

**INTEGRATING CUSTOMARY AND STATUTORY LAW SYSTEMS OF WATER
GOVERNANCE FOR SUSTAINABLE DEVELOPMENT.THE CASE OF THE
MARAkwET OF KENYA**

ELIZABETH WANJIRUGACHENGA

Principal Supervisor: Professor Donna Craig

A thesis presented for the degree of


Doctor of Philosophy

School of Law, University of Western Sydney

2012

STATEMENT

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.

A handwritten signature in blue ink, appearing to read 'Elizabeth Gachenga', is positioned above a horizontal line.

Elizabeth Gachenga

TABLE OF CONTENTS

<i>STATEMENT</i>	<i>ii</i>
<i>TABLE OF CONTENTS</i>	<i>iii</i>
<i>ACKNOWLEDGEMENTS</i>	<i>vii</i>
<i>PUBLICATIONS AND PRESENTATIONS</i>	<i>viii</i>
<i>ABSTRACT</i>	<i>ix</i>
<i>LIST OF SELECTED ACRONYMS</i>	<i>x</i>
<i>LIST OF TABLES AND FIGURES</i>	<i>xii</i>
<i>I CHAPTER 1 INTRODUCTION</i>	<i>1</i>
A Background	1
1. The Research Problem	4
2. Objectives of the Research	5
B. Significance and Scope	6
C. Research Method	11
D. The Case Study	12
1 Background	16
2 Literature Review	17
3 Case Study Objective	19
E. Data Collection Methods	20
F. Outline of Chapters	22
<i>II CHAPTER 2 WATER RESOURCE GOVERNANCE AND SUSTAINABLE DEVELOPMENT</i>	<i>24</i>
A Sustainable Development	24
1 Genesis and Essence of Sustainable Development	25
2 Criticisms of Sustainable Development	29
3 Legal Status of Sustainable Development	32
4 Sustainability versus Sustainable Development	36
5 The Case for Sustainable Development	37
B Water Governance Systems for Sustainable Development	40
1 State of Renewable Freshwater Resources	40
2 Water Governance and Law	43
3 Implementing Sustainable Development	48
<i>III CHAPTER 3 LEGAL THEORIES AND CONCEPTS UNDERLYING ‘MODERN WATER LAW’</i>	<i>53</i>
A Law, Custom and Customary Law in Legal Positivism	54
1 Legal Positivist Theories and Concepts	54
2 Roots of the Theory	55

3	<i>Notion of Law and Legal Method</i>	58
4	<i>Relation of Law, Reason and Custom in Legal Positivism</i>	61
B	Effects of Legal Positivism on Modern Law	66
1	Customary Law in Legal Positivism	66
2	<i>Centrality of State in Legal Positivism</i>	70
C	Legal Property Theories and Concepts	71
1	Water Rights as Property	71
2	<i>Property in Common Law Systems</i>	73
3	<i>Property as Exclusion and Dominion</i>	73
4	<i>Property Law and Economic Theories</i>	75
5	<i>Common Property Regimes: Notion and Misconceptions</i>	78
6	<i>Non-Tragic Commons</i>	85
7	<i>Common Property Regimes in Modern Legal Frameworks</i>	87
D	Conclusion	89
IV	CHAPTER 4 'MODERN WATER LAW': LEGAL FRAMEWORKS FOR FRESHWATER GOVERNANCE	91
A	International Legal Frameworks for Freshwater Resource Governance	91
1	International Legal Instruments for Freshwater Governance	92
2	<i>Towards a Global Water Law?</i>	95
B	National Legal Frameworks for Freshwater Governance	97
1.	<i>Centrality of State and Statute in Development of Water Law</i>	99
2.	<i>Property Governance Systems in Modern Water Law</i>	101
3.	<i>Modern Water Rights Regimes</i>	103
4.	<i>Recognition of Customary Water Rights by Statute</i>	111
5.	<i>Water User Organisations (WUOs) and Customary Institutions</i>	114
C	Conclusion	118
V	CHAPTER 5 CUSTOMARY LAW SYSTEMS AND SUSTAINABLE DEVELOPMENT	120
A	Nature of Customary Law	120
1	Re-defining Customary Law Systems	120
2	<i>Existence and Relevance</i>	123
B	Customary Law Systems and Sustainable Development	126
1	Chthonic Nature	127
2	<i>Sui Generis Conceptualisation</i>	129
3	<i>Localism</i>	130
4	<i>Inherent Sustainability</i>	131
C	An Analytical Framework for Investigating Customary Law Systems of Water Governance that Foster Sustainable Development	133
1	Knowledge Management System	135
2	<i>Feedback Mechanism</i>	136
3	<i>Inherent Rule Modification Procedure</i>	137
4	<i>Stratification of Norms</i>	138
5	<i>Balance of Rights and Duties</i>	138
6	<i>Autonomy</i>	139
D	Recognition of Customary Law	140
1	General Provisions for Recognition of Customary Law in Statute	140

2	<i>Participation</i>	142
E	<i>Conclusion</i>	145
VI	CHAPTER 6 MARAKWET'S WATER RESOURCE GOVERNANCE SYSTEM	146
A	Nature of Marakwet's Customary Water Governance System	146
1	Features	147
2	Relevance	151
B	Marakwet's Customary Law and Sustainable Development	158
1	Knowledge Management System	159
2	Effective Feedback Mechanism	161
3	Inherent Modification Procedure	163
4	Stratification of Rules	165
5	Balance of Rights and Responsibilities	166
6	Autonomy	167
C	Conclusion	168
VII	CHAPTER 7 KENYA'S STATUTORY FRAMEWORK AND CUSTOMARY LAW SYSTEMS OF WATER GOVERNANCE	169
A	Place of Customary Law in Kenya's Legal System	169
B	Kenya's Statutory Water Framework and Customary Law Systems	173
1	Policy Goals and Community Participation	174
2	Kenya's Water Law and Marakwet's Customary Law System	177
3	Institutional Framework under Kenya's Water Act	186
C	Integration of Customary Law Systems in Water Governance Frameworks	197
D	Conclusion	202
VIII	CHAPTER 8 HUMAN RIGHTS-BASED APPROACH (HRBA): STRATEGY FOR INTEGRATION OF CUSTOMARY AND STATUTORY LAW IN WATER GOVERNANCE FOR SUSTAINABLE DEVELOPMENT	203
A	The Human Rights-based Approach	203
B	The HRBA in Water Governance for Sustainable Development	205
1	Recognition of the Human Right to Water	205
2	Normative Content and Justiciability	208
3	Practical Application of the HRBA	213
C	The HRBA in Recognition of Indigenous Peoples' Right to Self-governance through Customary Law Systems	216
1	Content and Scope of the Right	217
2	Potential Conflicts between Customary Law and Human Rights Law	220
D	Limits of the HRBA in a Legal Positivist Framework	223
IX	CHAPTER 9 EXPLORING ALTERNATIVE LEGAL THEORIES AND CONCEPTS FOR WATER GOVERNANCE FRAMEWORKS	225
A	Legal Pluralism	225
B	Classical Legal Theory	231
1	Notion of Law as Practical Reason	231

2	Nexus of Law and Nature, Custom and Reason	235
3	Customary Law in the Classical Legal Theory Context	237
C	Legal Frameworks for Water Governance in a Classical Legal Theory Context	240
X	CHAPTER 10 CONCLUSION	245
A	New Approaches for Investigating the Customary and Statutory Law Interface	245
B	Legal Theories and Concepts: Setting Parameters for Modern Water Law	247
1	Legal Positivism	247
2	<i>Customary Law as Immemorial Usage</i>	249
3	<i>Theory of Knowledge</i>	250
4	<i>Limits to Concept of Property and Governance Systems</i>	251
C	Customary Law Systems and Sustainable Development: Areas for Further Research	252
D	Seeking Strategies to Redress the Gap	254
	APPENDICES	256
	Appendix 1: Questionnaire for Water Users	256
	Appendix 2: Guideline for Focus Group Discussion with Community Leaders	262
	Appendix 3 Guideline for Focus Group Discussion with Women	264
	Appendix 4: Semi-structured Questionnaire for Government Officials in Water Sector	266
	BIBLIOGRAPHY	268
	Cases	268
	Legislation	268
	Articles/Books/Reports	269
	Treaties	301
	Other	302

ACKNOWLEDGEMENTS

This work has benefited from the support of many, to whom I am greatly indebted.

Firstly, I am indebted to Strathmore University for the financial support that has enabled me complete this degree. I would also like to thank NORAD for contributing to the funding for the fieldwork component of this research.

A special thanks to my principal supervisor Professor Donna Craig, for providing invaluable guidance on the form, structure and content of this thesis. More importantly, Professor Craig thank you for generously sharing your knowledge and wisdom acquired over years of work and experience and for being such a good mentor. I would also like to thank my co-supervisor, Professor Michael Jeffery, for all his assistance and support and in particular for improving my appreciation of the socio-political issues surrounding my research topic. I am also indebted to my associate supervisor, DrLaura Horn, whose input, especially in the areas of sustainable development and international law, helped improve the clarity and precision of this work.

Many others provided support in various ways and at different stages of this thesis. To Harrison, David, Richard, Chebet, Cynthia and all the people I worked with in Marakwet, thank you for your help, participation and hospitality. To Professor Patricia Kameri-Mbote, many thanks for the advice, support and encouragement. Thank you Professor Migai-Akech, for those tips and suggested readings at the beginning of this candidature which helped me get organised and enriched my appreciation of property theory. I am also indebted to Professor David Gathii, DrMarina Nehme and Renee Ngunjiri for taking time to read through some of my initial writing and providing some useful comments. A special thanks to DrScott Mann, Professor Lee Godden, Professor John Finnis and Professor Peter Ørebech who provided comments and suggestions on readings. To the Early Career Research Water Governance Group (NCCARF) members, thank you for the experience in trans-disciplinary research. To Luis, Stella, Naomi and other colleagues from Strathmore, thank you for the encouragement and the persistent ‘when do you finish?’ that helped me not to lose focus. Carmel, I am very grateful to you for listening to my ‘Gaelic’. Maria, Joan, Wanjiku, Val, Wambui and all my friends in Australia and Kenya, you know yourselves, thank you for the support and understanding.

Finally, I would like to express my special gratitude to my entire family and especially to my parents, whose love and support helped me complete this research project.

PUBLICATIONS AND PRESENTATIONS

Elizabeth Gachenga, 'Kenya's Water Act: Opportunities for Integration of Customary Institutions of Water Governance through Water Resources Users Associations and Water Service Providers' (2011) 22 *Water Law* 124.

Donna Craig and Elizabeth Gachenga, 'The Recognition of Indigenous Customary Law in Water Resource Management' (2010) 20 *Water Law* 278.

'Marakwet Customary Water Resource Management, A Gendered Perspective, Presentation to Partners of The Human Rights and Gender Dimensions of Water Governance in Africa: Actors, Norms and Institutions Project (NORAD) (Malawi, April, 2011).

'Customary Law in Legal Education in Kenya' Paper Presented at the 7th Annual Ethics Conference: The Ethics of Sustainable Development in Higher Education, (Strathmore University, Kenya 28-29 October 2010).

ABSTRACT

This research investigates the disconnect between customary and statutory law systems in legal frameworks for water governance and whether the integration of these systems would result in positive outcomes for sustainable development. A novel approach to the investigation is adopted, which seeks the root of the problem in the conceptual and theoretical framework within which water law is developed. By proposing a broader normative base, this research seeks to contribute to the search for more comprehensive solutions to the problem of recognition of customary law systems. Given the centrality of water to sustainable development, this research has significant implications not only on the development of water governance frameworks and the design of the property rights regimes in these frameworks but also on the capacity of the legal systems to achieve sustainable development.

An analysis of 17th century common law jurisprudence identifies the legal theories and concepts that form the basis of contemporary legal frameworks for water governance in common law jurisdictions. Consequently, this thesis investigates the legal positivism developed in the period and its notion of law and customary law as well as the property theory and its conception of property rights regimes. The effect of these theories and concepts on the integration of customary and statutory law systems in water governance frameworks is explored.

Based on existing literature, the nature and features of customary law systems are investigated and used to determine if a customary law system for water governance exists in the case of the Marakwet. This thesis proposes an analytical framework for investigating the normative aspect of customary law systems and identifying principles indicating the likelihood of positive outcomes of sustainable development. This framework is applied to Marakwet's customary water governance system. The analysis of Marakwet's system in the context of Kenya's water law confirms the limits set by legal positivism and property theory on the capacity of the law to accommodate customary law systems for water governance.

An exploration of the human right to water and the right of indigenous peoples' to self-governance using customary law systems, demonstrates the potential of using the human rights-based approach to integrate customary law systems of governing water into the statutory framework. The research also proposes the exploration of classical legal theory as an alternative theoretical framework for transcending the limits set by legal positivism.

LIST OF SELECTED ACRONYMS

CAAC	Catchment Area Advisory Committee
CBO	Community Based Organisations
CKRC	Constitution of Kenya Review Commission
CPC	Community Project Cycle
EIA	Environmental Impact Assessment
ELDOWAS	Eldoret Water Services Company
EMCA	Environmental Management and Coordination Act
EU	The European Union
FAO	Food and Agriculture Organization of the United Nations
FIDA	Federation of Women Lawyers
FMIS	Farmer Managed Irrigation Scheme
GWP	Global Water Partnership
HRBA	Human Rights-based Approach
ICCPR	International Covenant on Civil and Political Rights
IECSCR	International Covenant on Economic, Social and Cultural Rights
ILA	International Law Association
IMF	International Monetary Fund
IMWI	International Water Management Institute
IUCN	International Union for the Conservation of Nature
IWA	International Water Association
IWA	International Water Association
IWRM	Integrated Water Resource Management
KARI	Kenya Agricultural Research Institute
KVDA	Kerio Valley Development Authority
KVDA	Kerio Valley Development Authority

LVBNA	Lake Victoria North Basin Authority
LVNWSB	Lake Victoria North Water Service Board
NEMA	National Environment Management Authority
NGO	Non-governmental organisation
NWCPC	National Water Conservation and Pipeline Corporation
OHCHR	Office of the United Nations High Commissioner for Human Rights
SPA	Service Provision Agreement
UDHR	Universal Declaration of Human Rights ()
UNDESA	United Nations Department of Economic and Social Affairs
UNEP	United Nations Environment Programme
WASREB	Water Services Regulatory Board
WHO	World Health Organisation
WRMA	Water Resource Management Authority
WRUA	Water Resources User Association
WSB	Water Services Board
WSP	Water Service Provider
WSTF	Water Services Trust Fund
WTO	World Trade Organization
WUA	Water User Association
WUO	Water User Organization
WWAP	World Water Assessment Programme

LIST OF TABLES AND FIGURES

Figure 1 Legal Research Styles. Arthurs, H W, 'Law and Learning: Report to the Social Sciences and Humanities Research Council of Canada by the Consultative Group on Research and Education in Law' (Information Division, Social Sciences and Humanities Research Council of Canada, Ottawa, 1983).	12
Figure 2: Kenya's Position in Africa. 2010 Google - Map Data © 2010 Google, Tracks4Africa	14
Figure 3 Terrain Map of Marakwet District and Position in Kenya. © 2010 Google - Map Data © 2010 Google, Tracks4Africa. Marakwet district's position in Kenya. Made of data from ILRI, 2007	16
Figure 4 Framework for Analysing Customary Law Systems of Water Resource Governance	135
Figure 5 Institutional Framework Established under Kenya's Water Act. Source: Ministry of Water and Irrigation Kenya, National Water Services Strategy 2007-2015	187

I CHAPTER 1 INTRODUCTION

A Background

Fresh water is fundamental for life and for livelihoods and thus the management of water resources is an essential issue in society. Different paradigms of water resource governance have emerged and evolved in the course of time, reflecting prevalent societal values and policy goals.

