in the climate legislative process sought to legitimately expand central state control over people, resources, behaviours, and choices. They promoted narratives and actions that position them as central actors in addressing community problems and as those mandated by the central government. In addition, they often attempted legitimise their role as agents with the expertise needed to act

as proxies of communities in decision-making processes. This proxy representation role was often competed between the EOs, the civil society, and other partners working with communities. A respondent raised concerns with this interface role played by the EO thus:

Most often experts came from outside the community to lead participatory and consultation processes. They mostly came to the community with fixed ideas and only wanted people to involve the community for symbolic reasons - just to show that local communities and farmers participated in their final reports. At the end of the sessions, people may say it was very beautiful, it was very successful and yes people were invited, and they came for a meeting. However, the question is: did these people understand the process, did they actively participate, and were their interest or voices taken interests incorporated in the final outcomes? (FR15, 2021)

The view above demonstrated that EOs as intermediary bureaucrats have a high level of power in their interface role between state-citizen. They often positioned themselves as those with power and authority to bring policy solutions proposed by the state. On the other hand, some community members see these EOs as detached from the policy problem and those experiencing the problem at the local level.

Communities believed the EOs representing state interests were detached from the problem and therefore did not understand what solutions were relevant to the context. This view of the detachment of the state agents from the policy process has been expressed by Long.⁵⁷ He demonstrated how the interaction between community members and extension agents could be seen as an encounter of two forces (those with knowledge and those with power).⁵⁸ In the Kenyan context, these two forces are interdependent and the interaction between the communities with the knowledge systems and the EO representing state interests results in conflicts.

From the perspective of the national and intermediary bureaucrats, the communities are not important holders or producers of knowledge relevant to the policy and law-making process

⁵⁷ N. Long, *Encounters at the Interface* (Agricultural University of Wageningen, Netherlands 1989)

⁵⁸ *ibid*

on climate change. They felt although LIKP should not be discounted when tackling climate change, they cautioned against over-relying on it because produced marginal results. In addition, they viewed LIKP as obsolete and going extinct, as was found in Chapter 2 (Section 2.4) and Chapter 5 of this thesis. Often, the ILC were invited to participate and were presented with opinions and perspectives on how to deal with climate change based on scientific evidence and with a pre-determined agenda. In this way, they were not considered capable of informing the process based on their knowledge systems in line with the constitution and other legal instruments in Kenya that emphasised their participation and consultation in such processes. The role of interface bureaucrats as everyday regulators and implementers of policies and laws has been examined within the framework of natural resource interventions.⁵⁹ However, it offers useful insights for the climate change legislative process in Kenya. This is specifically on the interplay of knowledge-based power of communities and statutory power of the state and their proxy representatives in community level legislative processes.

Generally, a majority of ILC recognise that in the past, EOs played an active role as intermediaries of the state at the local level, particularly in scaling-down government policies in the agriculture and related sectors. However, regarding climate change policy and law-making process, they did not play a significant role as would have been expected by communities and other policy actors involved in the process. Over several years, there has been a reduction (or complete breakdown) in the interactions between extension workers and local communities.

Interestingly, the EOs had differing views about their role in the climate change policy and law-making process. Views about their limited involvement in the process corroborated views expressed by the farmers. For example, EOs indicated that during the process, their

⁵⁹ Cleaver, F. D. and De Koning, J. Furthering critical institutionalism (2015) *International Journal of the Commons* 9 (1), 1-18, Frances Cleaver, *Development through Bricolage: Rethinking Institutions for Natural Resource Management* (Earthscan, London 2012).

expertise was solicited. However, their role ended at the level of their offices, where they were asked to make inputs to the law by a panel of government experts and hired consultants (EO 7, 2021). When probed why their traditional role of working directly with grassroots communities was not the case, one of them indicated that over the years, the budgets for extension services had been cut thus opportunities to directly engage with farmers were rare. Specifically, concerning the climate change law-making process, she suggested that limited resources and time did not allow for them to work with groups in the field as they would have expected. According to her, EOs did not have the resources to engage with local communities compared to other policy actor groups, like the CSOs, under the umbrella network KCCWG network, who received significant resources from their external partners and collaborators that allowed them to work directly with local communities and draw on their knowledge systems.

6.2.3 Non-state actors including CSOs, think tanks, and development partners

The Kenyan civil society organisations, also referred to as Public Benefit Organisations, played an important role in the climate change law-making process. They were active, mobilised the resources, and financed participants, especially from specific sectors and interest groups to attend fora for deliberation, development of ideas, and narratives around sectoral and group interests.

At the inception of the climate change legislative process, two main consortiums of CSOs existed. These were made up of community-based organisations and thematic-based organisations interested in agriculture and climate change issues. These included the Kenya Climate Forum (KCF) headed by the Forest Action Network (FAN) and the National Climate Change Consortium of Kenya (NCCCCK), led by the then Kenya National Federation of Agricultural Producers (KENFAP). In 2008, these consortiums merged into one entity – the Kenya Climate Change Working Group (KCCWG). The Group met in an inaugural meeting in

February 2009 and defined a common quest to combat the destructive effects of climate change in Kenya. This mission was to be accomplished by generating consistent, evidence-based information for climate change action and guiding the development of a Climate Change bill.

This deliberative process for a climate change law initiated by the KCCWG concurs with the work of Njoroge, Ratter, and Atieno.⁶⁰ They described the climate change law-making process as one involving deliberative inclusionary processes involving CSOs that initiated the idea of a Climate Change Act making process. This was based on consistent and up-to-date evidence-based information on climate change in Kenya linked to specific sectors.⁶¹

The CSOs researched different aspects of climate change adaptation and resilience involving communities. According to Njoroge and others, the CSOs provided a mix of adaptation actions based on a scientifically credible and socially inclusive foundation with community knowledge around nine thematic sectors to support decision-making to avoid maladaptation.⁶² In line with this, a climate change researcher who participated in the process that led to the development of the Climate Change Act noted that:

the sector-specific actors such as those in agriculture, water and health developed their knowledge and ideas by coming up with concrete, unified narratives about adaptation through “climate hearing”, conferences and workshops, which shaped the narratives around climate change in their sectors of interest (RR 1 2021).

When probed about what these sectors and groups were and how they were constituted, the respondent indicated that the groupings were formed around different sectors based on the vulnerability of the sectors to climate change including agriculture, water, health, energy,

⁶⁰ J. M. Njoroge, B. M. W. Ratter & L. Atieno, ‘Climate Change Policy-making Process in Kenya: Deliberative Inclusionary Processes in Play’ (2017) *International Journal of Climate Change Strategies and Management* 9(4), 535-554

⁶¹ The nine thematic groups tasked to gather knowledge around climate change included (1) Water thematic group; (2) Energy thematic group; (3) Agriculture, Livestock and Fisheries thematic group; (4) Tourism, Trade and Industry thematic group; (5) Conservation, Pastoralism and Conflict over Natural Resources thematic group; (6) Health thematic group; (7) Forestry thematic group; (8) Urbanization, Housing and Infrastructure thematic group; and (9) Education thematic group.

⁶² Njoroge and others (n 16) 544

tourism, industries, infrastructure. The formation of these sector groups for the purpose generating data sector specific responses to climate change was discussed in Chapter 5.

6.2.3.1 Sources of CSOs' power

The CSOs drew their power from three sources. Firstly, their ability to generate up-to-date evidence-based information about climate change needed for decision making. Secondly, the power in their numbers (power magnification), and thirdly their ability to pool resources together. These sources of power are discussed below.

Power through evidence generation

Kenya's civil society acquired most of its power through its capacity to generate evidence needed for the climate change legislation. The initial effort by a member of Kenya's Parliament to develop a climate bill in 2008, discussed in Section 6.2.1 above, was handicapped by the lack of background information on climate change in Kenya. The parliamentarian could only proceed when he encountered civil society at a forum organised in collaboration with the Norwegian Church Aid in Kisumu. During this encounter, he found common ground with the CSOs working on a regulatory environment for climate change action. So, a convergence of concerns between the parliamentarian and the civil society bodies resulted in joint efforts toward realising the climate change regulatory framework. The civil societies were to bring onboard climate research data, technical expertise, and financial support, while the parliamentarian was to lobby the political fraternity towards developing the Climate Change Act. The CSO in Kenya thus played an interfacing role between the communities and the national legislators. They supported communities in gathering evidence of the LIKP used to understand and respond to climate change and also in finding opportunities where this

knowledge can get into the political process of climate change law-making. This finding concurs with Howlett and others, who state that one valuable resource that interest groups can deploy is knowledge and information that might be unavailable or less available to others.⁶³ Thus, groups that have such knowledge and information at their disposal and can channel it to legislators and bureaucrats could have the power to influence the policy-making process significantly.

Civil society, as an indirect actor in law-making, used its ability to generate and deploy knowledge and evidence as a source of power. This power resulted in a convergence of concerns with the parliamentarian and other government entities resulting in joint efforts towards the development of the 2016 Climate Change Act. This interaction between civil society and the parliament on the same agenda was not void of conflicts. These conflicts amongst policy actors are discussed in a subsequent section of this chapter.

Power magnification through its membership.

The climate change legislative process started with a small elite group made up of government officials and state legislators keen on dominating the process. This was based on the powers bestowed upon them by the Constitution. Thus, they viewed the process as technical, needing technical responses from the government. This perspective aligns with views expressed by an officer of the Ministry of Environment and Forest (GO 37), who stated that the draft policies and bills were written by technical officers drawn from all ministries, departments, agencies, parliament, and county governments. Later, technical consultants were hired to do the legal review of the documents. However, this process stalled because it lacked sufficient evidence and information on climate change.

⁶³ Michael Howlett, M Ramesh & Anthony, Perl Studying Public Policy: Policy Cycles and Policy Subsystems (OUP Canada 2009)

While civil society, through the Working Group, generated the evidence to unblock this gridlock, it also had to contend with the powerful and small political elite class who were keen to take over the process. It thus developed a counter-power from the size of its membership. The KCCWG was a consortium of leading CSOs at different levels working on thematic issues affected by climate change. This finding above is supported by the views of a climate policy researcher thus:

The activism “noise” made by KCCWG in 2009 when it engaged its members and its constituents while working on the climate change policy paper was too loud to be ignored by the government. In response, the government set up its own team to draft NCCRS. However, when the government’s NCCRS was published In April 2010 it did not provide any feasible policy paper on climate change as did the KCCWG draft. Rather, it made recommendations for possible responses to climate change (RR01, 2021).

The ‘noise’ made by the CSOs through the umbrella network (KCCWG) highlighted by the above respondent implied the group was powerful and capable of contending with state power. The KCCWG kept an open-door policy that led diverse thematic interest groups, and local and international organisations to join or support the network.

This finding on the power acquired through numbers by the CSO concurs with that of Birkland, who posited that power magnification is a key way to counteract the small elite group dominance in policy and law-making.⁶⁴ This entailed the formation of bigger interest groups with a unified narrative instead of individual groups pressuring for consideration of personal group interest.⁶⁵ All other things being equal, bigger groups can be expected to be taken more seriously by other competing powers in the law and policy-making.⁶⁶

⁶⁴ Donald Baumer & Carl Van Horn, *Politics and Public Policy: Strategic Actors and Policy Domains* (CQ Press 2014), Thomas Dye, *Understanding Public Policy* (Pearson 2013), James Anderson, *Public policymaking* (Cengage Learning 2014), Gabriele Abels, ‘Citizen involvement in public policy-making: Does it improve democratic legitimacy and accountability? The case of pTA’ (2007) 13(1) *Interdisciplinary Information Sciences* 103

⁶⁵ Birkland (n 30) 160

⁶⁶ *Ibid*

However, the finding reveals that irrespective of group sizes, variations in power still exist. Therefore, groups must use other sources of power including their ability to access and control resources (information, knowledge, finances) available to them to push their issue on the agenda.

Power from access and control of resources

Kenya's civil society through the KCCWG sourced additional power through its ability to pool financial and technical resources which were deployed for its work. Operating on an open-door policy as highlighted above, it attracted diverse actors and institutions, including international NGOs, that had financial resources to support the climate change agenda in Kenya. According to a University Lecturer and climate researcher at Kenyatta University:

A number of embassies through their government organisations like USAID, NORAD and SIDA put in significant funding at the disposal of both the government and civil society, especially for the thematic groups they were interested in. Those that received more funding support developed strong narratives and were more influential in shaping the final agenda. I think some of the gainers of this policy and act included the agricultural, manufacturing, health, and resource extraction thematic groups. One of the biggest losers was the tourism sector because they had few networks and did not have much representation in the development of the Climate Change Act (RR3, 2021).

The view expressed by the respondent above implies that the involvement of a multitude of actors resulted in an imbalance of opinions. A reason for this was because the actors had varied opinions and understandings about framing the climate issues and how the law could address them. But also, that the external actors had a lot of influence because the funding they provide to their sectors of interests enable the promotion of their interests by the grantees during the agenda setting stage. The KCCWG played a central role in gathering these views and convincing these actors with competing agendas to work towards a common goal.

In line with the views of the researcher on international funding, interviewees representing the other stakeholder groups were equally of the opinion that the legislative

processes were heavily funded by bilateral and multilateral agencies. For example, some of them indicated that during the period of the development of the climate change adaptation law, Kenya was a beneficiary of significant amount of external funding from development partners. Some of these included the Africa Adaptation Programme (AAP), a USD92 million initiative launched by the Japan International Co-operation Agency (JICA) and the Africa Adapt Knowledge Sharing Innovation Fund project, jointly funded by the Department for International Development (DFID) UK. In addition, Kenya was part of the Climate Change Adaptation in Africa (CCAA) programme, which was co-financed by the International Development Research Centre (IDRC) and the UK DFID. In addition to these projects, Kenya hosted several African head offices of many bilateral and multilateral agencies, including UNDP, UNEP and FAO, which offered both technical and financial support to the process.

From the findings, it is observed that most of these international organisations directed their funding and technical support to sectors of interest to them. Some respondents were questioned as to why some sectors received more support or were of interest to the international partners. Most of the respondents reported that these were sectors that were most impacted by climate change and therefore attracted more attention. In addition, the respondents suggested that the interest in these sectors was shaped by Kenya's vision 2030 which identifies priority areas for Kenya's development. For example, agriculture, infrastructure, and health received significant funding compared to the tourism sector.⁶⁷ The ability for specific sectors to access more financial and technical support resulted in power differences and the ability to contribute to the process.

The availability of funding created power asymmetries amongst the civil society. The KCCWG made efforts to minimise these power differentiations. This was done by putting in place an inclusive strategy for public awareness creation, policy research and analysis, and

⁶⁷ Njoroge and others (n 16) 545

advocacy on vulnerability assessments, baseline studies, and research; advocacy, involving the identified sectors including the tourism sector that was underfunded.⁶⁸ This strategy equally entailed a bottom-up consultative approach to ensure communities made direct inputs to the process as discussed below.

6.3. Multi-level and multi-sector interaction amongst climate policy actors

The process to engage ILCs in Kenya in the climate change legislative process was bottom-up. The ILCs organised around thematic sectors in the different agroecological zones were given the opportunity to contribute their views in the process. In this process, indigenous and local communities were treated as a special and stand-alone group. The analysis revealed that this classification was on the basis that they faced challenges accessing and exercising control over resources such as land and capital and were thus more prone to the negative impacts of climate change.

In line with this, an executive member of the KCCWG noted that:

During the climate change legislative process, we organised communities and indigenous groups as a standalone group of stakeholders to enable them to express their views and interests. We did not merge them with other groups. By providing them with a platform of their own, we observed that they were not intimidated, nor further marginalised. They had the free will to express their views, interest, and knowledge and speak with their peers. Sometimes when we merged or lumped them with other civil society groups, their voices got lost (GO26, 2021).

The engagement of the indigenous community as a standalone group on the basis of their vulnerability to climate change and poor access to resources and support was a significant source of empowerment of this cluster.

⁶⁸ KCCWG, 'Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016', (2016 Kenya Climate Change Working Group) <https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>, accessed 22 February 2022

As described in Section 5.2 of Chapter 5, climate hearings at the community level were the main channels of engaging with these actors. A report by the KCCWG indicates that members of this network traversed the length and breadth of Kenya and engaged with communities in a two-sided journey. This included raising awareness about climate change and gathering community stories on the impacts of climate change and their indigenous adaptation strategies for input into the Bill development process. The report states that in the discussions, the community members did most of the talking while KCCWG members gathered the evidence.⁶⁹

In line with this, a CSO activist hailed the bottom-up approach by noting thus:

The actors of climate law-making including the CSO, parliamentarians, and researchers understood why a bottom-up approach was necessary. This led to the gathering of views from different actors across Kenya (CSO 10, 2021).

The document review reveals that the views of community actors were gathered across the different agroecological zones in the climate hearings. These included farmer clusters in Eastern Kenya, Agro-Pastoralists of South-eastern Kenya, Pastoralists of Northern Kenya, the Great Shivala Shieru (Meaning ‘our world’ in the Luhya language), and Kakamega Western Kenya alone involving 3,000 people, mostly small holder farmers. In the coastal agroecological zone, the hearing took place in Mombasa. The responses from most respondents, including the ILC and the civil society, indicated that the climate hearings from the needs and issues identification phase were structured to enable communities that were most impacted by climate change to make inputs to the process from the different agroecological zones. This was based on their understanding and response to the impacts of climate change. While the law and accompanying policies emphasise the importance of LIKP, these are mostly intentions and aspirations and raised the question of gap between policy and actual practice. As discussed in

⁶⁹ KCCWG, ‘Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016’, (2016 Kenya Climate Change Working Group) <https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>, accessed 22 February 2022 p27

Section 5.5.3, the intentions and aspirations on the use of LIKP and scientific knowledge to tackle climate change as expressed in Kenya's climate change policy and law-making can only be assessed when these are implemented and evaluated in the later stages of the law and policy-making process.

6.4. Power distribution amongst climate change policy actors in Kenya

This section discusses and analyses the findings on the power dynamics amongst the policy actors of Kenya's climate change legislative process. It also examines how these power dynamics shape the participation of actors in the process. As discussed in Section 6.1 above, these actors are diverse. They are clustered into indigenous and local communities, non-state actors including civil society, private sector, local and international donor organisations, central and country governments (Senate, parliament, and MDAs).

The power to create enabling legislation for climate change is assigned officially to parliament. However, parliament cannot make climate change legislation alone. Thus, the power to make climate change legislation is not concentrated in the hands of parliament alone. Other policy actors, including those representing MDAs and civil society, compete and have access to have some of this power. As highlighted in previous sections, the capacity of other actors, especially civil society, to generate the evidence and to mobilise the needed financial resources that are important for the legislative process is a source of their power. This results in power fragmentation (distribution) amongst the different actors. Although power is not concentrated in the hands of the legislature and the executive, the level of fragmentation of power is low. In general, the legislative and executive bodies still have the utmost authority to make laws in Kenya despite the fact that the climate change policy and law-making process was started by the civil society. This results in bargaining (conflictual cooperation) between the different policy actors. This finding aligns with the Brockhaus and Di Gregorio framework

on the typology for the power configurations.⁷⁰ While the government has the statutory obligation to make laws, climate change is a new policy area, and this power is fragmented amongst diverse policy-makers. In addition, the influence of the international policy regimes and institutional arrangements, including the financial mechanism that supports the involvement of diverse policy actors in the process, creates an atmosphere for power distribution. The nature of this power distribution and the interactions that emerge between the different actors are highlighted in Figure 12. These power domains and the interactions tie with the findings of literature on power distribution examined by Brockhaus and Di Gregorio within the framework of REDD+ policy-making in Indonesia, Section 3.3.3 of Chapter 3.

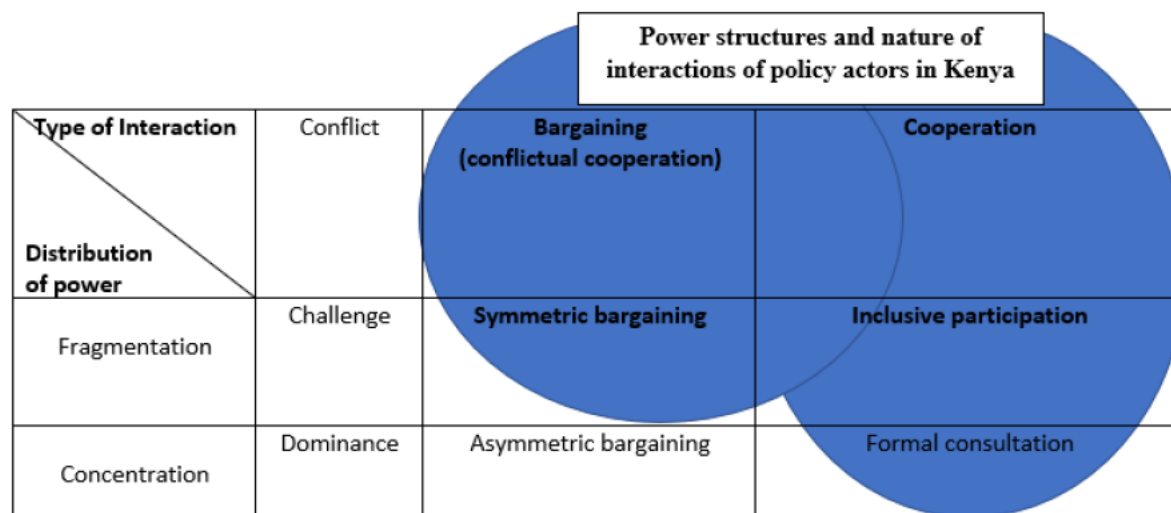


Figure 12: Adapted conceptual framework: typology of power and ensuing interactions amongst policy actors of Kenya's climate change policy and law-making process

Source ⁷¹

The adapted framework above shows that power distribution amongst policy actors in Kenya is fragmented yet concentrated. Even though the state retains its power as a result of its

⁷⁰ Maria Brockhaus, and Monica Di Gregorio, 'National REDD+ policy networks: from cooperation to conflict' [2014] *Ecology and Society* 19(4) 1-16

⁷¹ Adapted from Brockhaus and Di Gregorio 2014: 5, adapted from Kriesi and Others 2006: 343

statutory obligation, the distribution of power amongst policy actors resulted in balanced mix of cooperation and conflict (bargaining) interactions. They used available resources, such as knowledge and finance, to link and bond with each other to push for their interest over specific policy issues when cooperation, bargaining, or disagreements arise. The KCCWG played a frontline role to pool local and external resources to link and bond with each other as well as the ILC found at grassroots levels. As a result of the mix of power distribution, it was found that cooperation and conflict coexisted amongst the state policy actors (MDAs, parliament, senate). This resulted in an interaction described as “conflictual cooperation” or “bargaining”, described by Kriesi and others as in a comparative analysis of group and power constellations in policy-making in Chapter 3.

In Kenya’s climate change policy and law-making process, it was found that there was predominantly a low concentration of power and a balance between cooperation and conflict. Therefore, a situation of symmetric bargaining emerges and policy actors, especially ILCs and CSOs, could influence the extent of their participation and the policy outcomes. However, it was also found that depending on the stage of the policy-making process, the policy domain fluctuated from one typology to another shaped by the nature of the policy problem, interests to be affected, and the arrangements in the policy environment. For example, during the gathering of evidence to inform the Climate Change Bill, power was more evenly distributed and there was more inclusive participation. This was seen when the bill was moved to institutions with statutory obligations to make laws, power became concentrated at this level and cooperation here was considered as a formal consultation. Furthermore, the analysis reveals these power typologies and resulting interactions were visible within policy actor groups for power competitions and conflicts were found amongst members of indigenous and local communities and between civil society and the government. Some of these power typologies and the nature of interactions are discussed below.

6.4.1. Power competition between local Communities and local elites

In the climate change legislative process in Kenya, power asymmetries emerged within the ILCs. The actors in the community who had better socio-economic status (because they had formal education and accessed and controlled resources) were more influential. These influential actors were found at the centre of decision-making processes that involved communities. On the other hand, there were community members who should have had more influence by virtue of their local knowledge on adaptation but whose power remained quiescent at the peripheries of decision making. These more powerful community members emerged as ‘counter-elites’ and claimed to represent the views and interests of the whole community in decision-making processes. While some respondents from the ILC policy actor group reported that they were involved in the law and policy-making process, others reported a contrary view. For example, a farmer from this group reported that the process was exclusive and referred to those who were invited as ‘big people’ or ‘big guns’ who emerge as ‘local elites’ with the right connections thus:

I have never been invited to attend a climate change decision-making meeting nor heard of one where, genuine farmers were called to make inputs. The ‘big people’ come up with these policies and laws and force them down our throats without considering our views and realities in our context. Where farmers are involved, they are the ‘big gun’ farmers and not small ones like us who suffer much from climate change (FR 28, 2021)

The respondent, upon further probing about counter-elites, responded that these community elites, in addition to their socio-economic status, could form networks and were more influential both within and outside of the community. This implies that, in instances where

communities were to be involved in decision-making, the process emerges as negotiation between the external elite and those influential in communities who were often co-opted.⁷²

The interaction between the actors in the periphery and those at the centre of decision-making at community level results in power asymmetries in this cluster. Those at the centre emerge as more powerful, claiming legitimacy to represent their interests, while other community members emerge as proxies. This aligns with the elite theory which says a small minority group, consisting of members of the elite class by virtue of socio-economic status, hold the most power.⁷³ This finding concurs with the study by Paniagua on the role of counter-elites in the resolution of environmental conflicts in marginal and depopulated rural areas in North America.⁷⁴ Different levels of power asymmetries emerge even amongst those who are traditionally marginalised from mainstream decision-making processes. This creates further disenfranchisement as those who are more powerful fight for their interests instead of the common good.

Some community respondents held a contrary view to that expressed above on the proxy representation role played by a counter-elite class. For example, one farmer who was amongst the actors in the periphery of the ILC policy group expressed the view that:

At the village level, the different actors collaborated and were cooperative in the decision-making process on climate change. However, when the meetings were at a higher level away from the village level, they needed representatives to go and present the people's ideas. This was a little challenging to get the right people to represent the people at that level. This selection of few people to represent us though challenging, was good because we cannot all go due to limitations of time and resources. (FR14, 2021)

⁷² Graham Wilson, 'Elites and Bureaucracies' (1993) 6(3) *Governance* 42

⁷³ Deric.Shannon, *Political sociology: oppression, resistance, and the state* (Pine Forge Press 2011); Martin Gilens & Benjamin Page, 'Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens' (2014) *Perspectives 'on Politics* 12 (3) 564-581

⁷⁴ Angel Paniagua, *Environmental Problems, place elites and counter-elites in depopulated rural areas*, in Justin Daniels, *Advances in Environmental Research* (Nova Science Publishers 2015)

This view was generally shared by most of the farmers and community-based CSOs respondents and supports the representation of communities by proxy representatives because of logistical challenges. However, this only reinforces the position of the counter-elites, who are representatives of choice by the EOs, working for the county or central government for their interests, including for political gains.

6.4.2. Power competition between CSOs and governments

At the start of the climate change legislative process, a small elite group consisting of senior government officials were keen on dominating the process. This was based on the powers bestowed upon them by the Constitution. They also viewed the process as a technical and, therefore, needing technical solutions. In line with this, the Compliance Officer at the NEMA in charge of climate change issues stated that the draft policies and bills were written by technical officers drawn from all MDAs, parliament, and county governments.

Before a point of convergence was arrived at between these contending powers (CSOs and the government) they both ran two parallel processes in from 2006 up to 2010 with the same agenda - a Climate Change Bill as seen in Section 1.2.6 of Chapter 1.

The government developed the NCCRS with scientific work done by government-funded consultants and technical expertise from the MDAs and counties. It is reported in the NCCRS that developing the NCCRS entailed thirteen workshops (one launch workshop, ten regional consultative workshops, and one consensus workshop). Furthermore, a consultative workshop with members of parliament was held as well as a consultative meeting with members of the cabinet chaired by the Prime Minister, which endorsed the Strategy.⁷⁵

⁷⁵ *ibid*

On the other hand, the KCCWG developed a draft climate change bill (draft policy paper) by gathering views from the constituted thematic sectors and engaging with ILCs. It equally solicited the expertise of legal practitioners from the Kenya Law Commission to draft its Strategy Paper, which was richer in terms of the strategies and actions proposed to address the impacts of climate change compared to the government's strategy.

When the KCCWG was subjected to the parliamentary process, power and control came into force. A civil society activist reported that 'KCCWG was at the mercy of politicians and had no power over the bill' (CSR 17, 2021). This led to a delay in passing the Bill for two years (2010-2012). However, when the Bill was later voted in parliament, it was again rejected by the President on the grounds that it lacked 'public input' as per the constitution. This decision by the government was contentious. For example, Transparency International (TI) Kenya observed that:

Failure of the draft bill to pass parliamentary reading hurdles is viewed as a matter of contested, conflicting views and demonstration of power and interest between the government and KCCWG. This is because the paper was largely informed by "comprehensive research" and stakeholders' input, drawn from far and wide.⁷⁶

Another conflict over power between the civil society and government was the coordination and leadership of climate change bodies to manage climate change issues that were to be established in Kenya. This included the National Climate Change Council (NCCC) to manage climate change funds, set targets for the regulation of greenhouse gas emissions and advise on how to integrate climate change at national and county levels. The NCCC was proposed by the civil society, in its strategy, while parliament recommended the lower status of an independent authority with the powers of a parastatal. While the proposed Council was maintained, it was after a disagreement between these two policy actor groups. In addition, the

⁷⁶ Transparency International Climate Governance Network, 'An Analysis of Possible Reasons for the Rejection of the proposed Climate Change Bill 2012' (Transparency International Kenya 2012)

proposed list of members of the Council was a source of conflict between parliament and civil society. The proposed list included:

(1) Four persons, one each nominated by the following bodies:

Maendeleo ya Wanawake Organisation (a women's NGO that deals with issues to do with women's rights and gender equity in Kenya)

Institute of Climate Change, University of Nairobi

Association of Professional Societies of East Africa.