Sustainable development, though a contested term, represents the predominant paradigm of governance. This was confirmed in the Rio+20 United Nations Conference on Sustainable Development (June 2012), where Heads of State and Government, high level representatives as well civil society articulated the overall policy goal for society in terms of sustainable development.¹ The outcome of the Conference was a common declaration renewing global commitment to the promotion of an economically, socially and environmentally sustainable future for the planet and for present and future generations.² The Declaration resulting from the Conference, referred to as ‘The Future We Want’, also recognises that water is at the core of sustainable development given its linkage to key global challenges, and thus reiterates the importance of integrating water in sustainable development.³

Despite the adoption of sustainable development as a policy goal, many governments and communities are still grappling with the challenge of how to meet the water resource needs of a growing population while sustaining ecological flows so as to ensure sustainability for present and future generations.⁴ Water governance is a challenging task given the complexity of the hydrological cycle and the multiplicity and inter-connection of users and uses of water resources. Sustainable development requires the integration and coordination of these multiple factors. Legal systems, which are the complex assemblage of norms, practices and institutions used to order society, are an important mechanism for achieving the required coordination.

¹Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012).

²Ibid 1.

³Ibid 119.

⁴United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNON, 2010) ix.

In modern society, legal systems for water resource governance are conceived primarily in the context of statutory law, which is law enacted by state organs. However, in many countries, across all the continents, certain aspects of water resource development and management, particularly at the local level, are governed by informal norms, practices and institutions developed by the resource users. In this thesis, the term ‘customary’ is used to refer to these informal or non-statutory norms and institutions. The importance of customary systems for water resource governance is particularly evident in Sub-Saharan Africa where land and water resources are regulated by plural normative systems including statutory law, customary laws of different ethnic groups and in some cases Islamic law. In spite of this, water reform in most of these countries has focused primarily on the statutory legal systems, with little attention given to customary law systems.

The failure to accommodate or integrate customary law systems adversely affects the attainment of sustainable development. As recognised by the Declaration – ‘The Future We Want’, the need for the active involvement and meaningful participation of all stakeholders including inter alia, indigenous peoples, women and local communities, at all levels of decision-making, planning and implementation of policies and programmes is crucial for sustainable development.⁵ Many indigenous peoples and local communities use customary law systems to govern their natural resources. The active involvement and meaningful participation of such indigenous peoples and local communities thus implies the integration of their customary law systems, including those for water governance, with the statutory legal frameworks.

In the last two decades, water sector reforms in most countries have sought to incorporate into their legal systems, institutional arrangements that facilitate the participation of users at the various levels of water resource governance; from policy formulation right through implementation and enforcement. Statutory legal systems have sought to create through legislative enactments the normative and institutional frameworks for such community based management of water resources. However, in many countries a strong presence of pre-existing water user organisations precedes these statutory creations. This is particularly evident in the case of irrigation, where in many countries around the world, there exists a

⁵Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012), 43.

long tradition of user managed systems of irrigation.⁶ These pre-existing user organisations often have their origin in non-statutory normative systems and corresponding institutional frameworks developed by the users.⁷ In most cases, a property regime established by the users governs their relation with the water resource and with each other.⁸ These locally established water user organisations, which are distinguished from the legally created ones, are organic institutions developed through a bottom-up democratic process. In many cases, they continue to play an important role in the management of local water resources.⁹

In some countries, particularly those with a colonial history, pre-existing water user arrangements predate colonial rule and the legal systems established by the post-colonial state. As a result of this, modern legal systems tend to refer to these pre-existing normative systems and institutions used to govern water resources as 'traditional' or 'customary' implying a connotation of antiquity or long usage. The link of customary with antiquated and traditional has also led to the association of customary law for water resource governance with developing countries. In the case of developed countries, the term customary in this context is reserved for the vestiges of customary forms of governance still present in the legal systems due to the existence of an indigenous minority population. The need to recognise the water rights of indigenous peoples in the statutory legal systems developed for water governance is nevertheless acknowledged as essential for ensuring sustainability of water resources which tend to be shared across indigenous and non-indigenous populations.¹⁰ As discussed in later sections of this thesis, such a notion of 'customary' is limiting as it fails to consider the reality of these non-statutory forms of governance which are in most cases dynamic and constantly adapting.¹¹

⁶Salman M A Salman, *The Legal Framework for Water Users' Association: A Comparative Study*, World Bank Technical Paper No. 360 (The World Bank, 1997).

⁷Stephen Hodgson, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law' (2009) (100) *FAO Legislative Study*

⁸ Ostrom and others refer to these systems as common property systems. See, eg, Shiu Y Tang and Elinor Ostrom, *The Governance and Management of Irrigation Systems: An Institutional Perspective*, ODI Irrigation Management Network Paper (Overseas Development Institute, 1993).

⁹Stephen Hodgson, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law' (2009) (100) *FAO Legislative Study*

¹⁰Melanie Durette, 'A Comparative Approach to Indigenous Legal Rights to Freshwater: Key Lessons for Australia from the United States, Canada and New Zealand' (2010) 27 *Environmental and Planning Law Journal* 296.

¹¹Donna Craig and Elizabeth Gachenga, 'The Recognition of Indigenous Customary Law in Water Resource Management' (2010) 20 *Water Law* 278.

The resilience of these customary governance regimes of water resources have led water law practitioners and researchers to concede that they constitute a factor to be reckoned with when preparing 'modern' legislation for water resource governance.¹² Further, research on these systems has shown that in some cases their resilience is the result of an inherent adaptive capacity which makes the systems more sustainable than state developed systems.¹³ It has also been argued that customary law has a potential to contribute to the achievement of sustainable development in so far as it fosters the societal values and goals associated with sustainable development.¹⁴ Given that these customary governance forms are self-developed, they arguably represent a more democratic process of development of law and thus are more likely to be successful at attaining sustainable development.¹⁵

Despite the growing appreciation for the potential role of customary norms and institutions in the governance of water resources for sustainable development, most modern legal systems are primarily statute based and state-centric.¹⁶ Further, these systems are premised on the market paradigm that perceives legal normative systems and institutions on the two-dimensional plane of either state-owned and governed or privately owned and market regulated.¹⁷ As a consequence, there is little room for recognition of customary normative systems and institutions which as noted, are often self-developed and based on common property regimes or other property systems that are not necessarily centred on markets.

1. *The Research Problem*

On the basis of the foregoing, it may be surmised that the paradigm in which modern legal systems are conceived does not adequately recognise customary systems for water resource governance. Nevertheless, as noted above, the literature on customary water governance and

¹² See, eg, Eastern and Central Africa Programme for Agricultural Policy Analysis, 'Accommodating Customary Water Management Arrangements to Consolidate Poverty-focused Water Reform: A Policy Brief' (ECAPAPA, 2007) <<http://hdl.handle.net/10625/42486>>.

¹³ Elinor Ostrom and Roy Gardner, 'Coping with Asymmetries in the Commons: Self-Governing Irrigation Systems Can Work' (1993) 7(4) *The Journal of Economic Perspectives* 93.

¹⁴ Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

¹⁵ Peter Ørebech, 'Customary Law and Sustainable Development' (Paper presented at the Workshop in Political Theory and Policy Analysis, Bloomington, Indiana, 6 March 2006).

¹⁶ See, eg, Hodgson in Stephen Hodgson and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006)

¹⁷ See Jules L Coleman, *Risks and Wrongs* (Cambridge University Press, 1992); Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001* <<http://www.benkler.org/WhitePaper.pdf>>.

common property regimes, indicates that these systems continue to exist and that in some instances, they are more suitable in achieving sustainable development of water resources. This thesis thus deduces a hypothesis on the basis of the above observations.

This thesis thus puts forward the hypothesis that there is a disconnect between statutory and customary law systems for the governance of water resources and that therefore, the redress of this disconnect would contribute to sustainable development of water resources in jurisdictions where customary law systems continue to operate. This hypothesis will be explored using a case study of the Marakwet community whose customary based irrigation system is the oldest in Kenya.

2. Objectives of the Research

The primary objective of this thesis is to explore with the help of theoretical and analytical frameworks as well as the case study, the hypothesis that there is a disconnect between statute and customary law in modern legal systems for water governance and that customary law systems can contribute to sustainable development. Apart from confirming or disproving the hypothesis, the exploratory approach taken in the thesis will provide the opportunity to use the data generated from the case study to clarify or modify the theories. If the hypothesis is confirmed, the thesis will also use the results of the investigation to propose legal strategies for developing water resource governance systems that foster sustainable development by drawing on both statutory and customary law, with particular application to Kenya.

The above objectives will be pursued using the following set of formulated research questions:

1. What are the legal theories and concepts forming the basis of statutory legal systems for management of water resources?
2. What legal theories and concepts underlie the prevalent notions of law, custom, customary law and property in modern legal frameworks for water governance in common law jurisdictions?
3. What effects do these legal theories and concepts have on the capacity of the statutory legal systems to recognize customary law in the management of water resources?
4. Does customary law continue to exist in the context of water resource management in rural Kenya and if so how effective is it in the management of contemporary systems of water resource management?

5. What principles of sustainability does the Marakwet customary law system for the management of water resources demonstrate?
6. What are the possibilities of recognition of Marakwet's customary Law in the Kenyan statutory legal system for the management of water resources?

B. Significance and Scope

The themes of sustainable development, customary law, recognition of customary law and water resource governance have been the subject of copious research from various disciplines including law, ecology, environmental science and anthropology. However, most research in the area has studied the themes independently, with only a small percentage of the literature addressing the subjects as a unit whole and in the context of a legal research problem as this thesis seeks to do. A review of some of the research which has adopted a similar approach as that taken in this thesis demonstrates a gap which this thesis seeks to fill.

Kwa, whose work reviews the literature on sustainable development since its popularization by the Brundtland Commission,¹⁸ argues that the concept has strong roots in traditional systems of governance as demonstrated by a case study on the 'traditional' notion of sustainable development in Papua New Guinea.¹⁹ This work provides interesting parallels to the present research given the approach adopted which involves connecting the notion of sustainable development to customary notions of governance. Kwa's work adopts as an analytical framework the constituent principles of sustainable development as expounded in the context of international law. While the framework is enriched with an additional principle observable from an analysis of the traditional notion of sustainable development, it is primarily developed in the context of international environmental law. The case study thus constitutes the application of the analytical framework developed in a bid to identify evidence of the existence of principles in traditional governance systems of Papua New Guinea that match those identified as key to sustainable development in the international environmental law framework.

The present research takes a different approach from that taken by Kwa in so far as the concept of sustainable development is critically analysed in the context of underlying legal theoretical frameworks. As the notion of law is challenged, the framework for analysing the

¹⁸United Nations World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment (1987).

¹⁹Eric Lokai Kwa, *Traditionalizing Sustainable Development: The Law, Policy and Practice in Papua New Guinea* (PhD Thesis, University of Auckland, 2006) <<http://hdl.handle.net/2292/2873>>.

concept of sustainable development is radically expanded. As a consequence, the international framework within which the constitutive principles of sustainable development have been developed is reviewed but this does not mark the limits of the analytical framework used in this research. The research rather develops an analytical framework for evaluating the notion's association with customary water governance systems on the basis of an alternative legal theoretical framework to legal positivism. This freedom from the limits of the notion of law laid by the legal positivist framework enables this research to explore the notion of sustainable development from multiple frameworks including Kwa's international environmental law framework but also from other non-statutory or customary law frameworks.

Several researchers have engaged with the issue of recognition of customary rights in the legal systems developed for management of natural resource governance. Strack explores the question of recognition of aboriginal rights in the management of rivers in Canada and New Zealand.²⁰ The work explores the status of aboriginal rights in rivers in the context of property rights granted by the common law, treaty provisions and the body of law recognised in these jurisdictions as customary/Aboriginal law. Two case studies, one based on a community governing the Bow River in Alberta Canada and another with a governance system of the Taieri River in Otago, New Zealand provide practical illustrations. The present research explores these forms of recognition of Aboriginal rights of water in New Zealand and Canada as well as other forms of recognition used in other settler colonies such as Australia and the United States. This work forms the basis for critiquing the prevalent notions of law, customary law and property and provides a basis for proposing alternative frameworks. While Strack's research is contextualised in former settler colonies with a minority indigenous population, the present research uses a case study from Kenya whose indigenous population is the majority.

Kalinoe, like Strack also investigates the nature of indigenous water rights at common law.²¹ He however, does not undertake a comparative study but rather seeks to determine the impact of the statutory water law regime on the customary water rights in Papua New Guinea. While the basic approach of this research is similar to that adopted in this thesis, the present work

²⁰Michael S Strack, *Rebel Rivers: An Investigation into the River Rights of Indigenous People of Canada and New Zealand* (University of Otago, 2008).

²¹Lawrence Kuna Kalinoe, *Water Law and the Nature of Customary Water Rights in Papua New Guinea* (PhD Thesis, University of Wollongong, 1998).

analyses not just the customary rights but rather the customary normative systems and institutions and moreover does so in the wider context of underlying theoretical frameworks. Nkonya's work on customary institutions of rural water management in Tanzania is particularly insightful as Tanzania, as Kenya, is in East Africa and the customary institutions under study in the Bariadi district are similar to the institutions developed by the Marakwet community.²² The research which is grounded in anthropology and social studies, adopts an empirical approach in which the impact of customary institutions of rural water management is analysed and compared to that of statutory laws for water governance. The evidence collected suggests that customary institutions in Bariadi district play a more significant role than statutory law institutions despite the shortcomings of the former, for instance in the tendency to discriminate against women. The research thus proposes the need for statutory legal systems to recognise the importance of customary institutions and to design policies and strategies to improve customary institutions, particularly with respect to participation of women in decision making.

The findings of Nkonya's research provide evidence from which the present work infers a hypothesis on the relation between customary and statutory law systems. While the work by Nkonya is situated in Anthropology, the present research seeks to contextualise the problem in a legal context. As a result, the use of a case study of the Marakwet community in the present research differs from the use of the Bariadi district case study in Nkonya's work. In the present thesis the case study is contextualised in a wider conceptual research exploring legal theoretical frameworks. The empirical data from the case study is used to gain insight into the issues researched and to illustrate the theoretical arguments made.

The present research is premised on an argument shared by Justin Rose's work which is that despite the abundance of literature on customary notions of natural resource governance, there is a dearth of literature on the legal theoretical underpinnings of the issues in question.²³ Rose seeks to contribute a legal perspective to the paradigm shift required in order to provide a suitable legal theoretical framework for participatory or community based approaches to natural resource governance.²⁴ His work proposes legal pluralism and common property as alternative theoretical frameworks to legal positivism for developing the discourse on

²²Leticia Kuchibanda Nkonya, *Drinking From Own Cistern: Customary Institutions and their Impacts on Rural Water Management in Tanzania* (PhD Thesis, Kansas State University, 2006).

²³Justin Rose, *The Village and the Leviathan Law, Environmental Governance and the Local Polity in the Federated States of Micronesia* (PhD Thesis, Macquarie University, 2007).

²⁴*Ibid.*

community based approaches to natural resource governance.²⁵ Rose demonstrates the practical implication of the theoretical arguments made in his work through two case studies of natural resource law and governance in Pohnpei, Federated States of Micronesia.

While agreeing that there is a gap in the literature relating to customary law and governance institutions, this thesis takes a different approach to that taken in Rose's research. The present work acknowledges and reviews the literature in the area of customary law and governance based on legal pluralism as an alternative theoretical framework to legal positivism including the work by Rose. The thesis will also review literature critical of the attempt to use legal pluralism as a legal theory or philosophy.²⁶ Given the shortcomings of legal pluralist theories, the present research explores the theory of law as practical reason as an alternative to legal positivism and proposes its use as a framework for developing legal systems for water resource governance that accommodate customary law and facilitate sustainable development. Many contemporary legal theorists concede that law is a product of reason, though there is disagreement among them on the understanding of reason.²⁷

Apart from exploring the legal theoretical framework of law as practical reason, this thesis also explores common property regimes and water resource governance in the context of the wider property theory. Common property regimes have been studied from a variety of disciplines and more recently have been the subject of inter-disciplinary investigation. Elinor Ostrom has studied the subject of common property over the last two decades and published extensively in the area.²⁸ The research generated from this literature will be reviewed and used to gain insights into the workings of common property regimes and specifically common property governance systems for irrigation.

Karatna's research situated in the discipline of natural and built environments explores Ostrom's framework for analysis of common pool resources as a possible framework for the analysis of natural governance regimes.²⁹ The framework is used to analyse a common pool

²⁵ Ibid.

²⁶ See, eg, Brian Z Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*.

²⁷ See, eg, Neil MacCormick, 'Contemporary Legal Philosophy: The Rediscovery of Practical Reason' (1983) 10(1) *Journal of Law and Society* 1, Steven J Burton, 'Law as Practical Reason' (1988-89) 62 *Southern California Law Review* 747 and John Finnis, 'Describing Law's Foundation' (2011) *UCL Colloquium* 26 January 2011.

²⁸ See, eg, Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990) her pivotal work on commons.

²⁹ Patcharasorn Karatna, *Analysis of a Common Pool Resource* (Doctor of Philosophy Thesis, University of South Australia, 2005) <<http://arrow.unisa.edu.au:8081/1959.8/82987>>.

resource in Thailand which consists of a canal used for agriculture, transport, commerce tourism and aesthetics. Karatna's research and other related works provide useful insight into the workings of the various variables identified by the research on common pool resources as influential in resource allocation. Nevertheless, as pointed out by Qiao, the multiplicity of variables makes it difficult to replicate studies based on this model.³⁰ Further, as the model is based in the context of institutional design, it would need adaptation in order to be applied to legal systems for water resource governance.

Ørebech and Bosselman have sought to adapt the common pool resource model into a framework for the analysis of customary law and used the modified framework to analyse the contribution of customary law systems to sustainable development.³¹ The present research builds on this framework and develops it further with insights drawn from more recent work on the common property institutional arrangements.³² Moreover, the present research seeks to enhance these frameworks further by contextualizing them more deeply in the legal property theory discourse.³³

Various legal strategies for integrating customary law systems into the statutory legal systems for water resource governance have been explored. In Australia, an agreement approach recognising customary law has been proposed and tested in the context of the Anmatyerr people of the Northern Territory.³⁴ This model whose use has also been explored in Canada seeks to use the pre-existing common law principles governing agreement making to implement the rights of indigenous peoples to participate in the management of their water resources on the basis of customary law.³⁵ In Tanzania, a strategy of organising water users into the statutory created water user associations has been explored as a means of integrating pre-existing customary management systems into statutory legal systems for water

³⁰Shitong Qiao, 'Governing the Post-Socialist Transitional Commons: A Case from Rural China' (2012) *Student Scholarship Papers. Paper 122*<http://digitalcommons.law.yale.edu/student_papers/122>.

³¹Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) .

³² See, eg, Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*.

³³Carol Rose, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711; Lawrence Lessig, Code and the Commons, (Keynote Address at the Conference on Media Convergence, Fordham University Law School, February 9, 1999)<<http://cyber.law.harvard.edu/works/lessig/fordham.pdf>>.

³⁴Donna Craig et al, *An Agreement Approach that Recognises Customary Law in Water Management* (Land & Water Australia, 2009).

³⁵Durette (2010) above n 10.

governance. Some of the literature documenting the experience includes a case study on the attempt to integrate the traditional rotation-based water sharing system (*Zamu*) with formal water management instruments in the Mkoji sub-catchment.³⁶ Kapfudzaruwa et al have also evaluated the effectiveness of legal water user associations in integrating pre-existing traditional governance forms in rural South Africa.³⁷

The present research critically analyses these and other strategies proposed in the context of the frameworks developed for common property regimes and evaluates the suitability of such strategies for the realization of the full potential of the customary law systems with their common property governance regimes.

The theoretical arguments made in this thesis relate to the notion of law prevalent in modern legal systems but with a focus on jurisdictions with a common law tradition. As a result, the review of literature on legal theory is limited to the literature from the common law legal theory tradition. As indicated, there is a vast amount of literature on common property governance systems in the context of economics, political science and more recently institutional analysis design. While some of this literature will be reviewed to provide an insight into the wider context of the discourse, the present thesis will focus primarily on applying the literature in the context of law. The research questions outlined in the foregoing section will serve as a guideline for scoping the research.

C. *Research Method*

The research design adopted will be the fundamental research design, in which a deeper understanding of the law as a social phenomenon is sought through a research that considers the historical, philosophical, linguistic, economic, social and political aspects of law.³⁸ The methods used to achieve the objectives of the research will be qualitative.³⁹ A multiplicity of qualitative methods will be used depending on their suitability to the research objectives sought. The diagram below illustrates the different types of methods used in legal research and the position of the fundamental research design model used in this thesis.

³⁶ Abraham Mehari et al, 'Integrating Formal and Traditional Water Management in the Mkoji Sub-catchment, Tanzania: Is it Working?' <<http://www.bscw.ihe.nl/pub/bscw.cgi/d2607619/Mehari.pdf>>.

³⁷ Farai Kapfudzaruwa and Merle Sowman, 'Is There a Role for Traditional Governance Systems in South Africa's New Water Management Regime?' (2009) 35(5) *Water SA* 683.

³⁸ Terry C M Hutchinson, *Researching and Writing in Law* (Lawbook Co, 2006).

³⁹ While appreciating that some scholars argue that the distinction between qualitative and quantitative research is blurred, this thesis uses the term qualitative methodology in the context of traditional classification of research methodology. This means research involving data that is not materially quantifiable.

APPLIED RESEARCH Professional constituency			
INTERDISCIPLINARY METHODOLOGY (Research about law)	Law Reform Research (socio-legal research/law in context)	Expository Research (conventional treatises & articles) <i>Black Letter Law Thesis</i>	DOCTRINAL METHODOLOGY (Research in law)
	* Fundamental Research (socio-legal research/law in context)	Legal Theory Research (Jurisprudence, legal philosophy etc.)	
PURE RESEARCH Academic constituency			

Figure 1 Legal Research Styles. Arthurs, H W, 'Law and Learning: Report to the Social Sciences and Humanities Research Council of Canada by the Consultative Group on Research and Education in Law' (Information Division, Social Sciences and Humanities Research Council of Canada, Ottawa, 1983).

The choice of the methodology is informed by the subject matter under study. The investigation of customary water resource governance systems, their potential role in achieving sustainable development and their interaction with the statutory water resource governance framework constitutes a research that goes beyond the bounds of the 'black letter of the law'. This is because such a study is not just a research in law but research about the law in so far as it investigates phenomenon outside the scope of statute as well as considering law in context.⁴⁰ A fundamental research design allows for a critique of the law not just from within law but also from the context of the external reality within which law is applied.

Further as the phenomenon under study in this research goes outside the scope of statutory law, the methods adopted for study require inter-disciplinary methods apart from the traditional legal research methods. This explains the inclusion of a case study. The term 'case study' is used in different contexts in social science research. In this thesis it is used to refer not to a methodological choice but rather a choice of what is studied.⁴¹

D. The Case Study

In many parts of Sub-Saharan Africa, the management of water resources, particularly in rural areas, is in the hands of local community user groups who rely on their customary

⁴⁰Paul Chynoweth, 'Legal Research' in Andrew Knight and Les Ruddock (eds), *Advanced Research Methods in the Built Environment* (Blackwell Publishing, 2008).

⁴¹Robert E. Stake, 'Qualitative Case Studies' in Norman K. Denzin and Yvonna S. Lincoln (eds), *The Sage Handbook of Qualitative Research* (Sage Publications, 3rd ed, 2005) 433.

norms and institutions for governing water resources. The origin of most of these systems, which pre-date colonial rule, can be traced to the initial occupation by the communities of their present territories. In East Africa, the systems commonly revolve around an irrigation system that is used to supply water for domestic and agricultural use for the local community.⁴²

Kenya, which is in Sub-Saharan Africa, has a long tradition of customary governance. The traditions and cultures of many communities living in Kenya are replete with rules relating to ecological stewardship and management of natural resources.⁴³ As Huggins observes, water management was an integral part of the customary laws and behavioural norms of the different communities.⁴⁴ Some examples of these rules are the spatial-temporal restrictions on the use of grazing and agricultural land during drought among the Maasai and Gabra communities in pre-colonial times.⁴⁵ These rules were developed and enforced in the context of the wider community based systems of political and social governance. The establishment of colonial rule in Kenya led to a political re-organisation of the nation with the establishment of novel legal systems which were to a great extent intended to replace the pre-existing normative and institutional arrangements. Despite this re-organisation, customary institutions continued and continue to exert a significant influence on the governance of natural resources. This is particularly the case with water resources. Kenya has a long history of customary institutions for governance of water resources.⁴⁶ These institutions play a vital role in water resource management particularly in rural areas where two-thirds of the country's population lives.

⁴²Mats Widgren et al, *Islands of Intensive Agriculture in Eastern Africa: Past & Present* (British Institute in Eastern Africa, 2004).

⁴³Migai-Akech, Patricia Kameri-Mbote and Charles O Okidi, *Environmental Governance in Kenya: Implementing the Framework Law* (East African Education Publishers, 2008) 195.

⁴⁴Chris Huggins, 'Water Policy and Law in a Water-Scarce Country: Implications for Smallholder Irrigation in Kenya ' in Herbert G Blank, Clifford M Mutero and Hammond Murray-Rust (eds), *The Changing Face of Irrigation in Kenya. Opportunities for Anticipating Change in Eastern and Southern Africa* (IWMI, 2002) 278.

⁴⁵ Migai-Akech et al, above n 42, 195.

⁴⁶ See, eg, Robert C Soper, 'A Survey of the Irrigation Systems of the Marakwet' in Benjamin E Kipkorir, Robert C Soper and Joseph W Ssenyonga (eds), *Kerio Valley: Past Present and Future* (University of Nairobi, Institute of African Studies, 1983) Matthew Davies, 'The Irrigations System of the Pokot Northwest Kenya' (2008) 43(1) *Azania: Archaeological Research in Africa* 50 .

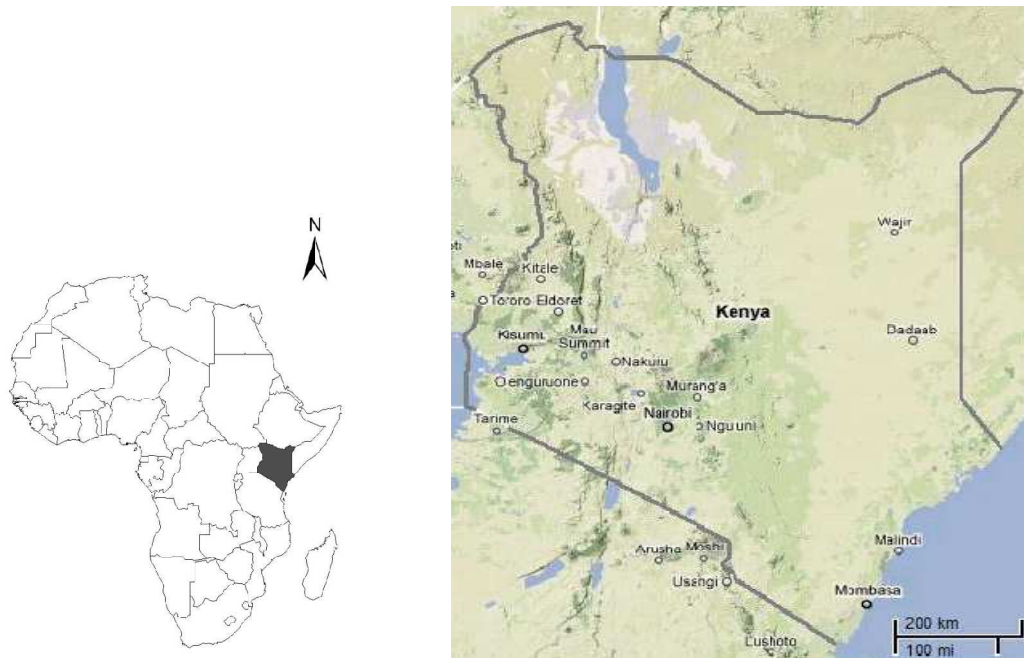


Figure 2: Kenya's Position in Africa. 2010 Google - Map Data © 2010 Google, Tracks4Africa

A comprehensive legislative and institutional reform of the water sector in the country conducted at the beginning of this decade was intended to coordinate all institutional arrangements for water resource governance into the statutory legal framework.⁴⁷ The reforms were also directed at improving provision of water and sanitation both in urban and rural areas. However, in spite of the reforms, water management in the country continues to be a challenge. As at 2008, it was estimated that approximately 60 per cent of poor people living in rural and urban areas in the country did not have access to adequate water and sanitation services.⁴⁸ The reason for this state of affairs is not just physical scarcity but economic scarcity of water, the latter referring to a lack of water caused by lack of infrastructure or investment necessary to ensure adequate water supply.⁴⁹ Notwithstanding the government's efforts to increase investment in the sector, formal administrative structures set in place by the water law continue to face serious challenges in meeting the increasing demand for water given their limited resources and implementation capacity.⁵⁰ In view of the

⁴⁷ See *Water Act 2003* (Kenya).

⁴⁸ Ministry of Water and Irrigation Kenya, 'Issue Paper on Increasing Access to Water & Sanitation Services to the Underserved' (Paper presented at the Annual Water Sector Conference, 2008).

⁴⁹ Ibid.

⁵⁰ Robert Gakubia, 'Water Services Sub-sector Working Group' (Paper presented at the Annual Water Sector Conference KICC, Nairobi, 24 October 2010).

above, customary institutions developed by users have, in the absence of state supplied services, provided the framework through which users develop water infrastructure and manage the allocation of water resources.⁵¹

This thesis uses a case study of a customary water resource governance system in Kenya to illustrate that customary law exists and has the potential to contribute to sustainable development⁵² and that therefore the redress of the disconnect between customary and statutory law would contribute to development of legal frameworks for water resource governance that foster sustainable development. The case study also provides the opportunity for considering legal strategies for the integration of statute and customary systems of water resource governance for sustainable development.

The oldest customary managed irrigation system in the country is that along the Marakwet Escarpment in the Kerio Valley.⁵³ The choice of Marakwet's customary water resource governance system as a case study for this thesis is thus purposeful. The area under focus in this research is Kaben location which is on the northern side of Marakwet District bordering Pokot district. Marakwet district is on the Northern side of the Great Rift Valley in Kenya.

⁵¹Albert Mumma, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' in Mark Giordano, Barbara Van Koppen and John Butterworth (eds), (CABI, 2008).

⁵²See Ørebech, Peter et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

⁵³Ssenyonga Joseph, 'The Marakwet Irrigation System as a Model of a Systems Approach to Water Management' in Benjamin Kipkorir, Robert Soper and Joseph Ssenyonga (eds), *Kerio Valley: Past, Present and Future* (University of Nairobi, Institute of African Studies., 1983) 96.

two main seasons. Whereas the rainfall in the area around the escarpment is high, only about 597mm falls per year in the valley floor, a situation made worse by the fact that the area is prone to drought.⁵⁹ The district is home to one of the largest remaining natural forests in Kenya, an important catchment for the area, but which unfortunately is threatened by illegal foresting.⁶⁰

The Marakwet communities have a tradition of customary law and governance that predates colonial rule.⁶¹ This system also forms the backbone of a robust water resource governance regime. The irrigation system practiced is a form of hill furrow irrigation and has been described as slope off-take irrigation system.⁶² Hill furrow irrigations systems are common in East Africa. The irrigation furrows date back to the initial occupation of the community in the valley prior to colonial rule.⁶³ The furrows are the main source of freshwater resources for the community both for agricultural and domestic use. The community thus provides a good example of a customary based system of water resource governance in Kenya. This study focuses on the area bordering Pokot and more specifically Sambalat.

2 Literature Review

The Marakwet community have been the subject of several studies from different disciplines. Kipkorir's study is an important source of the community's social and cultural history which is to a great extent linked to their customary norms and governance systems.⁶⁴ The study though dated provides a useful background on the community's social organisation and thus helps gain insight on the normative and institutional structure of their water resource governance system. However as Kipkorir himself notes the traditional structures of the

⁵⁹ Watson, Elizabeth E, William M Adams and Samuel K Mutiso, 'Indigenous Irrigation, Agriculture and Development, Marakwet, Kenya' (1998) 164(1) *The Geographical Journal* 55.

⁶⁰ Study based on satellite data indicate a 14% decrease in forest coverage has occurred in the 23 year period between 1986 and 2009 and that a failure to intervene could result in a 45% decrease by 2100. See above n 58.