Kenya Climate Change Working Group.

(2) Two persons appointed by the Cabinet Secretary.

The TI report indicated that the proposal was contested because there were three civil society organisations on the proposed Council and was viewed as civil society being opportunistic and wanting to create opportunities for themselves through the Council.⁷⁷

In line with TI's position, there were similar contestations about the setting up and membership of the climate change coordinating body from other actors. Interestingly, the contestations regarding proposed members of the body came from a small number of civil society informants. For example, a civil society activist expressed his feelings about the proposed leadership not emanating from a democratic process thus:

A process characterised by conflicts, especially in the setting up of the Climate Change constitutive body. The University of Nairobi and the KCCWG at some point claimed leadership of this body, but it was not clear who they represented or who elected them. Again, they had a lot of influence because they initiated the process. In trying to position themselves, they knew what they wanted at the end of the day (RR1, 2021).

Still on the issue of the membership of coordinating body, another respondent remarked that:

⁷⁷ *ibid*

Kenyan Climate Working Group, purported/claimed to be representative of all other people. But again, this presentation was not real because KCCWG did not represent all CSO. It was something for a select few, it was exclusive. (CSO2, 2021).

The view above expressed by a few respondents from the civil society policy actor group questions the legitimacy of the KCCWG and the representative role it played in the law and policy-making process. This diverse view demonstrated that dealing with a cross cutting issue such as climate change involved diverse actors, knowledge, interests, and power. The civil society was seen by others as attempting to push for their individual interests in the process which was aimed at a common agenda of developing a law and policy that address the impacts of climate change. These different power dynamics amongst the actors significantly influenced the way they participated in the process. This is discussed in the section below.

6.5. Participation of actors in the climate law-making process

Actors with different levels of power and authority participated in the climate change legislative process. The direct actors included the government (parliament and the MDAs) and they had the direct responsibility to make laws that were initially voted as Bills and assented to by the President, as provided in Article 94 of the Kenyan Constitution.⁷⁸ In addition, members of the public could participate as indirect actors with powers to make laws by petitioning parliament or forwarding legislative proposals to members of parliament both at central and devolved levels in line with the provisions of Article 119 of the country's constitution. Furthermore, it was a legislative requirement for the public and their organised interest groups to participate in the legislative activities of the Parliament of Kenya in line with provisions of Articles 10, 118, 124, 201, and 232 of the 2010 Kenyan Constitution.⁷⁹ This

⁷⁸ GoK, 2010 Constitution

⁷⁹ *ibid*

flexible legislative provision that allowed diverse actors to participate gave room for the interactive nature of climate change policy and law-making process in Kenya.

The flexible legal provisions allowed the participating actors, based on their knowledge and levels of power, to shape the process. They willingly either compromised their positions, formed winning coalitions, or pushed for a win-win scenario where all actors were happy with the final law enacted. However, hegemonic relationships resulting from the differences in the level of knowledge, the socio-economic status of actors, the formal and informal power, and authority to make or participate in policy and law-making existed amongst the different actors. These hegemonic relations shaped the way different actors participated or viewed their participation in the process before the point of consensus.

The sentiments expressed by the respondents and evidence from secondary sources depict a conflict over the issue of participation. The process of participation evolved from an instructive, to consultative, conflictual cooperative process.⁸⁰ It was equally found that consensus was reached between the two concurrent actions that were geared towards the same agenda of issues identification in the first stages of the policy and law-making process, which was largely a bottom-up approach to participation led by the CSOs and the predominantly top-down approach of the government.

Firstly, the issues identification phase began with a bottom-up approach led by the CSOs under the KCCWG (The Group). The Group relied on thematic groups working directly with communities to ‘study and recommend’ to the legal practitioners hired to draft the civil climate policy. The policy problems generated were again validated by engaging other actors at community level through climate hearings.

⁸⁰ Andrea Cornwall, ‘Unpacking ‘Participation’: models, meanings and practices’ [2008] *Community Development Journal* 43(3) 269–283

Mercer, C., ‘The discourse of Maendeleo and the politics of women’s participation on Mount Kilimanjaro’ (2002) *Development and Change* 33(1) 101-127

Secondly, a concurrent process for issues identification led by the government began as an instructive and top-down approach. The government (executive, parliament, MDAs, and county governments) assumed it had all the evidence related to climate change to be able to make all the policy decisions. It relied upon expert reports produced by hired consultants from international bodies. However, these reports were less comprehensive compared to the civil society reports and stakeholder consultation and, further, participation was limited. All the interviewees reported that stakeholder participation and consultation was one of the key requirements to build the evidence required for Kenya's climate change policy and law-making. The absence of which made any outcomes of such a process in Kenya null and void.

The Parliament of Kenya defines public participation as a 'process of interaction between an organisation and the public with the aim of making acceptable and better decisions through informing, listening, dialogue, debate, analysis as well implementation of agreed solutions.'⁸¹ However, this was not always the case as reported by some respondents. They felt that their role was to veto what had already been decided. Pertaining to the government-led issues identification stage, one of the respondents' reports, their role was simply to validate a job that had been done as opposed to actively contributing throughout the process:

Often the government experts came to the community with fixed ideas and only wanted people to participate for symbolic reasons. Most often experts came from outside the community to lead these processes. ... knowledge of elites and technical experts were at the centre stage, and we were an afterthought. Our ideas were sought and we were involved in the process as a symbolic gesture to show that we were part of the process, to show that it was a citizen-wide action. But our views were not taken seriously (CSR 25, 2021).

This opinion was echoed by a few respondents, especially the indigenous and local policy actors. Many others from the different policy actor groups (ILC, CSOs, high level bureaucrats) who took part in the KCCWG process had contrary views as they saw the process, including

⁸¹ Parliament of Kenya, National Assembly, Public Participation in Legislative Process (FactSheet 27, so17) <http://www.parliament.go.ke/sites/default/files/2018-> Accessed 6th April 2022.

the climate hearings, as inclusive and very participatory in nature. However, it was hard to define what the threshold for a good public participation and consultation process was. Thus, the participation and consultation process in the policy and law-making process was highly contentious.

In 2012, six years into the process, a draft Climate Bill was tabled by parliament and was rejected by the President of Kenya. This was on the grounds that the process did not meet the threshold of public participation and consultation of all policy actors”. This decision was highly contested on the grounds that sufficient input had been gathered by civil society through the thematic groups and climate hearings in the different agroecological zones. When respondents were probed on what threshold for public participation meant, there was a lack of clarity as to what this meant except that it needed many more people to be consulted during the process. However, several respondents reported that following this rejection, the policy actors made a fresh start and engaged in an in-depth, broad-based consultative and cooperative process amongst different actors at different levels. The Head of Compliance at Kenya’s NEMA noted that:

After the rejection of the Bill by the President for a lack of threshold of stakeholder engagement, the leadership of the process was taken up by the Ministry of Environment, and the Bill was moved from a Private Member Bill to a National Government bill. More actors including those representing ILC and CSOs were involved, and it was subjected to extensive stakeholder engagement. We went around all the counties, organised more Climate Hearings, gathered views. We equally engaged the policymakers of the national and county assemblies, the governors of the Counties, MDA, county government stakeholders, local NGOs and series of others according to various categories and we managed to have the threshold for stakeholder engagement that was satisfactory to everyone (GO25, 2021).

In this consultative and cooperative process, the government played a lead role as the formal actor with the utmost authority and mandate to make policies and laws in Kenya. However, the government worked with other actors, including the civil society as partners who have powerful interests in the process. The competition and conflicts between these powerful interests resulted

in a consensus and a win-win situation for the policy actors. These power dynamics amongst the actors are discussed in the next section.

The nature of power distribution amongst the actors in Kenya resulted in low fragmentation of power amongst the policy actors. According to the framework on power by Brockhaus and Di Gregorio, this resulted in ‘symmetric bargaining’ (see figure 12, chapter 6). The symmetric bargaining is characterised by the co-existence between conflict and cooperation amongst the policy actors. Compromises and agreeing on a win-win outcome for the policy actors characterised this process. The win-win was a consensus on the Climate Change Bill between the government and the civil society who both had powerful interests in the legislative process. This was following several contestations and eventual rejection of the first draft Bill by the President of Kenya.

The rejection by the government offered valuable opportunities for learning between the government and civil society. The government understood the relevance of the climate change bill presented to parliament. It developed the NCCAP to support and inform the review of the draft bill. On the other hand, the CSOs, through the KCCWG, realised the power and control the government had over the bill once it was in parliament. This conflict because of power distributed amongst the actors resulted in compromise and cooperation. A climate change policy researcher and university lecturer referred to this point of consensus as a ‘meet me halfway’ strategy between the government and civil society to facilitate the revision of the bill (RR/UL1, 2021). In this ‘meet me halfway’ strategy, the KCCWG allowed the government to take over the coordination process. This resulted in the government dedicating more resources to the cooperative and collaborative process.

As a result, a task force of 15 members drawn from the KCCWG, TI (K), Kenya Association of Manufacturers and University of Nairobi, among other stakeholders who provided technical support, was published. The task force spearheaded dialogue and advocacy

at national and county levels to ensure stakeholders were aware and understood the implications of the policy and Bill. These processes addressed some of the challenges including the exclusive and representation issues amongst local and indigenous people. For example, a farmer who took part in the post-rejection consultation expressed the following feeling about the process:

I feel that my ideas were considered as I see some of the things I proposed in the National Action Plan, the National Climate Change Response Strategy, and the policy recommendations regarding our knowledge and practices in the law. I can also add that a lot of consultations happened at the community level. Experts from the commission on law reform took our views and crafted them using legal language. (FR14, 2021).

Such views expressed amongst the respondents about the post-rejection collaborative and cooperative effort between the government and civil society signify that it led to opportunities for incorporation of diverse knowledge. This finding ties with the literature review on law and policy-making in Chapter 3. It was found that the outcomes of competing policies are affected by the complex interaction of diverse actors and power of interests involved in a policy area. This space is synonymous to the garbage can theory where negotiation and compromise happened among the policy-makers who agreed on results that satisfied the majority of actors. In this case, competition among the policy actors, with their diverse knowledge, interests, and power, intensifies. This competition in the policy space creates opportunities for consensus amongst the policy actors on what should be taken on board during the process.

6.6 Conclusion

The climate change legislative process in Kenya revealed a complex non-linear interaction between diverse actors with different levels of power and authority. These actors include the central and devolved governments (parliament and MDAs) with direct and statutory obligations to make laws. In addition, other actors, including CSOs, research institutions,

businesses, and communities, are equally powerful actors, capable of generating knowledge and evidence and pooling the required resources needed to drive the legislative process to tackle climate change. Although the state statutory power and authority make policies and laws; climate change policy and law-making process involved the participation of state and non-state actors. The participation of non-state actors in the legislative process is in line with the provisions of Articles 10, 118, 124, 201, and 232 of the 2010 Kenyan Constitution. Having these numerous actors engaging on the same agenda of a climate change policy and law has its benefits. As a matter of fact, some are of the opinion that it offers advantages such as enhancing awareness of the policy issue to wider audiences and participation of more actors, pooling of resources, competition and cooperation amongst actors, and that these outweigh the disadvantages including the complexity of involvement of actors found at different levels of governance and the length of time it takes to engage these diverse set of actors to build a consensus.

There are diverse actors with different interests involved in Kenya's climate policy and law-making process. They have a range of preferences, objectives, degrees of power and levels of resources. These actors are not only elected officials, legislators, and bureaucrats but also include other policy actors beyond formal arrangements such as CSOs, the private sector, and the public at large.

In relation to power dynamics amongst actors, the parliament and MDAs have the utmost powers to legislate. As a result, each of these at the issues identification stage sought to maintain its power and influence rather than collaborate and cooperate. However, developing climate change legislation in Kenya was hinged on the generation of evidence and mobilisation of resources to drive the process. The central government lacked the full capacity to do all of this. This resulted in some power-sharing with other actors that have the capacity to address government shortcomings. Therefore, the power to make climate change policies and laws in

Kenya was found to be fragmented amongst the policy actors as opposed to concentrated in the hands of those with statutory obligations to make laws.

As a result of this fragmentation or low concentration of power in the hands of a single policy actor of the climate change policy and law-making process in Kenya, it was also revealed that the process was characterised by competition, conflicts, and compromises amongst the actors. Conflicts were significant between the government and the KCCWG over control of the legislative process and coordination of the climate change council. The KCCWG worked closely with parliamentarians who spearheaded the process at parliamentary level. These parliamentarians championed the interest of communities given that their advocacy was informed by evidence generated through the bottom-up participatory process led by the civil society.

Kenya's CSOs emerged as a powerful and influential actor in the legislative process. They started the policy formulation process while advocating for government action. This process commenced with a combination of bottom-up and top-down processes to generate evidence that saw engagement with their constituencies and collaboration with other stakeholders especially the government. At some points, they acted as an interface bureaucrat supporting the elite interests. At other times, they worked to serve the interest of their constituents, especially marginalised indigenous and local communities. They did this by empowering them to counter the state hegemony using their local knowledge to influence the process. They equally were an entry point for the promotion of the agenda of multinational development agencies and governments who had an interest in Kenya's climate agenda.

Finally, the chapter also revealed the relevance of participation in the process. Participation provided opportunities for interested parties to contribute their views to the policy and law-making process. But participation is not viewed in the same way by all actors. It is defined and understood differently and, thus, can be misused by elites in the policy and law-

making process. In the Kenyan climate change law-making process, it was a largely cooperative decision-making from the perspective of the majority of actors of the process, as opposed to simple co-option and consultation between elites from the national level and local elites.

CHAPTER 7: INSTITUTIONAL ARRANGEMENTS IN CLIMATE POLICY AND LAW-MAKING IN KENYA

7.1 Introduction

This chapter presents and analyses findings related to the institutional arrangements within the Kenyan legal system and how these shaped the climate change legislative process and the incorporation of diverse knowledge. As discussed in Chapter 4, the institutional arrangements in the ‘policy space or universe’ of policy and law-making include the legal institutions, structures, and cultural elements of the legal system, which often interact with and are influenced by external elements.

The institutional arrangements analysed and discussed in this chapter are those developed in Kenya from the late 1990s when climate change became topical in the country¹ up until entry into force of the Climate Change Act in May 2016.² The context depicts a multi-level governance arrangement from sub-national through national to international levels, involving diverse policy actor groups and different modes of interactions.

Based on the Actor-Knowledge-Institutional (AKI) analytical framework developed by the researcher from the review of literature, this chapter is divided into three sections. Firstly, the legal institutions and structures found in the Kenyan policy space are examined to discover how they influence climate change policy and law-making and the incorporation of different knowledge systems. The legal elements discussed in this section include the 2010 Constitution that ushered in a shift from a central to decentralised governance system and the development of accompanying

¹ GoK, National Climate Change Response Strategy: Executive Brief, 2010, <http://www.environment.go.ke/wp-content/documents/complete%20nccrs%20executive%20brief.pdf>, Accessed 16/04/2022

² GoK, Climate Change Act, 2016 http://www.environment.go.ke/wp-content/uploads/2018/08/The_Kenya_Climate_Change_Act_2016.pdf Accessed 16/04/2022

norms and regulations to implement it. This multi-level governance mechanism also introduced new modes of decision-making from national to sub-national levels and emphasised public participation. The introduction of the new constitution coincided with a rise in domestic processes to develop laws, strategies, policies, and plans in response to climate change and related issues. This was amidst Kenya's international commitment to address climate change. The interaction between the domestic and international legal institutions and structures shaped the outcome of the legislative process. The second part examines how the legal institutions and structures shaped the legal culture of the policy actors, particularly their perceptions of the process concerning the incorporation of knowledge of diverse policy actors. The analysis of the perceptions derived from interviews is combined with that from the document review to identify and investigate the enablers and constraints in such arrangements for incorporating the knowledge of policy actors in the process.

This chapter links to the previous chapters of this thesis. As found in Chapters 5 and 6, policy and law-making entail an interaction between actors, their knowledge and interests, and power dynamics in the policy space. These elements are closely linked to the structural and cultural elements examined in this chapter. The interactions in these spaces determine the opportunities and channels where policy actors can act to influence decisions and relationships that affect their lives.

7.2 Institutional arrangements for climate policy and law-making in Kenya

The policy and law-making processes are shaped by the structural and cultural elements that interact in the policy space. The structural elements established by states include the existing laws and governance arrangements for law-making in the policy space. These, in turn, influence

the cultural elements, including the values and attitudes of policy actors and the interaction and communication among them in the different stages of the policy-making process. Their participation in the different stages of the process determines how their knowledge is used to understand the policy problem and incorporated as part of the solution.³ This study recognised that climate change was a cross-cutting issue governed and located in a national-to-local level hierarchical structure and subjected to the influences of external institutions and regimes. This resulted in a complex policy space with opportunities and constraints for multiple actors to influence the policy and law-making process and the outcomes.

7.2.1. Institutional arrangements at the national level.

Responding to climate change as a cross-cutting issue with sub-national, national, and international implications requires multiple institutional arrangements at the domestic and international levels. At the domestic level, the Government of Kenya (GoK) set up an inter-ministerial committee on climate change and created Semi-Autonomous Government Agencies (SAGAs) and institutions to deal with climate change issues, including the incorporation of diverse knowledge. These arrangements for addressing climate change at the national level in Kenya are complex compared to those used in solving sectoral issues. Although the centralised and decentralised arrangements in Kenya were hailed by Kenyans for enhancing the governance of the nation, it further compounds the complexity in dealing with climate change as a cross-cutting issue. Other factors that increased this complexity are the influence of institutions (especially financial mechanisms) beyond the Kenyan jurisdiction.

³ Peter John, *Analyzing Public Policy* (Routledge 2012); Mark Bevir, *The SAGE Handbook of Governance* (Sage 2011)

These legal institutions put in place by the GoK facilitated inter-organisational processes amongst state and non-state policy actor groups. This resulted in a mixture of horizontal and vertical interactions that facilitated policy integration. The integration of policies across sectors contributed to overcoming the silo mindset that was held strongly by some state actors, particularly the Ministries of Environment and Forestry (MoEF), Natural Resources, and Devolution and Planning. Horizontal and vertical policy integration enhanced the incorporation of diverse sector knowledge, especially the LIKP of local communities.

In horizontal integration, the MoEF, which hosts the permanent Climate Change Directorate (CCD), is the appointed sector ministry that ensures that policy integration occurs uniformly and horizontally across the different sectors. In addition, the 2010 Constitution laid the framework for policy integration from central government to the decentralised government. In Kenya, these two governance levels are integrated and pursue similar policy directions. As noted in the previous section, the policy direction is set up at the central government and then cascaded to the local context with limited opportunities for policy directions to emanate from the local levels. The mixture of horizontal and vertical interactions contributes to policy integration across sectors and governance levels.

The analysis reveals the following vertical and horizontal integration of institutional structures and policies set up for the Climate Change Act in Kenya at the national level, which is replicated at county level, as shown in Figure 13

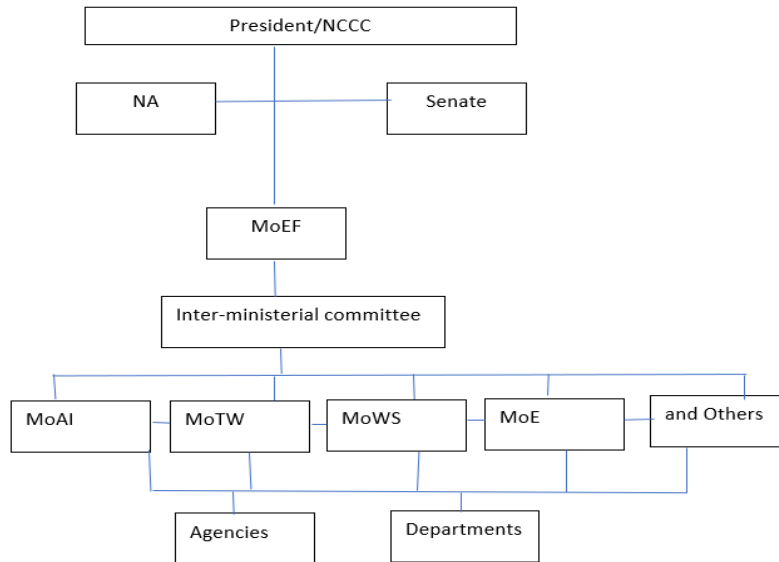


Figure 13: Cross-sector and cross-level horizontal and vertical interactions in tackling climate change⁴

From the illustration above, the MoEF played the role of a coordinating institution, pushing for cooperation amongst the other ministries. It produced the rules for cooperation and facilitated the mobilisation of ministries to adapt policy integration. However, the role of these champions in pushing for policy integration at their different ministries did not culminate in success in all ministries. Some MDAs that prioritised climate change issues including water, energy, health, tourism, and infrastructure amongst others performed better in policy integration than others such as the Ministries of Arts and Sports. Most respondents from the government reported that successful MDA champions continuously shared their experiences to inspire those lagging behind to do the same in order to achieve harmonised policy integration. The head of the Climate Change Unit at NEMA posited that this coordinated effort enabled the different ministries to contribute to the process.

⁴ Prepared by the Researcher

As found in Chapter 3, horizontal and vertical integration does not only happen at the ministerial level. In some cases, the parent ministry is disaggregated into SAGAs and departments. In Kenya, in general, some key ministries including MoEF and Ministry of Devolution and Arid and Semi-Arid Lands (ASALs), have specialised departments and agencies. This process of agencification creates structures with distinctive, formalised identities, hierarchies, and functional capacities (decision-making accountability over personnel and finance). These semi-autonomous agencies are sometimes seen as different from the parent ministry. Notwithstanding, the parent ministry, the SAGAs, and departments are engaged in horizontal and vertical interaction geared towards the harmonised integration of policy in the sector while they equally remain part of the government's institution. This finding on agencification in Kenya is important as it aligns with the devolution process discussed in Chapter 1, as the government decentralised its functions by establishing counties and new MDAs. This disaggregation of institutions and the devolution of power and resources enabled more actors, institutions, and organisations across and beyond the government with similar agendas to address climate change. However, this added to the complexity of developing a climate change law that responded to the needs of all these actors.

The existence of the powerful and legitimate NEMA facilitated the work of the MoEF in its role as the first champion of policy integration and in spearheading the inter-ministerial committee. For example, some government officials emphasised the role of NEMA as the National Implementing Entity (NIE) of adaptation related issues in Kenya. One stated that:

In 2014, a contractual agreement between NEMA and the Adaptation Fund Board (AFB) accessed and put at the disposal of project implementers at national and sub national level USD10 million (approximately KSH 1 billion). The oversight on implementation of this programme was provided by the Inter-ministerial committee spearheaded by the Ministry of Environment, Water and Natural Resources. The success of NEMA has been due to its ability to coordinate, develop of harmonised guides of integration and reporting (Now MoEF). (GO 25, 2021).

From the view above, it implies there are two levels of guidance for promoting policy integration. First, there are the guidelines produced by the NCCC at the Presidential Office. These guidelines support vertical integration between the key ministry and the National Council. Second, there are guidelines produced by the MoEF with the support of NEMA that produced uniform and standard guidelines used across the different sectors. The different ministries then report their progress on integration to inter-ministerial committees, implying a horizontal approach to integration. In addition, the perspective on the role of NEMA in facilitating integration across the ministries aligns with findings by Jordan and Lenschow, and Bauer and Rametsteiner on success factors for policy integration for a body providing oversight on the process.⁵ While the then MoEF demonstrated a strong intent to play this coordination role, it came from a long history of working as a siloed organisation, that was keen to achieve its sector goals rather than common ones. In line with this, a climate researcher noted that the cross-cutting nature of climate change pushed this frontline ministry to work closely with other ministries as it could not address the climate issue alone.

As found in Chapter 6, significant financial resources were channelled to some thematic groups more than others. These financial mechanisms supported rather than reduced this silo mentality. Sectors such as agriculture, health, manufacturing, and infrastructure developed a stronger narrative and pushed their interests as a priority on the climate change agenda. In addition, as also found in the Chapter 6, some of the actors from the MDAs were identified as either growth first stonewaller or progressive internationalists. For the growth first stonewallers, less was required in terms of policy integration as they emphasised the need to align to what was happening

⁵ Andrew Jordan & Andrea Lenschow, *Innovation in Environmental Policy?: Integrating the Environment for Sustainability*, (Cheltenham, Edward Elgar 2008); Anja Bauer & Ewald Rametsteiner 'Policy integration and co-ordination: theoretical, methodical and conceptual aspects' (Proceedings of the 1st cost action E51 joint MC and WG meeting, Grosspetersdorf, Austria 2006), 31

internationally. Conversely, the progressive realist from different ministries emphasised the need to examine what was being done in Kenya at the different governance levels. Thus, they championed the process of vertical and horizontal interactions which led to policy integration across the different sectors. Policy integration in the sectors could be linked to the expression of intent in the Climate Change Act on need to identify and use LIKP for climate change. This is also confirmed by the identification of some specific LIKP of agrarian communities incorporated in the policies, strategies, and programmes for climate change adaptation such as the NCCRS, NCP, and the Kenya Climate-Smart Agriculture Policy (2017-2026), discussed in Sections 5.4 and 5.5 in Chapter 5.

7.2.2 2010 Post-constitutional reforms and introduction of counties

A vital reform that took place at the same time when there was a growing need to address climate change through the development of policies and laws was the 2010 constitutional reform. The 2010 Constitution replaced the 1963 Independence Constitution. This constitutional reform transformed the policy and law-making system from a centralised system to a pluralistic and decentralised system. It devolved two of the three arms of government (Executive and Legislature) into 47 counties.⁶ The constitutional change had implications for national and sub-national governance with devolution of powers as defined in Chapters 1 sections 2, 3 & 4 of the Kenya 2010 Constitution thus:

The people may exercise their sovereign power either directly or through their democratically elected representatives. Sovereign power under this Constitution is delegated [...] to Parliament [National Assembly and Senate] and the legislative assemblies in the county governments [...] the national executive and the executive

⁶ GoK, 2010 Constitution, First Schedule (Art 6 (1)) https://www.constituteproject.org/constitution/Kenya_2010.pdf

structures in the county governments [...] The people's sovereign power is exercised at the national and county levels.⁷

This new institutional arrangement for decision-making implies that law-making will occur at the national and decentralised levels. It also implies greater public involvement in the decision-making process at different levels of governance, as set out in Articles 10, 118, 124, 201, 221, and 232 of the Constitution. The main goal of the decentralisation process is to devolve power, resources, and representation from the central to the local level. Several accompanying laws have been enacted to give effect to Articles 131(1) (b) and 132 (3) (b) of the Constitution on devolution, such as the National Government Coordination Act of 2013 and the County Government Act of 2017.⁸

To facilitate the devolution process, the 2010 Constitution introduced two (bicameral) houses of parliament made up of the National Assembly and the Senate. The National Assembly is the lower house of the Kenyan legislature. It consists of 350 members, comprising 290 members elected by the registered voters of single-member constituencies, 47 women representatives elected from each county, 12 members nominated by the political parties, and the speaker of the assembly who is elected by the assembly and serves as an ex-officio member.⁹ On the other hand, the Senate consists of 67 members plus the Speaker, who is an ex-officio member. Article 98 of the Constitution established that the Senate shall consist of the following: 47 members, each elected by the registered voters of the counties, each county constituting a single member constituency; 16 women members who shall be nominated by political parties according

⁷ Constitution of Kenya: https://www.constituteproject.org/constitution/Kenya_2010.pdf?lang=en p.13 Accessed 16/04/2022

⁸ The primary objective of decentralisation in Kenya is to devolve power, resources and representation down to the local level. As a result, various laws have been enacted by Parliament to create strategies for the implementation framework and the achievement of devolution. Most of these laws were developed at the same time when the processes to develop the Climate Act was being developed. These laws have been compiled and made accessible to the public by the Kenya National Council for Law Reporting <http://kenyalaw.org/kl/index.php?id=3979>, Accessed 25/05/2022, GoK, The County Government Act 2012, http://www.parliament.go.ke/sites/default/files/2017-05/CountyGovernmentsAct_No17of2012_1.pdf, Accessed 25/05/2022

⁹ *ibid*

to their proportion of members of the Senate elected under clause (a) in accordance with Article 90; two members, being one man and one woman, representing the youth; two members, being one man and one woman, representing persons with disabilities; and the Speaker, who shall be an ex-officio member.¹⁰

The new constitution emphasised the role of Kenya's two (bicameral) houses of parliament in making laws and exercising their legislative power through Bills passed by the Assembly and assented to by the President. The introduction of the bicameral system, via the 2010 Constitution, meant the National Assembly or Senate could pass bills for processing. In the Kenyan context, the National Assembly is superior to the Senate in legislative matters as it deals with issues of national interest. In contrast, the Senate deals with issues concerning the counties. In other words, any bill could originate from the National Assembly and be sent to the President to get assent, except for Bills concerning county governments that could be introduced in the National Assembly or the Senate. This representative role by the Senate to protect the interests of the counties and their governments at the Parliament of Kenya demonstrates the level of power and authority accorded to the counties by the 2010 Constitution to contribute to state affairs.