⁶¹ Mervyn W H Beech, 'Sketch of Elgeyo Law and Custom' (1921) 20(79) *Journal of the Royal African Society*. On early accounts of the Marakwet's law and custom.

⁶² Linden Vincent, *Hill Irrigation: Water and Development in Mountain Agriculture* (Overseas Development Institute, 1995).

⁶³ Robert C Soper, 'A Survey of the Irrigation Systems of the Marakwet' in Benjamin E Kipkorir, Robert C Soper and Joseph W Ssenyonga (eds), *Kerio Valley: Past Present and Future* (University of Nairobi, Institute of African Studies, 1983).

⁶⁴ Kipkorir, Benjamin and Frederick Welbourn, *The Marakwet of Kenya: A Preliminary Study* (East African Educational Publishers, 2008).

governance system of the Marakwet are dynamic and have changed significantly since the 1960s when the data used for his work was collected.⁶⁵

Apart from this work on the history and anthropology of the Marakwet, significant research has been undertaken in the area of the irrigation systems of the Marakwet. Soper's work on the Kerio Valley includes invaluable information on the irrigation system of the Marakwet.⁶⁶ This work provides a useful background of the geo-spatial characteristics of the hill irrigation furrows constructed by the community. It also discusses the geographical attributes of the area and elaborates on the technical aspects of the irrigation system.

Further work on the community's irrigation furrow system was conducted by Watson, Adams and Mutiso. This work generated information on the nature, extent and significance of the irrigation furrows in the wider context of irrigation in the area. Though the work discusses to some extent the organisation of the furrow system along water rights, the focus is on the technical aspects of construction of the furrows. The objective of the case study in this thesis is to investigate, in a legal context, the normative and institutional structures of water resource governance of the Marakwet.

In another article, the same authors investigate the rules governing water allocation in Marakwet's irrigation system in the wider context of farmer managed irrigation systems.⁶⁷ This latter piece, which is based on empirical data, describes the 'formal rules' developed by the community to determine water allocation with an emphasis on the gender issues affecting water rights. The authors suggest on the basis of their research that apart from these formal rules, there also exist 'working rules' which they argue include informal practices such as sharing, buying and stealing of water. These working rules are, according to the authors, what determine water rights and allocation in reality. The case study in this thesis goes beyond a description of the rules, whether formal or informal, for water allocation and seeks rather to understand the extent to which these rules form a normative structure of a legal nature and contribute to sustainable development.

⁶⁵ Benjamin Kipkorir and Frederick Welbourn, *The Marakwet of Kenya: A Preliminary Study* (East African Educational Publishers, 2008) ix.

⁶⁶ See Soper, Robert C 'A Survey of the Irrigation Systems of the Marakwet' in Benjamin E Kipkorir, Robert C Soper and Joseph W Ssenyonga (eds), *Kerio Valley: Past Present and Future* (University of Nairobi, Institute of African Studies, 1983).

⁶⁷ William M Adams, Elizabeth E Watson and Samuel K Mutiso, 'Water, Rules and Gender: Water Rights in an Indigenous Irrigation System, Marakwet, Kenya' (1997) 28 *Development and Change* 707.

A more recent research commissioned by the Kenya Agricultural Research Institute (KARI) considers the institutional aspects of the irrigation systems in the Kerio Valley Basin in the context of the new Water legal framework.⁶⁸ This study which consists of an ethnographical and sociological analysis of the two irrigation systems in the Perkerra and Kerio Valley irrigation schemes describes the water management institutions and analyses their strengths and weaknesses. The analysis is undertaken in the context of the Water Act. The study concludes that though the institutional arrangements envisaged in the Water Act may be more effective in raising agricultural productivity, in the case of the Kerio River Basin, they may not be as effective at minimising conflicts and may in the long run be counter-productive as they erode the traditional systems already in place.⁶⁹ The results of this study suggest that traditional systems of irrigation management in the Kerio Valley are effective and thus justify the in-depth study of these systems.

A review of the existing literature on the irrigation system of the Marakwet indicates that none of the studies have analysed the customary water resource governance system in the context of the theoretical and analytical framework proposed in earlier sections of this thesis. The present study seeks to conduct such an in-depth study of one of the systems of the Kerio River Basin- the Marakwet customary water resource governance system but from a legal perspective. A critical analysis of the normative and institutional frameworks of this system is undertaken from the perspective of the legal theoretical and analytical frameworks discussed in foregoing sections. This case study builds on the data generated from the existing literature, and supplements this with the data collected in the course of field work conducted by the researcher. The information on Marakwet's customary water resource governance systems is then used to evaluate the validity or otherwise of the hypothesis presented in this research.

3 *Case Study Objective*

The objective of using the case study in this research is twofold. Firstly, to conduct an investigation of a customary law system for management of water resources, that is the Marakwet customary system. The case study provides the basis for investigating the notion of

⁶⁸J C Mulindo, W Chepkonga and T Chepkonga, 'Institutions for Irrigation Water Management and Use: A Comparative Analysis of the Perkerra and Kerio River Basins' (Paper presented at the 10th KARI Biennial Scientific Conference, KARI Headquarters Nairobi, 2006)
<http://www.kari.org/fileadmin/publications/10thProceedings/Poster/Institution_IrrignWaterMgt.pdf>.

⁶⁹Ibid.

law, the concept of property and principles of sustainability underlying the customary water resource system. It will also highlight the extent to which existing forms of recognition of customary law in Kenya's water statutory legal framework are adequate for accommodating this system. Secondly, the case study will also be used to illustrate the theoretical arguments made in this research particularly those relating to the legal theories and concepts underlying modern water law and the effects of these on legal systems for water governance.

Marakwet's customary system has been purposely selected because in the case of customary systems for the management of water resources in Kenya, it constitutes a close to ideal scenario. This is because Marakwet's customary water resource management system, as noted, is the oldest customary irrigation management system in the country, thus demonstrating evidence of resilience. Moreover, the customary system continues to play a central part in the management of water resources in the area.

E. Data Collection Methods

For purposes of evaluating the legal theories and concepts underlying modern water law, the methodology used will to a great extent be doctrinal research. A critical analysis and evaluation of relevant literature will be undertaken. A reflection on the social, political and economic context within which law operates will influence the interpretation of the relevant literature.

The information for the case study used in this research is based on primary and secondary data. Secondary data was obtained from a desktop literature review. The data included background information on the Marakwet, their history and their social, political and economic organisation. Information on the legal framework and institutional mechanisms related to water resource governance at the national and local level and which have an impact on the Marakwet was also reviewed.

Apart from the desktop review, this case study is also based on primary data collected during fieldwork conducted over two months in Marakwet district in November 2010 and February 2011. Most of the community members who participated in this study live around Kaben location which is in the Kerio Valley River Basin close to the border with the West Pokot County. The data collection methods used included three focus group discussions, semi-structured interviews and personal observation by the researcher.

The participants of the first focus group discussion were purposefully chosen from among clan council elders who are responsible for issues related to management of the furrows and

thus knowledgeable on management norms and institutions.⁷⁰ Through chain sampling a group of council representatives from different clans composed of both elders and some younger men involved in furrow management issues was selected for the focus group discussion. The objective of the focus group discussion was to provide background information on the furrows, their management and the customary water resource management system. The discussion also served to gain insight into the normative and institutional structures of the water resource governance system of the community.

In the Marakwet community women do not have a direct role in the management of the irrigation system. This research nevertheless, sought to obtain the views of the female members of the community and to determine the extent of their role in the governance of water resources. A focus group discussion was thus organised with a group of older women to determine their views on governance issues and a further one with younger female community members, whose views on the customary governance system were distinct from those of the older women.⁷¹ This stratification of age groups was useful to determine if there are changing perspectives of perceived roles in water governance over time.

Data was also collected from randomly selected water users with the aid of semi-structured questionnaires.⁷² The water users provide a different perspective of the water governance system from the council members. Forty-three water users were interviewed both men and women and from different age groups.

Apart from reviewing the provisions in the statutory legal framework, interviews were also conducted with an official from the Eldoret Water Services Company (ELDOWAS) and another from the Lake Victoria North Water Services Board (LVNWSB) Regional Office in Eldoret.⁷³ The objective of these interviews was to obtain information on the actual operation of the institutional mechanisms set up under the Act.

One of the objectives of the field work had been to conduct interviews with representatives from a Non-governmental organisation (NGO) that had been working on water projects in the area. However, after making preliminary visits to the area, the researcher realised that the anticipated interview could not take place, as the NGO's mandate in the area had been

⁷⁰ See Appendix 1: Questionnaire for water users

⁷¹ See Appendix 2: Guideline for focus group discussion with community leaders

⁷² See Appendix 3: Guideline for focus group discussion with women on furrow issues

⁷³ See Appendix 4: Semi-structured interview guide for government officials/ statutory agency officials

concluded and they no longer maintained an office in the area. Instead, a discussion between the researcher and an official from the Kerio Valley Development Authority (KVDA), which is a state corporation set up for purposes of coordinating development projects in Marakwet was organised. A further informal discussion with a researcher working for a not for profit initiative of water professionals also provided some insight into the technical aspects of water resource management in the area.

F. Outline of Chapters

Chapter two of this thesis consists of an analysis of the concept of sustainable development and of the implication of adopting it as a policy goal for water governance systems. An overview of the global state of freshwater resources and the situation in Kenya provides a context for the study.

Chapter three is a critical analysis of the legal theories and concepts underlying modern legal systems for water resource governance. This forms the basis for evaluating the effect of these conceptual and theoretical frameworks on modern water law. In chapter four, a review of international and national frameworks for water governance illustrates the arguments made in the preceding two chapters. In chapter five, a review of existing literature on customary law systems provides the basis for defining these systems and identifying their main features. In this chapter, an analytical framework for investigating customary law systems is developed. The objective of the framework is to identify the features inherent in customary law systems that demonstrate positive outcomes for sustainable development.

In chapter six, the definition and features identified in chapter five are used to determine the extent to which it can be affirmed that a customary law system of water governance continues to exist in the case of the Marakwet. Further, the analytical framework developed is applied to determine what principles if any of sustainability the customary law system demonstrates. An analysis of Kenya's water law in chapter seven, demonstrates the extent to which this law is developed on the basis of the main features of modern water law. Further, this chapter critically analyses the relation between customary law and statutory law systems of water governance in the context of Marakwet's system and Kenya's Water Act.

On the basis of the human right to water and the indigenous peoples' right to self-governance, chapter eight proposes the application of the human rights-based approach as a possible legal strategy for integrating customary and statutory law systems so as to enhance sustainable development. In view of the limits set by the legal theories and concepts identified in chapter

three, chapter nine investigates classical legal theory as an alternative framework for water law. Chapter ten concludes the arguments made in the thesis, highlighting some of the limitations of this research and the areas for further study.

II CHAPTER 2 WATER RESOURCE GOVERNANCE AND SUSTAINABLE DEVELOPMENT

The present chapter analyses the literature on fresh water resources, water resource governance and sustainable development, setting the background for the analysis of legal systems for freshwater resource governance. While appreciating that sustainable development is a contested term, this thesis argues that the concept most aptly describes the societal values and goals associated with water resource governance in modern societies. As a result, the notion of sustainable development is critically analysed. The chapter begins with a background on the concept of sustainable development. This section discusses some of the controversies surrounding the legal status of the concept and the suitability of its adoption as a policy goal for water governance. This is followed by a brief overview of the state of freshwater resources globally and more specifically in the region where the Marakwet community live. A discussion on the notion of water governance provides the background for the examination of the role of law in the task of developing water governance systems that foster sustainable development. The chapter concludes with a discussion of some of the mechanisms presently used to develop legal frameworks for water governance that foster sustainable development.

A *Sustainable Development*

Water, the colourless and odourless compound of hydrogen and oxygen is the most essential resource for both human and environmental life. Water is closely linked to food security and livelihoods. Apart from its role in food production and economic development, water is also embedded into the socio-cultural aspects of peoples' lives. Numerous species of flora and fauna depend for their survival on availability of adequate quantity and quality of freshwater for their survival. The natural flow of water is also necessary for supporting many ecosystems and habitats. This makes the sustainable management of water a matter of central importance to the social stability and economic development of any community, as well as to the ecological system.¹

Although the world is currently on track to reach the Millennium Development Goal of halving the number of people without access to safe drinking water by the year 2015, the need to improve the provision of basic water and sanitation services and the sustainable

¹Dante Augusto Caponera, *Principles of Water Law and Administration: National and International* (Taylor & Francis, 2007).

management of water resources continues to be a pressing challenge for the global society.² Despite the progress made, about 2.6 billion people still lack access to basic sanitation and the limits of sustainability of water resources both surface and ground, have already been reached or surpassed in many regions.³

In the recently concluded Rio+20 United Nations Conference on Sustainable Development, the importance of water in the achievement of the global policy goal of sustainable development was reiterated as follows:

*We recognize that water is at the core of sustainable development as it is closely linked to a number of key global challenges. We therefore reiterate the importance of integrating water in sustainable development and underline the critical importance of water and sanitation within the three dimensions of sustainable development.*⁴

The above statement confirms the intricate linkage between water and sustainable development. Sustainable development is acknowledged as the policy goal for all natural resource governance including governance of water resources. In addition, the importance of water for achieving sustainable development is also recognised further confirming the importance of the linkage.

1 *Genesis and Essence of Sustainable Development*

The link of the adjective sustainable to the concept of development in the late twentieth century represented the attempt to articulate the policy objective of balancing the need for ecological sustainability with the pursuit of economic development and social equity in the use of natural resources.⁵ Although the genesis of the idea goes further back, it is commonly accepted that its popularisation is owed to the publication in 1987, by the World Commission on the Environment and Development of the report: *Our Common Future* popularly referred

²United Nations Millennium Declaration, GA Res 55/2, UN GAOR, 56th sess, Agenda item 60(b), UN Doc A/RES/55/2 (8 September 2000), art 19.

³United Nations Environment Programme (UNEP), *The Fifth Global Environment Outlook (GEO-5)* (United Nations Environment Programme (UNEP), 2012), 16.

⁴Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012) [119].

⁵Daniel C Esty, 'A Term's Limits' (2001) *Faculty Scholarship Series*<http://digitalcommons.law.yale.edu/fss_papers/434>.

to as the Brundtland Report.⁶ The Brundtland Report defined the concept as follows: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'⁷ The Report further highlighted two key concepts as forming the basis of the notion of sustainable development. These are:

*the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.*⁸

Prior to the formulation of the concept by the Brundtland Report, the United Nations General Assembly had in 1962 called for the integration of natural resource protection measures with economic plans, thus highlighting the importance of integration, which is the underlying basis of the notion of sustainable development.⁹ The 1972 Stockholm Conference¹⁰ advanced the economic development and environment linkage further, thus laying the foundations for the concept of sustainable development.

The essence of the concept was its proposal to bring together two apparently conflicting policy goals, that is, economic growth and environmental protection into a single formula.¹¹ This apparent opposition between economic growth and environmental protection is based on two premises: firstly, an understanding of economic growth as dependent on the use of natural resources for production and secondly, the association of environmental protection with natural resource conservation. Consequently, the greater the exploitation of natural resources, the higher the economic return, so that economic growth is inversely proportional to natural resource conservation. The concept also sought to include the social principle of equity into this paradigm of environment and development. Sustainable development thus

⁶United Nations World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment (1987).

⁷Ibid.

⁸Ibid.

⁹Economic Development and the Conservation of Nature, United Nations GA Res. 1831(XVII), UN GAOR, 17th Session, Supplement. No. 17, U.N. Doc. A/RES/1831 (XVII) (1962).

¹⁰*Declaration of the United Nations Conference on the Human Environment*, UN Doc A/Conf.48/14/Rev. 1(1973).

¹¹ See, eg, Donald K. Anton, 'The 2012 United Nations Conference on Sustainable Development and the Future of International Environmental Protection' (2012) 7(1) *Consilience: The Journal of Sustainable Development* 64. The opposition of economic growth and environmental protection has been argued by several environmental lawyers particularly those critical of the concept of sustainable development.

requires states to practice intergenerational equity in the pursuit of development, that is, to consider not only the needs of present generations, but also the needs of future generations, ensuring that their capacity to meet their own needs is not compromised.

Since its formulation and definition, the concept of sustainable development has become a central feature of global governance. The importance of the concept and its proposed paradigm, linking the environment and development, has been reiterated in subsequent global governance summits. The United Nations Conference on Environment and Development, held in Rio in 1992 (Earth Summit), confirms this.¹² The Declaration begins with the affirmation of the consensus by member states on their commitment to the pursuit of sustainable development. This consensus is founded firstly, on the acknowledgment of human beings as the centre of sustainable development and thus their right to a healthy and productive life in harmony with nature;¹³ secondly, on the sovereignty of States to use their natural resources to pursue development subject to the no harm principle to other States;¹⁴ and finally, on the conviction that development must be guided by principles of intra-generational and inter-generational equity.¹⁵

In 2002, a World Summit on Sustainable Development was convened in Johannesburg with the objective of reviewing the progress made in the achievement of the principles set out by the Rio Conference. The summit resulted in a declaration confirming global consensus on the adoption of sustainable development as the desirable policy objective for governance systems for natural resources.¹⁶ The Plan of Implementation adopted at Johannesburg embraced the notion of sustainable development as elaborated by the Rio Declaration but enriched the concept further as demonstrated by the statement below:

‘...efforts will also promote the integration of the three components of sustainable development – economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars. Poverty eradication, changing unsustainable patterns of production and consumption,

¹²*Rio Declaration on Environment and Development*, UN Doc A/CONF151/26 vol. 1 (1992).

¹³*Ibid* [1].

¹⁴*Ibid* [2].

¹⁵*Ibid* [3].

¹⁶*The Johannesburg Declaration on Sustainable Development*, Agenda item 13, UN Doc A/CONF.199/L.6/Rev. 2, (4 September 2002).

*and protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development.*¹⁷

In June 2012, at the Rio+20 Conference on Sustainable Development, the commitment to sustainable development was reiterated as a global common vision.¹⁸ The Rio+20 outcome document reaffirms the commitment of heads of states and governments and high level representatives to implement the outcomes of past summits on sustainable development and to address new and emerging challenges.¹⁹ While acknowledging the definitions of sustainable development included in past summits and conferences, this document builds on the concept further as demonstrated:

*'We recognize that poverty eradication, changing unsustainable and promoting sustainable patterns of consumption and production and protecting and managing the natural resource base of economic and social development are the overarching objectives of and essential requirements for sustainable development. We also reaffirm the need to achieve sustainable development by promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems that supports, inter alia, economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges.'*²⁰

From the foregoing, it can be concluded that the essence of the notion of sustainable development is the integration of economic development, social development and environmental protection in the global pursuit of eradication of poverty.

Apart from its reiteration in global governance summits, the concept of sustainable development is now included in many multilateral agreements on environmental law adopted subsequent to its formulation.²¹ In many international environmental law instruments, sustainable development is included as a goal. The implication is that decision-making processes related to development and which have an influence on the environment must

¹⁷United Nations, Report of the *World Summit on Sustainable Development*, Resolution 1, UN Doc. A/Conf 199/20 (9 April 2002) annex [2].

¹⁸Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012) [1].

¹⁹Ibid B.

²⁰Ibid [4].

²¹ See, eg, *United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*, opened for signature 14 October 1994, 1954 UNTS 3 (entered into force 26 December 1996), art 2 *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994), art 2.

foster the notion of sustainability. On the basis of this, the International Law Association Committee on Legal Aspects of Sustainable Development argues that the notion 'has become an established objective of the international community and a concept with some degree of normative status in international law.'²²

Despite the reiteration of the centrality of the concept of sustainable development as a policy goal and the commitment of state governments to its implementation, the usefulness of the concept has been challenged on various grounds. A review of the progress made on the goals and targets set in previous global conferences on the environment and development indicate positive current trends in development represented by improved economic growth, increase in income levels and social outcomes.²³ However, alongside the positive growth trends, there is an atmosphere of elevated risk and uncertainty caused by factors such as the projected adverse effects of climate change, the financial crisis including the present Euro-crisis, rising food prices as well as rising inequalities across and within countries.²⁴ Further, on the environmental front, the picture appears bleak. Based on the standards set by the Stockholm Resilience Centre, three out of the nine planetary boundaries identified as limits within which human development can occur safely have been breached, that is climate change, biodiversity loss and nitrogen concentration in the oceans.²⁵

The lack of congruence in progress made on the development and environment fronts has brought to the fore criticisms against the concept of sustainable development, some of which, have plagued the concept since its popularization by the Brundtland Report. In the following section, some of these criticisms against sustainable development are discussed in the context of the incorporation of sustainable development as a policy goal in legal frameworks for resource governance.

2 *Criticisms of Sustainable Development*

Notwithstanding its adoption as the policy goal guiding environmental governance and development of natural resources, sustainable development is a contested term.

²²ILA Committee on Legal Aspects of Sustainable Development (2002) 5.

²³Charles Kenny and Andy Sumner, *More Money or More Development: What Have the MDGs Achieved?* Working Paper 278 (Centre for Global Development, 2011).

²⁴Naila Kabeer, 'Can the MDGs Provide a Pathway to Social Justice? The Challenge of Intersecting Inequalities' (UNDP 2010)

²⁵Johan Rockstrom et al, 'A Safe Operating Space for Humanity' (2009) (461) *Nature* 472.

One of the criticisms against the concept argues the notion was compromised from its birth as evidenced by the circumstances surrounding its formulation. The attempt to develop legally binding international environmental obligations was from the onset marked by contention. While most developed countries regarded the need to address environmental concerns as urgent, developing countries argued that economic development was in their case more urgent than the environmental agenda.²⁶ This resulted in a polarization of opinions on global environmental governance.²⁷ This was evident at the Stockholm Conference where developing countries demonstrated a reluctance to lend their support to the environmental commitments reached at the conference on the basis that this compromised their right to achieve economic development. Developing countries thus argued for a common but differentiated responsibility in addressing environmental issues. This principle acknowledges that both developed and developing nations have a responsibility to resolve global environmental problems but recognizes that the responsibilities are distinct for various reasons.²⁸

The above contention led to a political compromise represented by the linking of environmental sustainability with economic development issues so as to obtain a wider consensus on the global environmental agenda. The compromise reached was reflected in subsequent international environmental governance instruments. The Rio Declaration manifests the same delicate balance of policy goals pursued.²⁹ On the one hand, it upholds the principles of public participation, precautionary approach and the polluter pays principle,³⁰ while on the other hand, it reaffirms the need to balance these principles with the right to development, poverty alleviation and the recognition of the common but differentiated responsibilities.³¹

This reluctance on the part of developing countries is understandable in the context of the prevalent theories of economic development which tended to regard development as a linear

²⁶Alhaji B M Marong, 'From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable Development' (2004) 16(21) *The Georgetown International Environmental Law Review*26.

²⁷Esty, above n 5.

²⁸ See Malgosia Fitzmaurice, *Contemporary Issues in International Environmental Law* (Edward Elgar, 2009).For a more detailed analysis of the principle of common but differentiated responsibility.

²⁹Peter H Sand, *International Environmental Law after Rio* (Oxford University Press, 1993).

³⁰*Rio Declaration on Environment and Development*, UN Doc A/CONF151/26 vol. 1 (1992) [10], [15] [16].

³¹*Ibid* [3], [5] [7].

process.³² The very classification of countries as ‘developing’ and ‘developed’ is instructive of the extent of influence of the linear conception in development theories. The taxonomy implies that there is a progressive path to development and a common goal sought by countries. Whereas developed countries have attained the goal, developing countries are in transit and so would benefit from learning from the experience of developed countries. Further, this opposition to the environment agenda on the part of developing countries is comprehensible in the context of development theories that reduce the concept of development to economic growth. The environmental agenda was associated with the environmental movement which in turn was founded on the limits to growth theory.³³ The limits to growth theory called for a reconsideration of the unbridled use of natural resources which was the path that most countries had until then taken in the pursuit of economic development. From a linear development theory perspective, the attempted shift to the limits of growth theory and its associated environmental movement was not popular as it constituted a deviation from the trajectory that led to economic growth and thus to development. As Boer rightly points out, this reduction of development to economic growth is the cause of the preference of the term sustainability to sustainable development by some scholars and policy makers.³⁴

A further objection against the concept of sustainable development is related to its ambitious objectives. By linking economics to the environment, the concept of sustainable development seeks to associate poverty with environmental degradation as opposed to the earlier converse view in which environmental degradation was viewed as a necessary evil in the pursuit of economic development.³⁵ Sustainable development seeks to overthrow economic competitiveness as a societal goal which would ensure that all countries would maintain environmental robustness and gain economic wealth as opposed to being caught up in the economic race driven by competitiveness which resulted in economic losers and winners.³⁶ The concept thus attempts to cause a paradigm shift not just in thought but in societal goals.

³² See, eg, Frank Upham, 'Mythmaking in the Rule of Law Orthodoxy' (2002) *Rule of Law Series*. For a critique on the rule of law theory.

³³ See, eg, Rachael Carson, *Silent Spring* (Houghton Mifflin, 2002); Paul R Ehrlich, *The Population Bomb*, A Sierra Club-Ballantine book (Ballantine Books, 1968).

³⁴ Ben Boer, 'Implementing Sustainability' (1992) 14 *Delhi Law Review* 1, 1.

³⁵ Esty, above n 5.

³⁶ Edith Brown Weiss, 'Environmentally Sustainable Competitiveness: A Comment' (1993) 102(8) *The Yale Law Journal* 2123.

Furthermore, the concept's even more ambitious attempt to surpass the confines of time; by seeking to incorporate the needs of future generations as a consideration in present decision making is considered noble but to some extent utopian.³⁷ This intergenerational equity requirement has also complicated the attempts at determining the exact implications of the concept. The ambitious goal sought by the concept has been likened to a revolution, suggesting the colossal nature of what is required to achieve the concept's goal.³⁸

The effectiveness of sustainable development in achieving environmental objectives has also been questioned on the basis that the concept as formulated is too anthropocentric. While acknowledging that the concept seeks to incorporate environmental concerns, it is argued that this is subordinated to the capacity of human persons to meet their needs either presently or in the future. Such a focus distinguishes the notion from concepts previously used in international environmental law like the 'wise use' concept which referred more to the capacity of the resources to retain their capacity to meet the needs of future generations. This nuance has led some environmentalists to critique the concept of sustainable development for placing the human person at the centre of sustainable development at the expense of the environment which ought to take precedence.³⁹

The above criticisms and other factors have contributed to the challenges associated with defining the legal status of the concept of sustainable development as demonstrated in the following section

3 *Legal Status of Sustainable Development*

From the beginning, the attempt to determine the legal nature and effect of the notion of sustainable development was characterised by difficulties and controversy. In the 1992 Earth Summit, an attempt was made to develop a binding convention on sustainable development of natural resources based on the 22 legal principles underlying sustainable development that had been developed by the Brundtland Report. The efforts failed and instead the Earth Summit settled for the adoption of non-binding principles of environment and development.

³⁷Michael Redclift, *Sustainable Development: Exploring the Contradictions* (Routledge, 1987).

³⁸Artur PawBowski, 'The Sustainable Development Revolution' (2009) 4(1) *Problems of Sustainable Development* 65.

³⁹Redclift Michael, 'The Meaning of Sustainable Development' (1992) 23(3) *Geoforum* 395.

The Earth Summit also adopted Agenda 21 which constituted a plan of action for the achievement of sustainable development.⁴⁰

Similarly, after the World Summit on Sustainable Development, the ensuing Declaration on Sustainable Development (Johannesburg Declaration)⁴¹ did not extend to the 'modus operandi' adopted by states in achieving the goal. The attempt to develop a binding agreement related to sustainable development was once again foiled by a lack of consensus in the negotiations during the summit.⁴² During the period leading up to the Rio+20 Conference on Sustainable Development, efforts were made to develop legally binding goals on implementation of sustainable development. Although no binding commitments were made, the resulting document made reference to the registry of voluntary commitments.⁴³ The absence of a legally binding instrument on sustainable development arguably contributes to the controversy surrounding the nature and effect of the concept.

Notwithstanding the above, many international environmental law instruments developed after the formulation of sustainable development incorporate the concept as a policy goal. However, most of these do not create legally binding obligations with respect to sustainable development but rather include it as a guiding principle or goal of development. The effect of this is that the legal status of the concept of sustainable development remains unclear. Sustainable development has been classified variously as a 'concept', 'principle' or 'emerging principle' of environmental law.⁴⁴ The term 'concept' in this context has been used to signify a policy objective and to distinguish it from 'principle' which in turn is used to signify a guideline with a normative character.⁴⁵

⁴⁰Agenda 21: Programme of Action for Sustainable Development, UN GAOR, 46th sess, Agenda Item 21, UN Doc A/Conf.151/26 (14 June 1992).

⁴¹The Johannesburg Declaration on Sustainable Development, Agenda item 13, UN Doc A/CONF.199/L.6/Rev. 2, (4 September 2002).

⁴²Kevin R. Gray, 'World Summit on Sustainable Development: Accomplishments and New Directions?' (2003) 52(1) *The International and Comparative Law Quarterly* 256.

⁴³Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012) [283].

⁴⁴ See, eg, the different opinions in the *Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)* [1997] ICJ Rep 7; Philippe Sands, *Principles of International Environmental Law* (Cambridge University Press, 2nd ed, 2003) 266; Alan Boyle and David Freestone (eds), *International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford University Press, 1999) 33.

⁴⁵Jaye Ellis, 'Sustainable Development as a Legal Principle: A Rhetorical Analysis' (2008) *SSRN eLibrary*2.

The 1997 International Court of Justice majority decision in the *Gabčíkovo-Nagymaros* case defined sustainable development as an important ‘concept’.⁴⁶ It has been argued that in doing so the Court defined sustainable development as a value or objective which state parties are obliged to take into account in the course of decision-making on development projects. This implies that sustainable development has implications on the process of decision-making but not necessarily on the outcome.⁴⁷ It may therefore be concluded from the decision that the recognition of sustainable development as a policy requirement does not mean that the outcome of the development process must be sustainable but rather that the development must be the outcome of a process that fosters sustainable development.⁴⁸ This suggests that whereas sustainable development cannot be classified as a non-legal policy comparable to a political ideal, neither can it be defined as a legal principle in the strict sense of that term but rather falls somewhere between the two.⁴⁹ Proponents of this view, thus conclude that sustainable development prescribes a process of analysis and decision making rather than a strict legal standard for resource use.⁵⁰

In his separate opinion in the *Gabčíkovo* case, Judge Weeramantry argued that sustainable development is a legal principle basing his position on the grounds of its ‘inescapable logical necessity’ and on account of its wide acceptance in the international global governance realm.⁵¹ Some scholars leaning towards this view have been reluctant to use the term legal principle, given the notion’s lack of independent legal weight, and have proffered alternative descriptions such as ‘umbrella principle’.⁵² The reference to ‘umbrella’ signifies the bringing together of legal and political principles. According to this view, most of the principles embodied in sustainable development are referred to in the Rio Declaration and include: the

⁴⁶*Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)* [1997] ICJ Rep 7.

⁴⁷Alan Boyle, ‘The Gabčíkovo-Nagymaros Case: New Law in Old Bottles’ (1997) 8 *Year Book of International Environmental Law* 18.

⁴⁸Douglas Fisher, *The Law and Governance of Water Resources: The Challenge of Sustainability*, New Horizons in Environmental Land Energy Law Series (Edward Elgar 2009).

⁴⁹Klaus Bosselman, *The Principle of Sustainability. Transforming Law and Governance* (Ashgate 2008) 54.

⁵⁰Joseph W. Dellapenna, ‘Is Sustainable Development a Serviceable Legal Standard in the Management of Water?’, (2004) 127(1) *Journal of Contemporary Water Research and Education* 91.

⁵¹*Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)* [1997] ICJ Rep 7. Separate opinion of Judge Weeramantry A(c).