Articles 96 (2), 109 to 113 of the Constitution detail the procedures for interactions between the Senate and the National Assembly. For example, Article 96 (2) states that 'the Senate participates in the law-making function of Parliament by considering, debating, and approving Bills concerning counties.'¹¹ The constitution also gives guidelines for relations between the two houses, including jointly resolving questions when there are bills that concern counties. Article 110 (4 & 5) states that the two houses must agree on bills concerning the counties before they are

¹⁰ibid

¹¹ GoK, 2010 Constitution

referred by the Speaker of the House in which the Bill originated to the President for assent within seven days. If there is any disagreement on the bills or their amendments, they are channelled to the Mediation Committee.

The slight disparity in the level of power to make decisions between the Senate and National Assembly on matters of national interest could imply the level of importance given to the contributions from the devolved levels to national policy and law-making. Some respondents reported that, despite the clarity in the mandates, the two houses often battle for supremacy as the National Assembly sometimes bypasses the Senate to deal with issues that the Senate should handle. Some respondents indicate that such actions by the National Assembly undermine the Senate, which could serve as a platform for coordination between the national and sub-national level policy actors. Despite the existence of two houses of parliament and the differences in power between them, the origin of ideas for the development of policies and laws in Kenya and the procedures to enact the laws are alike. The source of bills and the procedure for the law-making in Kenya are examined in the following section.

According to a Kenya National Assembly Factsheet on how Law is Made in Kenya, the law-making process begins with introducing ideas of bills to the National Assembly or Senate.¹² These ideas could originate from:

1. A Parliamentary Party, introduced in the name of the Leader of the Majority Party or Leader of the Minority Party or their respective deputies.
2. the Executive; introduced in the name of the Leader of the Majority Party or Leader of the Minority Party or the name of the Chairperson of the relevant Committee.

¹² The National Assembly of Kenya, Factsheet No. 2 How Law is Made (Parliament of Kenya 2017) http://www.parliament.go.ke/sites/default/files/2018-04/2_How_Law_is_Made.pdf Accessed 22/05/2022

3. individual member(s) of the National Assembly; introduced in the name of the Member sponsoring the bill.
4. A committee of the House; introduced in the name of the Chairperson or the member designated by the Committee.
5. A member of the public may also petition Parliament pursuant to Article 119 of the Constitution and the Standing Orders to legislate on a matter introduced by way of petition conveyed by the speaker and committed to the relevant Departmental Committee for consideration and publication of the consequential Bill.
6. Alternatively, members of the public may forward legislative proposals to the Member of Parliament.

From the sources of bills above, the idea for a bill could come from members of the public. With respect to the climate change legislative process in Kenya, the civil society organisations initiated the idea for a climate bill before it was taken up and introduced by a member of parliament as a private member bill, as found in Section 6.2.2.1, page 231. Documentary evidence and responses from the interviews indicate that the initial idea for a climate change law in Kenya was put forward as a legislative proposal by the Kenya Climate Change Working Group (KCCWG) to the member of parliament who presented the Draft Bill as a private member bill to the National Assembly. This bill then went through all the stages of the bill process from the first to third reading and presentation to the President for assent, as depicted in Figure 14:

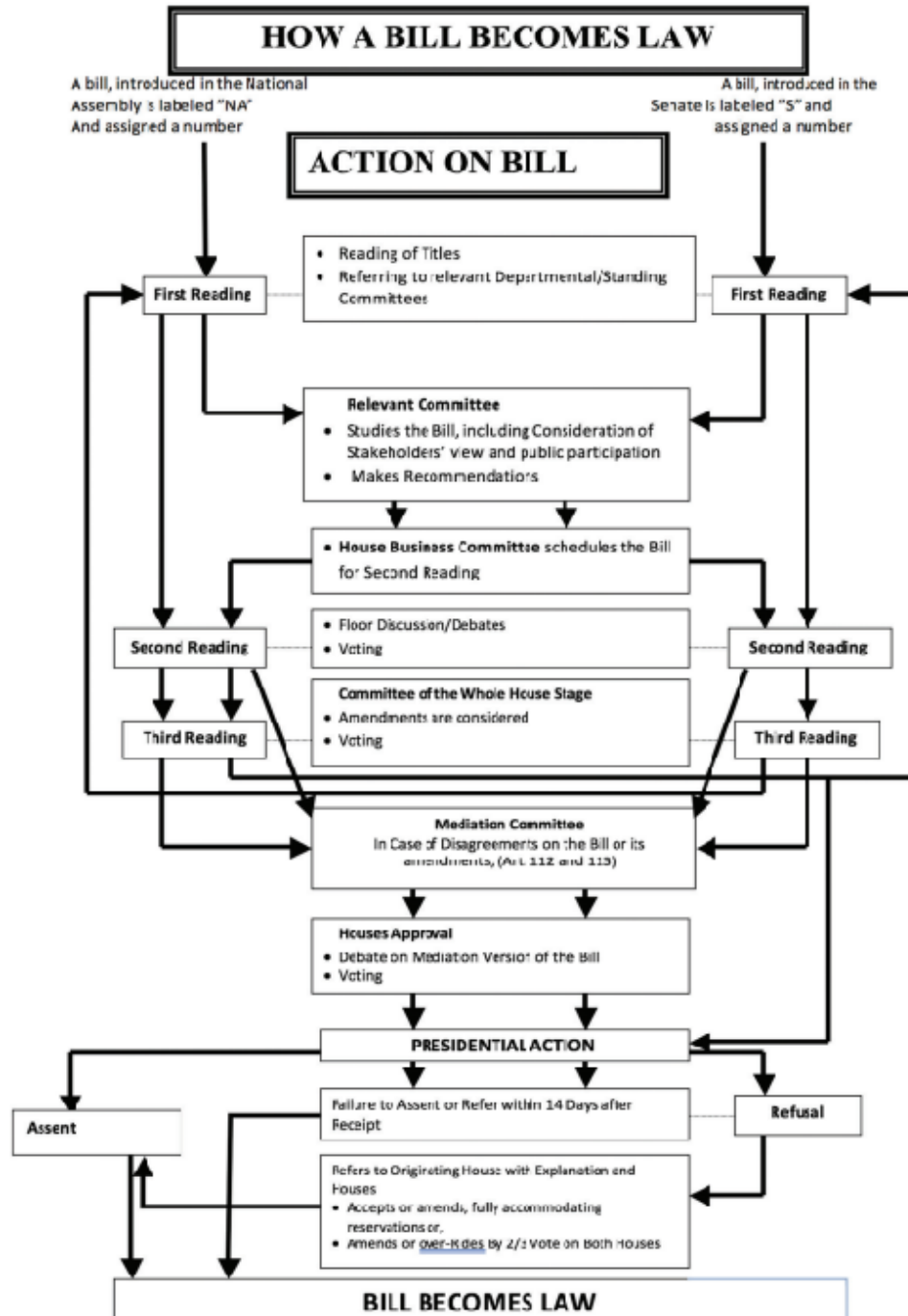


Figure 14: The bicameral legislative process in Kenya¹³

¹³ Source: Kenya National Assembly (2017)

The figure above shows a distinct but coordinated approach to law-making between the two houses of parliament. In the case of climate change legislation, which is a cross-sector issue with multi-level governance implications, some respondents felt that the two houses of parliament could combine their efforts in the legislative process. However, the findings revealed that the climate change legislative process was handed over to the National Assembly, mainly composed of politicians and elites who were not in touch with the realities of climate change. The Climate Change Bill went to parliament rather than the senate because climate change was considered first as a national issue and the constitution made it clear that such issues are handled by the National Assembly and not the Senate. While the Senate participates in law-making, its scope of intervention is mostly around debating and approving bills concerning counties and the determination of the quota of national revenue allocated to each county. Most respondents, especially those from the ILC policy actor group, hailed the active role that CSOs played in gathering the evidence of the use of the knowledge to understand and respond to climate change. These were contained in the civil society policy paper channelled to the parliamentarian who then championed their course in the National Assembly. However, the civil society felt that the senate would have played a more active part and a representative role of the interest of their constituencies in the Climate Change Bill. This was because they felt the senators had a closer proximity to the communities and better understood community needs.

The devolution of power from the national to the sub-national level had implications for Kenya's governance and decision-making processes. The devolution of power meant new multi-level governance arrangements characterised by horizontal (between the counties, sectors, and policy actors at the same governance levels) and vertical interactions (between the counties, sectors, and actors at subnational levels those at the central government). These new horizontal

and vertical arrangements in policy and law-making that resulted from the devolution process are examined in the next section.

7.3 Governance arrangements across levels, sectors, and actor groups

The horizontal and vertical approach to policy and law-making involving different policy actor clusters and levels of governance is characteristic of the climate change legislative process in Kenya. These actors include state, non-state, and international non-governmental organisations, actors, and institutions whose interests are different but interdependent. They are engaged in either vertical (relatively hierarchical) or horizontal (less hierarchical) negotiations and discussions at subnational, national, and international levels. These horizontal and vertical interactions across governance levels, actors and sectors are exemplified in Figure 15.

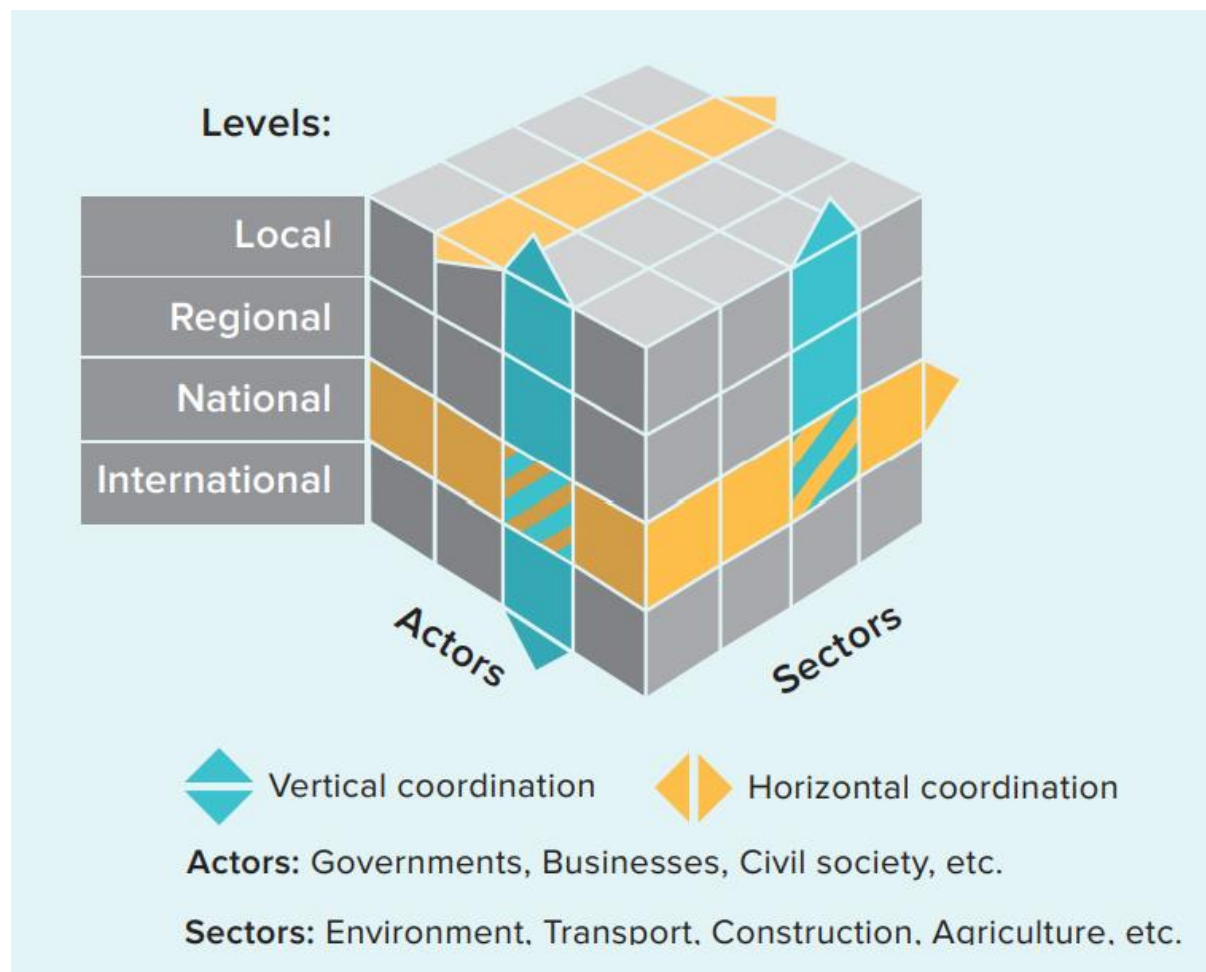


Figure 15: Vertical and horizontal interactions in climate governance in Kenya.¹⁴

These horizontal and vertical arrangements shaped policy-making in two ways. First, they determine the interactions amongst actors and the power distribution level in the policy-making process, as examined in Chapter 6. Second, they determine the degree of integration amongst the actors, including their knowledge and interests in the legislative process. In the Kenyan policy and law-making context, the horizontal and vertical arrangements across sectors, actor groups and levels are interdependent as will be seen in the following sections in relation to the climate change policy and law-making process.

¹⁴ Source: Johara Bellali and Others, *Multi-level climate governance in Kenya - Activating mechanisms for climate action* (Berlin: Adelphi/ILEG 2018), p. 20.

7.3.1 Vertical arrangements and incorporation of knowledge

Vertical arrangements in policy and law-making recognise the existence of central and local levels in the policy-making space with diverse actors and knowledge systems at these different levels. This arrangement depicts two levels of governance with similar policy directions, suggesting a top-down policy and law-making process with a policy direction set by the central government and cascaded to the local context. In this case, there is significant interaction between the bureaucratic and legislative layers of actors and institutions that are either interconnected or work in isolation. These interactions involve policy actors representing the executive. The Kenya scenario depicts several vertical interactions between the executive (bureaucracy) with more power and control over the legislature (elected politicians), the national and sub-national government, and legislature-agency interaction.

Regarding the climate change legislative process, vertical coordination happens between the national and the devolved governments. This relationship is primarily top-down as the central government defines how the sub-national governments develop their legislation. For example, regarding the interaction between national and county governments, Articles 6 and 189 of the 2010 Constitution spell out the nature of the interactions between the two governance levels thus:

The governments at the national and county levels are distinct and inter-dependent and shall conduct their mutual relations based on consultation and cooperation. [the respective governments shall] assist, support, and consult and, as appropriate, implement the legislation of the other level of government; and liaise with government at the different levels to exchange information, coordinate policies, and administration, and enhance capacity. They may set up joint committees and joint authorities.¹⁵

This was the case for the climate change law and policy-making process as found in the document review and presented in the timeline that set the boundaries for this study in Section

¹⁵ GoK, 2010 Constitution, p. 60, https://www.constituteproject.org/constitution/Kenya_2010.pdf, accessed 10/05/2022

1.2.6, Chapter 1. Between 2010 and 2011, the consultative process between the two levels of government intensified. When the draft Climate Change Authority Bill was handed to Parliamentarian Dr Ottichilo, who presented it to parliament, the Bill went through first and second readings as shown in Figure 14 page 274. Following this, the National Assembly and Senate Members of the Departmental Committee on Environment and Natural Resources debated in detail each of the clauses of the Bill. This led to further climate hearings conducted at county levels led by the Senators in collaboration with the civil society. Enriched documents followed more climate hearings. Again, after the rejection of the Bill in 2013, the Bill was again tabled to both houses for a third reading following further consultative process and gathering of more evidence in collaboration with other policy actors.

Besides the constitutional arrangement above, the GoK has put in place other mechanisms to support these vertical interactions between the national and sub-national levels and between the MDAs and other policy actor groups at different levels. This sort of arrangement is observed in Kenya's climate change legislative process. According to the Ministry of Environment and Forestry officer, the NCCAP Taskforce has been established to lead this vertical arrangement in policy-making. This official stated thus:

The Taskforce is responsible for regular coordination of climate change issues between county and national governments. [...] the county governments must incorporate, or mainstream actions outlined in the NCCAP and the Climate Act into the County Integrated Development Plans (CIDPs). Structures have been established at different levels of government to encourage cooperative governance between the national and county governments (GO 28, 2021).

The views expressed by the official above concur with the findings in Chapter 6 on actors and power dynamics. The different actors are found in these other governance spaces with their knowledge, level of power, and authority. Because the power to influence policy and law is fragmented, the competition and cooperation atmosphere leads to developing a joint plan and

policy direction. Most of the respondents felt that due to the vertical arrangements in place, some of their knowledge on climate change adaptation was gathered at the subnational levels and incorporated into the national climate law. However, others felt that there was considerable room for improvement. Therefore, rather than just attempting to find a meeting point between the policy actors, the vertical arrangements enhanced the interaction, brought together different actors with different knowledge and levels of power, including ILCs. For example, the climate hearings brought together policy actors from national and county levels together with those at the subnational levels. These included ILCs, CSOS, senators, and parliamentarians. These interactions during the different stages of the policy and law-making process were characterised by these vertical interactions which facilitated the incorporation of diverse knowledge including the LIKP of ILC.

7.3.2 Horizontal arrangements and incorporation of knowledge

Horizontal arrangements between governance levels, actors, and sectors were also observed in the Kenyan policy space. This equally shaped how policy actors, sectors at the same levels of governance and across sectors relate to each other and influence the law-making process. Such arrangements are essential when legislative solutions are sought for policy issues, such as climate change, that cut across multiple sectors and involve actors situated at different levels of governance. In Kenya's climate change legislative process, horizontal interactions and communication occur between various ministerial departments and agencies and non-state actors dealing with varying but related issues of climate. For example, the Kenya Climate Change Working Group, as found in Chapter 6, was the frontline group promoting horizontal interaction between the civil society policy actors grouped around thematic interests. Likewise, the inter-

ministerial and inter-agency committees, as provided in Articles 124 and 189 of the Constitution and highlighted in section 7.2.1 above, supported the horizontal arrangements and interactions among policy actors, actor groups and sectors.

The horizontal interactions and communication were found amongst state and non-state policy actor groups. For example, horizontal interactions around thematic groups were observed in the set-up and function of the KCCWG and the interactions between the sector MDAs. Respondents from the different stakeholder groups expressed awareness of this horizontal arrangement in the context of climate change policy and law-making. They indicated that these arrangements favoured dialogue and coordination of knowledge within and between actor groups and sectors at the same governing level. Following the gathering of knowledge and evidence amongst the policy actors and sectors at the same governance level, the thematic groups reinforce their narratives during the forums and debates on the climate change legislative process and the development of the policy paper and draft Bill. However, such views suggest a strong inclination towards a silo mentality as each policy actor group seeks to promote sector-specific knowledge and interests. A silo mindset is found to impact whose knowledge and what knowledge is incorporated in the climate change law-making process, as will be seen in the last part of this chapter on enablers and constraints of incorporation in the institutional arrangements of law-making. In the climate change law-making process, structures were put in place to address the silo mentality, as discussed in section 7.6.3 below.

7.3.3 Complementarity in horizontal and vertical arrangements

To enhance interactions and communication across governance levels and between policy actor groups and sectors, a mix of horizontal and vertical governance arrangements were observed

in Kenya’s policy space. The communication and interactions between actors across governance levels shape the level of incorporation of diverse views in different ways. For example, at the ministerial level, the inter-agency interactions were coordinated by the Ministry of Environment and Forest (MoEF), which hosts the Climate Change Directorate. This directorate not only coordinated the MDAs but it also involved other policy actors and sectors at different governance levels. As seen in Figure 16, it played a central role in promoting horizontal and vertical interactions between diverse policy actor groups.

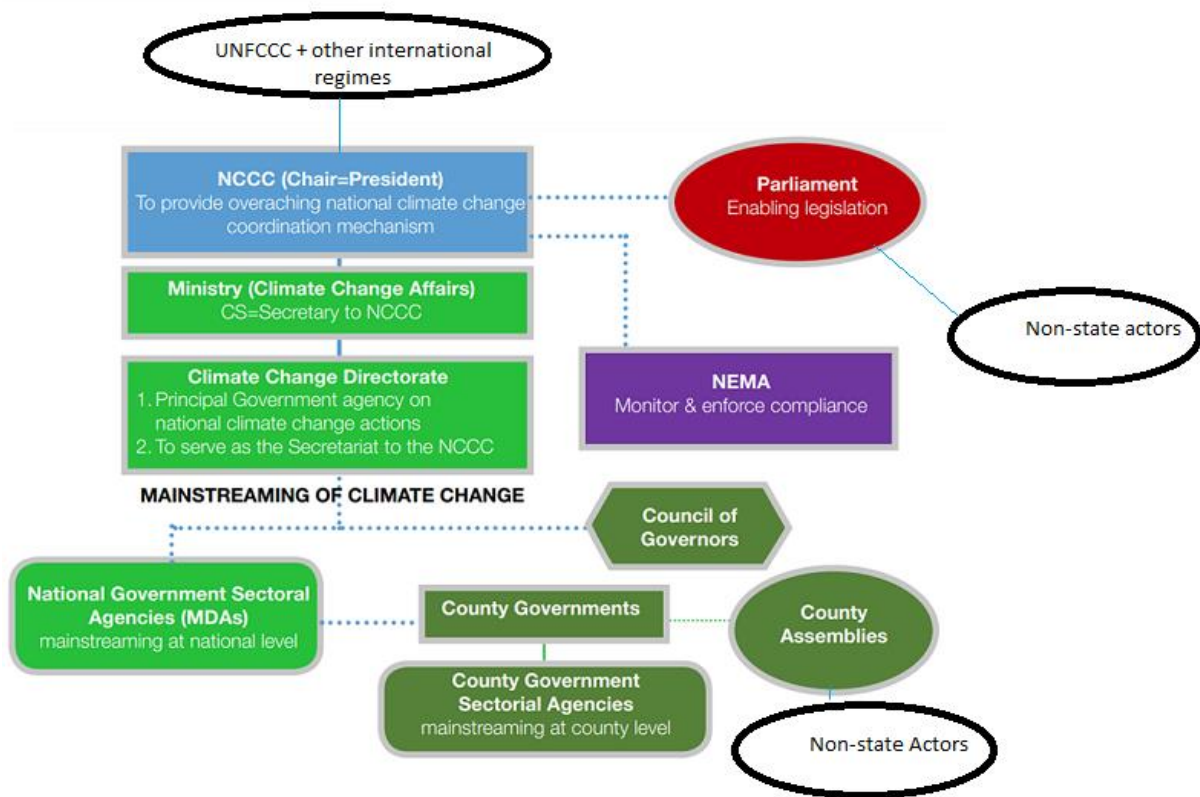


Figure 16: Adapted climate change institutional coordination structures in the Climate Change Act 2016¹⁶

¹⁶ Source: Adapted from Kenya National Adaptation Plan 2015-2030, p. 10.

A coordination structure like the one above was progressively developed and implemented from the 2013-2017 National Climate Change Action Plan (NCCAP) to the 2015-2030 Kenya's NAP. These supported vertical and horizontal interactions amongst policy actor groups, sectors, and across different levels. The GoK established the National Climate Change Council (NCCC), chaired by the President of Kenya, who is at the apex of the hierarchical structure. The NCCC also comprises four Cabinet Secretaries from key line ministries, including economic planning, energy, environment, and forestry, and the chairperson of the Council of Governors as well as representatives from the private sector, marginalised communities, civil society, and academia.¹⁷ The NCCC is charged with overseeing climate change affairs and the coordination of the NCCAP's implementation. The Cabinet Secretary, who doubles as Secretary to the National Climate Change Council and Kenya's UNFCCC Focal Point, provides advice to the President on legislative proposals produced by the parliament.

The central executive (president, cabinet, ministers) and county executive (governor, cabinet, and deputy ministers), and legislatures (national and county level parliaments and senates) have executive and legislative powers to make laws. Generally, the constitution states that the legislature has the statutory power to enact laws while the executive implements the laws enacted to enforce the will of the state. The constitution provides for the legislative oversight of the executive.¹⁸ However, regarding climate change policy and law, the executive powers seem to supersede the legislative powers. The establishment of the high-level advisory body, referred to as the National Climate Change Council (NCCC) chaired by Kenya's President, could be interpreted as the President capable of making executive orders which have the effect of law regarding this

¹⁷ Republic of Kenya, 'The Climate Change Act 2016 (Kenya Gazette Supplement No. 68 (Acts No. 11), Ministry of Environment and Forestry' (2016).

¹⁸ GoK Kenya Constitution 2010, pp 31, 40, 44, 47

policy issue.¹⁹ In addition, the CCD is equally created and serves as the secretariat of the NCCC and provides technical advice to the government.²⁰ The Directorate works with other MDAs through the inter-ministerial committees at the national level and the county governments.²¹

In addition, the National Environmental Management Authority (NEMA), a semi-autonomous agency was established under the Environmental Management and Coordination Act (EMCA) No. 8 of 1999, as the National Implementing Entity (NIE) for the Adaptation Fund and the Green Climate Fund (GCF). Another independent authority that ensures coordination across sectors and actors is the National Drought Management Authority (NDMA), established by the NDMA Act 2016. The NDMA has as mandate to oversee all issues linked to drought management, adaptation, and resilience building, especially in Kenya's arid and semi-arid areas (ASALs). The agencies and authorities report directly to the NCCC. Below the NCCC is the CCD, the government's lead agency on national climate change policy, within the Ministry of Environment and Forestry (MoEF).

For example, regarding the role of Kenya's MoEF, the Kenya's National Climate Change Framework Policy notes:

The Government of Kenya, led by the Ministry of Environment and Forestry, worked with stakeholders from civil society, the private sector, and national and county governments to analyse and coordinate diverse knowledge needed to develop Kenya's climate change legislation.²²

¹⁹ The CC Act. S 5; Johara Bellali et al, Multi-Level Climate Governance in Kenya: Activating Mechanisms for Climate Action (adelphi/ILEG 2018) 32-33.

²⁰ Ibid, s 6

²¹ Ibid, s 33(1)

²² National Climate Change Framework Policy, November 2014, page 8.; Government of the Republic of Kenya, National Climate Change Action Plan 2018-2022 (Ministry of Environment and Forestry, Nairobi 2018) page 4.

The views contained in the policy document indicate horizontal and vertical interactions are supported by interactions of respondents from different stakeholder groups. For example, regarding the county and national government interactions, a climate change researcher noted that:

While County governments can make certain laws and policies related to environmental issues such as climate change, these must be aligned to what is developed at the national level. There is nothing the national government will do that affects counties without consulting them before and expecting things to go smoothly. Like when we were developing the NCCAP in 2018, we had to do it in tandem with the County Integrated Development Plan (CIDP) developed at the same time. [...] So, the CIDP of 2018 and the NCCAP of 2018 speak to each other, indicating the managed coordination between national and county governments (RR17, 2021).

In line with the above point, other respondents indicated that the finance mechanism put in place for climate change governance facilitated integration of the local policy process into the national policy process. For example, some respondents cited the County Climate Change Fund (CCCF) which consisted of a legislation enacted by county governments and county-controlled fund destined for locally prioritised adaptation projects. However, the CCCF evolved to encompass mitigation measures and it was reported by the respondents that this effectively influenced the national climate change policy. This finding aligns with the view of Orindi and others that the CCCF in Kenya exemplified a successful collaborative climate policy and action with the county and national levels.²³ They stated that it originated from the county level, but later became ‘a key component in a comprehensive national policy planning and finance framework, channelling money from international and national sources to community-driven priorities.’²⁴

Although many other respondents expressed similar views to the one above, a few of them had reservations regarding the efficiency of such county-national level interactions. Some felt that

²³ Orinid and others, *The County Climate Change Funds in Kenya. Real Practice in Collaborative Climate Action*. (Berlin: Adelphi 2020), <https://www.adelphi.de/en/publication/county-climate-change-funds-kenya>, accessed 20/06/2022

²⁴ *ibid*

although the counties have the mandate and capacity to develop bylaws and policies, aligning these sub-national laws to existing national laws depicts a highly vertical and top-down interaction. This reduces the chances for incorporation of views from the sub-national level. The respondents suggested that, regarding climate change where these two-way interactions occur, input from the sub-national level should be prioritised. They emphasised that for some sectors such as agriculture and forestry, where the capacity and knowledge to respond to climate change adaptation is abundant at the sub-national level, the national process could benefit from this knowledge base by using it to inform the laws that are enacted.

The importance of the intricate link between horizontal and vertical arrangements found in the climate change policy space in Kenya concurs with the work of Nunan, Campbell and Foster. They posit that vertical and horizontal interactions in policy spaces are central to facilitating policy integration.²⁵ Although these are used to explain policy integration within and across sectors, they could also be applied when incorporating diverse knowledge in legislative processes dealing with climate change involving diverse sectors and actor groups at different levels of governance. Such horizontal and vertical interactions amongst policy actors are not limited to the domestic policy and law-making space; they are equally connected to the international space.

7.4. Interdependencies between domestic and international policy spaces for climate governance.

Cross-cutting issues are not often addressed solely by domestic structural arrangements. These domestic structural arrangements are intertwined with international structures. Interestingly,

²⁵ Nunan, F., Campbell, A. & Foster, E. 'Environmental Mainstreaming: The Organisational Challenges of Policy Integration' [2012] *Public Administration and Development* 32, 262-277

in Kenya, the development and implementation of a new constitution coincided with the development of a national climate change law, which was shaped by global climate change legislative processes, as seen in Table 6 below:

Table 6: Evolution of structures in the legal context of climate change in Kenya: 1999 to 2016

1992	1994	1999	2005	2010	2010	2012	2012	2013	2014	2015	2016	2016
Kenya Signed UNFCCC	Ratified UNFCCC	EMCA	Kyoto Protocol	New Constitution Devolution of Governance System with the creation of 47 Counties	NCCRS White Paper KCCWG Policy Paper	NCCAP/NAP 2013-2017 Devolved Government Act 2012	First Climate Bill passed by Parliament but Rejected by President	Change of government from Mwai Kibaki to Uhuru Kenyatta.	Revamped Climate Bill	National Adaptation Plan, NAP (2015- 2030) and Submission of the first NDC Report	Paris Agreement	Climate Change Act
Reiterated a need to build a national policy framework for adaptation, resilience building, and slow carbon development		First national Environmental issues but considered insufficient to address climate change. Act established National Environment Management Authority (NEMA)	Ratified the Kyoto Protocol	Changes from centralised to a decentralised system. Enacting diverse laws by Parliament to enable the devolution process	Established Vision 2030, with emphasis on the 'Climate Smart Pathway.'	Established to operationalise the NCCRS. Recommends enacting a standalone climate change legislation. The Devolved Government Act provides criteria for transferring functions from the national level to county government.	Bill was rejected because it did not meet the threshold for public participation, although many stakeholders disagree.	More State support for the climate law through the re-constituted Ministry of Environment. Cabinet Secretary established a multi-level Task Force of 15 members to develop the national policy and law.	Bill passed through Senate and National Assembly.	Acknowledge the role and importance of a national climate change legislation	Kenya signed and ratified the Agreement.	Climate Bill signed into law by the President of Kenya. Public Participation Bill proposed. National Climate Change Council and Climate Change Directorate were established.

Table 6 above indicates a significant evolution in Kenya’s policy landscape after the ratification of the UNFCCC in 1995 and the Kyoto Protocol in 2015. The 2010 Constitution introduced a domestic multi-level governance arrangement for policy and law-making. It also emphasised the interaction between the domestic and international levels in the legislative process. For example, Chapter 1 (5) states that ‘The general rules of international law shall form part of the law of Kenya’. Also, Chapter 1 (6) says ‘Any treaty or convention signed and ratified by Kenya shall form part of the law of Kenya under the new Constitution.’²⁶ In reviewing the literature on law and policy-making in Chapter 3, it was noted that Kenya was an active actor in international legislative agenda development on climate change.²⁷ Many respondents, especially from the civil society and

²⁶ *ibid*

²⁷ Fankhauser and others (n 7) 319, Babette Never, ‘Who drives change? Comparing the evolution of domestic climate governance in India and South Africa’ (2012) *Journal of Environment and Development* 21(3) 362-387,

government policy actor groups indicated that the legislative process aligned with the international processes. For example, many cited Kenya's alignment to Article 7 (2) and (5) of the Paris Agreement as a guiding principle for developing the Kenya Climate Change law.²⁸

Therefore, in addition to the sub-national and national level interactions, an emphasis on the alignment of international laws with what was happening domestically meant that three levels of interaction existed in the policy space on climate change, as demonstrated in Figure 17.

Dubash and Others, 'Developments in national climate change mitigation legislation and strategy (2013) Climate Policy 13(6) 649-664

²⁸ Article 7 (2) & (5) of the Paris Agreement emphasise local, subnational, national, regional and international dimensions of the impacts and response to global climate change [...] to protect people, livelihoods and ecosystems. In addition, the Agreement acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, [...] guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.

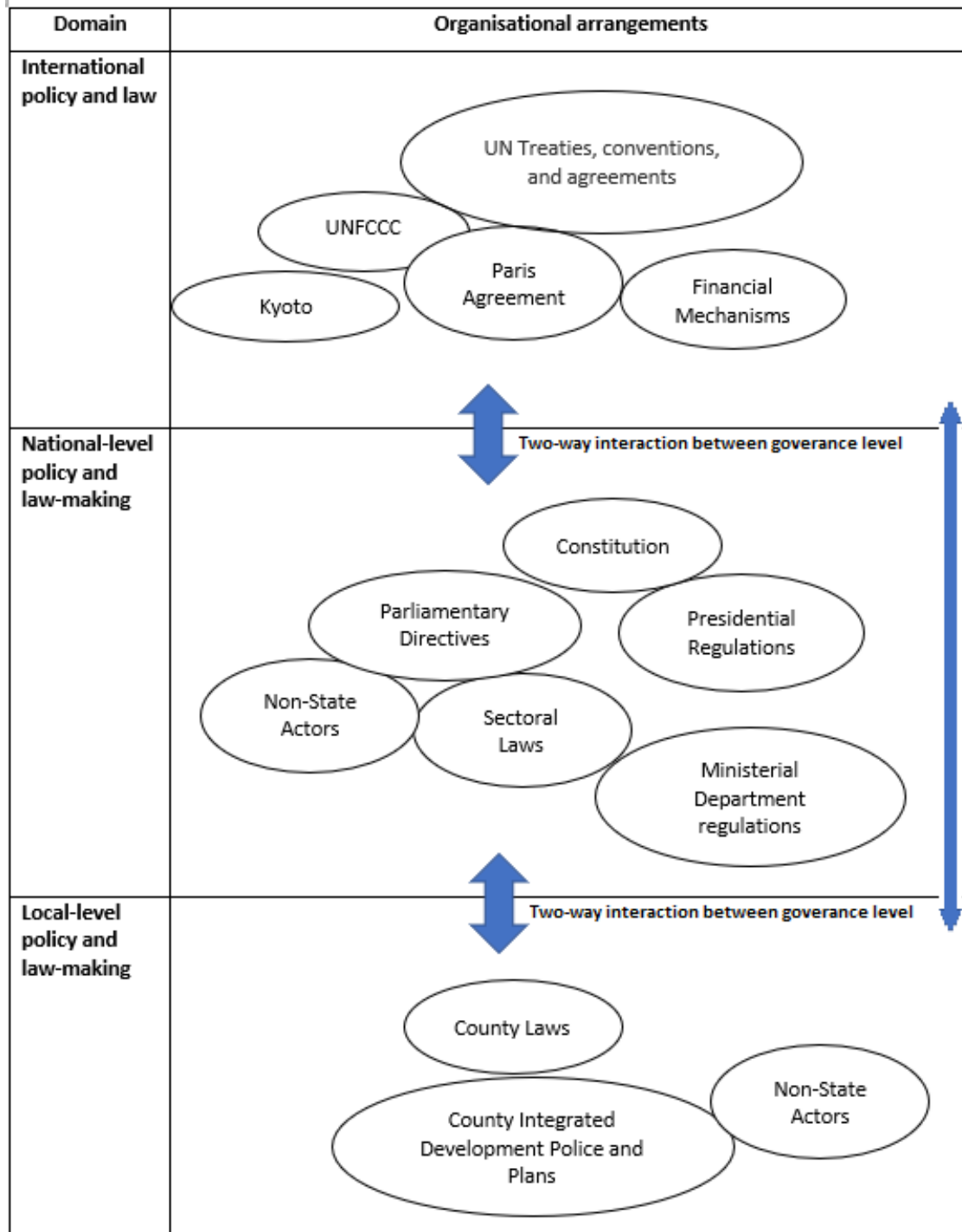


Figure 17: Illustration of multi-level governance interactions in climate policy and law-making in Kenya²⁹

²⁹ Source: Prepared by the researcher

The interviews and secondary data revealed that the sub-national, national, and international levels fit into each other and reflect a bottom-up and top-down approach to decision-making. The thick blue arrows indicate the two-way interactions and negotiations between the different governance levels, characterised by diverse actors with different levels of power and influence on the process. This analysis aligns with Piattoni's conceptualisation of multi-level governance (MLG) which involves shifts in authority and power relations along three dimensions.³⁰ Firstly, the devolution of power from the central to the local level; secondly, increased power-sharing between state and non-state actors; and thirdly, the reduction of state sovereignty through international coordination mechanisms.³¹ These institutional arrangements, from international to national to the sub-national level, shape how decisions are 'created, constructed, regulated and contested, between, across and among scales' through policy actor interactions and negotiations.³² The different policy actors found at different governance levels cannot simply make decisions and enforce them on other groups. Some negotiation and cooperation need to occur between the different actors.³³

The analysis revealed that despite the external institutional arrangements, including funding mechanisms put in place alongside the international regimes, the high-level government policy actors, in collaboration with other actors, have remained dominant in the domestic policy processes, as opposed to intergovernmental and international actors whose influence remains marginal. This view on the dominance of national actors in the national process is echoed by the

³⁰ Simona Piattoni 'Multi-level Governance: a Historical and Conceptual Analysis' [2009] *Journal of European Integration* 31(2) 163-180

³¹ *ibid*

³² Di Gregorio, 'Multi-level governance and power in climate change policy networks' (2019) 54 *Global Environmental Change* 64, 65,

³³ Chapter 11 of the 2010 Constitutions lays down the guidelines for how law and policy interactions should occur between the central and county levels in Kenya

Principal Secretary in the State Department of Environment, Ministry of Environment, and Natural Resources in the opening section of the 2015-2030 NAP. He calls for the alignment of all international interventions to existing arrangements within the Kenyan jurisdiction. For example, regarding international funding for climate change issues, he says:

The NAP will be distributed widely [...]. It is expected that development partners will find the information helpful in aligning their funding preferences with Kenya's aspirations to attain a low carbon climate resilient economy by addressing climate change adaptation and mitigation on equal footing.³⁴

Beyond the international and national levels, the devolution process gave local institutions more power and control in some legislative processes. For example, the County Assembly and Senate were active throughout the stages of the climate legislative process. This allowed for greater involvement of local level state and non-state actors to engage in climate change policy and law-making processes in line with the country's constitution.

The introduction of the 2010 Constitution and the development of accompanying legislation to implement it, as found in the sections above, introduced a multi-level governance approach for decision-making in Kenya. The new institutional arrangements for governance coincided with significant evolution of the policy and legal processes leading to the development of the 2016 Climate Change Act. Thus, the processes for the development of the law to address climate change as a cross-sector issue involving multi-actors found at multi-scales was the first litmus test for the 2010 Constitution. It was found that the policy actors developed a national Constitution with new legal arrangements, which later on shaped Kenya's legal culture in policy spaces. Concerning climate change, this legal culture shapes the actors' attitudes towards the

³⁴ GoK, 2015-2030 NAP, pvi

climate change law-making process and the views on what and whose knowledge gets incorporated in the final law, discussed in the following sections.

7.5. Legal culture in response to institutional arrangements for climate change governance

The legal context within the institutional arrangements examined above shaped the legal culture of the policy actors. This legal culture determined how people viewed the structures and institutions of policy and law-making. The legal culture includes the policy actor's perception and attitude towards the institutional setup and the processes shaped by these institutions. The following section examines the policy actor's perceptions and attitudes towards the policy and law-making process, and the opportunities and constraints for the incorporation of diverse knowledge.

Findings from the interviews reveal that the policy actors in Kenya have different viewpoints on the institutional setup and how these shapes the climate change policy and law-making process. Views from the respondents suggest that the institutional arrangements for climate change law-making are shaped mostly by the reasons why such a law is needed in the first place. These views are linked to whether the need to develop policies and laws in response to climate change is in response to Kenya's international policy obligation or driven by a domestic need to address climate change as a priority policy issue. These views shape how respondents view the law and the state's legitimacy in implementing the law after it is developed.

Two views emerged amongst the respondents, which align with the findings in the literature on legal culture in section 4.3.4 in Chapter 4. This revealed that different groups of actors in the policy landscape have various reasons for pushing for a response to climate change. This

shapes how policy actors interact and what and whose knowledge is incorporated into the law enacted.

The first group viewed the climate change policy and law-making process as one led by the ‘growth first stonewallers’ who felt that Kenya should make minimal effort at the domestic level in response to climate change. The respondents believed Kenya should align with the international legal responses by replicating what was agreed upon at the international level at the domestic level. The second group, referred to as ‘progressive realists and internationalists’ felt that Kenya should take ownership and increase their engagement with policy actors and sectors at the domestic level to develop a legal response that considers the contextual realities of climate change in Kenya. The outcome of the climate change legislative process was shaped by combining these two viewpoints, as examined in the following section.

7.5.1. Growth first stonewallers

A few respondents representing different actor groups felt that Kenya should do the minimum regarding climate change legislation. Their views suggest that the debates about climate change did not start in Kenya but happened within the context of a more extensive discourse at the international level. They equally felt that climate change was not a priority issue for Kenya until the country signed and ratified the UNFCCC in 1994 and later hosted the Twelfth session of the Conference of the Parties COP of the UNFCCC in Nairobi from 6 to 17 November 2006. As a result of the external push for nations to engage in domestic policy and legislative processes, the Kenyan government had to simply adopt or align with the frameworks developed at the international level in response to climate change. This was opposed to engaging with people

nationally and sub-nationally and building on how they were experiencing and responding to climate change to develop a legal response.

For example, a lawyer and policy researcher who participated in the climate change policy-making process felt that those in the developed world conceived climate change and, therefore, should develop the solutions by stating thus:

Climate change was recognised and conceived of as a problem in the West, and therefore the actors in that context were in the right position to take the lead in finding a solution. For example, the need for laws emanated from the developed world, and countries had to domesticate these international laws. Because Kenya had become a signatory to this international law in 1992, it had an obligation to domesticate by enacting a national law on the issue (LP27, 2021).

Other respondents expressed views about the influence of international policy regimes, especially financial regimes, on domestic processes. They felt that the direct or indirect participation of multinational bodies and donor institutions with offices in Kenya and the provision of donor funds for the climate change legislative process skewed the agenda in favour of multinational bodies. They cited the open-door policy of the KCCWG, as seen in Chapter 6, which supported the direct involvement of the external actors. These respondents felt that donor funding played a significant role in pushing policy-makers to increasingly align with the donor's agendas. This was opposed to developing a domestic agenda through fully engaging with actors from the different sectors and levels of governance in Kenya.

While this view is contested by other respondents, as discussed subsequently in this chapter, this point of view concurs with the findings of section 6.4.2 of Chapter 6. This suggests that policy-makers found mainly at the central levels hurriedly developed the laws by relying on expert reports produced by government-hired consultants and evidence from the IPCC reports. This was viewed as a deliberated attempt to meet the international obligations and

access funding promised following Kenya’s participation at the international level. In addition, the analysis suggests that the presence of bilateral and multilateral agencies in Kenya with their specific agendas, such as IDRC, UK DFID, JICA, UNDP, UNEP and FAO, offering financial and technical support at the domestic levels is viewed by these respondents as constraining, rather than enhancing, stakeholder engagement in the process. In other words, the availability of financial resources constrained rather than enhanced the genuine participation of diverse actors and incorporation of domestic knowledge, including the LIKP of communities.

Regarding funding for the legislative process, a policy researcher noted that donor funding often came with an agenda, thus:

The hidden benefits behind enacting laws may be because the IMF or World Bank wants us to enact such a law before we as a country can access funding. Sometimes these national laws are passed before the state, and the policy actors even understand why this should be done. Even at the County level, the World Bank set conditionalities for access to funding by the counties. One of these was developing a county climate change law and accompanying strategies. Many Counties quickly enacted laws to access these funds at the expense of developing policies and laws to respond to the climate challenge (RR21, 2021).

Although the view expressed above is specific to the county level, it highlights the powerful and influential role that donors and the international community have on the climate change legislative process in Kenya because of the funding and technical support they provide.

This international influence helped entrench the perspectives of the growth first stonewallers who felt that Kenya should align with the international policy processes and draw inspiration from there. According to them, Kenya did not need to do much concerning engaging the domestic stakeholders in the process but that they should simply “copy and paste” what was contained in the global regimes and frameworks. These group of actors argue that while climate change impacts were real, the objective should be to maximise

growth so that Kenyans can better handle the impacts. This view is contrary to the views of most of the respondents, referred to as progressive realists or internationalists in the literature. This second group emphasises prioritising environmental sustainability and equity through an inclusive process of decision-making to address climate change. Although they are keen to generate action, this group is sceptical of global negotiations. They opined that the discussions side lined core concerns of equity. This analysis ties with that done by Dubash who examined the perspectives of different policy actors in India regarding India's climate change policies vis-à-vis international regimes.³⁵ As examined in the next section, this group felt that Kenya took ownership of the process and engaged with policy actors and sectors at different levels to develop a policy and law as opposed to relying on what was agreed at the international level.

7.5.2. Progressive realists and internationalists

Most of the respondents were categorised as progressive realists and internationalists and felt that Kenya was severely impacted by climate change and the country should engage in domestic actions to address the issue. The domestic actions entailed engaging with actors across sectors and levels of government to gather their views on climate change and how they were responding to it to build a national and coordinated response. The international responses only aligned with domestic responses, which remained a priority as provided in Chapters 1(5) & (6) of the Kenyan Constitution.

³⁵ Navroz Dubash, Toward a Progressive Indian and Global Climate Politics (Centre for Policy Research Working Paper 2009/1), https://cprindia.org/system/tdf/working_papers/1253785461-CPR%20WP%202009-1_Dubash.pdf, Accessed 21/02/2023

These respondents generally acknowledge Kenya's active role in international discourses and actions in response to climate change. But they state that Kenya is progressively linking domestic actions to global actions to respond to climate change rather than its policies and actions as determined by what was happening at the international level. For example, the Head of Compliance and lead on climate change issues at NEMA, who was repeatedly cited as a key person in the Kenya climate change legislative process by other interviewees, emphasised the place of domestic processes thus:

Kenya is drought and flood-prone and is heavily dependent on the natural resource base. Over 80% of the country is arid or semi-arid and is classified among the climate-vulnerable countries according to the UNFCCC categorisation. Evidence of climate change became apparent to Kenyans progressively over the years. As a country, we decided in 2010 that we needed to act, and therefore at the COP 2010, the NCCRS was launched. This was a recognition that climate change was an issue affecting Kenya's social and economic wellbeing. This NCCRS was a platform for formulating other climate-related policies and establishing structures in Kenya, including the National Climate 2012 Action Plan and the 2016 National Climate Change Act.

The views expressed by the officer imply that climate change had been an issue that affected Kenya, and before the Government signed the international agreements, domestic actions to address climate change had begun. In addition, climate change was addressed within sector-specific ministries such as agriculture, energy, forestry, and transport. After signing and ratifying the UNFCCC in 1992 and 1994 respectively, the officer agreed that Kenya became more active in building an enabling policy framework for adaptation and resilience towards low carbon development. Before its global commitment in response to climate change, the authorities had begun seeking strategies to address the challenge through sector policies and laws. This concurs with the work of Wambua, who examined the emerging lessons from Kenya's 2016 Climate Change Act and posits that the policy processes that preceded the enactment of the law demonstrate a well-considered planning process and support the perspective that Kenya's Climate Change Act

was not an impulse-driven response to global trends in climate legislation.³⁶ The legal context and culture examined in the sections above determine whether individuals or groups were aware of the structures, institutions, and culture in the law and policy-making space. This enhances the incorporation of their knowledge in the policies and final law enacted.

Therefore, influence of the international law and the direct and indirect involvement of development partners and governments through their diplomatic missions, although seen by some respondents as negative, was also advantageous. Their support was necessary to support Kenya in their domestication of the aspirational and global goals on addressing climate change to the domestic level. The Kenyan Government set its own national targets guided by the global level of ambition while considering national circumstances and how these aspirational and global targets should be incorporated into national planning processes, policies, and strategies.

7.6. Enablers of and constraints on the incorporation LIKP into the institutional setup and legal culture

This section examines how the institutional arrangements examined in the sections above shape policy actors' perspectives about the climate change policy and law-making process. This is done within the framework of how this enables or constrains the incorporation of LIKP. The policy actor groups in Kenya have diverse views on how the institutional setup and the culture it generates enables or constrains the incorporation of knowledge in the climate change legislative process. The enabling factors examined include an institutional setup that favours citizen participation and freedom of association. On the other hand, some constraints to the incorporation of knowledge are

³⁶ Clarice Wambua, 'The Kenya Climate Change Act 2016: Emerging Lessons from a Pioneer Law' (2019) 13(4) Carbon & Climate Law Review 257, 259

the disparity in the level of awareness of the legislative process by actors at the different governance levels, issues of silo mentality, and the structures used for communication on the legislative process amongst actors at the different governance levels.

7.6.1. An enabling environment for citizen participation and incorporation of knowledge

In theory, Kenya's legal system and culture enables citizen participation and incorporation of their knowledge in the climate change legislative process. Firstly, public participation is emphasised through the provisions of Articles 10, 118, 124, 201, 221, and 232 of the 2010 Constitution. These articles support public engagement in policy, legislation planning, and service delivery. Secondly, the devolution process introduced by the 2010 Constitution allowed for the development of laws creating a democratic space for citizen participation in implementing the devolution. Some of these laws and regulations were examined in section 7.2 above.

These laws and regulations give general information about public participation in Kenya. For example, in Part 2(69)(d) on the obligation in respect of the environment, the 2010 Constitution seeks to 'encourage public participation in the management, protection, and conservation of the environment.'³⁷ In addition, Articles 56 and 100 of the Constitution emphasise the need to ensure a representation of minorities and marginalised groups thus:

The State shall implement affirmative action programmes designed to ensure minorities and marginalised groups participate and are represented in governance and other spheres of life. [...] In addition, Parliament shall facilitate public participation and involvement in the legislative and other business of Parliament and its committees.³⁸

³⁷ GoK, 2010 National Constitution

³⁸ *ibid*

Specifically, Article 118(1) (a and b) obliges parliament at all governance levels to conduct its business in an open manner that facilitates public participation and involvement in its legislative processes. It states that after a Bill is introduced in Parliament and referred to the relevant committee, Parliament needs to facilitate public participation in the Bill making through different steps, including:

- i. Creating awareness by placing print and visual advertisements.
- ii. Involvement by identifying key stakeholders and interested groups, including those directly affected and those that can offer solutions.
- iii. Contacting the public by issuing relevant communication to the stakeholders in writing and issuing invitations to meetings and requesting submissions of memoranda and documents from stakeholders.
- iv. Holding meetings in line with agreed action plans at different levels necessary to get views.

In line with the constitutional provisions on public participation above, the 2015-2030 NAP and Schedule 4(2)(f) of the Climate Change Act 2016 gives specific details on what public consultation entails.³⁹ Some of these include reaching out to stakeholders by publishing relevant information in at least two newspapers with national circulation, at least one newspaper circulating in the locality, and at least one radio station broadcasting in the locality. This is followed by extensive consultations at different levels involving diverse actors. A review of the policy documents and plans related to climate change indicates that these regulations were respected. For example, the NAP reports that over 1,000 stakeholders from national and county government,

³⁹ GoK, 2015-2030 NAP, GoK, Climate Change Act 2016

parliament, private sector, civil society, women's groups, youth groups, and representatives of from minority groups such as persons with disability, forest users, pastoralists, and fisher communities were consulted before the development of the NAP.⁴⁰

This evidence from the climate policy documents above concurs with findings reported by Mbiru, a prominent Kenyan Climate Change Learning Consultant who reiterates that the Climate Change Act requires every governmental entity to ensure participation and consultation with stakeholders as a priority.⁴¹ She stated that the Kenyan Government generally conducts public consultations when developing strategies, laws, and policies relating to climate change. However, the communication strategy used by the Kenyan Government to disseminate information on climate change does not effectively reach grassroots communities due to existing socio-economic and language barriers.⁴² This limits the uptake of LIKP generated from the local levels. This socio-economic barrier to effective communication on public decisions is an important consideration. However, it is not within the scope of this thesis but is an important area for further research.

It is worth noting that coordination challenges between the central and devolved governments are also reflected in public participation and access to information. This is particularly disadvantageous for those in the marginalised areas and thus limits their influence on policy and law-making. The analysis revealed that the methods used for communication hardly achieved the purpose of an inclusive process. Considering access to information and the use of information as power, the current approach to making climate change information available could imply a deliberate attempt to disempower further and enhance the marginalisation of communities.

⁴⁰ *ibid*

⁴¹ Sheila Mbiru, 'Background Report on National Climate Change Priorities and Relevant Capacity Development Goals and Initiatives in Kenya' Ministry of Environment and Forestry (2020), https://www.kccwg.org/pdf/Background%20Report_NCCP.pdf, GoK NCCAP, 2018-2022, p4.

⁴² Joe Ageyo, J., & Idaah Muchunku, 'Beyond the Right of Access: A Critique of the Legalist Approach to Dissemination of Climate Change Information in Kenya' [2020] *Sustainability* 12(6), 1-15

Some respondents found mainly in the urban areas reported that throughout the legislative process, including the development of the NCCRS and the NAP, quality information that was relevant and regular was provided, and the analysis provided by the civil society and the government agents enabled them to make informed choices. These respondents felt that the legal context offered an opportunity for them to organise themselves and facilitate information flow and capacity development so that their members could participate in the climate change decision-making process. For example, one said:

The citizen groups and natural resource end-users at the decentralised level, such as the Kwale County Natural Resource Network, became critical actors in County Politics. It brought together diverse individuals and CSOs across Kwale County to promote public participation [...]. The network provides a platform for citizens and community groups to discuss, organise, and influence county and national policies and legislation in line with local priorities. They collaborate with other influential civil society organisations located in the capital cities, such as the KCCWG, to promote the views of its members in the climate legislative process (CSO34, 2021).

The respondents with the views above indicated that, in addition to their location in urban areas where many public hearings were held, they benefitted from other infrastructure such as mobile telephony that supported regular access to information on the legislative process in Kenya. In addition, this infrastructure facilitated two-way communication between central and sub-national levels on climate change issues as many citizens have access to mobile telephones.

Conversely, some other respondents, especially those from the indigenous and local communities who reside primarily in remote areas, felt that the mechanisms for disseminating information on the legislative process did not enable them to participate and incorporate their knowledge thoroughly. These communities have little access to the infrastructure needed to access information through the portals used by the government for information dissemination. This is in addition to the language barriers as English was used for communication in areas where Swahili was predominantly used. According to them, their knowledge and proposed solutions to the policy

issue were not adequately considered, even if the regulation created opportunities for them to be represented by proxies in instances of decision-making. It was also found that a small number of respondents from the ILC policy actor group held a contrary view to that expressed by their counterparts regarding the nature of communication. These respondents mentioned the KCCWG civil society-led communication and engagement process to gather stakeholders' knowledge on climate adaptation. The ILC group indicated that the efforts by the KCCWG, which focussed on direct engagement with communities using decentralised arms of the umbrella networks at the county level, was a successful process in getting their inputs in the national process. These respondents stated that the KCCWG used Swahili to enhance communication with and inputs from ILCs during the law and policy-making process throughout the climate hearings, as described and analysed in section 5.2 of Chapter 5.

The rejection of the Climate Change Bill in 2014 by the President of Kenya, who was the head of the National Climate Council (NCC), on the grounds of its failure to meet the 'threshold for public participation,' was highlighted by all respondents. According to them, this was an indication of the GoK's commitment to ensure the public participation of citizens and incorporation of their knowledge in policy and law-making processes. However, what the 'threshold for public participation' meant was unclear. Some respondents from the different actor groups indicated that the threshold for public participation meant consulting many actors from the different counties and agroecological zones representing the various socio-economic sectors with information dissemination on the legislation process and getting their inputs. However, all the respondents reported that a more rigorous process was embarked upon after the rejection of the Bill, with more climate hearings held throughout Kenya involving state and non-state policy actors for another two years.

These mixed views expressed by the respondents above imply that government-led processes mainly targeted socio-economically powerful individuals, who live in urban centres and have access to essential services and infrastructure that facilitate access to information. On the other hand, the civil society-led processes engaged more with grassroots communities to ensure they made input into the climate law and policy-making process. The legal structures and regulations enabled the state and non-state policy actors to work together to develop the national climate change law. As found in Chapters 5 and 6, these policy actors' complementary actions resulted in some incorporation of LIKP for climate change adaptation in the strategies, policies, and the law enacted.

7.6.2. Disparity in the awareness of guidelines of public participation amongst policy actors

There was general awareness by the different policy actor groups at the different governance levels of guidelines for public participation. The respondents were generally aware of the channels to follow to make petitions if they had issues with the law and policy-making process. This usually occurs when their rights to participation and incorporation of their views are violated. For example, the most cited Article 37 of the Constitution states that 'every citizen has the right to [...] present petitions to public authorities.' There is a general awareness of guidelines for the national-level climate change strategy and actions concerning the climate change legislation. Respondents who were knowledgeable about the 2016 Climate Change Act repeatedly cited Schedule 4(2)(f) of the Act, which states that where a requirement for public consultation in matters relating to climate change is imposed, the responsible authority is required to publish a notice inviting written comments and objections to the policy.

However, despite this general awareness, there is a disparity in the level of awareness between national and sub-national respondents. The sub-national respondents, especially those in indigenous and local community actor groups, were less aware of the national-level climate change guidelines for public consultations. Most of them were happy with the consultation process led by the government and civil society and saw no reason to petition the process. As found in Section 5.5 of Chapter 5, those who develop and use LIKP were involved throughout all climate change policy and law-making stages, either directly or through proxies. However, the success of using the LIKP mentioned in the policies and law will depend on the implementation of the law, which is not within the scope of this thesis.