⁵² This seems to be approach taken by the ILA in International Law Association Committee on Legal Aspects of Sustainable Development, ‘Fifth and Final Report: Searching for the contours of international law in the field of sustainable development’ (Paper presented at the New Delhi Conference 2002., New Delhi, 2002).

principle of cooperation, the no harm principle, the precautionary principle, the principle of integration, the principle of common but differentiated responsibilities and the principle of equity encompassing intergenerational equity.⁵³

The term 'interstitial norm' has also been proposed as defining the legal nature of sustainable development.⁵⁴ An interstitial norm is referred to as a principle that modifies the normative effect of other primary norms of international law by establishing the relationship of these norms when they threaten to conflict or overlap.⁵⁵ Sustainable development is so described given its normativity in establishing the link between economic development and environmental sustainability.

While acknowledging the legal elements contained in the notion, other scholars hold that this does not make sustainable development a legal principle. They challenge the notion on the grounds of its lack of normativity. Sustainable development is regarded as lacking a normative effect in so far as it cannot be used as a justiciable element in a legal process. Boyle has argued that it is unlikely that sustainable development can constitute a legal element that can be used to challenge the sustainability of a development decision made by a particular state.⁵⁶ Whereas this seems to be the position given the majority decision in the *Gabčíkovo case*, an argument for the inclusion of sustainable development among the principles of international environmental law may be made on the grounds that other notions have been recognised as principles of international law despite not having proved a justiciable element.

The lack of clarity on the legal status of sustainable development is reflective of a deeper controversy regarding the legal status of principles of international environmental law in general. As shall be discussed in the next chapter, in a framework that conceives of law as enforceable statutory rules, the recognition of international legal principles in the absence of evidence of their justiciability becomes problematic. Bosselman argues that none of the various international judicial tribunals such as the International Court of Justice, the

⁵³Rio Declaration on Environment and Development, UN Doc A/CONF151/26 vol. 1 (1992).

⁵⁴Ellis, Jaye, 'Sustainable Development as a Legal Principle: A Rhetorical Analysis' (2008) SSRN eLibrary.

⁵⁵Vaughan Lowe, 'The Politics of Law-Making: Are the Method and Character of Norm Creation Changing?' in Michael Byers (ed), *The Role of Law in International Politics: Essays in International Relations and International Law* (Oxford University Press, 2000).

⁵⁶Boyle, Alan and David Freestone (eds), *International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford University Press, 1999) 16.

International Tribunal for the Law of the Sea, the Panel and Appellate Body of the World Trade Organization (WTO) or the Human Rights Council have referred to sustainable decision in the context of a norm generating principle or as a legal principle forming the reason for the decision (*ratio decidendi*).⁵⁷ This is notwithstanding the decision in the *Gabčíkovo case* which as discussed above resulted in a majority decision recognising sustainable development as a concept of international law rather than as an overarching legal principle of international law.⁵⁸ In the absence of a decision determining the norm-generating quality of the notion, its justiciability remains untested and thus its status as a legal principle of international law unsettled.

4 *Sustainability versus Sustainable Development*

Given the challenges associated with the notion of sustainable development, it has been argued that a more effective approach would be to develop economic, social and environmental policies independently so as to avoid the risk of any of these aspects being sacrificed for another.⁵⁹ According to this view, the inclusion of social and economic considerations in what initially was an agenda for environmental protection, has only served to water down the principle of ecological sustainability.⁶⁰ The term 'sustainability' is thus distinguished from sustainable development and proposed as a more accurate description of the goal sought by environmental law. According to this view, sustainability represents a higher-order social goal which is also a fundamental property of natural systems, while sustainable development is a variable policy through which society seeks to enhance the property of sustainability.⁶¹ Based on this distinction, the effective way to ensure that normative legal frameworks adopt the ethic embodied by sustainable development is to grant ecological sustainability the status of a legal principle.⁶²

⁵⁷ Klaus Bosselmann, 'Sustainability and the Courts: A Journey Yet to Begin?' (2010) 3(1) *Journal of Court Innovation* 337, 339.

⁵⁸ *Ibid*, 341.

⁵⁹ Richard Peet and Michael Watts, *Liberation Ecologies: Environment, Development, Social Movements* (Routledge, 2004)

⁶⁰ Klaus Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (Ashgate, 2008) 57.

⁶¹ Stephen Dovers and Robin Connor, 'Institutions and Policy Change for Sustainability' in Benjamin J. Richardson and Stepan Wood (eds), *Environmental Law for Sustainability: A Reader*, Osgoode Readers (Hart Publishing, 2006).

⁶² Bosselmann, above n 60.

Proponents of this approach point to the acceptance of sustainability by courts as a material consideration in planning decisions.⁶³ It is argued that the inclusion of sustainability as opposed to sustainable development is due to the relative facility of adopting the former as a legal standard. In the case of water resources for example, the adoption of the principle of sustainability would imply that no more water should be used over a specified period than is naturally or artificially rechargeable during the same period.⁶⁴ It would be much harder to define a clear standard for sustainable development given the inclusion of in some cases contradictory goals that must be balanced and uncertainties such inter-generational equity considerations. As a consequence, proponents of sustainability argue for its replacement of sustainable development.

This approach of using sustainability as opposed to sustainable development seems reminiscent of the pre-Brundtland situation characterised by an environmental movement whose strength was undermined by a lack of integration of environmental sustainability in development planning. The Brundtland definition of sustainable development was a response to the shortcomings of a sectoral based approach to environmental conservation. An approach laying emphasis on ecological sustainability as opposed to sustainable development risks undermining the integration objective sought by the Commission's concept of sustainable development. The simplification sought through the identification of sustainability as the ethical core may be useful for purposes of fitting the concept more neatly into the existing legal theoretical and ontological paradigms but this would be at the cost of obscuring other ethical values such as social equity and economic welfare which are also important for society particularly where water resource governance is concerned. This thesis is of the view that sustainable development constitutes a more comprehensive articulation of the policy goals associated with water governance. The next section outlines some of the reasons why sustainable development is the suitable concept.

5 *The Case for Sustainable Development*

The Brundtland Report's explanation of the rationale behind the notion of sustainable development provides solid reasons to justify the adoption of the concept of sustainable development and to counter some of the criticisms of the concept discussed above.

⁶³ Andrea Ross, 'Why Legislate for Sustainable Development? An Examination of Sustainable Development Provisions in UK and Scottish Statutes' (2008) 20 *Journal of Environmental Law* 35, 48.

⁶⁴ Dellapenna above n 50, 91. See also Ethan Timothy Smith and Christopher Lant, 'Water Resources Sustainability: A Guide to This Issue' (2004) 127(1) *Journal of Contemporary Water Research and Education* 1.

Against the claim that the attempt to unite two disparate realms of the development and environment is too ambitious and undermines the environment agenda, this report responds with the argument that in fact the converse is true. This view resonates with the arguments made by many developing countries, which are still grappling with poverty. As noted in the section above, this criticism is founded on the premise that development is synonymous to economic growth which growth is driven by exploitation of natural resources. Based on this premise, it is presumed that economic growth implies an increase in resource use which in turn implies the increased risk of environmental degradation, resource depletion and the resultant poverty.⁶⁵ The Brundtland Report concedes that economic growth is always associated with the risk of environmental damage but also recognises that only through economic growth can poverty, which undermines the capacity to protect the environment, be eliminated.⁶⁶ The Report acknowledges that environmental protection is inherent in the concept of sustainable development just as is the focus on the sources of environmental problems (poverty and social inequities) rather than the symptoms.⁶⁷ In support of the Brundtland Report, numerous studies have proved that the resource use necessary for reducing poverty in Africa and Asia would be marginal, having little immediate impact on the scale of global resource use or on carbon emissions.⁶⁸ This further strengthens the argument that development and environment are not necessarily opposed or irreconcilable. Sustainable development better represents the aspirations of nations at different levels of growth.

As noted from the Brundtland Report, sustainable development was not intended to replace the environmental movement but rather to improve the efforts of the movement to implement environmental protection. The Report points to two features of environmental law at that time that limited its effectiveness in achieving environmental goals and which would be remedied

⁶⁵Claire Melamed, Andrew Scott and Tom Mitchell, 'Separated at Birth, Reunited in Rio? A Roadmap to Bring Environment and Development Back Together. A Background Note' (2012) <www.odi.org.uk>.

⁶⁶United Nations World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment (1987) [8].

⁶⁷Ibid [50].

⁶⁸ See for example International Energy Agency, *World Energy Outlook 2011* (IEA/OECD, 2011); Richard Dobbs et al, *Resource Revolution: Meeting the World's Energy, Materials, Food and Water Needs*, (McKinsey Global Institute, 2011).

by adopting sustainable development as a paradigm for international law.⁶⁹ Firstly, the fact that international environmental law was until then structured along the territorial organisation of states undermined its capacity to effectively pursue global environmental governance goals. Further, environmental law lacked a unifying principle resulting in dispersion of efforts in setting protective measures and sectoral approaches. Sustainable development helps unify these efforts, elevate the issues to a global level and thus improve the chances of implementation of the objectives sought by the environmental movement.

For a significant proportion of the global population, a direct relation exists between natural resources and their livelihoods. In light of this and given the economic challenges and social inequities that characterise many societies, a policy focusing solely on ecological sustainability seems unjustifiably skewed. This thesis thus argues that sustainable development represents a more comprehensive policy goal for water resource governance in these situations. Further, even in developed countries, water resources may be closely linked to the economic, social, cultural and religious values of some communities.⁷⁰ As a result, a policy goal that isolates ecological sustainability from these social, cultural and economic aspects would be undesirable in so far as it obscures the reality.

Consequently, notwithstanding the challenges of implementing the concept of sustainable development, this thesis argues that presently, it provides the most suitable articulation of the integrative approach to development of natural resources. In the case of water resources, the appreciation of this nexus is crucial. Apart from having an economic value, water is absolutely essential for survival both of human beings and of ecosystems in general. Besides, water also has social, cultural and in some cases a religious value. A societal goal for water resource governance systems should incorporate these values of water. While conceding that as an articulation of societal values, the concept may eventually evolve, this thesis argues that for the moment sustainable development constitutes the most suitable paradigm for developing water resource governance systems.

The next section discusses the implication of incorporating sustainable development as a policy goal for water governance.

⁶⁹United Nations World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment (1987), ch 12.

⁷⁰ See the arguments made for the nexus between sustainability and indigenous claims to religious and spiritual value of water resources in Rhett B Larson, 'Holy Water and Human Rights: Indigenous Peoples' Religious-Rights Claims to Water Resources' (2011) 2 *Arizona Journal of Environmental Law and Policy*.

B *Water Governance Systems for Sustainable Development*

As noted in the introduction to this chapter, water is the most essential resource for human life and eco-system health. A review of the present state of freshwater resources globally and in Kenya where the Marakwet community live in the following subsection demonstrates the challenges faced in the development of water resource governance systems for sustainable development.

1 *State of Renewable Freshwater Resources*

Water is a natural occurring resource that is to some extent renewable. It is estimated that about 110,000 cubic kilometres of precipitation fall on land annually with approximately two thirds of this being lost through evaporation and the remaining third being converted to surface runoff that eventually feeds rivers, lakes, and groundwater aquifers.⁷¹ Rivers, lakes and aquifers are referred to as renewable freshwater resources in so far as they can be withdrawn and used for various purposes and then eventually returned to the environment. This process by which renewable freshwater resources reach the earth are used and then return to the environment forms part of the bigger hydrological or water cycle. In broad terms the hydrological cycle refers to the cyclic movement of water in the globe, from the sea to the atmosphere, from the atmosphere to the sea and subsequently back to the sea.⁷²

Human beings have a strong impact on the hydrological cycle due to the role they play in withdrawal of water resources both in terms of flows and stocks. Renewable water resources are referred to in terms of flows while non-renewable freshwater resources are referred to in terms of quantity or stock.⁷³ The terms 'withdrawal', 'abstraction' or 'extraction of water' refer to the act through which water is removed from its source for a specific use.⁷⁴ It is estimated that of the total water withdrawn worldwide, 42% is used for agriculture, 36% for households and 27% for manufacturing.⁷⁵ The basic needs of securing food supply as well as

⁷¹Robert B Jackson et al, 'Water in a Changing World' (2001) (9) *Issues in Ecology* 1, 2-4.

⁷² Caponera above n 1, 4.

⁷³Jean Margat, Karen Frenken and Jean-Marc Faurès, 'Key Water Resources Statistics in Aqustat' (2005) *FAO's Global Information System on Water and Agriculture* <[ftp://ftp.fao.org/agl/aglw/docs/PaperVienna2005.pdf](http://ftp.fao.org/agl/aglw/docs/PaperVienna2005.pdf)>, for more on this distinction of renewable and non-renewable water resources.

⁷⁴Amit Kohli, Karen Frenken and Cecilia Spottorn, 'Disambiguation of Water Use Statistics' (2010) <<http://www.fao.org/docrep/013/al815e/al815e00.pdf>>, 4.

⁷⁵Petra Döll et al, 'Impact of Water Withdrawals from Groundwater and Surface Water on Continental Water Storage Variations' (2012) 59-60 *Journal of Geodynamics* 143, 143.

sanitation justify the withdrawal of water for irrigation and household use. Economic development is to a large extent driven by industry and thus the 27% withdrawal for manufacturing is necessary for livelihoods.

Kenya, whose Marakwet community is the subject of the case study in this thesis, is classified as a water scarce country with renewable freshwater resources being below 647 cubic metres, corresponding to about 20.2 cubic kilometres per year.⁷⁶ The average annual rainfall is estimated at 630 millimetres per year.⁷⁷ The estimated total water withdrawal at 2000 was 2.7 cubic kilometres with a projected increase to 5.8 cubic kilometres by 2010.⁷⁸ While annual water withdrawal is relatively low, the country also has a very low storage capacity amounting to only about 4.5 cubic metres per capita of water.⁷⁹ More than 90% of the total annual withdrawal is used for agriculture.⁸⁰

Renewability of freshwater water resources is affected by the fact that the water returned to the environment is not always of the same quality and quantity as that prior to withdrawal. Consumptive water use refers to a use of water resources resulting in a substantial reduction in the quantity or quality of water that returns to the environment.⁸¹ Non-consumptive uses on the other hand, refer to uses such as eco-system maintenance, navigation, recreation, sport, fisheries, hydropower production, cultural and other social-religious uses that do not reduce the volume of the water source. About 33% of the annual global groundwater withdrawals are for consumptive use.⁸² Apart from the challenge of consumptive use, 35% of global water withdrawal is sourced from groundwater, some of these groundwater bodies have such a

⁷⁶Ministry of Water and Irrigation (Kenya), 'Ministerial Strategic Plan 2009-2012. Water for all' (2008).

⁷⁷FAO, 'Country Fact Sheet Kenya' (2012)
Aquastat<http://www.fao.org/nr/water/aquastat/data/factsheets/aquastat_fact_sheet_ken_en.pdf>.

⁷⁸Food and Agriculture Organization of the United Nations, 'Country Profile- Kenya' (2005) *Water Report No. 9*<http://www.fao.org/nr/water/aquastat/countries_regions/kenya/index.stm>.

⁷⁹ Ministry of Water and Irrigation (Kenya), 'Ministerial Strategic Plan 2009-2012. Water for all' (2008)vii.

⁸⁰Food and Agriculture Organization of the United Nations, 'Country Profile- Kenya' (2005) *Water Report No. 9*<http://www.fao.org/nr/water/aquastat/countries_regions/kenya/index.stm>.

⁸¹ Amit Kohli, Karen Frenken and Cecilia Spottorn, 'Disambiguation of Water Use Statistics' (2010)
<<http://www.fao.org/docrep/013/al815e/al815e00.pdf>>, 1.

⁸²Petra Döll, et al, 'Impact of Water Withdrawals from Groundwater and Surface Water on Continental Water Storage Variations' (2012) 59-60 *Journal of Geodynamics* 143.

negligible rate of recharge on a human time scale that they are regarded as non-renewable sources.⁸³ These groundwater renewals affect the sustainability of freshwater resources.