7.6.3. Technical and financial resources promoting silo mindsets

Before developing an overarching national framework law, issues related to climate change were addressed by sector-specific ministries and agencies, including the ministries of environment, forest, water, natural resources, health, and infrastructure. During this process, the law groups were organised around their sector-specific and thematic interests. This was done by the KCCWG, and the sector-specific MDAs attempted to control the process and press for the consideration of their sector knowledge and interests as a priority as opposed to engaging in an inclusive process. This silo mindset amongst policy actor groups had implications for incorporating different knowledge in the policy and law-making procedure. The national climate legislative process thus entailed overcoming the existing silo mindset by bringing these other policy actors from different sectors and governance levels together.

The existence of a silo mentality meant that there was a challenge in having an effective cross-sector approach to the climate legislative process. The institutional set up, including the

inter-ministerial committees, the horizontal and vertical interactions across sectors, actor groups and governance levels, contributed to minimising the existing silo mentality that could constrain the incorporation of diverse knowledge. In addition, the GoK took steps to promote climate change as a cross-sector issue that needed a cross-sector and multi-actor response. For example, a lead government official at the Ministry of Environment and Forests reported that efforts were made to overcome the silo mindset amongst the government ministries and agencies by raising awareness and improving understanding of climate change as a cross-sector issue. He indicated that throughout the legislative process it was reiterated that:

Climate change is an environmental issue and equally an economic, social, and sustainable development issue. While a few people and sectors still believe that it is fundamentally an environmental problem, many have accepted the cross-sector nature of the case. They need to consider knowledge and approaches to respond to it from different sectors and actors (GO25, 2021).

The government official also revealed that this silo mindset was minimised through a proportionate allocation of tasks between the ministries and agencies. Thus, competition for leadership in the climate change legislative process was reduced as each key MDA focused on a specific climate change-related task, such as drought management, food security, urban infrastructure, and contributed to the agenda and the final policy and law. The existence of horizontal and vertical interactions across governance levels, sectors, and policy actor groups significantly contributed to overcoming the silo mentality. This finding on overcoming a silo mindset and engaging in a participatory and inclusive legislative process aligns with the work of Hemmati and Rogers on multi-stakeholder engagement and communication for sustainability. In their work, they posit that ‘If we do not achieve building a shared understanding across the borders of stakeholders and sectors working on different aspects of essentially the same issues, we will remain in the silos that

work in isolation, being weaker, or even undermining each other's efforts.'⁴³ While an overarching national law to address climate change was developed, it was not easy to determine whether silos were overcome and will remain as such during the implementation of the law with significant internal and external funding to be involved.

7.6.4. Challenges of information access and dissemination

The Government of Kenya demonstrates a genuine will for stakeholder engagement through the institutional setup. Stakeholders have been actively and regularly involved in the climate change legislative process. However, there is scope for improvement, particularly regarding access to information by those most affected by climate change but have little influence on the policy and legislative processes.

The existing channels for disseminating information and public consultation are not inclusive and are found to exclude further those traditionally excluded from decision-making processes. In line with this, a farmer indicated that:

Public participation is a requirement of our constitution. But most of the time, those in charge of making the policies and laws do not go down to engage with those served by the policies and laws to gather their inputs effectively. [...] the Ministry for Agriculture has been holding public meetings (*barazzas* -used by most respondents to mean public meetings) in various parts of the country. Still, I think the *barazzas* do not achieve the public participation goals as very few people who are often influential are selected to participate. The communication before and during consultation sessions at the policy agenda setting stage and policy formulation stage were mainly done in English. Most farmers do not understand English, making it hard for them to participate and contribute to the process (FR14, 2021).

⁴³ Hemmati, Minu and François Rogers, *Multi-stakeholder engagement and communication for sustainability: Beyond Sweet-Talk and Blanket Criticism – Towards Successful Implementation* (CatalySD 2015)

Slightly similar views were expressed by other respondents, especially from the ILC group of actors. Most of them pointed out that policy and law-making profoundly affected how they participated and whether their knowledge was taken into account. These local-level actors indicated that they were often invited out of the context where they experienced the problem to engage in the decision-making related to climate change. This was seen as problematic as earlier highlighted in a comment made by a farmer (FR15, 2021, page 187).

Regarding whether their LIKP was incorporated in such processes, the respondent further commented that they had their own way of gathering information. External actors needed such knowledge to engage with them to fully tap into the wealth of relevant LIKP used for adaptation purposes. The views expressed by these respondents implied that they were disempowered when they were invited to take part in public hearing sessions outside of their communities. Some of them referred to the spaces where they were invited and consulted on the climate policy and law-making process as ‘boardroom’ (usually in Nairobi). These respondents found these spaces disempowering and constraining their ability to present and advocate for the incorporation of their LIKP in the process.

Several challenges emerged in Kenya as it was dealing with two herculean tasks during the same period. First, addressing the complex issue of climate change through policies and law-making. Second, rolling out a constitution that introduced a new and multi-level system of governance and decision-making. In the process, Kenya overcame some challenges, and these experiences could serve as worthwhile lessons for other low-income countries keen on enacting legislation on climate change. Some of these challenges include the silo mindset of some government officials and their sectors of operations as well as communication challenges including how to package LIKP in legal forms to be taken up in the agenda and policy formulation stages of

the law-making process. In addition to defining a threshold for participation, there needs to be coordination between the central and devolved governments. However, the success or effectiveness of the process that led to the development of Climate Change Act can only be established following the successful implementation of the law and how this contributes to the achievement of Kenya's climate change goals. Thus, bridging the gap between policy and practice.

7.7. Conclusion

This chapter examined the institutional arrangements, including the legal and regulatory instruments developed by policy actors in Kenya, and how these shaped legal culture on legislative processes on emerging policy issues such as climate change. The legal and regulatory instruments examined in this chapter included the 2010 Constitution that ushered in devolution and the laws, strategies, policies, and plans developed to deal with climate change from 1990 to 2016. The successes and challenges in the development of the 2016 Climate Change Act offers learning opportunities for other countries with a similar governance context that are keen on developing policies and laws that incorporate the LIKPs of communities. More so, it offers opportunities for Kenya post devolution.

First, the institutional arrangements in the context of policy and law-making include those conferring additional climate responsibilities on already existing institutions (MDAs), the establishment of the novel National Climate Change Council chaired by the President of Kenya, and the devolution process by the 2010 Constitution. The implementation of the new constitution coincided with the climate change legislative process, and thus Kenya embarked on two herculean tasks simultaneously. These institutional arrangements in place and the new arrangements brought in by the 2010 Constitution created the needed policy space for developing a law to address the

complex and cross-cutting issue of climate change. Thus, a policy mainstreaming and integration approach to address climate change policy and law involving multiple sectors and actors at different levels of governance resulted from these institutional arrangements. The successful mainstreaming and integration of policies within and between sector ministries created an enabling environment for the incorporation of diverse knowledge, including the LIKP of agrarian communities, gathered during the different interactions.

Second, the legal context supports a vertical and horizontal approach for the engagement of policy actors at the different governance levels. This facilitates the interaction and communication between state and non-state policy actor groups. This synergy between the state and non-state actors results in a complementary effort between them. This enhances public participation and the incorporation of diverse knowledge, including the LIKP of communities, generated from the sub-national level. However, some mechanisms to enhance cross-level interactions and communications were beneficial to actors in urban areas with higher socio-economic status and access to better services, such as the internet, than indigenous and local communities found in remote areas. This is found to constrain the level of awareness, participation, and incorporation of diverse knowledge in the process.

Third, the structures, including the Constitution and other rules and regulations, support freedom of association. Thus, several networks and interest groups exist in the Kenyan policy space. These include civil society that plays an active role in facilitating the generation of climate-related evidence and organising climate hearings using communication mechanisms to ensure that knowledge and interest, especially of those at grassroots level feed, into the climate legislative process. However, the level of stakeholder engagement is less than desired. The channels and portals for disseminating public education and ensuring public knowledge on climate change are

not tailored by the government to enable the full engagement of non-state actors in the process. Civil society tries to bridge these gaps, thus ensuring participation, particularly among the marginalised, primarily found in remote areas.

Fourth, there is a mix of views on how much ownership Kenya should take in developing its climate change law. The respondents were split into two groups. The first and small group referred to as growth first stonewallers felt that Kenya should do the minimum by aligning the domestic climate change legislative process to what was happening globally. Conversely, most respondents identified as progressive realists and saw the outcome of the climate change legislative process as one that engaged actors at the domestic level and one where the law should be developed based on local realities and responses to climate change in Kenya as well as being progressively aligned to global processes.

Lastly, there is a significant influence of international institutional arrangements, including the international climate change regimes; experiences from other jurisdictions, including the UK Climate Act 2006; and financial mechanisms on Kenya's domestic institutional arrangement. However, the domestic policy actors' high sense of ownership supported by legal context and culture enables the prioritisation of domestic processes and the alignment of the international processes to this.

CHAPTER 8: CONCLUSION

8.1. Introduction

This concludes the research presented throughout this thesis. First, it introduces reflections on the research questions, analytical framework, and research design. Second, the original contributions of the research are presented. Then, this chapter concludes with possible areas and directions for further research and a concluding thesis summary.

8.2. Answering the research questions

This section pulls together the findings presented in Chapters 5, 6 and 7 to explain how these respond to each sub-question and the overall research question set out in Chapter 1. This is guided by the analytical framework developed following the literature review on LIKP and policy and law-making in Chapters 2 and 3, respectively, to establish the extent to which the research questions have been addressed.

The overall research question asks, ‘How does the process of law-making on climate change enable or constrain the incorporation of LIKP?’. This research question was further broken down into three sub-questions, including:

- i. How do different systems of knowledge, such as LIKP, operate in Kenya's climate change policy and law-making process?
- ii. How do different categories of policy actors associated with different systems of knowledge and sources of power engage in Kenya’s climate policy and law-making?

- iii. How do the institutional arrangements in the domestic policy space and beyond support the engagement of policy actors and the incorporation of knowledge and interest in the policy and law-making process?
- iv. How does the Kenyan case study on policy and law-making on climate change and the incorporation of LIKP sit within the wider quest for the incorporation of LIKP domestic laws on climate change, in line with Article 7.5 of the Paris agreement?

The qualitative research findings were presented and discussed in Chapters 5, 6, and 7; they were guided by the analytical framework while considering the reviewed literature in Chapters 2 and 3. These are used to determine the extent to which the main research question and sub-research questions are addressed.

8.2.1. Sub-question 1: How do different systems of knowledge, such as LIKP, operate in Kenya's climate change policy and law-making process?

Considering the discussion in Chapter 1, those who depend on agriculture and natural resources for their livelihood are at risk because climate change significantly threatens these sectors. Therefore, adaptation to the impacts of climate change is crucial for those in this sector, especially smallholder farmers.¹ Due to the cross-sector nature of climate change, the success of adaptation measures requires a corresponding cross-sector and multidimensional approach for

¹ Adaptation is a priority for Kenya based on the vulnerabilities. Stakeholders prioritised adaptation actions for the different sectors during the NCCAP process. The Adaptation Technical Analysis Report (ATAR) proposed long lists of priority actions and the NCCAP prioritised actions in the agriculture, livestock, water, environment, infrastructure, sustainable livelihoods, energy infrastructure and tourism sectors, https://issuu.com/boonigor/docs/atar_final_august_24_2020, accessed 26/07/2022. For broader discussion on adaptation as a priority in climate governance see: Roger Pielke Jr., 'Rethinking the Role of Adaptation in Climate Policy' [1998] volume and issue number? *Global Environmental Change* 8 (2), 159-170

building adaptive capacities, especially of farmers, in a sustainable way. Knowledge was central in the policy and law-making process, particularly its potential use by policy actors throughout all the stages of the policy and law-making process. The study of the concept of knowledge in policy and law-making on specific issues is not new.² In Chapters 2 and 3, it was found that policy actors use knowledge to make choices and influence agenda setting and the outcome of such processes. In other words, when policy actors frame their interests, this knowledge is then used to illuminate the policy issues' various dimensions. Therefore, the more knowledge policy actors and policy actor groups (including government bureaucracies, universities, corporations, CSOs including indigenous and community-based groups, think tanks, the general public) can produce, consolidate and process, the more important and influential they are in policy-making.³ Thus, policy actors prioritise acquiring, synthesising, storing, guarding, or maintaining knowledge. The policy actors and groups who are powerful as a result of their knowledge are thus capable of defining issues on their terms, manipulating and shaping public opinion, demands, interests, perceptions, and expectations.⁴ As found in the literature, the success of policy-making depends on how policy-makers at different levels define their interests, influence the agenda, and formulate policies. This is equally a function of the knowledge available to these policy actors.

Using knowledge to address single policy or sector-specific issue is not straightforward. This becomes more complicated when dealing with a policy issue like climate change, which is cross-cutting, involving multiple sectors, actors, and levels of governance (multiple decision-

² Falk Daviter, 'The political use of knowledge in the policy process' (2015) 48 Policy Sci 491, Nathan Caplan, 'The two-communities theory and knowledge utilisation' [1979] American Behavioural Scientist 22(3) 459-505, Edward Green, 'Knowledge, Power, And Policy Analysis: Sharing the Resources' [1980] An Interdisciplinary Journal 63(2) 178-198

³ Edward Green, 'Knowledge, Power, And Policy Analysis: Sharing the Resources' [1980] An Interdisciplinary Journal 63(2) 178-198

⁴ Ibid; John Kingdon, *Agendas, Alternatives, and Public Policy* (Harper Collins Publishers 1984)

makers, multiple interests at stake). As found in Chapter 1, climate change is a global issue characterised by complexities and technical uncertainties, making policy coordination necessary and increasingly challenging.⁵ Climate change policy actors are unfamiliar with the technical aspects and, therefore, find it hard to define straightforward solutions to the problem.

As the analysis in Chapter 5 shows, there are two main knowledge systems found in the climate change policy space of Kenya: LIKP and the scientific knowledge system. Communities, mostly farmers (including pastoralists, agro-pastoralists, fishers) who rely on their natural resources for survival, widely use LIKP at the sub-national level. This knowledge is passed from generation to generation. However, they are actively innovating this knowledge through processes of experimentation, (re)development, and copying innovative best practices from other local and international contexts while tackling old and emerging challenges, including climate change.

Local indigenous knowledge and practices in Kenya is extensive, sporadic, heterogenous, and used mainly by indigenous and local communities (ILC) in Kenya's five agroecological zones. This LIKP was not tied to a particular context, as most literature in the field of LIKP suggests. Evidence from Kenya revealed that during their interactions, the ILC were involved in processes of knowledge (re)development, copying knowledge and experiences from elsewhere, and sharing knowledge and experience on adaption to climate change.

The LIKP knowledge system was highly regarded throughout Kenya for its inherent value in promoting sustainability and care for the natural environment. Policy actors and groups in Kenya were aware of this LIKP for decision-making on climate change. Some of them had knowledge of the constitutional provision on the use of LIKP for the country's development and Article 7.5 of

⁵ Peter Haas, 'Introduction: epistemic communities and international policy coordination' [1992] *International Organisations* page numbers 46(1), 1-35

the Paris Agreement, which acknowledges that adaptation should be built on and led by, amongst other factors, ‘traditional knowledge, knowledge of indigenous peoples and local knowledge systems.’⁶ Generally, the policy actors admitted that they were keen to continuously use and promote their LIKP in the decision-making process. However, in Kenya, this knowledge system suffered from significant challenges. Some of these included how it is developed, captured in legalistic ways, maintained, and available during the policy and law-making process. Similar challenges were found in environmental policy-making processes as in the case of Aboriginal Communities of Canada’s NWT and those of Australia.⁷

In Kenya, the application of traditional knowledge in the policy and law-making process fell into two categories. The first category included those methods that are based on the official recognition of traditional knowledge, followed by the development of rules and procedures for the use of this knowledge by institutions and authorities. In this top-down approach, the structures of governance were constructed to accommodate LIKP, with high-level policy actors consisting of politicians and bureaucrats who showed little interest in accessing and using LIKP compared to scientific knowledge systems.

The second category increased the capacity of indigenous and local communities to bring their LIKP to influence the policy and law-making process. This bottom-up approach is characterised by initiatives designed to encourage the learning and transmission of traditional knowledge at the community level, as well as developing the means to communicate this

⁶ Paris Agreement (Paris, 12 December 2015, in force 4 November 2016)

⁷ Gearheard and others, ‘The Iglinit project: Inuit hunters document life on the trail to map and monitor arctic change’ [2011], *Can. Geogr./Le Géographe Canadien* 142, 42-55, Helen Wheeler & Meredith Root-Bernstein, ‘Informing decision-making with Indigenous and local knowledge and science’ (2020) *Journal of Applied Ecology* 57 (9) 1634-1643 Stephen Ellis, ‘Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making’ [2005] *Arctic* 58 (1) 66-77, Purcell, T., and Onjoro, E.A., ‘Indigenous knowledge, power and parity: Models of knowledge integration in Sillitoe, P., Bicker, A., and Pottier, J., eds. *Participating in development: Approaches to indigenous knowledge* (Routledge 2002) pp 162-188.

knowledge within the institutional arrangement for policy and law-making. These bottom-up processes were facilitated by civil society organisations. In the case of the Inuit Communities of the NWT of Canada, Ellis posited that institutional arrangements for incorporating LIKP are of little value if the knowledge cannot be accessed and is not forthcoming.⁸ Thus, many organisations worked with local communities and their LIKP to increase their capacity and ability to influence governance policies and procedures. As seen in the Aboriginal Communities of Canada's NWT, this was enhanced through developing initiatives that increased aboriginal groups' means to participate in environmental decision-making. These initiatives were typically implemented by providing funds to aboriginal groups to participate in environmental decision-making processes, such as public hearings and environmental assessments. In this context, it was found that increasing the capacity of indigenous and local community groups to participate in these processes enabled them to articulate their views and naturally promote LIKP, which were incorporated in the decision-making process. Also, it was found that building their political capital by making them realise the strength in their numbers enabled the promotion of their LIKP when politicians and bureaucrats engaged with them political processes of decision-making on environment and resource use. Here, their political capacity was used to identify and explore opportunities in political structures to negotiate and advocate for incorporating their LIKP with other knowledge systems.

Similarly, in Kenya, civil society, through their umbrella network (KCCWG), was engaged in building the knowledge capacity of the indigenous and local communities (ILC) to articulate their knowledge and also their political capital to engage in the climate change policy and law-making process. This was through the formation of the thematic working groups and the

⁸ Ellis (p69)

organisation of climate hearings in collaboration with other key policy actors, such as senators, representing each county in Kenya's Parliament. Civil society and other policy actors facilitated processes that enhanced the capacity of ILCs to participate in these processes to promote their LIKP. Some LIKP datasets in Kenya included communities' observations, local weather station data, and narratives on their successful practices. In addition, CSOs supported ILCs in using their political capital and power to identify and explore opportunities in political structures to negotiate and advocate for incorporating their LIKP with other knowledge. However, this is a novel area and how the different types and expressions of LIKP are identified and codified into tangible products that are communication-friendly and made available to policy-makers has not been examined in the scholarship.

There was also the scientific (also referred to as technical or expert) knowledge system which is generated both domestically and outside of Kenya. It was developed and used more so by policy actors, not in the indigenous and local community actor groups. Scientific knowledge is generated by academics and technical experts in Kenya in quantitative and qualitative forms and is prioritised by policy-makers as the basis for decision-making. These experts are found at different institutions and sectors in Kenya, including the MDAs, universities, research think tanks, individual experts, and consultants hired by the government and other policy actor groups to generate scientific knowledge. Regarding climate change, some scientific knowledge originates from outside Kenya, including knowledge included in reports produced by IPCC and other institutions such as the United Nations agencies, including UNEP, UNDP, World Bank, and FAO. Therefore, using scientific knowledge involved transferring and applying knowledge in a context that sometimes differs from that in which it is created.

In Kenya, scientific knowledge was transferred from the national to the local context through decentralised sector ministries and a network of extension workers of the Ministry of Agriculture, Livestock, Fisheries, and Co-operatives. These state agents and institutions then worked with local farmers to facilitate knowledge transfer. Scientific knowledge was relied upon because it was deemed necessary in order to respond to extreme situations which were recurrent in Kenya, such as floods, drought and extreme crop failure. However, it took a long time for communities to fully understand how scientific knowledge works and how it should be applied to their specific context. The evidence suggests that some adaptation solutions proposed to communities to tackle the impacts of climate change have recorded marginal and short-term results. For example, the introduction of a hybrid maize species, to enable communities grow food to cope with the food shortage due to droughts, was reported to have significant yields during the first growing season but failed in subsequent seasons and rendered the soils less fertile when compared to the indigenous species of crops and livestock. This constitutes the major challenge of using scientific knowledge, especially in addressing policy issues such as climate change, whose impacts were felt locally in Kenya.

In line with the literature on knowledge, the policy actors at different levels in Kenya developed, acquired, and used scientific knowledge and LIKP to make choices, influencing the policy-making agenda and outcomes. Also, the more knowledge policy actors can produce, process, and consolidate the more important and influential they became. Thus, each policy actor group prioritised acquiring, synthesising, storing, and maintaining knowledge which defined their interests. They used their knowledge in a competitive or complementary manner with others in policy and law-making process.

As seen in the background section on Kenya in Chapters 1 and 2, the literature acknowledges that LIKP plays an important role in making decisions on the environment and natural resource issues in diverse contexts, including Kenya, is growing.⁹ This literature suggested that combining and complementing LIKP with scientific knowledge can generate successful climate change response strategies, characterised by enhanced local participation and ecosystem-based and community-based adaptation implementation.¹⁰ In this context, both knowledge systems were seen as sources of power, shaping policy actors' influence.

However, several challenges limited the uptake of LIKP vis-à-vis scientific knowledge in the policy and law-making process. These included: (i) bureaucratic structures that did not recognise everyday informal language of lay people where local knowledge is embedded, (ii) the use of language understood and used by policy actor groups with higher status distorted communication, and (iii) overshadowing LIKP and its developers in the process. In theory, both knowledge systems were regarded for policy and law-making on issues crucial to the development of Kenya. The Kenyan Constitution (Articles 11 and 40) emphasised combining these two knowledge systems in all decision-making processes supporting Kenya's development. To support this constitutional requirement, the Government of Kenya enacted the Traditional Knowledge and Cultural Expression Act (TKCE) 2016, dedicated to capturing and protecting LIKP from the different counties for its incorporation in policy and development processes. This led to the development of strategies to ensure the implementation of the TKCE Act 2016, including

⁹ Jan Salick and Nanci Ross, 'Traditional peoples and climate change' in Planning for Climate Change (Routledge 2018), Elia Mwangi, 'The Role of By-Laws in Enhancing the Integration of Indigenous Knowledge' [2019] *Carbon & Climate Law Review* 13(1) 19-30, Nelson Chanza and Anton de Wit, 'Enhancing climate governance through indigenous knowledge: Case in sustainability Science ([016] *South African Journal of Science* 112(3) 1-7

¹⁰ Cuthbert Makondo and David Thomas, 'Climate change adaptation: Linking indigenous knowledge with western science for effective adaptation' [2018] *Environmental Science & Policy* 88, 83-91

establishing a Traditional Knowledge Digital Repository (TKDR), through the Kenya Copyright Board (KECOBO).¹¹

The TKCE Act 2016 was developed during the same period as the Climate Change Act 2016. Both laws deal with two intertwined issues as revealed in this study. However, the processes for developing them occurred in silos, and there was no evidence of the two mutually reinforcing each other. A thorough investigation of the advantage of having a law that captured and protected LIKP in a context where climate change laws were developed could enhance its incorporation is beyond the scope of this study.

Scientific knowledge and LIKP in Kenya appear to co-exist competing knowledge systems. Using the two knowledge systems in isolation or in combination for developing policy and law to tackle climate change had advantages and disadvantages. Local indigenous knowledge and practices was grounded with its power deeply rooted in the local context where it was generated. However, some of it was often tacit knowledge and hardly transferred and used out of the context where it was developed and used. In addition, the communities in the different agro-ecological zones were acquainted with specific LIKP for effective adaptation measures for securing livelihoods. However, responding to rapid environmental changes might go beyond the coping capacity of LIKP, rendering the knowledge unsuitable or even dangerous when altered to suit the situation thus leading to maladaptation.¹²

¹¹ Mathilde Pavis, 'Kenyan Reform on Traditional Knowledge and Traditional Cultural Expressions: Two Years On' (The IPKatFebruary 04, 2019) <<http://ipkitten.blogspot.com/2019/02/kenyan-reform-on-traditional-knowledge.html>> accessed 1 April 2019.

¹¹ Miles, M.B. and Huberman, A.M., *Qualitative data analysis: an expanded sourcebook*, (second edition. Sage 1994)

¹² Lori Thrupp, 'Legitimizing local knowledge: from displacement to empowerment for Third World people' [1999] *Agriculture and Human Values* 6(3) 13-24

On the other hand, scientific knowledge was often externally introduced and mostly prioritised by external policy actors who interact and engage with communities. In Kenya, scientific knowledge was promoted by elites and experts such as extension officers who were sometimes detached from the policy problem and those experiencing the problem at the grassroots level.¹³ Thus, it was often challenging for communities to understand and use this knowledge to respond appropriately to issues, including climate change, in the local context. Despite the shortcomings of the two knowledge systems, they were used in a complementary manner by policy actors during the climate change policy and law-making process. In the literature review in Chapter 2 and the analysis in Chapter 5, this complementary or combined use of LIKP and scientific knowledge in policy-making processes was presented with some examples.¹⁴

However, incorporating LIKP systems into climate adaptation legislation must be done cautiously for a few reasons. First, most of the perspectives on LIKP for climate change adaptations gathered from the interviews in Kenya and findings from literature gave an idealistic and romanticised view of LIKP with less focus on the challenges faced by the knowledge system. Second, while the knowledge system is recognised, guidelines on how it is incorporated alongside scientific knowledge to address the impacts of climate change and build the adaptive capacity of communities are yet to be developed.

The laws and policy recommendations on using LIKP are suggestive and intentional, and it is yet to be demonstrated how this works in practice. An examination of whether the complementary role of scientific knowledge and LIKP is successful in addressing the impacts of

¹³ Wolmer and others, *Understanding policy processes - A review of IDS research on the environment*, (Brighton, Knowledge, Technology and Society Team (KNOTS), Institute of Development Studies, Brighton 2006), 14

¹⁴ Radaelli Claudio, 'The role of knowledge in the policy process' [1995] *Journal of European Public Policy* 2(2) 159 – 183, Anthony Barker and Guy Peters (eds) *The Politics of Expert Advice. Creating, Using and Manipulating Scientific Knowledge for Public Policy* (Edinburgh University Press, Edinburgh, 1993).

climate change in the Kenyan context can only be established through an assessment of the actual implementation process of the Climate Change Act 2016. However, this is not within the scope of this study which focused on the process from 2006 to 2016, when the law was enacted. The implementation process is crucial to determine the effectiveness of laws to address the policy issue in question. For example, Vel and others raised this concern in the Indonesian context where distinct ‘policy communities’ started a process that helped shaped the 2014 Village Law in order to promote their long-term political agendas.¹⁵ Here, the involvement of local communities was facilitated by a particular features of Indonesia’s law-making process which enabled them to get a Bill passed that went against considerable vested interest from government bureaucracies.¹⁶ However, after the Bill went through parliament and was enacted as law, they were less successful in securing implementation of the new law, as this process was still dominated by the government bureaucracies that were defeated in the law-making process. In the Kenya climate change and law-making process, very few policy actors felt defeated or dissatisfied with the process. However, the difficulty in nominating members to NCCC which is expected to be a powerful body due to the potential resources it shall pull suggests that the bureaucrats and politicians can dominate this process in the future resulting with winners and losers.

8.2.2 Sub-question 2: How do different categories of policy actors associated with different systems of knowledge and sources of power engage in climate policy and law-making in Kenya?

¹⁵ Vel and others, ‘Law-making as a strategy change: Indonesia’s New Village Law [2017] *Asian Journal of Law and Society* 4 (2) 447-471

¹⁶ *ibid*

As noted above, climate change is a cross-cutting issue involving multiple actors operating in different sectors with their sectoral knowledge. The knowledge system held by the policy actors, including the level at which they are found in the governance arrangement and their socio-economic status, shaped the level of their power and relationships during the development of the Climate Change Act 2016. Haas aptly highlighted the relationship between knowledge and power when he states that policy actors' control over knowledge and information defines the level of power and the interest they prioritise in decision-making.¹⁷ As found in Chapter 6, policy actors located at local and national levels in Kenya contributed to the design of climate laws and policies.

In Kenya, developing responsive and sustained laws that enhanced the adaptive capacity of communities was made with inputs from these diverse policy actors. Regarding climate change adaptation, which predominantly occurred at local levels where the impacts are severe, developing laws that achieved community and ecosystem-based adaptation was sometimes characterised by the direct involvement of those active in adaptation. This was supported by the multi-actor and multi-sector approach adopted by the state and non-state actors involved in generating knowledge and evidence that was used to inform the climate adaptation agenda and the outcome of the process. These actors are found at different levels of governance, drawing their power from diverse sources. This power shaped their interest and interactions through the different stages and defined the process's outcomes. Based on this rationale, this study identified three main policy actor groups. These policy actor groups included: (i) the indigenous and local communities (ILC), (ii) non-state actor groups including civil society, private sector, researchers and research institutions, extension workers, and development partners, and (iii) high-level bureaucrats or government officials

¹⁷ Peter Haas, 'Introduction: epistemic communities and international policy coordination' [1992] *International Organisations* 46(1) 1-35

(parliament and MDAs). These actors had different levels of power derived from other sources, including their knowledge and this power differentiation shaped the interactions between the policy actors.