As noted above, most freshwater withdrawals are for purposes of meeting human needs, with agriculture accounting for approximately 70% of the total worldwide withdrawals of freshwater resources. Despite the need for the withdrawal of freshwater for human needs, the centrality of freshwater for life systems makes its sustained availability a necessity not only for human needs but also for the ecosystem. Ensuring the sustained availability of water for these multiple needs constitutes one of the fundamental challenges for modern society.⁸⁴

Apart from the challenges posed by withdrawals, freshwater resources are also under pressure from the effects of climate change.⁸⁵ While modelling techniques used to predict climate change effects are controversial, at the present state of scientific development, they represent the best available source of scientific information on anticipated effects of climate change. One of the predicted adverse impacts of climate change on freshwater resources is increased scarcity especially in the sub-tropical and mid-latitude areas of Central America, Southern Europe, northern and southern Africa and Australia.⁸⁶ It is also predicted that climate change is likely to cause extreme changes in the magnitude, frequency and intensity of precipitation levels causing more frequent and violent floods and more prolonged droughts.⁸⁷ These changes will affect the East African Region where a marked reduction in water availability is predicted to result in productivity losses estimated at 33% in maize and more than 20% in sorghum and 18% for millet.⁸⁸ Some of the predicted effects of anthropogenic climate change such as the increased frequency and magnitude of climate-related natural disasters are already being experienced in the form of droughts, floods, landslides, wind storms and hail storms all of which have an effect on rain-fed agriculture.

⁸³Petra Döll, et al, 'Impact of Water Withdrawals from Groundwater and Surface Water on Continental Water Storage Variations' (2012) 59-60 *Journal of Geodynamics* 143.

⁸⁴ United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNEP, 2010).

⁸⁵United Nations Environment Programme (UNEP) (ed), *Global Environment Outlook GEO4 Environment for Development*, Global Environment Outlook Report (United Nations Environment Programme, 2007).

⁸⁶ Bryson Bates et al (eds), *Climate Change and Water*, IPCC Technical Paper VI (IPCC Secretariat, 2008).

⁸⁷Ibid.

⁸⁸Donald K Anton and Dinah L Shelton, *Environmental Protection and Human Rights* (Cambridge University Press, 2011), 464.

The above factors have led to the description of the present state of freshwater resources both globally and in the East African region, as 'a crisis'.⁸⁹ Nations all over the world are struggling to ensure adequate freshwater supply to their people and to the environment in a climate of competing uses complicated by the adverse effects of climate change. However, even though the physical scarcity of water resources is a main challenge, poor governance is exacerbating the problem.⁹⁰ Arguably, power, poverty and inequality as opposed to physical availability are the greater challenges for water management in many jurisdictions.⁹¹ In Kenya, for example governance issues and development challenges aggravate the problems of water stress caused by physical scarcity and natural disasters. These challenges include corruption, financial constraints, continuing degradation of catchment areas and high levels of unaccounted for water as well as the challenges of managing regional basins.⁹² Most of Kenya's water resources are shared and thus problems of regional governance of transboundary basins have implications on the water availability in the country. For instance, the Marakwet community studied in this thesis, source their water from the Embobut River which is part of the Lake Victoria Basin which extends across Kenya, Uganda and Tanzania. The availability of water resources for the community is thus affected by activities of other users of the Basin.

A brief overview of the state of freshwater resources thus confirms the need to address water resource management issues in the context of water governance and sustainable development. In the following section, the notion of water governance is discussed further. The section also analyses the role of law in implementing sustainable development through water governance frameworks.

2 *Water Governance and Law*

Legal systems are not the sole components of water governance systems. However, they constitute an important part of these systems. A brief examination of the notion of water

⁸⁹United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNON, 2010).

⁹⁰Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009), 59.

⁹¹UNDP and IFAD, 'The Challenges of Water Governance' in *The United Nations World Water Development Report* (ed), *In World Water Assessment Programme, Water: A shared responsibility*. (UNESCO, 2nd ed, 2006) 44.

⁹²Ministry of Water and Irrigation (Kenya), 'Ministerial Strategic Plan 2009-2012. Water for all' (2008) ix.

governance in the following subsection provides a useful basis for the subsequent analysis of the role of law in development of water governance systems for sustainable development.

(a) *Extending the Notion of Governance to Water*

The word 'governance' is a broad term still in the process of evolution and thus has no universally accepted definition.⁹³ The Commission on Global Governance defines the term as 'the sum of many ways individuals and institutions public and private, manage their common affairs.'⁹⁴ According to this definition, the Commission acknowledges that governance is a continuing process in which diverse, and in some cases, conflicting interests could be accommodated. The process of governance encompasses tools such as laws and regulations, economic instruments and other initiatives that may be useful in achieving the intended outcome.⁹⁵ Governance thus includes not just formal institutions and regimes but also informal arrangements which are considered useful for regulation.⁹⁶

The above notions of governance have influenced water resource management, though the term has only recently been applied to water resources. The connection between governance and water management was first made in 2000 at the Second World Water Forum at The Hague.⁹⁷ The concept is now widely used in research, policy and practice of water management. The Global Water Partnership (GWP) has characterised the world water crisis as mainly a 'crisis of governance. Water resource governance has been described as 'the range of political, social, economic and administrative systems that are in place to regulate development and management of water resources and provisions of water services at different levels of society'.⁹⁸

⁹³Jessica Vapnek, et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009).

⁹⁴Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance* (Oxford University Press, 1995).

⁹⁵United Nations Department of Economic and Social Affairs (UNDESA), 'Valuing and Charging for Water' in World Water Assessment Programme (ed), *Water: A Shared Responsibility*. (UNESCO 2nd ed, 2006.) 400.

⁹⁶Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance* (Oxford University Press, 1995).

⁹⁷Second World Water Forum, *Ministerial Declaration of The Hague on Water Security in the 21st Century* (22 March, 2000).

⁹⁸Peter Rogers and Allan Hall (eds), *Effective Water Governance*, Tec Background Papers (GWP, 2003), 7.

The use of the term water governance signifies a shift from the perception of the state of water resources as a bio-physical crisis to a crisis of governance. This has widened the scope of water management from technical issues of water availability to socio-economic and even political issues surrounding water resources including democracy, corruption, and power imbalances.⁹⁹ The paradigm of governance has also served to highlight the link between poverty, development and water scarcity. The formulation of water resource management in terms of governance has also contributed to its appreciation as a multi-level governance task involving authorities from local levels, to the national, regional, supranational and global levels.¹⁰⁰ In developing countries the existence of multi-level governance in the water sector is especially pertinent. Institutions involved include international financial agencies and non-governmental organisations which provide financial and technical assistance and contribute to the design and implementation of water governance systems as well as customary law institutions. Governance is thus recognised as the key that links national policy making with policy implementation relating to water resources.¹⁰¹

In the last twenty five years, societal goals with respect to water development and use have been characterised by the effort to find the right balance between environmental protection and the use of water for human development.¹⁰² As demonstrated earlier, the concept of sustainable development serves as a unifying philosophy of all the efforts to achieve environmental sustainability in the course of using natural resources for achieving economic development.

There is thus global consensus on the need to pursue sustainable development in water governance and to govern water effectively so as to achieve sustainable development. The challenge however, lies in the practical implementation of the policy goal. The task of developing water governance systems for sustainable development is one that requires the cooperation of many institutions and communities at the international and local level. The complexity, uncertainty, interdependencies, multiple stake-holders involved and controversy

⁹⁹Håkan Tropp, 'Water Governance: Trends and Needs for New Capacity Development' (2007) 9 (Supplement 2) *Water Policy* 20.

¹⁰⁰Joseph W. Dellapenna and Joyeeta Gupta, 'A Book Conversation with the Editors and a Reviewer. Law and Water Governance: Past, Present, and Future' (2011) 36(3) *Water International* 398.

¹⁰¹Patricia Wouters and Andrew Allan, 'What Role for Water Law in the Emerging "Good Governance" Debate?' (2004) 15(3) *Journal of Water Law* 85.

¹⁰²Patricia Wouters, 'The Relevance and Role of Water Law in the Sustainable Development of Freshwater' (2000) 25(2) *Water International* 202, 204.

characterising the task of developing water governance systems that foster sustainable development has led to the description of the task of developing water governance systems for sustainable development as a 'wicked problem'.¹⁰³ The notion of 'wicked problem' originated in the discipline of policy and social planning to characterise social complexities involving constant change and unprecedented challenges among other difficulties.¹⁰⁴

As noted earlier, the pursuit and achievement of sustainable development is the responsibility of governments, entrepreneurs, civil society and the public at large. The question as to what role law and legal systems ought to play in this task of achieving sustainable development is discussed in the following subsection.

(b) Role of Law in Water Governance for Sustainable Development

While the general role of law is to set standards for human behaviour by prescribing rules that govern activities and decisions, in some instances, law does not set a standard of behaviour but rather guarantees the outcome to be achieved by future behaviour in particular circumstances.¹⁰⁵ Understood as such, the role of law with respect to policy objectives including that of sustainable development would be to enforce previously set standards. Law thus ensures that the procedures and standards set out in the decision-making process as necessary for sustainable development are followed.¹⁰⁶

This view of the role of law distinguishes between the procedural element and the substantive elements of sustainable development and considers law as being primarily directed at the procedural aspect of sustainable development. The procedural elements relate to how sustainable development may apply to a particular proposed development, while the substantive element refers to the implementation of sustainable development objectives.¹⁰⁷ The focus on the procedural element is evidenced by the preoccupation of law with public participation rights, environmental impact assessments (EIAs), and other aspects of 'how'

¹⁰³Ray Ison, 'What are the Critical Governance Research Needs? Urban Perspectives' (Paper presented at the National Climate Change Adaptation Research Facility (NCCARF) Water Governance Forum, Canberra, 16 November 2010).

¹⁰⁴Horst W J Rittel and Melvin M Webber, *Dilemmas in a General Theory of Planning* (Institute of Urban & Regional Development, University of California, 1972).

¹⁰⁵Douglas Fisher, 'Sustainability - The Principle, its Implementation and its Enforcement' (2001) 18 *Environment & Planning Law Journal* 361, 361.

¹⁰⁶*Ibid*, 362.

¹⁰⁷Laura Horn, 'Sustainable Development' - Mere Rhetoric or Realistic Objective?' (2011) 30 *University of Tasmania Law Review* 119, 125.

sustainable development is to be applied. Substantive elements of sustainable development include considerations such as the sustainable use of natural resources and the equitable allocation of resources among different generations.¹⁰⁸

Arguably, law's preoccupation with procedural elements contributes to the substantive elements of sustainable development. For instance, by establishing a system of allocating water rights, the law sets up the rules for balancing competing needs and determining trade-offs. Further, the law develops mechanisms designed to ensure monitoring, compliance, dispute avoidance and settlement as well the mode of effecting changes in the system.¹⁰⁹ This contributes to the achievement of sustainable development in so far as the law provides a coherent structure that ensures the coordination and proper working of the multiple actors in the deliberation process and determines the best course of action to bring about sustainable development.

Other views hold that water law and legal systems go further than the procedural aspects arguing that they establish the necessary substantive and procedural norms for governance, thus assuring the stability, predictability and flexibility required for the effective governance of water resources.¹¹⁰ According to this view, the role of water law is thus to:

- a. Define the legal entitlement to water and establish a rights framework that prescribes the parameters for its development
- b. Provide the necessary framework for the balancing of competing needs of all stakeholders
- c. Design mechanisms to guarantee the relevance and resilience of the rights regime including mechanisms for monitoring, regulation, implementation and dispute settlement
- d. Facilitate the rational modification of the existing regime to ensure adaptability to changing circumstances.¹¹¹

¹⁰⁸Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 3rd ed, 2009), 116.

¹⁰⁹Wouters, Patricia, 'The Relevance and Role of Water Law in the Sustainable Development of Freshwater' (2000) 25(2) *Water International* 202,203.

¹¹⁰ Ibid.

¹¹¹ Ibid.

Consequently, for a legal framework for water governance to contribute to sustainable development, it must demonstrate the features identified above. As shall be noted later in this thesis, these factors are comparable to the features identified by frameworks developed for analysing the potential of customary law systems of water governance to contribute to sustainable development.

As noted in the foregoing section, international law on sustainable development provides a basis for determining the content of the notion and its underlying principles. Some argue that that a discrete sustainable development law is emerging consisting of a group of congruent norms and the body of international environmental law that addresses the area of intersection between international economic law and international human rights law.¹¹² The following subsection seeks to identify some of the main features of this body of sustainable development law.

3 *Implementing Sustainable Development*

The International Law Association (ILA), a recognised academic authority in international law, has attempted to codify the international law relating to sustainable development in the New Delhi Declaration on the Principles of International Law Relating to Sustainable Development.¹¹³ The Declaration which represents the view of several publicists provides a useful basis for determining the legal content and nature of sustainable development.

The Declaration is based on seven main principles of international law, which are identified as key to ensuring the achievement of sustainable development. These are:

- a. The sustainable use of natural resources;
- b. The principle of equity and the eradication of poverty,
- c. The principle of common but differentiated responsibilities;
- d. The precautionary principle;
- e. The principle of public participation and access to information and justice;
- f. The principle of good governance; and
- g. The principle of integration and interrelationship particularly in relation to human rights and social, economic and environmental objectives.¹¹⁴

¹¹²Marie-Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices and Prospects* (Oxford University Press, 2004).

¹¹³International Law Association (ILA), *New Delhi Declaration of Principles of International Law Relating to Sustainable Development*, ILA Resolution 3/2002, annex, UN Doc. A/57/329 (6 August 2002).

¹¹⁴*Ibid.*

Although these principles are drawn from international law, the Declaration extends their application to a wider realm, by affirming that the principles should guide not only the interaction of states but also intergovernmental organizations, peoples and individuals, industrial concerns and other non-governmental organizations.¹¹⁵ The principles thus provide a basis for developing the substantive content of the notion of sustainable development. However, the question of the priority or weight that ought to be assigned to the different principles continues to present a challenge to the implementation of sustainable development.¹¹⁶ Different views exist on the issue of priority and relative importance of the different principles in the implementation of sustainable development. Some have argued that the central aspect of sustainable development is also dependent on its being a bottom-top approach and that thus the principle of participation should be granted most weight.¹¹⁷ However, this view has been contested on the basis that the outcomes resulting from a bottom-top approach to decision-making are not necessarily consistent with ecological sustainability.¹¹⁸

The absence of prioritization or weighting of the different international law principles for sustainable development does not hinder the implementation of the concept by legal frameworks. As shall be argued later in this thesis, the implementation of sustainable development through legal frameworks for water governance requires a deliberative process in which the different principles constituting sustainable development are balanced in the context of the circumstances. As noted by the ILA, the principle of integration and interrelationship is of particular significance, given that it represents the very essence of the concept of sustainable development.¹¹⁹ The principle of integration serves as a central point of reference, ensuring that an internal coherence is retained in the course of addressing the broad and multiple aspects considered in sustainable development.¹²⁰

¹¹⁵Ibid, preamble.

¹¹⁶International Law Association, *First Report of the International Law Committee on International Law on Sustainable Development*, (2004), 7.

¹¹⁷Peter Ørebech, 'Customary Law and Sustainable Development' (Paper presented at the Workshop in Political Theory and Policy Analysis, Bloomington, Indiana, 6 March 2006).

¹¹⁸Michael Jacobs, 'Sustainable Development as a Contested Concept' in Andrew Dobson (ed), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* (Oxford University Press, 1999).

¹¹⁹International Law Association, *First Report of the International Law Committee on International Law on Sustainable Development*, (2004), 5.

¹²⁰Ibid, 5.

The New Delhi Declaration contextualizes the concept of sustainable development within the paradigm of international human rights law. The rationale for this is the recognition that ‘the realization of the international bill of human rights, comprising economic, social and cultural rights, civil and political rights and peoples’ rights, is central to the pursuance of sustainable development’.¹²¹ Although the complementarity of sustainable development and human rights is evident at a policy and political level, the practical application of this in the context of law is problematic. Legal frameworks seeking to integrate human rights and sustainable development have to address issues of how to reconcile potentially conflicting rights, as for example the conflicts arising between the right to a healthy environment and the right to development.¹²² In addition to this, legal frameworks must also determine if to consider the right to sustainable development in the context of rights of peoples comparable to the right to self-determination or as a right at the individual level comparable to the right to a healthy environment or the human right to water.¹²³ Some of the other practical challenges faced in the implementation of legal frameworks seeking to contextualize water governance for sustainable development in a human rights framework shall be discussed later in this thesis.