Firstly, the ILCs were primarily engaged in agriculture and lived in the different agro-ecological zones of Kenya for several generations. However, this did not imply homogeneity. Two sub-groups existed in this policy actor group. These included those at the centre of the local context who were relatively more powerful and influential than the more marginalised and poorer group at the peripheries. There were three sources of power within this policy actor group. The first and most crucial source of their power came from the development and use of LIKP to understand and respond to the impacts of climate change; they constituted most of this policy actor group. The sheer strength in numbers of this policy actor group who were active in (re)developing, innovating, and using LIKP resulted in a powerful political capital which they also leveraged to push for the incorporation of their LIKP and interests in the different stages of the process from the bottom.

High level policy actors often rely on the political capital found at the grassroots level to build legitimacy in general and specifically in the climate change policy and law-making process. As found in the literature review, Birkland refers to this as ‘power magnification’ by formation of bigger interest groups as opposed to individual policy actors pressuring for consideration of their issues, knowledge, and interests to counteract this small elite group dominance.¹⁸ The civil society and other policy actors in Kenya worked with the ILC to harness this capacity through direct engagement with these actors, especially during the climate hearings. However, this policy actor

¹⁸ Thomas Birkland, *An introduction to the Policy Process: Theories, Concepts, and Models of Public Policy making* (Routledge 2016, 4th Edition)

group remained poorly organised compared to other policy actor groups that relied on scientific knowledge. Thus, their power remained quiescent and underexploited.

Another source of power for some members of this actor group is their socio-economic status in relation to others within this policy actor group. For example, community members who have acquired some formal education or are engaged in socio-economic activities other than agriculture (teachers, retirees, business owners, etc.) acquire a higher status and power. These people, referred to by other policy actors in this group as the ‘big people’ or ‘big guns,’ often act as proxies in the decision-making processes, as analysis in Chapter 6 suggests. However, they are not elected or designated by the community members to play the representational or proxy role in the decision-making process. The higher-level policy actors often co-opt them. As a result, in the decision-making, these co-opted individuals represent their personal, as opposed to the common interest. Thus, those who participate and are consulted during the processes are not those policy actors who are powerful because of their ability to develop and use LIKP, which is relevant for understanding and responding to climate change.

The second group of policy actors included the high-level policy actor group is made up of the central and county governments (executive, senate, and parliament), MDAs, and government extension officers working at central and county levels. In Kenya, the policy and law-making occurred at national and decentralised levels in line with the country’s 2010 Constitution that introduced the devolution process. The constitution institutes a central level and county-level executive and legislative authority.

The different MDAs were involved and played active roles in the climate change law-making process as they captured and integrated the sector-specific knowledge through the inter-ministerial committee. These MDAs generate initial knowledge and propose bills to the parliament

based on the political, economic, or social crises, which the NCCC compiles at the Presidential cabinet office. The Ministry of Environment and Forests (MoEF) is a key ministry traditionally responsible for environmental issues in Kenya. However, climate change is a cross-cutting issue, as found in Chapters 1 and 2. The MoEF still has substantial power; the power to decide on climate change issues is spread across the sector ministries working on climate-related issues. The MoEF plays the coordination role of the inter-ministerial committee. Overcoming the siloed mentality of a single ministry wanting to control the process through an inter-ministerial process geared towards a joint climate change agenda has contributed to the incorporation and integration of knowledge, including the LIKP of ILC.

It was found that prior to the climate change policy and law-making process in Kenya the extension officers were the primary agents through which scientific knowledge was transferred to community levels. In some instances, they facilitated cross-fertilisation between LIKP and scientific knowledge through the dedicated demonstration farms created at community levels. They often positioned themselves as those with power and authority to bring policy solutions and strategies developed by the state for application at the local level, as found in Chapter 6 (Section 6.2.3). On the other hand, communities saw them as detached from the policy problem and how the problem was experienced at the local levels. Communities have remained sceptical about the external policy solutions and strategies as they have been unsustainable. Generally, regarding the role of extension officers in the climate change policy and law-making process in Kenya, there has been a significant reduction (or complete breakdown) in the interactions between extension workers and local communities. Due to limited budgets allocated for extension services and the technical nature of climate change, they were not as active in the process as they and the local communities would have expected.

However, from Chapter 5 on knowledge in climate policy and law-making, climate change was complex, and the knowledge required to design policies and laws was widespread amongst policy actors, sectors, and levels. In other words, the law and policy-making needed to tackle sector-specific policy issues were more straightforward where single policy actor groups or state institutions in charge had the utmost authority to set the policy agenda and outcome of the process.

Climate change is different because it is a cross-cutting issue, as highlighted in Chapter 5. It was equally an issue that intersected with more than one sector and level of governance, therefore, needing a multi-sector approach to address them.¹⁹ These sectors and policy actors were often implicated in multiple and, sometimes, complex governance arrangements.²⁰ The power to develop climate policy and law in Kenya was distributed or fragmented amongst other policy actor groups at these different levels. As in section 8.2.1 above, the knowledge generated by diverse policy actor groups can assist the governments in their statutory role in understanding and establishing the way the climate is changing and how to classify and respond to the impact using laws and policies.

The third group of policy actors included the non-state actor policy groups including CSOs, think tanks, and development partners, also referred to in Kenya as public benefit organisations, were key players in the climate governance process. The Kenya Climate Change Working Group (KCCWG), the leading network that groups different consortia of community-based and thematic-based organisations, played a frontline role in the climate change agenda in Kenya. It operated an

¹⁹ Evert Meijers, Dominic Stead 'Policy Integration: what does it mean and how can it be achieved? A multidisciplinary review' 2004 (Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies-Interlinkages and Policy Integration), http://userpage.fu-berlin.de/ffu/akumwelt/bc2004/download/meijers_stead_f.pdf, accessed 20/10/2020; Imran Ahmat, 'Climate Policy Integration: Towards operationalization. In: Economic & Social Affairs'. (DESA Working Paper N.73. New York 2009), https://www.un.org/esa/desa/papers/2009/wp73_2009.pdf, accessed 25/07/2022

²⁰

open-door policy that enabled other non-state actors, including multilateral and bilateral development partners, to join. The network actively mobilised resources and built the capacity of its members to engage with constituents, including those at sub-national levels, to generate the knowledge that was used to develop the initial climate change bill. Thus, the CSOs derived their power from three sources, including the strength in their numbers and coordination ability, their ability to generate up-to-date and evidence-based knowledge needed for climate change law and policy, and the ability to pool technical and financial resources locally and from international financial institutions for the climate change agenda.

During the climate change legislative process, the KCCWG used a thematic group approach with groupings formed around different sectors based on their vulnerability to climate change, including agriculture, water, health, energy, tourism, industries, and infrastructure. Sector-specific evidence was generated through these groups. However, such an approach had disadvantages and advantages. It was disadvantageous because some policy actor groups, such as the agriculture and infrastructure thematic groups, received more financial and technical support than others. These sectors became more powerful and influential, with sector-specific knowledge, which allowed them to gain an edge over the others. This resulted in some form of silo mentality amongst these powerful sectors as they sought to promote their sector interests in a process requiring a multi-sector approach. Conversely, it was advantageous because the agriculture sector received substantial technical and financial support and, thus, there was a more direct engagement between the CSOs and the ILCs operating in this sector during the climate hearings, as described in Chapter 5 (Section 5.3.2). The resulting top-down and bottom-up interactions amongst policy actors at different levels of governance created opportunities for the intersection of scientific and LIKP developed and used by agrarian communities to understand and respond to climate change.

However, as will be seen in the next section, the incorporation of LIKP into policy and law-making is not an automatic result of ILCs participating in the process.

Regarding the measures to address the power asymmetry resulting from access to and control of resources, the KCCWG took steps to minimise this power asymmetry between sector groups by putting in place an inclusive strategy for public awareness creation, policy research and analysis, and advocacy on vulnerability assessments, baseline studies, advocacy, involving the identified sectors.²¹ The climate hearings they organised facilitated this process.

8.2.3 Sub-question 3: How do the institutional arrangements in the domestic policy space and beyond support the engagement of the policy actors and the incorporation of the knowledge and interests in the policy and law-making process?

The Government of Kenya (GoK) recognises climate change as a cross-cutting issue governed and located in a national-to-local level hierarchical structure and subjected to the influences of external institutions and regimes. This results in a complex policy space with opportunities and constraints for multiple actors to influence the incorporation of their knowledge into laws and policies. Thus, the GoK established a multi-level governance arrangement from sub-national, national to international levels, involving diverse policy actor groups and different modes of interactions. This multi-actor, multi-sector, and multi-level approach to climate change law-making is supported by the establishment of institutions that cover all aspects of climate change in Kenya, including a National Climate Change Council (NCCC) chaired by the President and comprised of four Cabinet Secretaries from key line ministries, including economic planning,

²¹ KCCWG, 'Climate Change Legislation in Kenya: 2008-2016 The Story of the Journey from 2008 – 2016', (2016 Kenya Climate Change Working Group)
<https://www.kccwg.org/pdf/Climate%20Change%20Legislation%20Final.pdf>, accessed 22 February 2022

energy, environment, and forestry. Also included as part of this national-level body is the chairperson of the Council of Governors and representatives from the private sector, marginalised communities, civil society, and academia. In addition, a Climate Change Directorate exists in the MoEF that coordinates policy integrations and mainstreaming across the MDAs, and the county governments through the established Council of Governors.

Also, at the national level, the government established an inter-ministerial committee on climate change, created Semi-Autonomous Government Agencies and Authorities (SAGAs), and institutions such as the National Environmental Management Authority (NEMA) that all deal with relevant climate change issues, including the incorporation, integration and mainstreaming of diverse knowledge in the development of the Climate Change Act 2016. These institutions established specifically to address climate change at the national and sub-national levels, are complex compared to those used to tackle sector-specific policy issues. This complexity is a result of the cross-cutting nature of climate change.

These legal institutions put in place by the GoK to address climate change as a cross-cutting issue facilitate inter-organisational processes amongst state and non-state policy actor groups. This results in a mixture of horizontal and vertical interactions that facilitate policy integration. Integrating existing policies that deal with climate change within and across sectors, including forestry, agriculture, health, transport, infrastructure, tourism, contributed to overcoming the silo mindset held strongly by some state institutions, particularly the MoEF. As presented in Section 8.2.2 above, the MoEF, which hosts the permanent Climate Change Directorate, is the appointed sector ministry that ensures that policy integration occurs uniformly and across the different sectors. This institution facilitates horizontal and vertical interactions, which result in policy integration. More specifically, the Kenya Meteorological Department (KMD) captured the

rainmaking processes and materials linked to the widespread tradition that enabled local communities to predict, cause, redirect, or dispel rainfall and then combined this with scientific data for reliable weather forecast. The respondents were unanimous that mainstreaming rainmaking traditions in the national climate change action plan would result in a better response to the phenomenon. This analysis corroborates the literature on the integration of scientific and LIKP for better climate change decision-making.²² The successful integration entails incorporating knowledge generated by the sectors including LIKP of ILCs, which are mostly agrarian.

The complex issue of climate change policy and law-making in Kenya is further compounded by the evolution in the governance system from 2010 onwards. The 2010 Constitution changed the governance system from a centralised to a decentralised one. The constitution provides a robust legislative groundwork for policy and law-making from the sub-national level to the national level. The development of Climate Change Act 2016 served as a litmus test for the new constitution. The institutional arrangements established by the constitution facilitated the development of the foundational policies and strategies for developing the Climate Change Act 2016. Some of these include the Kenya National Adaptation Programmes of Action, National Climate Change Response Strategies, National Adaptation Plan, the County Integrated Development Plans (CIDP), and County Climate Change Acts (CCA). In addition, the 2010 Constitution laid the framework for policy integration from the decentralised government to the central level. In Kenya, these two levels of governance are setup to carry out similar policy directions. This multi-level governance arrangement supports a mixture of horizontal and vertical

²² Tom Kwanya, 'Mainstreaming Indigenous Knowledge in Climate Change Response: Traditional 'Rainmaking' in Kenya' (The 8th International Knowledge Management in Organisations Conference 2013) 603-615 https://link.springer.com/chapter/10.1007/978-94-007-7287-8_49 accessed 18/10/2019

interactions contributing to policy integration across sectors and governance levels. These findings tie with the recommendations presented in Chapter 11 of the 2010 Constitution, which lays down the guidelines for how law and policy interactions and the process for developing them should occur between the different levels of governance.²³ Some previous scholarship looked at the roles of horizontal and vertical interactions for climate action in Kenya.²⁴ The central and decentralised governments have specified mandates and functions. This institutional arrangement creates opportunities for the climate change legislative process to be collaborative, multi-level, and devolved, facilitating the participation of diverse actors and sectors to enhance the incorporation of diverse knowledge.

The process of developing Kenya's Climate Change Act 2016 was resource intensive, time-consuming and resulted in the generation of power asymmetries when a selected few were consulted to participate in the policy and law-making process, as highlighted above. The 2010 constitutional arrangement introduced a complex process of devolution of powers and resources from central to county levels. This new institutional arrangement is highly beneficial as it emphasises stakeholder participation and consultation throughout the development process in Kenya, which is interpreted in this thesis to include the development of policies and laws. However, public participation is vaguely defined in this national law. This lack of clarity as to what the threshold for public participation and consultation should be, further complicated an issue that is ubiquitous and already hard to deal with. Some policy actor groups used this vagueness to settle political scores and disputes with undesirable consequences on the climate change policy and law-making process. For example, the President's highly controversial decision to reject the

²³ GoK, 2010 Constitution Ch 11

²⁴ Johara Bellali and other, Multi-level governance in Kenya: Activating mechanisms for climate action (Berlin Adelphi/ILEG 2018) p. 20

first Climate Change Bill in 2014 on the grounds that the threshold for public participation was not attained arises in every discussion and policy document on the Kenya Climate Change Act law-making process.²⁵ This further complicates a process that involved climate hearings and the development of policies and strategies for five years (2009-2014), including the 2010 National Climate Change Response Strategy and the 2013-2017 National Climate Change Action Plan (NCCAP), developed in 2012, that paved the way for the development of the Climate Change Act 2016. The return to the drawing board to conduct further stakeholder consultations for two more years following the presidential rejection in 2014 was beneficial in getting more input, especially from local levels. However, this required significant investment in time, financial, and technical resources.

Compared to other contexts, like the United Kingdom, Zander posits that engaging in consultation to make laws takes up to a third of the time required to develop a law.²⁶ While this time requirement varies, other shortened forms of consultations risk not yielding the desired results or jeopardising the credibility of the process. For example, the use of surveys, polls, and newspapers could be less resource-intensive but ‘...breeds bureaucracy’ and provokes negative reactions from those excluded.²⁷ A similar position is held by Cretney, who states that those consulted make up a select group of committee members, elites, and those in executive positions in participating institutions who may have views that do not mirror that of the wider membership.²⁸ Such legislative processes could potentially be rejected or make amendments politically harder to

²⁵ Transparency International Climate Governance Network, ‘An Analysis of Possible Reasons for the Rejection of the proposed Climate Change Bill 2012’ (Transparency International Kenya 2012)

²⁶ Michael Zander, *The Law-Making process* (6th Edition, Cambridge University Press 2004) p473; The National Assembly of Kenya, FactSheet No. 2 How Law is Made (Parliament of Kenya 2017) http://www.parliament.go.ke/sites/default/files/2018-04/2_How_Law_is_Made.pdf Accessed 22/05/2022

²⁷ *ibid*

²⁸ Stephen Cretney, ‘The Politics of Law Reform: A view from the Inside’ [1985] *Modern Law Review* 48(5) 493-517

achieve before parliament.²⁹ Although the initial idea of the Climate Change Bill was introduced as a private member's bill following initial knowledge on the policy issue compiled by civil society, the subsequent stages, including the public participation and consultations during the agenda setting and formulation, was carried out using methods that breed some bureaucracy.

Although the legislating the Climate Change Act 2016 took a very long time, the methods used for participation and consultation of policy actors resulted in power asymmetries amongst the policy actors and limited the incorporation of LIKP. The participation and consultation processes were carried out in line with Articles 56, 100, and 118 (1) 9(b) of the Constitution, the Parliamentary Fact Sheet 27, and Schedule 4(2)(f) of the Climate Change Act 2016. These all give specific details on what public participation consultation entails.³⁰ Some of these include reaching out to stakeholders by publishing relevant information in at least two newspapers with national circulation, at least one newspaper circulating in the locality, at least one radio station broadcasting in the locality, and holding meetings with agreed plans at all levels.³¹

As found in Chapter 7 (7.6.1), some of these processes are exclusive as not all policy actors have access to the infrastructure to use these mechanisms for participation and consultation of stakeholders. Some of these mechanisms constrain the uptake of LIKP generated from the local levels. The policy actors at this level see their participation as a tokenistic and symbolic gesture to influence them to veto what others have decided.³² Notwithstanding, the Climate Change Act 2016

²⁹ *ibid*

³⁰ GoK, 2016 Climate Act

³¹ Parliament of Kenya, National Assembly, Public Participation in Legislative Process (Factsheet 27, so17) <http://www.parliament.go.ke/sites/default/files/2018-> Accessed 6th April 2022.

³² Joseph Njoroge and others, 'Climate Change Policy-making Process in Kenya: Deliberative Inclusionary Processes in Play' (2017) *International Journal of Climate Change Strategies and Management* 9(4) 535-554
Joe Ageyo, & Idaah Muchunku, 'Beyond the Right of Access: A Critique of the Legalist Approach to Dissemination of Climate Change Information in Kenya [2020] *Sustainability* 12(6) 1-15.

is widely accepted by Kenyans, and the risk of rejection is low. However, this can only be assessed following a period of implementation of the Act and its accompanying policies.

It is worth noting that the incorporation of LIKP in environmental decision-making has been found in the context of aboriginal communities in Canada and Australia not to be an automatic result of their participation in these processes.³³ It was found that the organisation of the process for participation in these contexts was not very different to that in Kenya. In Kenya, it was found that some structures and procedures for participation in the climate change policy and law-making process were very much entrenched in the western cultural tradition of decision-making, even though they allow for ILCs to participate within the confines of this tradition. After the climate hearings at the community level and identification of issues, the participation of ILCs diminished slightly as the process moved from the issues identification stage to the agenda setting and policy formulation stage. This is because discussions held away from the community and the language in the meetings and workshops were often rife with technical and scientific terms. The documents in such discussions are based on written documents and correspondence in English skewed towards scientific evidence, which is different from the way LIKP is communicated. As a result, the traditional knowledge experts (often elders) and their proxies rarely had much understanding of the policy and law-making process, let alone the material discussed as evidence in meetings and workshops, which limited their ability to contribute meaningfully. For example, most of the ILCs interviewed for this study reported that ILC representatives do not report the outcomes of these meetings back to their communities because they lack understanding about what was discussed.

³³ Leanne Simpson, *Aboriginal peoples and knowledge: Decolonizing our processes* [2001] *Canadian Journal of Native Studies* 21(1) 137-148, Jena -guy Goulet, *Ways of knowing: Experience, knowledge and power among the Dene Tha* (UBC Press 1988)

In addition to the sub-national and national level interactions, the 2010 Constitution also emphasised an interconnectedness of domestic policy processes with international regimes. Kenya plays an influential role in global climate policy processes, and these international processes (including financial regimes and laws), in turn, shape its domestic climate change policy space. Thus, three levels of interaction exist around Kenya's climate policy process: the sub-national, national, and international. The policy actors have different views about the nature and influence of interactions between these different governance levels on the climate change policy and law-making process. Some of them view climate change as a western conception. A group of policy actors referred to as the 'growth first stonewallers' opine that the GoK should do the minimum to address these issues, compared to other policy issues. This group remains sceptical about GoK's motive to engage in the climate legislative process especially viewing it solely as meeting a conditionality to access international funding. The second group referred to as 'progressive realists and internationalists' believe the GoK is taking ownership of the domestic climate change agenda, engaging diverse policy actors across sectors and levels, leading to the development of a law that considers the contextual realities of climate change in Kenya.

8.3 Response to the overall research question

This study answered the overall research question *how does the law and policy-making process on climate change in Kenya enable or constrain the incorporation of LIKP?* To answer this question, an analytical framework combining three themes was established from relevant elements of the literature review on knowledge systems, law, and policy-making. The themes included the role of knowledge, actors and power relations, and institutional arrangements in Kenya's policy space. These were used to guide the data collected and inform the analysis to

identify the factors that enhanced or constrained the incorporation of LIKP in the Climate Change Act 2016 making process.

8.3.1 Climate change is a cross-cutting issue needing cross-cutting responses

The analytical framework integrating knowledge, actors and power relationships, and institutional arrangements are developed with the following assumption. First, climate change is a cross-cutting issue. The term cross-cutting issues, used interchangeably with cross-sector issues, has been examined in different literature and studies as an issue that touches on various sectors, involving diverse actors operating in different sectors, with sector-specific knowledge and interests, and also needs multi-level governance to address it.³⁴ Climate change meets these characteristics and addresses it through policies and laws entails a complex interaction process between actors with their individual and sector knowledge.³⁵

Secondly, climate change impacts actors differently. With a focus on Kenya, the agriculture sector is most severely impacted. The smallholder farmers who make up over 80% of Kenya's population are not only victims of environmental changes such as climate change. They have historically developed and used their LIKP to understand and respond to such changes and sustainably manage their natural resources and wellbeing.

³⁴ Kate Urwin & Andrew Jordan 'Does Public Policy Support or Undermine Climate Change Adaptation? Exploring Policy Interplay Across Different Scales of Governance' [2008] *Global environmental change* 18(1) 180-191
Janelle Knox-Hayes, 'Negotiating climate legislation: Policy path dependence and coalition stabilization' [2012] *Regulation & Governance* 6(4) 545-567, Thomas Birkland, *An Introduction to Policy Processes, Theories, Concepts and Models of Public Policy Making* (4th Ed, Routledge 2015) 7-11

³⁵ Derrick Brinkerhoff, 'Rebuilding governance in failed states and post-conflict societies: core concepts and cross-cutting themes' [2005] *Public administration and development*, 25(1) 3-14; Evert Meijers, Dominic Stead 'Policy Integration: what does it mean and how can it be achieved? A multidisciplinary review' 2004 (Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies-Interlinkages and Policy Integration), http://userpage.fu-berlin.de/ffu/akumwelt/bc2004/download/meijers_stead_f.pdf, accessed 20/10/2020

Thirdly, people faced with uncertainties, such as climate change, which threatens their livelihoods, will develop diverse survival strategies including available knowledge supported by the institutional arrangements in the context.³⁶ These institutions are characterised by vertical and horizontal interactions between sectors, actors, and levels of governance at both domestic and international levels.³⁷ These interactions enable and constrain the integration or mainstreaming of policies within and across sectors (such as agriculture, energy, deforestation, transport, and infrastructure).³⁸ As a result, incorporating diverse knowledge, including LIKP of policy actors, is equally enhanced and constrained in different ways.

8.3.2 A favourable policy-making space for the incorporation of LIKP

Four approaches shape law and policy-making in Kenya: garbage can, institutionalism, pluralist, and elite approaches. These are linked to the literature review on law and policy-making in Chapter 3. The garbage can model involves diverse actors with a range of knowledge and interests engaged in setting policy agendas as the basis for policy outcomes.³⁹ This approach argues that decisions are made from a comparatively isolated stream of events, including participants' problems, solutions, knowledge, and interests.⁴⁰ This is closely related to the pluralism approach,

³⁶ F. Nunan, *Understanding poverty and the environment: analytical frameworks and approaches* (Routledge 2015); Arun Agrawal & CC Gibson, 'Enchantment and disenchantment: the role of community in natural resource conservation' (1999) *World Development* 27(4) 629-649, James Acheson, 'Institutional failure in resource management' [2006] *Annu. Rev. Anthropol.* 35, 117-134

³⁷ Johara Bellali and Others, *Multi-level climate governance in Kenya - Activating mechanisms for climate action* (Berlin: Adelphi/ILEG 2018), p. 20.; Guy Peters, 'Managing Horizontal Government: The Politics of Co-Ordination' (1998) *Public Administration* 76(2) 295-311

³⁸ Karl Hogl, Daniela Kleinschmit & Jeremy Rayner, Achieving policy integration across fragmented policy domains: Forests, agriculture, climate and energy [2016] *Environment and Planning C: Government and Policy* 34,399-414 Nunan, F., Campbell, A. & Foster, E. 'Environmental Mainstreaming: The Organisational Challenges of Policy Integration' [2012] *Public Administration and Development*, 32(3): 262-277

³⁹ Cohen and Others, 'A Garbage Can Model for Organisational Choice' [1972] *Administrative Science Quarterly* 17(1) 1-25, James Surowiecki, *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations* (Doubleday, New York 2004)

⁴⁰ *ibid*

which entails the participation of diverse actors, interest groups, and organisations in policy-making. In this case, outcomes are endorsed through competitive processes often involving unequal interest groups.⁴¹ In other words, the pluralism approach to policy and law-making entails knowledge, power, and resources, which are framed, negotiated, and implemented by different groups at different scales (in and out of where law-making is taking place). Policy actors in the policy-making process always seek to promote their knowledge on the policy agenda amidst dealing with acceptance or rejection from other interest groups. The institutionalism perspective is closely aligned to the pluralism approach, which focuses on formal and established arrangements of institutions, organisations, and networks that exist within and beyond the policy-making space or context.⁴² These arrangements also entail the context's governance system, authority, and power relations.⁴³ Beyond these three interconnected perspectives on how law and policy-making occur in Kenya, is the elitist theory approach. In this approach, comparatively few people in key positions amongst different stakeholder groups (NGOs, community, industry, academia, media, government, etc.) significantly control the law-making process.⁴⁴ This is often because of their ability to access and control state political and economic resources. This approach was found amongst the ILCs where some actors in the group developed elitist attitudes as result of their higher socio-economic and political status and attempted to control those of lesser socio-economic status. In addition, a small number of bureaucrats (by virtue of the position and statutory obligations to make policies and laws) had access to resources and power to dominate the process. However,

⁴¹ Ibid 201

⁴² Charles Cochran & Eloise Malone *Public Policy: Perspectives and Choices* (Boulder, Colo., Lynne Rienner 2005)

⁴³ Di Gregorio and Others, 'Multi-level Governance and Power in Climate Policy Networks' (2019) 54 *Global Climate Change* 64, 64-66; Thomas Tanner & Jeremy Allouche, 'Towards a New Political Economy of Climate Change and Development' (2011) 42 *IDS Bulletin* Volume 1-14, <https://bulletin.ids.ac.uk/index.php/idsbo/article/view/406>. Accessed 18/10/2019

⁴⁴ Michael Kraft & Scott Furlong *Public Policy: Politics, Analysis, and Alternatives* (SAGE 2012), Michael Hill & Frederic Verone, *The Public Policy Process* (7th edn, Routledge 2017)

because climate change policy and law-making was a new area that needed multi-sector and multi-actor input in the process, this power was fragmented amongst the different policy actors as opposed to concentrated in the hands of a few powerful elites.

Accordingly, the approaches to policy and law-making shaped the institutional and political commitments, policy frameworks, commitments of necessary resources, and engagement of policy actors at different governance levels, as analysed in Chapter 7. These factors either enhanced or constrained the incorporation of diverse knowledge, including scientific knowledge and LIKP, in Kenya's climate change law-making process analysed throughout this thesis.

8.3.3 Co-existence of LIKP and scientific knowledge

Climate change is a novel and complex policy issue, and knowledge is essential in understanding and responding to it. The knowledge component cannot be dissociated from the actor component of the analytical framework developed for this study. The actors hold knowledge, and the interactions between the actors within, across sectors, and governance levels shape the level of incorporation of knowledge. In Kenya, the diverse actors predominantly develop and use scientific and LIKP, work in different sectors at different levels, draw their power from various sources and interact with each other in diverse ways.

Scientific knowledge and LIKP are the two knowledge systems used to tackle climate change in Kenya. The policy actors prioritise the different knowledge systems, resulting in competition in the use of these knowledge systems. In tackling climate change through policies and laws in Kenya, these knowledge systems are used by policy actors in either a competitive manner, complementary manner, or a combination of both. The efforts made by the KMD and the KCCWG to directly engage with local communities where LIKP is developed and used, enabled

these policy actors to participate and input their knowledge in some stages of the climate policy and law-making. This included the KCCWG thematic working groups that enhanced the complementarity process of LIKP and scientific knowledge through a top-down and bottom-up interaction and the KMD network of community radios that built upon communities' LIKP and scientific knowledge for weather forecasting and developing early warning systems. Although some respondents criticised the climate hearings on the grounds that they were not participatory enough, the general feeling was that they created bottom-up opportunities for knowledge and interests to be gathered during the first stage (issue identification) of the process.

Policies and strategies that paved the way for the implementation of the Climate Change Act 2016, such as the agriculture and livestock development and environmental sectors policies, provided examples of LIKP relevant for tackling climate change already in use. Notably, the Climate Smart Agriculture Strategy 2017-2026 uses a combined LIKP and scientific knowledge to research and disseminate superior (drought tolerant, salt-tolerant, pest and disease resistant) crops, promoting indigenous knowledge on crops, breeding of animals from various agroecological zones that adapt well to climatic variances, protection of natural resource base (soil and water conservation using indigenous techniques) which are routine practices of agrarian communities.⁴⁵ The policy and law to address climate change in Kenya is informed by a combination of scientific knowledge and, to a lesser extent, LIKP. This study found that statements contained in the policies and law are predominantly aspirational. Clearly explaining the process of the co-production of climate policies and laws using LIKP and scientific knowledge is challenging. This is not only a problem in Kenya. At the international level, the statements in the climate change

⁴⁵ UNDP, Kenya Smart Agriculture Strategy 2017-2026 https://www.adaptation-undp.org/sites/default/files/resources/kenya_climate_smart_agriculture_strategy.pdf, accessed 29/07/2022 GoK, National Climate Change Response Strategy: Executive Brief, 2010, <http://www.environment.go.ke/wp-content/documents/complete%20ncrcs%20executive%20brief.pdf>

regimes, such as the Paris Agreement's Article 7.5, are aspirational statements with no clear mechanism on how this works in practice. Notwithstanding, the consideration given to LIKP in Kenya's Climate change policy and law-making could be seen as positive step. Translating the Climate Change Act 2016 and its related policies into practice can demonstrate effectiveness of a co-produced policy and law. This is an area for further research. Despite the positive views about LIKP in Kenya, it was found that some of policy actors held idealistic views about the use of LIKP to address climate change with its magnitude and scale. Ignoring the challenges faced by the knowledge system and attempting to use it in isolation to adapt to climate change, which was rapid and drastic, could render it unsuitable or even dangerous when altered to suit the situation. While studies establishing such occurrences are scanty, it is worth highlighting this.

8.3.4 Power distribution between fragmented and concentrated power with a mix of cooperation and conflict (bargaining) interactions.

A mix of the garbage can, pluralist, institutionalism, and elite perspectives characterised the climate change policy and law-making process in Kenya. Therefore, there are diverse policy actor groups with different forms of knowledge and interests that shaped their levels of power and nature of interactions in the climate change policy space. In this case, the knowledge, agenda, and outcomes in the policy and law-making process were negotiated and endorsed through competitive, negotiation, and bargaining interactions often involving unequal policy actors and policy actor groups. Each of these sought to promote their knowledge and interests in the agenda amidst dealing with acceptance or rejection from others. The conflictual cooperation and bargaining interactions amongst the policy actors were important elements necessary for consensus-building process to arrive at a joint climate change agenda and the development of an

acceptable law that incorporated the diverse knowledge of the policy actors involved. The length of time it took for the process to be completed was characterised by addressing conflicts related to stakeholder participation after the rejection of the first draft Bill, which was necessary to build consensus amongst the majority of the policy actors. The resulting climate change policy outcome in Kenya was thus an output of competing interests of groups rather than the output of powerful elite interests and policy actors with statutory powers.

Unlike other sector-specific policy issues where the Kenyan Parliament and other government bodies had the utmost power to legislate or develop knowledge to make proposals for policies and laws through all the stages of the process, climate change policy and law-making was different. Even though these high-level policy actor groups retained their statutory powers at the issues and needs identification, and policy formulation stages of the climate change policy and law-making process, this power was fragmented amongst policy actors, such civil society. These policy actor groups were able to generate evidence from the grassroots level and then pool the necessary resources. The frontline role played by civil society to develop the Climate Change Bill that was taken up by parliament attested to the fragmented nature of the power at the onset of the process. However, when the Bill was taken over by high level bureaucrats, the power shifted to them and the interactions between them became characterised by formal consultations. It was reported that, although the high-level bureaucrats in their statutory rights were more powerful at the later stages of the law and policy-making, they relied on the capacity of other policy actor groups, including the civil society, the ILCs and their partners, and proxies to make the final decision.

8.3.5 Multi-level governance arrangements for climate law-making in Kenya

The institutional arrangements present both opportunities and constraints for incorporation of LIKP and scientific knowledge in the climate change law and policy-making process in Kenya. Firstly, the existence of a policy environment that promotes citizens', including minorities and the marginalised, participation at all levels of governance supported interactions between actors and intersection of their knowledge. Although elaborate, the Kenyan policy actors are aware of the guidelines for public participation. However, mechanisms for public participation contained in these guidelines are not accessible nor are they sufficient to enhance public participation and consultation of all policy actors. For the climate change law and policy-making process, this shortcoming was addressed in two main ways. Firstly, through the lengthy and resource intensive period dedicated to public participation and consultation. Secondly, through the enabling environment for the operation of CSOs and other development partners who work directly with local communities using bottom-up approaches. This facilitated the participation of diverse actors, especially local communities, and enhanced the uptake of their LIKP and incorporation into the policy agenda and final policies and laws.

Another enabler for the incorporation of LIKP facilitated by the institutional arrangements was the availability of technical and financial support for the climate change legislative process. Financial resources support the government and other non-state actors in engaging in an in-depth process to gather knowledge and evidence across sectors and levels that inform the climate agenda. At the same time, some sectors received more financial and technical support than others. Thus, those sectors became more powerful due to the relevant knowledge on climate change they generated, narratives they developed, and the broad advocacy they carried out to influence policy in their direction. In some instances, these sectors wanted to prioritise their knowledge and

interests above all others, resulting in a siloed mindset. The GoK addressed the emergence of these siloed mindsets among the policy actors by using a sustainability approach by calling the attention of actors to understand climate change as a sustainable development issue that cuts across all sectors of the economic, social, and political life of Kenya.

Lastly, an indirect but significant constraint to incorporating LIKP in the climate change legislative process in Kenya was the disparity in access to climate-related information between the national and sub-national levels. The channels for disseminating information and spaces and location of public consultation were not inclusive and excluded those who had traditionally been side lined from decision-making processes. This limited the potential for the LIKP knowledge system holders to understand the process and fully make inputs at the different stages. For example, Article 118 (1) 9(b) of the Constitution, the 2015-2030 National Adaptation Plan and Schedule (s. 4(2)(f)) of the 2016 Climate Change Act gave specific details on what public consultation and participation entailed. Some of these included reaching out to stakeholders by publishing relevant information in at least two newspapers with national circulation, at least one newspaper circulating in the locality, and at least one radio station broadcasting in the locality. This mechanism excluded most communities at sub-national levels that did not have access to this communication infrastructure. Even if they accessed them, they had limited formal education that permitted them to read, listen to and understood the messages published and broadcasted. The analysis in section 7.6.1 of Chapter 7 showed that some of these mechanisms limited the uptake of LIKP that was generated from the local levels. The policy actors at this level saw their participation as a tokenistic exercise to get them to veto what others had decided.⁴⁶ Notwithstanding, the Climate Change Act

⁴⁶ Njoroge and others, 'Climate Change Policy-making Process in Kenya: Deliberative Inclusionary Processes in Play' [2017] *International Journal of Climate Change Strategies and Management* 9(4) 535-554
Joe Ageyo, J., & Idaah Muchunku, 'Beyond the Right of Access: A Critique of the Legalist Approach to Dissemination of Climate Change Information in Kenya' [2020] *Sustainability* 12(6) 1-35

2016 is widely accepted by Kenyans, and the risk of rejection of the final policy and law is low. However, this can only be tested when the Act and its accompanying policies are implemented, administered, and evaluated.

8.4 Contribution of the thesis

This thesis has offered extended knowledge on policy and law-making in the novel area of climate change regarding the limited attention to the incorporation of LIKP. It contributes to theoretical knowledge on policy and law-making towards the incorporation of LIKP as well as empirical evidence on national policy and law-making to tackle climate change in Kenya. In addition, the analytical framework that brings together three interdependent themes (knowledge, actors, and institutional arrangements), wherein there is limited research addressing them together, is a contribution made by this study. These areas of contribution are presented below.

8.4.1 Contribution 1: Theoretical knowledge on policy and law-making towards the incorporation of LIKP, using Kenya as a case study.

This research contributes to the theoretical knowledge on policy and law-making towards incorporating knowledge, especially the LIKP of agrarian communities. This is in addition to empirical evidence on law and policy-making on climate change as a cross-cutting issue with significant impacts in Kenya. It expands knowledge on policy incorporation by bringing together three perspectives connected using the specific case of the development of the Kenyan Climate Change Act 2016. These theoretical lenses included knowledge systems, policy actor and power

relationships, and institutional arrangements. Previous studies have only marginally addressed this, with the few attempting to deal with the issues in isolation rather than being mutually interdependent.⁴⁷ Thus, this analytical framework guiding the analysis of experiences of policy actors within and across sectors and governance levels in Kenya could explain what enables or constrains the incorporation of LIKP regarding climate change as a cross-cutting issue.

Literature on policy and law-making to address environmental disturbances, such as climate change, has given little attention on how to incorporate the LIKP of local communities that are directly impacted. There is also little evidence of comprehensive studies on climate change legislative processes and how diverse actors, including state and non-state actors with competing interests, knowledge, and levels of power, interact and shape the outcome of such processes. Furthermore, there is yet to be a consensus on the international and academic normative content of climate change laws.⁴⁸

This thesis offers knowledge on policy and law-making regarding the issues raised above using the specific case of the Kenyan policy and law-making process in response to climate change. It makes a theoretical contribution to knowledge on policy and law-making by incorporating diverse knowledge and empirical evidence on the institutional arrangements necessary to address climate change as a cross-cutting and multi-level issue. The integrated framework brings three perspectives and connects them to expand knowledge on what shaped policy and law-making and

⁴⁷ John Tharakan, 'Integrating indigenous knowledge into appropriate technology development and implementation' [2015] *African Journal of Science, Technology, Innovation and Development* 7(5) 364-370, Olufemi Popoola, 'Actors in Decision Making and Policy Process' [2016] *GJISS* 5(1) 47-51; Donald Baumer & Carl Van Horn, *Politics and Public Policy: Strategic Actors and Policy Domains* (CQ Press 2014); Fritz Scharpf, *Games Real Actors Play: Actor-Centered Institutionalism in Policy Research* (Westview Press, Boulder, CO 1997), Fritz Scharpf, 'Institutions in Comparative Policy Research' [2000] *Comparative Political Studies* 33(6-7) 762-777; Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9 *Journal of Human Rights and the Environment* 32, 36; Lori Thrupp, 'Legitimizing local knowledge: from displacement to empowerment for Third World people' [1999] *Agriculture and Human Values* 13-24

⁴⁸ Olivia Rumble, 'Facilitating African Climate Change Adaptation through Framework Laws' [2019] *Carbon and Climate Law Review* 13(4) 237-245

incorporation of knowledge in response to the novel climate change issue yet to be addressed fully by the literature. In addition, most studies have focussed on the outcome of implementing the policies and laws and less on how they are made.

For the over-arching research question, the main theoretical contribution of this thesis is that it adds to the existing body of knowledge on understanding the law and policy-making process on climate change in Kenya as a cross-cutting issue that cannot be tackled by a single policy actor at one governance level. But, instead, this process is shaped by interrelated factors, including diverse actors with different knowledge and power relationships, and is a multi-level governance institutional arrangement (MLG). The MLG introduces horizontal and vertical interactions that involve the actors at different levels, as seen in Chapter 7. These actors draw their power from diverse sources, including their knowledge systems, power magnification through numbers, ability to generate evidence, and statutory authority to inform and influence the outcome of policies and laws. Some previous scholarship has highlighted this call made by Savaresi⁴⁹ for further exploration of the application of LIKP in climate change regimes beyond the international human rights law that has only sporadically examined this issue.

This research could be helpful for other low-income countries with a similar context or used for comparative studies with contexts that differ in developing an understanding of policy and law-making that incorporates LIKP across jurisdictions. This could result in developing and testing harmonised and integrative conceptual frameworks for climate change policy and law-making that incorporates LIKP that can be applied to different contexts. This address the gap in the literature, which is almost silent on the comparison of law-making on climate change and the

⁴⁹ Annalisa Savaresi, 'Traditional Knowledge and Climate Change: A New Legal Frontier?' (2018) 9(1) *Journal of Human Rights and the Environment* 1, 18

factors that shape the incorporation of different knowledge systems, including the LIKP, from communities across different countries. Also, it will contribute pragmatically to how to respond to Article 7.5 of the Paris Agreement.

8.4.2 Contribution 2: In the climate change law-making context of Kenya, knowledge is important, and farmers prioritise using their LIKP and are open to using other knowledge systems, including scientific knowledge.

This contribution to knowledge to tackle a specific policy issue adds to the literature on LIKP. This contribution moves beyond the commonly debated issues in the literature including the importance, divide, and linkages between LIKP and scientific knowledge,⁵⁰ and the challenges it faces as a knowledge system in relation to scientific knowledge.⁵¹ This thesis provides some understanding of the factors that enhance or constrain the incorporation of LIKP in the policy and law-making process that seeks to tackle the specific policy issues (climate change), which are cross-cutting in nature. Adaptation is local and local responses using LIKP are prioritised by local communities in Kenya. However, national policy actors prioritise scientific knowledge. The relationship between these two knowledge systems is one of competition and complementarity. Thus, responding to climate adaptation in Kenya through the legislative process highlights the

⁵⁰ Arun Agrawal, 'Dismantling the Divide Between Indigenous and Scientific Knowledge' (1995) 26(3) *Development and Change* 413-439

⁵¹ Ngulube P, 'Managing and Preserving Indigenous Knowledge in the Knowledge Management Era: challenges and opportunities for information professionals' (2002) 18(2) *Information Development* 95, 96, Peter Jaszi, 'Protecting traditional cultural expressions – some questions for lawmakers' (WIPO Magazine August 2017) <https://www.wipo.int/wipo_magazine/en/2017/04/article_0002.html> accessed 1 April 2019; Lori Thrupp, 'Legitimizing local knowledge: from displacement to empowerment for Third World people' [1999] *Agriculture and Human Values* 6, 13-24

importance of capturing this existing knowledge system of communities and complementing it with scientific knowledge for better adaptation in law and policy-making.

The incorporation of diverse knowledge, including the LIKP of agrarian communities in Kenya, resulted from the existing institutional arrangements that enabled cross-sector and cross-level horizontal and vertical interactions. Thus, a dynamic environment of policy and law-making can increase interactions between policy actors allowing for competition and complementarity between LIKP and scientific knowledge systems mediated by power relationships amongst the actors.

The interaction between knowledge systems contributes to addressing climate change as a cross-cutting issue through policy and law-making. This issue appears to have not been given much attention in climate research. This highlights the differences and complexities of addressing climate change with its multiple and differential impacts on different actors, with varying systems of knowledge found at different levels of governance.

8.4.3 Contribution 3: An analytical framework for examining interrelated knowledge, actor and power relations, and institutional arrangements for the incorporation of knowledge in climate law-making.

The analytical framework for incorporating knowledge developed for this study is a key contribution. The analytical framework used in this research originated from three interconnected themes: knowledge, actors, and institutions. The first perspective includes the diverse complementary and competing knowledge in Kenya, including LIKP and scientific knowledge. The focus is on LIKP, how they are developed, used, and maintained vis-à-vis scientific

knowledge, and the opportunities and challenges for incorporating this knowledge. The second perspective relates to the policy actors, who they are, where they draw their power, and their role in the climate legislative process. The third theme relates to the institutional arrangements, including the governmental structures from the national to the county level and how they respond to the cross-cutting and multi-level issues.

These themes are developed and analysed in separate chapters of this research. However, it is observed that these three themes are interrelated and relevant for analysing the climate change policy and law-making process to explore how it enables or constrains the incorporation of LIKP in policy and law-making using Kenya as a case study. This study found that the framework could be used as a guide for developing new policies and laws on climate change beyond Kenya, to enhance the incorporation of diverse knowledge systems, including the LIKP of communities. The framework could also be used to evaluate the success of the implementation of climate change policies and laws that incorporate LIKP and scientific knowledge to tackle climate change inclusively.

The analytical framework was used throughout the study and was determined to be effective in responding to the research question of how does the policy and law-making on climate change in Kenya enhance or constrain the incorporation of LIKP. However, the framework had some shortcomings.

8.5. How do the findings of this study sit within wider policy practice and applicability to other jurisdictions?

The findings of this study could strengthen Kenya's position as a global player in international policy discourse and actions to tackle climate. The nation is a pacesetter on climate change and

related issues in sub-Saharan Africa. At the COP 12 in 2006 hosted and chaired by Kenya, the parties adopted conclusions related to the programme of work on impacts, vulnerability, and adaptation to climate change, which was renamed as the ‘Nairobi Work Programme (NWP) on impacts, vulnerability, and adaptation to climate change’ at COP 12.⁵²

The objectives of COP 12 was to assist all Parties, especially developing countries, including the least developed countries and small island developing States to: improve their understanding and assessment of impacts, vulnerability, and adaptation to climate change; make informed decisions on practical adaptation knowledge and actions and measures to respond to climate change on a sound scientific, technical and socio-economic basis, taking into account current and future climate change and variability. The NWP was implemented by Parties, intergovernmental and non-governmental organisations, the private sector, communities, and other stakeholders. The NWP disseminates knowledge and information on adaptation and highlights the work of partners as widely as possible through a variety of knowledge products and publications.

The UN Subsidiary Body for Scientific and Technological Advice (SBSTA), responsible for policy recommendations during the COP, invites partner organisations under the NWP, including Kenya, to further enhance their support to the work of the UN Adaptation Committee by carrying out a range of activities in the areas of knowledge support and stakeholder engagement and the sharing of information and case studies. The findings of this study can potentially be relevant in refining Kenya’s contributions to these policy instances on adaptation.

Secondly, at the COP15 in Paris, the need to integrate diverse knowledge systems including LIKP and scientific knowledge, and the need to domesticate the international climate regimes were

⁵² UNFCCC workshop on adaptation planning and practices under the NWP, Rome 10-12 September 2007, <https://unfccc.int/topics/resilience/resources/adaptation-planning-and-practices>, accessed 01/03/2023

made explicit. Nations of the world have met in subsequent COPs to advance the aims and ambitions of the Paris Agreement and take forward its implementation guidelines.

However, as found in this study, how this happens in practice has not been fully demonstrated. This study, therefore, makes a practical contribution to how this can happen in a context of a devolved governance arrangement. Although the focus of the study is on the incorporation of LIKP in climate policy and law-making, the framework can be adapted and used by other jurisdictions in Africa that are dissimilar to the Kenyan context.

8.6 Future research

This thesis focussed on an ex-ante evaluation to determine how Kenya embarked on law and policy-making on climate change as a policy issue with multi-level, multi-sector and multi-actor implications. This was done to examine how this process enhances or constrains the incorporation of diverse knowledge and interests, including LIKP of rural communities. Several areas have emerged as fit for further research.

- (i) There is little empirical evidence on how countries have successfully developed and implemented policies and laws on climate change. The success of the policies and laws could be judged by how such policies and laws address the policy needs in the context. Otherwise, they remain aspirational statements contained in policies and laws. Further research could focus on an ex-poste evaluation to examine the success of the 2016 Climate Change Act and its accompanying implementation strategies and action plans. The focus would be to determine if this law and guidelines respond to Kenya's adaptation and mitigation needs, especially for those who experience climate change

daily. In addition, how the domestic legal landscape could influence the operation of this law. This is done while considering that, although the process of law-making is challenging, the more difficult challenge can be the law's application, enforcement, and assessment.⁵³

- (ii) This research explains how the knowledge and interests of diverse policy actors are incorporated into the policy and law-making process on climate change and makes a pragmatic contribution to the implementation of Article 7.5 of the Paris Agreement. Future research could apply comparative approaches across jurisdictions to establish how incorporation occurs, including the barriers and enablers of such processes.
- (iii) It would be valuable to learn how policy and law-making compare across jurisdictions that have opted for national framework laws and those that use sector-specific laws that address climate change. For example, comparing the Kenyan process to the process that led to the development of the UK Climate Change Act 2008 or Nigeria's Climate Change Act 2021. Such comparative research across jurisdictions could create opportunities for cross-pollination in the design of climate law and the design of a blueprint for climate change policy and law-making in different jurisdictions across Africa.
- (iv) It would be crucial to build on this thesis's findings to deepen the understanding of how actors, power relations, and institutions at different levels could play synergistic roles in enabling or constraining the incorporation of LIKP of agrarian communities in laws and how their implementation respond to their needs.

⁵³ Clarice Wambua, 'The Kenya Climate Change Act 2016: Emerging Lessons from a Pioneer Law' (2019) 13(4) Carbon & Climate Law Review 257, 259

- (v) Future research could be conducted in a context where a devolution system is taking place and could focus on the local level to see how well the national climate change laws inform the devolved county's climate change laws. Such a study could examine whether, at the devolved level, the incorporation of diverse knowledge, including the LIKP of communities who develop and use LIKP to tackle climate change, is enhanced or constrained. This is in addition to examining the difference it makes in cushioning them against the impacts of climate change when the laws are implemented.
- (vi) An investigation on the difference it makes for enhancing or constraining the incorporation of LIKP in having a law that captures and protects LIKP in a context where climate change policies and laws are being developed compared to others without such a process.

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Promotion of Traditional Knowledge and Cultural Expression Act 2016

Appendices

Appendix 1: UoB Ethical approval letter (Ethical Review ERN_19-0828)

Susan Cottam (Research Support Group)

Fri 10/01/2020, 15:01



Dear Dr Nsoh

Re: “Climate Change and Local Indigenous Knowledge and Practices in Kenya: An Analysis of Agrarian Community Responses and their Role in Formal Law and Decision-Making”

Application for Ethical Review ERN_19-0828

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee’s attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University’s Code of Practice for Research and the information and guidance provided on the University’s ethics webpages (available at <https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx>) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (<https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx>) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University’s guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University’s H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards

Susan Cottam



Tel: [REDACTED]

Email: [REDACTED]

Appendix 2: Semi-structured interview guides

Key informant: Farmers and other developers and users of LIKPs

General introduction

1. Personal Background

- a. Tell me about yourself and your daily activities.
- b. Are you part of a group? If yes, what is your group and what are activities of the group? How are you involved in its activities?

QUESTION	POSSIBLE PROBES AND PROMPTS
How do you believe you have been affected or will be affected by climate change?	What have you done or will do to in response to this? How they know what to do? where does the information you use comes from?
What do you know about local indigenous knowledge and practices? What are they?	<ul style="list-style-type: none">• where does the knowledge comes from? Developed? Maintained?• Why do you use that knowledge? Prompt for its use farming practices climate adaptation, conservation, health etc? Tell me your experience and examples of using that knowledge in farming and climate adaptation? Or what traditional knowledge could be drawn on for climate change adaptation and where does it come from. <ul style="list-style-type: none">• Tell me your experiences in promoting the production and use of LIKP?
What are your experiences and awareness of any local knowledge and practices being taken up in government policy or law?	<ul style="list-style-type: none">• Do you think LIKP are important for the development of laws and policies? Why or why not?• What were some of these government policy and laws? Prompt: Agriculture, Climate, Traditional Knowledge and cultural expression laws, conservation, water management etc?• Were your local knowledge and practices considered? If yes, which ones? Or What were the opportunities for you to add your local knowledge and practices?• Were those of others considered? If yes, which ones?• Why do you think that your local knowledge and those of others were considered or not?
What was your experience in participating in decision making processes?	<ul style="list-style-type: none">• Can you tell me about your participation in process that result to a decision that affects you in any way• How were you informed about the process? Were you told why you were being involved in the process? What was you understanding of the process? Or why did you participate in the process?

<p>Could you tell me what happened when you participated in this process? What was your experience of participating in the process?</p>	<ul style="list-style-type: none"> • Why did you participate in the process? Prompt: was it voluntarily or were you coerced, promised a payment, persuaded by a others ideas and knowledge? If you were promised a compensation or payment, by who, was promised kept? How did this influence your participation and contribution? • Were you instructed on what to do or you were presented with what was needed at the end and asked to give your consent? If yes describe how that happened? • What were the opportunities and at what stages of the process were you able to add your local knowledge and practices? • Were you consulted to get your opinion of what you wanted to see in the law? If yes describe how you were consulted? If no, why did this not happen? Prompt: did u participate directly or your ideas were presented by a representative (extension officer, NGO, business) on your behalf. How did you feel about directly participating or being represented by others? If you were represented by others, how were your representatives chosen? •
<p>Are you aware of the 2016 Climate Change Act or the 2016 TKCE?</p>	<ul style="list-style-type: none"> • When and how were you involved in the activities that led to the development of the 2016 climate change Act, 2016 TKCE Act or Agriculture and Food Authority Act? • Do you know if others participated in this process? If yes, who were these people, groups, or organisations? How did they participate? • Can you tell me more about your relationship with these other participants? Prompt: Did some people, groups or organisations have different or similar local and knowledge and practices to yours? Did you work, collaborate or compete with them? Were there any conflicts. Can you have explained how conflicts were addressed if any occurred? • Were there things that you liked or did not like about the process? • How satisfied were you with the process and with the incorporation of your interest, ideas and knowledge in the process? • Can you describe he existing arrangements in Kenya that facilitated your participation and contribution to the process?
<p>How do you think others view your LIKPs on agriculture and climate adaptation and those of others</p>	<ul style="list-style-type: none"> • How do you think your local knowledge and those of others is viewed by government (including extension workers), politicians, and science/scientists? Prompt: Why that is and why do they hold those views?
<p>How did the material, financial or technical support provided during the process help you and others or not to get you views at the different stages of the law and policy making process?</p>	<ul style="list-style-type: none"> • Tell me about the material, technical or financial support that was available to you and other during the law and policy making process? From where or from who did these come from? • Did international NGOs and development agencies support you to participate in this process? If yes, what was their contribution to the process? • Apart from any material and financial support, how involved were they in the process and at what stage? • Did the support you received influence you, changed your perception about your own ideas and knowledge or the process in anyway? If yes, how?

	<ul style="list-style-type: none"> • Did those who supported you materially. Financially and technically influence the process in any way? Was this important or not? • How helpful or not was their involvement in the process especially in enhancing or not the incorporation of your LIKP in the process? Or whose interest were they promoting, theirs or yours?
Do you think you had any power and influence during the process to ensure that your LIKP was incorporated in the Climate Act?	<ul style="list-style-type: none"> • Did you or any other person, group or community have more influence in the process? If yes or no, who and why did this happen? Prompt: The knowledge system they had, how you and your knowledge system was regarded, social issues (social class, race, gender, income etc) • Any examples of times during the process when you or others believed you had the more or less power and influence in the process? When did this happen and why? • What did you like or not about your ability and that of others, to influence the process or not.
What guidelines exist that support the incorporation or use of diverse views including LIKP of communities in law and policy making in Kenya?	<ul style="list-style-type: none"> • What do these guidelines say? Where are they found? • How were they followed or implemented? Did this support or not the incorporation of your LIKP and those of others during the development of the Climate Act? Or Agriculture Act?? • Do you think there are any challenges in implementing or following the guidelines? If yes, what are some of these changes? If no, what makes following the guideline easy?
Closing	<ul style="list-style-type: none"> • Is/are there anything that you would like to add? • Is/are there anything that I have left out? • Is/are there anything that you expected me to ask about the study?

Key informants: Central government officials

General introduction

2. Personal Background

- c. Duration of employment in current position
- d. Educational background
- e. Past/current background and position before current position in relation to policy making, climate change, agriculture in Kenya.
- f. Roles/Tasks of organisational unit.

QUESTIONS	POSSIBLE PROBES AND PROMPTS
How are laws developed and agreed in Kenya?	<ul style="list-style-type: none"> • What experience(s) do you have on how laws and policies are developed in Kenya? • What are some of the laws in Kenya that you participated or contributed to their development? Probe for 2016 Climate Act, the 2016 TKCE Act, Agriculture and Food Authority Act??? • Are there differences in the process of development of laws at National versus Decentralise levels? If yes, what makes the processes different?

	<ul style="list-style-type: none"> • What are some of the things that support or constrain the development of laws and policies in Kenya? e.g., the legal culture and context, the constitution, leadership transitions at all levels in the country etc etc? • What is the role of local communities including farmers, civil society, and other interest groups in such law and policy making processes?
Do you consider yourself well informed about the 2016 Climate Act of Kenya? 2016TKCE Act?	<ul style="list-style-type: none"> • What was your understanding of why the Climate Act was being developed? Was the objective clearly explained (was it a complex, simple process as explained)? • Can you describe the process or different stages that led to development of the Act? • How was judgement of the stages of the process and the entire process in achieving the stated objectives? Why do you hold these views? <p>Further probe: The political and governance system, the constitutional and other institutional arrangements, The legal culture, and context etc</p>
How were ideas/knowledge for the development of the 2016 Climate Act generated?	<ul style="list-style-type: none"> • How are ideas and evidence used in the development of laws and policies in Kenya generated? • How do local communities and other stakeholders contribute to this process? Probe for role of Extension workers, Universities, think tanks, business NGOs • How were the ideas for the development of the 2016 Climate Act and the 2016 TKCE Act developed? • How were your knowledge/ideas or those of others considered in the process? • What are your thoughts about the consideration given to your knowledge/ideas and those of those most impacted by climate change such as farmers? • Who contributed the most and the least ideas to the process? Why did this happen? • Were some ideas and knowledge considered important more than others? If yes, what ideas, whose and why do you say so? <p>Or</p> <ul style="list-style-type: none"> • Were the contributions (knowledge/ideas) of some people or groups considered more important than others? If yes, who were some of these people and groups? Why do you think this happened? Probe scientific knowledge, politicians, NGOs etc • Were you asked to support a particular idea, knowledge, or position? If yes, which and whose idea, knowledge or position
How do local communities who develop and use local indigenous knowledge and practices contribute to the processes or were supported to do so?	<ul style="list-style-type: none"> • What do you know about community LIKP in relation to climate change, agriculture, natural resources management etc? • Were such ideas and knowledge included or not in the climate act? If yes how did that happen? If no why did that not happen? Probe thierr role, role communities, role of extension officers, NGOs and research institutions??? • If yes, what were some of these LIKP from the communities that were incorporated in 2016 Climate Act? Did you support the incorporation or not of local communities' LIKP in the 2016 Climate Act? Why • What was the relationship between the 2016 Climate Act and the 2016 Traditional Knowledge and Cultural Expression Act (TKCE Act)? • If there was a relation, did the 2016 TKCE Act enhance or not the incorporation of LIKPs in 2016 Climate Act? How and why?
What guidelines exist to support the	<ul style="list-style-type: none"> • Where are these guideline found what do they say? • How are they followed or implemented?

incorporation or use of diverse views including LIKP of communities/farmers in law and policy making in Kenya?	<ul style="list-style-type: none"> • Do you think there are any challenges in implementing or following the guidelines? If yes, what are some of these changes? If no, what makes following the guideline easy to follow and implement? • How did these guideline support or not the involvement/participation of farmers and other local communities and the incorporation of their LIKP in the 2016 Climate Act or other related laws and policies?
Who are the actors in the law and policy making process and how do they participate in the process?	<ul style="list-style-type: none"> • Which actors did you involved in the process and why? people, groups, or organisations??? • How did you inform the different actors about the process? How do you know they understood why they were participating in the process? • How was the content at each stage of the process developed? Did you instruct them on what to do or presented to them what they needed to agree on? Or did they actively generate the contents of what was put together and taken in the law? • How and why did you consult different actors? • What was the nature of their participation: cooperation, collaborate or conflicts? Were there any conflicts? If yes amongst which actors and how were they resolved? • Were there things that you liked or did not like about the process?
How was the level of influence of different participants of the process? Or how did different participants of the law and policy making process influence the process?	<ul style="list-style-type: none"> • Did some people organisations have more influence than others? Which were these and why ? And how do they know that. • Did international NGOs and development agencies participate in this process? If yes, what was their contribution to the process? Did they influence the process in anyway? If yes, how? If they contributed or influenced the process, was this important or not? • How did this influence the outcome of the process? • What did you like or not about this?
What resources were used in this process and where did they come from?	<ul style="list-style-type: none"> • What role did funding and technical support play in this process? • Where did funding come from? (national government or international donor funding) • Did the funder participate in the process (directly or indirectly)? How did this funding and participation of the funder influence the process?
Closing	<ul style="list-style-type: none"> • Is/are there anything that you would like to add? • Is/are there anything that I have left out? • Is/are there anything that you expected me to ask about the study?

Key informants: Decentralised government agents (Agricultural extension workers), civil society organisations, Research institutions and development agencies.

General introduction

3. Personal Background

- g. Duration of employment in current position
- h. Educational background

- i. Past/current background and position before current position in relation to policy making, climate change, agriculture in Kenya.
- j. Roles/Tasks of organisational unit.

QUESTIONS	POSSIBLE PROBES AND PROMPTS
How are laws developed and agreed in Kenya?	<ul style="list-style-type: none"> • What experience(s) do you have on how decisions, laws and policies are developed in Kenya? • What are some of the decisions, laws and policies in Kenya that you participated or contributed to their development? Probe for 2016 Climate Act, the 2016 TKCE Act, Agriculture and Food Authority Act??? • Are there differences in the process of making decisions, laws and policies at National versus Decentralise levels? If yes, what makes the processes different? • What are some of the things that support or constrain the development of laws and policies in Kenya? e.g., the legal culture and context, the constitution, leadership transitions at all levels in the country etc etc? • What is the role of local communities including farmers, civil society, and other interest groups in such decision, law and policy making processes?
Do you consider yourself well informed about the 2016 Climate and the 2016 TKCE Acts of Kenya and the processes that led to its development?	<ul style="list-style-type: none"> • Can you describe the process or different stages that led to the Act? • What was your understanding of why the Climate Act was being developed? Was the objective clearly explained (how complex or simple was the process to you during and after the explanation)? • Were you informed of how you will be involved throughout the process? OR were you responsible for ensuring others were involved and contributed throughout the process? • Who else (persons, sectors, group, institution, organisation etc) participated in this process? Was any of them leading this process? Role of Parliament, , NGOs/CSOs, decentralised authorities, development and funding agencies, local communities. Businesses, economic interest groups, researchers and think tanks and the public at large? • According to you was this a successful process or not? What made this possible or not? The political and governance system, the constitutional and other institutional arrangements, The legal culture, and context etc • What did you like or not about the process?
How were ideas/knowledge for the development of the 2016 Climate Act generated?	<ul style="list-style-type: none"> • What ideas and knowledge were provided or used to the development of 2016 Climate Act? Where or from who did this evidence come from? • Do you have the feeling that your knowledge/ideas or those of others were considered? • Who contributed the most and the least ideas to the process? Why did this happen? • Were some ideas and knowledge considered important more than others? If yes, whose and why do you say so?
How do you view farmer's LIKP on agriculture and climate adaptation for law and policy	<ul style="list-style-type: none"> • Tell me about your perceptions of local agricultural knowledge and practices for agriculture and climate adaptation etc? Why is this the case? • how do you think local knowledge and practice is viewed by government, scientists, businesses, and farmers who develop and use it? How do you know this?

making on these issues and why?	
How did local communities who develop and use local indigenous knowledge and practices contribute or were supported to contribute to the Law and policy on climate change in Kenya?	<ul style="list-style-type: none"> • What do you know about community or farmers LIKP in relation to climate change, agriculture, natural resources management etc? • Were such ideas and knowledge of local communities included or not in the climate act? If yes, what were some of these local knowledge and practices incorporated, how were these included? What was your role, the role of the farmers who develop and use LIKPs, of NGOs, research institutions and businesses to support the not the incorporation of farmers LIKP???, • If local communities LIKP were not incorporated, why did this not happen? What could have helped? • Did you in particular support or not the incorporation or not of local communities' LIKP in the 2016 Climate Act? If yes or no why not? • What was the relationship between the 2016 Climate Act and the 2016 Traditional Knowledge and Cultural Expression Act (TKCE Act)? • If there was a relation, did the 2016 TKCE Act enhance or not the incorporation of LIKPs in 2016 Climate Act? How and why?
What guidelines exist that support the incorporation or use of diverse views including LIKP of communities in law and policy making in Kenya?	<ul style="list-style-type: none"> • Where are these guidelines found what do they say? • How are they followed or implemented? • Do you think there are any challenges in implementing or following the guidelines? If yes, what are some of these changes? If no, what makes following the guideline easy to follow and implement? • How did these guideline support or not the involvement/participation of farmers and other local communities and the incorporation of their LIKP in the 2016 Climate Act or other related laws and policies?
How did different actors in the process participate and influence the process?	<ul style="list-style-type: none"> • Which actors did you support or involve in the process and why? people, groups, or organisations??? • How did you inform the different actors about the process? How do you know they understood why they were participating in the process? • How was the content at each stage of the process developed? Did you instruct them on what to do or presented to them what needed to be validated by them? Or did they actively generate the contents of what was put together? • How and why did you consult different actors? • What was the nature of their participation: cooperation, collaborate or conflicts? Were there any conflicts? If yes amongst which actors and how were they resolved? • Did international NGOs and development agencies participate in this process? If yes, what was their contribution to the process? Did they influence the process in anyway? If yes, how? If they contributed or influence the process, was this important or not? • Were there things that you liked or did not like about the process?
How was the level of power and influence over this process?	<ul style="list-style-type: none"> • Did you or any other person, group or community have more or less influence in the process? If yes or no, can you explain which actor and why did this happen? • Any examples of times or stages during the process when you or others showed or had more or less power and influence over the process? • How did this power and influence shape the outcome of the process? • What did you like or not about your participation, power and influence and those of others in the process?

<p>How did the material, financial or technical support provided during the process help you and others or not to get you views at the different stages of the law and policy making process?</p>	<ul style="list-style-type: none"> • Tell me about the material, technical or financial support that was available to you and other during the law and policy making process? From where or from who did these come from? • Did international NGOs and development agencies support you to participate in this process? If yes, what was their contribution to the process? • Apart from any material and financial support, how involved were they in the process and at what stage? • Did the support you received influence you, changed your perception about your own ideas and knowledge or the process in anyway? If yes, how? • Did those who supported you materially. Financially and technically influence the process in any way? Was this important or not? • How helpful or not was their involvement in the process especially in enhancing or not the incorporation of your LIKP in the process? Or whose interest were they promoting, theirs or yours?
<p>Closing</p>	<ul style="list-style-type: none"> • Is/are there anything that you would like to add? • Is/are there anything that I have left out? • Is/are there anything that you expected me to ask about the study?

Appendix 3: Participant Information Sheet

Project title: **Climate Change and Local Indigenous Knowledge and Practices in Kenya: An Analysis of Agrarian Community Responses and their Role in Formal Law and Decision-Making.**

Researcher: Eric Ndeh Mboumien (PhD Student), [REDACTED]

This research has been approved by the University of Birmingham Humanities and Social sciences ethics committee.

Invitation

You are being invited to take part in this research because you are a key stakeholder in the law-making process on climate change in Kenya. Before you decide to do so, it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask me if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part.

What is the purpose of this study?

The aim of this research is to explore:

How law making on climate change adaptation enhances or constrains the incorporation of local indigenous knowledge and practices of agrarian communities using Kenya as a case study.

Climate change is a topic of global significance and will have devastating impacts for many Official Development Assistance (ODA) recipient countries. It will increase poverty, poor health, and food and energy insecurity in local communities that rely heavily on agriculture-based livelihoods. These farmers operate in a challenging political and economic environment, with limited access to farm inputs, mechanisation, finance, market access, and extension services. They therefore

use their Local Indigenous Knowledge and Practices (LIKPs), referred to in this research as a body of knowledge on their ways of knowing and doing for individual and collective decision making to enhance living within their means. LIKPs has been increasingly recognised as for agrarian adaptation to climate change. However, the extent to which LIKPs is integrated in the growing laws making on climate change and what makes this successful is still limited.

Kenya is pioneering process of developing and implementing laws on climate change and traditional knowledge in sub-Saharan Africa. The data gathered will therefore be analysed to gain a deeper understanding of the lived experiences of those who participate and how their views are taken into consideration in this process. Learning from your experiences in Kenya, I will be aiming to make theoretical explanations and draw conclusions from the relationships between the actors, concepts, factors, processes and mechanisms in the success or not of incorporating LIKPs in law making on climate change adaptation and its applicability beyond the Kenyan Context.

I have roughly ten questions to ask, and the interview will take no longer than 90 minutes. If necessary, the interview can be conducted in Swahili by a trained Research Assistant or by the Researcher with interpretation and translation support from this Assistant.

The information I gather will be used in my doctoral thesis, which will be submitted in support of candidature for a PhD in Law, awarded by the Birmingham Law School, University of Birmingham. The thesis will be submitted before September 2022. It is also my intention to submit this research to academic journals for publication, produce policy-relevant reports, a podcast and different blog articles with the assistance of National Geographic Society a global nonprofit organization.

Who can participate?

I intend to interview key informants from National Environment Management Authority (NEMA), sector ministries, agriculture extension workers, farmers NGOs, development agencies, Universities and research think tanks, and businesses. to gather in-depth qualitative data on how law making on climate change adaptation works, who and what is involved and what the issues and challenges are for the incorporation of local indigenous knowledge and practices.

Do I have to participate?

It is up to you to decide whether to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form/or give your consent verbally on record. If you decide to take part, you are still free to withdraw at any point before the withdrawal deadline (6 weeks after the interview) and without giving a reason. After this deadline it is not possible to remove your data from the study, as I will have begun the analysis process. If you wish to withdraw from the study, you can do this by contacting me through the email address provided below/contacting Peninah Cherotich, Lilian Kwamboka or Angela Chemeli on the number and emails provided.

Compensation for your participation

You will be compensated for the cost of your bandwidth for the online interview. To enable this compensation, you will need to provide your mobile phone number to Peninah Cherotich (Research Assistant working with me on this project and based in Nairobi – Kenya). Your

personal data will not be retained or used beyond the purposes stated here. This data will be treated as strictly confidential and safely disposed of after the compensation mechanism has been processed.

Processing compensation for participation.

The compensation will be done immediately or within a maximum of 7 days after the interview.

What are the benefits of taking part?

- Help you understand experiences and views of Kenya's law making on climate change adaptation and Protection of Traditional Knowledge and Cultural Expressions.
- Help you make recommendations about how to better help people like you to be involved and make decisions that are responsive to your needs.
- Tell your story.

What are the risks of taking part?

There are no perceived risks of taking part in this research. However, should there be any concerns, I will stop the interview until such issues that arise are addressed.

What if I change my mind about taking part?

If you would like to withdraw from the study, you may do so any time during the interview or up to 6 weeks after the interview. If you wish for your data to be removed from the study and not used for the research, you can email me at: [REDACTED]. You do not need to state why you wish to withdraw and I will send you confirmation by email that I have destroyed all of your data (deleting all electronic copies and shredding any paper forms).

Nothing will happen to you if you change your mind.

How will information about me be used?

The interview will be audio recorded using a digital recorder. This allows me to listen to the interview later and transcribe it. The transcribed interview will be anonymised. This means that you and any people you mention will be given pseudonyms. This might also be the case with places and organisations if these are information that could potentially identify you. The purpose of anonymisation is to protect you and ensure nobody will be able to tell that you took part.

I will analyse your transcript to inform my thesis. Examples from what you tell me will be used as evidence of lived experiences of participation in the law-making process. The findings from this research may also be published in journal articles, books, on the internet and through conference presentations, talks and compiled into a book.

Will my information in this study be kept confidential?

With your permission I would like to record the conversation, so that it may be translated and transcribed, where necessary. In circumstances where a research assistant is required to assist

with interpretation and translation, the employed person has also understood and signed a confidentiality agreement.

All the interview transcripts shall be anonymized: all personal data, direct and indirect identifiers (e.g. names, workplace, occupation) will be removed, or substituted. All transcripts and recordings will be securely stored on a password protected laptop, University of Birmingham server and University of Birmingham owned cloud system. Audio recordings will be disposed of at the end of the project.

All signed consent forms and participant information sheets will be scanned and stored digitally in an encrypted folder on a password protected laptop.

In accordance with University of Birmingham guidelines, anonymised transcripts will be stored securely and kept for 10 years after the research has concluded for use in the future. All confidentiality and anonymity rules will continue to apply to the data. Data archived may be shared in an anonymised form to allow reuse by the research team and other third parties. These anonymised data will not allow any individuals to be identified or identifiable.

At the end of the project, I will send you an executive summary of my findings. If you wish to read the thesis in full, you will also be given access to it.

The information you provide will be anonymised; all personal data, direct and indirect identifiers (e.g. names, workplace, occupation) will be removed, or substituted.

Who has approved this study?


I am conducting this research as a postgraduate research student at Birmingham Law School, University of Birmingham. The research has been approved by the University of Birmingham's ethical review process.

What should I do if I agree to take part?

If you agree to take part, please email the completed '**Consent Form**' to my email address provided below/alternatively, you can provide your consent verbally on the agreed day of interview. Similarly, if you wish to withdraw from the study please email before the withdrawal deadline - 6 weeks after the interview/contact Peninah using the phone number provided.

In addition, if you have a concern about any aspect of this study including wanting to withdraw within the stated timeframe, you may wish to speak to me, and I will do my best to answer your questions.

Furthermore, if you have any concerns about the way in which the study has been conducted, you can contact Dr Walters Nsoh or Professor Fiona Nunan my academic supervisors – contacts provided below.

Eric Ngang: 

Dr Walters: [redacted] or telephone: [redacted]

Professor Fiona Nunan: [redacted] Or telephone: [redacted]

or contact via post at: Birmingham Law School, University of Birmingham. Edgbaston, Birmingham, B15 2TT.

Research Assistant contacts:

Peninah Cherotich: Email: [redacted], Tel: [redacted]

Lilian Kwamboka: [redacted], Tel: [redacted]

Angela Chemeli: [redacted] Tel [redacted]

Thank you for taking the time to listen/ read this document,

Eric Ngang

Appendix 4: participant consent form

Title of project: Climate Change and Local Indigenous Knowledge and Practices in Kenya: An Analysis of Agrarian Community Responses and their Role in Formal Law and Decision-Making.

Name of researcher: Eric Ndeh Mboumien NGANG, [redacted]

Please tick box:

		Yes	No
1	I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	<input type="checkbox"/>	<input type="checkbox"/>
2	I understand that my participation is voluntary and that I am free to withdraw at any time up to 6 weeks after this interview.	<input type="checkbox"/>	<input type="checkbox"/>
3	I understand that I can refuse to answer any question.	<input type="checkbox"/>	<input type="checkbox"/>
4	I agree to my interview being digitally recorded.	<input type="checkbox"/>	<input type="checkbox"/>
5	I understand that data collected will be treated confidentially and I acknowledge the presence of a Research Assistant serving as a translator/interpreter where need be.	<input type="checkbox"/>	<input type="checkbox"/>
6	I understand that the data collected about me during this study will be anonymised before it is used in publications or conference presentations.	<input type="checkbox"/>	<input type="checkbox"/>

7	I agree that anonymous quotes from my interview can be used in conference presentations and publications.	<input type="checkbox"/>	<input type="checkbox"/>
8	I agree to allow the data collected to be used in future research projects.	<input type="checkbox"/>	<input type="checkbox"/>
9	I agree that audio recordings may be confidentially stored until the end of this project (approx. March 2023).	<input type="checkbox"/>	<input type="checkbox"/>
10	I agree that an anonymised transcript of the interview may be confidentially stored for 10 years.	<input type="checkbox"/>	<input type="checkbox"/>
11	I understand that I will be reimbursed for my data usage within 7 days of the interview through a payment transferred using my M-pesa account number. I also agree that my M-pesa account number shall be shared with the Research Assistant (Translator/interpreter) who oversees the payment.	<input type="checkbox"/>	<input type="checkbox"/>
12	By signing this document/verbally I am consenting to take part in this study.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/> Name of participant		<hr/> Date	
		<hr/> Signature	

Appendix 5: Research Assistant Agreement

PhD Project Title: Climate Change and Local Indigenous Knowledge and Practices in Kenya: An Analysis of Agrarian Community Responses and their Role in Formal Law and Decision-Making.

1. Introduction.

I am pleased to offer you a Research Assistant Agreement to perform services related to organising interviews with key informants (KI), administering interviews when needed, transcription and carrying out assigned administrative task for the online data collection in Kenya process for my PhD herein referred to as the “Project”. See summary of the Project in Annex 1 of this agreement. Your signature at the end of this letter will constitute your acceptance of this Agreement on the terms and conditions set forth below.

2. Parties.

THIS AGREEMENT IS MADE on the 2nd of June 2021 BETWEEN ERIC NGANG, PhD Student at the University of Birmingham Law School, Edgbaston, Birmingham B15 2TT, United Kingdom, of the one part and XXX of Nairobi, Kenya (the “Research Assistant”) of the other part. In this Agreement, Eric Ngang and Lilian Kwamboka are also referred to as “Parties” and “Party” refers to either of them.

3. Appointment/services.

Eric Ngang hereby appoints the Research Assistant, and the Research Assistant hereby accepts such appointment.to perform the following Services:

- Take part in a training to understand the research protocols and key Informant Interview (KII) guide on Wednesday the 2nd of June 2021.
- Follow-up with key informants identified by Researcher to set up appointments for online interviews.
- Contribute to identify potential informants in Kenya with rich knowledge on the research question and suggest these to the Researcher.
- Conduct at face-to-face interviews when infrastructure challenges do not permit researcher to conduct online interviews.
- Transcribe own interviews conducted.
- Review the transcriptions for editing to ensure readability and understanding.
- providing interpretation and translation support in Swahili where potential respondents are not comfortable with the use of English.
- Ensuring that time and task management are adhered to during the transcriptions.
- Providing Administrative support in Kenya including identifying key informants and setting up interview appointments, ensuring consent to conduct interviews are acquired.

4. Term.

This Agreement shall come into force on the 2nd of June 2021 (the “Commencement Date”) and will remain in effect until the 2nd of August 2021 (or as soon as Research Assistant completes the services in section 3 above).

This Agreement may be extended by mutual agreement of the Parties in writing.

5. Compensation

This is a Firm-Fixed contract. The total fixed price is **XXX KES**, to be paid upon successful completion and approval of deliverables as described in **Section 3 of this agreement**.

6. Payment of compensation.

The fixed payment to the Research Assistant will be made upon completion of deliverables as section 3 above and the submission of a completed and signed original Professional Services Invoice.

7. Other potential benefits to Research Assistant

If Research Assistant participates in the processes of collaborative coding and analysis, she/he will be added as a co-author of some of research outputs. This shall include the journal articles, blogs and co-organisation of public engagement events to share these outputs.

8. Property of the Researcher.

Any and all work produced by the Research Assistant pursuant to, or otherwise created as a result of, this Agreement (including, without limitation, services, deliverables, copyrightable works, technical and other data, and intangible property of all kinds) will be the sole property of the Researcher.

12. Confidentiality.

The Research Assistant acknowledges that any information obtained at any time during his/her work on this project is confidential and proprietary “Confidential Information.” The Research Assistant will hold Confidential Information in the strictest confidence and will not

- [i] use such information, directly or indirectly, for any purpose other than performance of this Agreement,

- [ii] disclose such information, directly or indirectly, to any other person.

This provision will continue in force after the Term. A violation of this provision will constitute a material breach of the Agreement. The Research Assistant shall sign an additional confidentiality agreement (Annex 4 of this agreement)

16. Termination.

This Agreement may be terminated by the Researcher or the Research Assistant, as applicable, under any of the following conditions:

- (a) if the Research Assistant materially fails to comply with any obligation or covenant contained in this Agreement; or
- (b) The Researcher has the right to terminate this Agreement at any time without the necessity of giving any reasons; therefore, or
- (c) the Research Assistant can give The Researcher one weeks' written notice of termination.

17. Consequences of Termination.

- In the event of termination, The Researcher will determine the extent to which the Research Assistant has satisfactorily delivered services prior to the effective date of termination and will determine the extent to which fees and costs, if any, are payable to the Research Assistant for the services performed.
- The Research Assistant shall be bound by all the provisions of this Agreement which specifically provide or by their nature are deemed to survive the termination of this contract.

18. Dispute Resolution

The Parties agree that should a dispute arise with respect to this Agreement whether during or after the Term, they shall make good faith efforts to resolve the dispute on a business basis through negotiations.

22. Assignment.

Neither this Agreement nor any of the duties or obligations arising under this Agreement may be assigned or subcontracted by the Research Assistant to other persons.

23. Research Assistant input

During the whole period of assignment, the Transcriber will be equipped with a personal portative (laptop) computer and will be accessible via internet including weekends (as appropriate). All expenses associated with personal equipment (mobile, laptop, etc.) maintenance will be covered by the Transcriber.

24. Governing Law.

This Agreement shall in all respects be governed by and construed in accordance with the laws of Kenya and the Parties submit to the exclusive jurisdiction of Kenya Courts.

IN WITNESS WHEREOF the Parties have each caused this Agreement to be executed, as of the date first written above.

By

_____ Date:

Eric Ngang
Researcher

AGREED TO AND ACCEPTED:

By:

_____ Date:

Appendix 6: Research Assistant/Translator Confidentiality Agreement

Name of Research Assistant/Interpreter/Translator:

I am aware that in the course of this assignment as a Research Assistant or interpreter or translator, I may have access to respondents' personal and confidential information and understand that any such information must be kept in confidence by me and used only in connection with the work assigned to me by the principal investigator, Eric Ngang. Personal use or sharing of confidential data is strictly prohibited.


I am aware that interview recordings and translated documents must be securely stored with password encryption when work is in progress and deleted after completed and sent to the principal investigator. I will not retain any such information for myself, including any and all means from which the information can be recovered or reproduced in any form.

I certify that I have read and understand the foregoing confidentiality agreement.

Signature: _____

Date: _____

Appendix 7: Kenya Research Permit


REPUBLIC OF KENYA

Ref No: [REDACTED]

RESEARCH LICENSE

[REDACTED]


This is to Certify that Mr. Eric Ndeh Mboumien Ngang of University of Birmingham, has been licensed to conduct research in Baringo, Kilifi, Laikipia, Machakos, Muranga, Nairobi, Nakuru, Nyeri on the topic: Climate Change and Local Indigenous Knowledge and Practices in Kenya: An Analysis of Agrarian Community Responses and their Role in Formal Law and Decision-Making, for the period ending : 21/June/2022.

License No: [REDACTED]

Applicant Identification Number [REDACTED]

Director Général
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

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Appendix 8 : Letters from host organisations in KENYA



Appendix 7: Letter to host researcher (Muranga'a University)



MURANG'A UNIVERSITY OF TECHNOLOGY
OFFICE OF THE DEPUTY VICE-CHANCELLOR
(Academic & Student Affairs)

P.O. BOX 75-10200 MURANG'A

Cell: [REDACTED] Email: [REDACTED]

REF: MUT/RI/DVC- ASA /68/2014/Vol.1

DATE: 20TH DECEMBER, 2019

Dr Walters Nsoh
University of Birmingham
B15 2TT

Dear Mr. Nsoh

SUBJECT: REQUEST TO HOST POSTGRADUATE RESEARCHER

We acknowledge with thanks receipt of your letter dated 31st October, 2019 requesting that Murang'a University of Technology hosts Mr. Eric Ngang, a PhD student at the Birmingham Law School, during field work for his research.

This request has been granted and by a copy of this letter, Dr. Joseph Njoroge is requested to provide necessary logistical support.

We look forward to a cordial working relationship with your university.

Yours sincerely,

[REDACTED]
Prof. Prisca Tuitoek, Ph.D
DEPUTY VICE-CHANCELLOR
ACADEMIC AND STUDENT AFFAIRS]

Copy to: Vice Chancellor
Deputy Vice Chancellor (F&D)
Registrar ASA
Dean SHTM
Dr. Joseph Njoroge



PMET IS ISO 9001:2015 CERTIFIED

Appendix 8: Letter to host Researcher (CASELAP, University of Nairobi)

Mr. Eric Ngang'a
Birmingham Law School, UK
C/o CASELAP
University of Nairobi

RE: APPOINTMENT AS A RESEARCH AFFILIATE

I am pleased to inform you that your request for appointment as a Research Affiliate at the Centre for Advanced Studies in Environmental Law and Policy (CASELAP), University of Nairobi, Kenya is hereby approved. The appointment is to enable you to conduct your research on "***How the law making on climate change adaptation enhances or not the incorporation of Local Indigenous Knowledge and Practices (LIKP) used by agrarian communities to build resilience.***" The appointment is tenable for a period of four (4) months w.e.f. **April 1, 2020 up to and including July 31, 2020.**

Please note the approval is given on the following conditions:

The approval is given on the following conditions:

1. That you undertake to deposit two copies of your research findings with the Director, Library and Information Services and Director, Centre for Advanced Studies in Environmental Law and Policy (CASELAP) before your departure;
2. That you fulfill whatever other conditions and requirements that the Department may impose on you as their Research Associate Fellowship including participation in staff seminars;
3. That the appointment is offered on the understanding that you have made your own arrangements regarding clearance from the National Commission for Science, Technology & Innovation (NACOSTI) to conduct research in Kenya. Obtain more details and apply for the research permit on the NACOSTI website (<http://www.nacosti.go.ke/>).



4. That you will abide by the University of Nairobi Intellectual Property Policy Acceptance Agreement;
5. That you pay to this University affiliation fees of KES 10,000/= (Ten Thousand Shillings Only), before the appointment becomes effective. Account details (Account Name: University of Nairobi, Bank: Barclays Bank, Branch: Queensway, A/c no. 094-8245531). The University charges affiliation fee as indicated below:
 - 0 - 3 months KES 5,000/=
 - 3 - 6 months KES 10,000/=
 - 6 - 12 months KES 20,000/=
6. That you will meet your medical and housing needs.

If you accept the appointment on these terms, please sign and return the following documents to the undersigned:

- a) Enclosed copy of this letter
- b) The Intellectual Property Policy Acceptance Agreement (IPPAA)



MADARA UGOTI
DEPUTY VICE-CHANCELLOR
(RESEARCH, INNOVATION AND ENTERPRISE)
AND
PROFESSOR OF MECHANICAL ENGINEERING

I (*Name of Research Associate*) _____ accept the appointment on the terms of this letter

Signature: _____ Date: _____
 Research Associate

- cc Vice-Chancellor
 Deputy Vice-Chancellor (Academic Affairs)
 Deputy Vice-Chancellor (Finance, Planning & Development)
 Deputy Vice-Chancellor (Human Resource and Administration)
 Deputy Vice-Chancellor (Student Affairs)
 Principal, College of Humanities and Social Sciences
 Director, Centre for Advanced Studies in Environmental Law and Policy (CASELAP)
 Director, Centre for International Programmes & Links
 Director, Library and Information Services