The substantive content of the concept of sustainable development can thus be determined from these international law principles of sustainable development. However, the question of how to develop legal frameworks that contribute to the achievement of sustainable development presents a challenge. Various tools have been proposed as mechanisms for achieving sustainable development. A recent tool proposed by the Rio+20 Conference on Sustainable development is that of the ‘green economy’.¹²⁴ The notion of ‘green economy’ is used to refer to an economy that can ‘contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems’.¹²⁵

¹²¹International Law Association (ILA), *New Delhi Declaration of Principles of International Law Relating to Sustainable Development*, ILA Resolution 3/2002, annex, UN Doc. A/57/329 (6 August 2002), preamble.

¹²²Ximena Fuentes, ‘International Law-Making in the Field of Sustainable Development: The Unequal Competition between Development and the Environment’ (2002) 2(2) *International Environmental Agreements: Politics, Law and Economics*, 126.

¹²³International Law Association, *First Report of the International Law Committee on International Law on Sustainable Development*, (2004), 7.

¹²⁴Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012) [56].

¹²⁵*Ibid* [56].

The notion of green economy is proposed as a new vision of economic growth that focuses on the intersection between environment and development for the achievement of sustainable development and eradication of poverty. The achievement of a green economy is dependent on the development of green economic policies. While these policies are not defined, the Rio+20 Outcome document provides that green economic policies should: be consistent with international law; respect the national sovereignty of countries over their natural resources; consider the welfare of indigenous peoples and other local and traditional communities; enhance the welfare of vulnerable and marginalized groups; and mobilize the full potential and equal contribution of both men and women.¹²⁶

A further notion of ‘greening of water law’ has been proposed as a means of achieving the green economy in the context of water governance. The greening of water law arguably constitutes a method through which water law can implement sustainable development.¹²⁷ Greening of water law is described as the theoretical and practical effort to modernise legal regimes for water governance so as to ensure the integration of environmental concerns into the water management priorities and decision-making practices.¹²⁸ In practical terms this greening of water law involves implementation of a more holistic approach to the drafting of water legislation so as to encompass all hydraulically related water resources in decision-making and ensure that the impacts of decisions on the natural environment and more specifically on water resources are taken into account.¹²⁹ The main emphasis of the greening of water law is thus the integration of environmental considerations in water related decision-making. However, the importance of integrating other aspects such as the water needs for human consumption, sanitation services, agricultural and industrial production as well as for recreation and aesthetics is also recognised.¹³⁰ The greening of water law thus calls for the balance of the eco-centric and anthropocentric approach in development and implementation of legal frameworks for water governance.

¹²⁶ Ibid [58].

¹²⁷ United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNON, 2010).

¹²⁸ Ibid 30.

¹²⁹ Ibid 31.

¹³⁰ Ibid 32.

The objectives sought by proponents of the green economy and the greening of water law are sound in so far as they seek to achieve the goal of sustainable development in water resource governance. However, the notion of green economy (and by extension that of greening of water laws) is limited by its underlying conceptual and theoretical framework which is neoclassical economics.¹³¹ In the next chapter, this thesis investigates this theory and other legal theories and concepts underlying modern water law and which therefore set the parameters within which legal frameworks for water governance are developed.

¹³¹Nicolas Kosoy et al, 'Pillars for a Flourishing Earth: Planetary Boundaries, Economic Growth Delusion and Green Economy' (2012) 4(1) *Current Opinion in Environmental Sustainability* 74.

III CHAPTER 3 LEGAL THEORIES AND CONCEPTS UNDERLYING ‘MODERN WATER LAW’

A subtle factor influencing the relationship between statutory and customary law in the development of legal water governance frameworks for sustainable development is the legal theories and concepts underlying these frameworks and particularly the effect of these on the conceptualisation of law, custom, customary law and property in these systems. This is because the possibility of interaction of customary and statutory law in legal frameworks for water governance is fundamentally dependent upon the notions of law, custom and customary law adopted by these systems. Further, as legal frameworks for water governance are founded on a property rights regime, the concept and theories affecting the notion of property also determine the property rights regimes anticipated in modern water law.

Part A of this chapter thus critically analyses legal positivism as the legal theory influencing the prevalent notions of law, custom, customary law and property in legal frameworks for water governance. The analysis demonstrates the significance attributed to the concepts of law, custom and customary law in the legal positivist context. In part B, an examination of the legal positivist notion of property establishes the significance attributed to the concept and the effects of classical economic theories and neoliberalism on the conceptualisation of property regimes in modern legal frameworks for water governance. This discussion also demonstrates how the commons and common property regimes, which are characteristic of customary law systems of resource governance, have been relegated to a secondary place in contemporary property law and thus in legal frameworks for water governance.

The import of the arguments made in this thesis can be applied to the legal frameworks for water governance in many jurisdictions, as most modern water frameworks demonstrate common themes. However, the focus of this thesis is on countries with a common law system and consequently, the analysis will primarily consider literature from the common law system. Further, a review of Marakwet’s water governance system in the context of Kenya’s water law in subsequent chapters will be used to illustrate the import of the general theoretical arguments made in this chapter.

Before beginning the discussion on the legal theories and concepts underlying modern law in common law jurisdictions, a clarification of terms may be useful. The expression ‘common law system’ is used to designate political entities or states, whose law for the ‘most part is

technically based on' English Common Law concepts.¹ The qualification 'for the most part' and 'technically based' in the above definition of common law systems is an important caution against the assumption that all legal systems classified as common law systems are similar. The classification is largely the result of a historic link of the country's legal system with the English common law system. However, with the passage of time, common law jurisdictions have developed distinctive legal systems with some countries adopting elements from pre-existing indigenous or religious governance forms and others leaning towards the codification approach which is characteristic of civil law systems.² Kenya is a good example of this, as it is classified as a common law country, though in reality it has a mixed system that integrates customary law and Muslim law with the common law.³ Notwithstanding the differences in the different countries, the classification provides a useful categorisation for purposes of scoping the analysis of the notion of law in this thesis.

A *Law, Custom and Customary Law in Legal Positivism*

1 *Legal Positivist Theories and Concepts*

While appreciating the complexity of factors affecting legal systems and the dangers of oversimplification, it can reasonably be concluded that in the last two centuries, law in common law jurisdictions has been influenced to a large extent by the legal positivist theory.⁴ This is notwithstanding the existence of other legal theories such as critical legal studies, feminist legal theory, critical race theory, and post modernism.⁵ The fact that these theories often seek to critique the legal positivist notion of law, confirms its prevalence in shaping contemporary legal and institutional frameworks both at the international and national law.

The positivist notion of law underlying modern legal systems has far reaching consequences on the understanding of law, custom, customary law, property and human rights. The

¹University of Ottawa, *Common Law Systems and Mixed Systems with a Common Law Tradition* (2012) University of Ottawa <<http://www.juriglobe.ca/eng/sys-juri/class-poli/common-law.php>>.

² For a discussion on the interaction of English common law with these indigenous governance systems see J N Matson, 'The Common Law Abroad: English and Indigenous Laws in the British Commonwealth' (1993) 42 *The International and Comparative Law Quarterly* 753.

³University of Ottawa, above n 1.

⁴William L Twining, *General Jurisprudence: Understanding Law From a Global Perspective*, Law in context (Cambridge University Press, 2009) in general; John Finnis, *Philosophy of Law. Collected Essays: Volume IV* (Oxford University Press, 2011), 162 referring to influence of Austin and Bentham on English-speaking philosophy of law.

⁵ See Terry Hutchinson, *Researching and Writing in Law* (Lawbook Co, 2006), 53 for an outline of the main themes of these schools of jurisprudence.

significance given to these concepts determines the nature of legal frameworks for water governance developed in these jurisdictions. This section thus reviews the notion of law expounded by legal positivism and the theory of knowledge underlying this notion of law. The theory of knowledge underlying the notion of law in legal positivism as shall be demonstrated has contributed to the notion of custom and the relation between law, reason and custom in modern legal frameworks. The significance attributed to custom in the context of legal positivist theory, as shall be shown, has influenced modern law's conception of customary law and its place in the statutory legal framework.

The legal concepts and theories underlying contemporary common law systems have their origin in the post 17th century common law jurisprudence.⁶ One of the most influential theorists of this period is John Austin (1790-1859), an English jurist to whom the systematic articulation of legal positivist theory is attributed. At the root of Austin's legal positivism was the notion of separability of law from its merits. His notion of law was founded on the argument that: 'the existence of law is one thing; its merit and demerit another. Whether it be or not is one enquiry; whether it be or not conformable to an assumed standard, is a different enquiry.'⁷ This to a great extent reflects the significance attributed to the concept of law underlying modern legal frameworks including those for water governance in most common law countries.

2 *Roots of the Theory*

Austin's notion of law was influenced by the political philosophy of Thomas Hobbes (1588-1679). The work of Hobbes laid the foundation for the legal positivist concept of law and the central role of the state in legal systems. The political philosophy of Hobbes marked the beginning of 'modern common law jurisprudence' which was a departure from the 'classical jurisprudence'. The term 'modern common law jurisprudence' is used in this thesis to refer to the common law legal theory expounded from 1600 onwards and it is argued this legal theory has been most influential to contemporary legal positivism. 'Classical jurisprudence' on the other hand is used to denote the legal theory prior to this period which had its foundation in

⁶Michael Lobban (ed), *A History of the Philosophy of Law in the Common Law World, 1600-1900*, A Treatise of Legal Philosophy and General Jurisprudence (Springer, 2007); Gerald J. Postema, *Legal Philosophy in the Twentieth Century: The Common Law World*, A Treatise of Legal Philosophy and General Jurisprudence (Springer, 2011).

⁷John Austin and Wilfrid E. Rumble, *The Province of Jurisprudence Determined*. *Cambridge Texts in the History of Political Thought* (Cambridge University Press, first published 1832, 1995), 157.

classical philosophy and which in chapter eight of this thesis shall be explored as an alternative legal theoretical framework for development of water governance frameworks.

Hobbes argued that the legitimacy of law was dependent not on truth but rather on the authority positing the law.⁸ This view distinguished his notion of law from that held by classical jurisprudence. For classical jurisprudence, law was the product of reason, while Hobbes saw it as the product of the will of the sovereign.⁹ He argued that the normative force of the law rested not on its substantive justice or rationality but rather on the moral authority of the law-giver.¹⁰ This concept of law laid the foundation for Austin's legal positivism which, as noted above, separated the legitimacy of the law from its merit. As shall be seen, this idea of law as a social fact whose legitimacy is not affected by its merit is still prevalent in modern law.

A further feature of Hobbes political philosophy that influenced legal positivism is its underlying theory of knowledge. Hobbes' thought was based on a rationalism founded on a form of logic, which was dependent on the scientific method.¹¹ Hobbes equated reason to the discursive process proper to theoretical knowledge and thus argued that the legal method had to demonstrate the same rigour and process of other theoretical sciences. Classical jurisprudence on the other hand, regarded law as a product of practical reason and thus, the method of law was that proper to practical sciences. The dichotomy of theoretical sciences and practical sciences has its origin in classical philosophy and shall be discussed further in chapter eight.

Hobbes clearly distinguished his theory of knowledge and understanding of reason from that of classical philosophers such as Aristotle, whom he criticized.¹² He contrasted science with what he regarded as less reliable forms of belief including probable inference based on experience, describing the latter as 'absurdity to which no living creature is subject but men.'¹³ Frustrated by the concession made by classical philosophy of the inexact, fallible and

⁸Thomas Hobbes, *Leviathan* (Fontana, 1976) ch 26.

⁹Martin Rhonheimer, 'Natural Law as a "Work of Reason"'. Understanding the Metaphysics of Participated Theonomy' (2010) 55 *The American Journal of Jurisprudence* 41, 49.

¹⁰Thomas Hobbes, *De Cive: The English Version [1647]* (Howard Warrender trans, Clarendon Press, first published 1647, 1983), ch 15.

¹¹ See Hobbes, *Leviathan* above n 8, 24.

¹²*Ibid*, 26-7.

¹³*Ibid*, 26.

variable nature of knowledge derived from practical sciences, Hobbes attempted to prove that law, though regarded as a practical science, was as predictable as the theoretical sciences.¹⁴ In his framework, the function of practical sciences and thus of legal science, would be to assure a greater certainty of expected outcomes.¹⁵ Using geometry as an illustration, he argued that the application of the scientific method to legal inquiry assured greater clarity and undisputed results.

The theory of knowledge or epistemology underlying legal positivism was also influenced by the thought of David Hume (1711-1776), who is considered among the most important British empiricists.¹⁶ Hume argued against what he regarded as a common confusion between 'is' that is, the reality and 'ought' referring to the particular course of action to be taken.¹⁷ He maintained that in the realm of pure logic, there could be no room for conclusions on particular courses of action. Applied to the notion of law and its discourse, this translates to the separation between what law is, which would be the realm of analytical jurisprudence, and what law ought to be, the latter being a normative or evaluative question that was of little relevance to law. This perspective formed the basis of Austin's analytical jurisprudence.

Analytical jurisprudence regards the study of law as a subject of scientific study. Due to the influence of Hobbes and Hume, Austin's idea of 'scientific study' was synonymous with the method of theoretical sciences. One of the objectives of Austin's work was to identify the characteristics that distinguished positive law, thus freeing the concept of law from its perennial confusion with the precepts of religion and morality.¹⁸ He thus sought to establish the criteria by which 'laws properly so called' could be distinguished from other quasi-laws. He defined laws properly so called as commands which oblige a person or persons to a course of conduct.¹⁹ Although this definition of laws properly so called does not per se exclude

¹⁴Stephen A Siegel, 'The Aristotelian Basis of English Law, 1450-1800' (1981) 56(18) *New York University Law Review*.

¹⁵Allen S Hance, 'Prudence and providence: On Hobbes's Theory of Practical Reason' (1991) 24(2) *Man and World* 155.

¹⁶William Edward Morris, 'David Hume' (2011) *The Stanford Encyclopedia of Philosophy* <<<http://plato.stanford.edu/archives/fall2011/entries/hume/>>>.

¹⁷David Hume, *A Treatise of Human Nature* (Oxford University Press, first published 1739, 2000).

¹⁸Austin and Rumble, above n 7, x.

¹⁹Ibid, 10.

customary laws that are obligatory, he categorised customary laws as quasi-laws which only gained the status of laws properly so called if promulgated by statute.²⁰

In the mid-20th century legal positivism experienced a shift in emphasis from the legislative institutions and coercive force of Hobbes and Bentham to the law implementing institutions like courts and the systematic and normative character of law advocated by Kelsen, Hart and Raz, among others.²¹ These theories concede that law is a product of reason in so far as it is possible to judge what is legally right and obligatory relativising such judgement with respect to place, time and relevant population.²² The concept of law is thus described as practical reason as was the case in classical jurisprudence. However, the understanding of practical reason underlying this notion of law is similar to that of Hobbes, Bentham and Austin which blurs the distinction between practical and theoretical sciences.²³

The legal positivist theories of the 20th century also deny that such the judgements involved in law require or presuppose a moral basis.²⁴ For instance, Hart (1907-1992), a dominant legal positivist of this period, maintains that law does not necessarily satisfy the conditions by which it is appropriately assessed. He defines law as the combination of primary and secondary rules, with the primary set of rules applying to conduct and the secondary set to determine the creation, application and validity of primary rules.²⁵

3 *Notion of Law and Legal Method*

Although there have been nuances in the articulation of the theory of law by its various proponents over the years, legal positivism to date maintains some of the features described above. For legal positivism, law is regarded as a social fact whose content and existence does not depend on its merits.²⁶ The legal positivist perspective on the question of whether law exists is thus independent of the extent to which the so called law satisfies ideals of justice,

²⁰ Ibid, 28.

²¹ See Robert P George, *The Autonomy of Law: Essays on Legal Positivism* (Oxford University Press, 1999) for a detailed account of these theorists contribution to the positivist concept of law.

²² Neil MacCormick, 'Contemporary Legal Philosophy: The Rediscovery of Practical Reason' (1983) 10(1) *Journal of Law and Society* 1, 5.

²³ Siegel, above n 14, 45-46.

²⁴ MacCormick, above n 22, 5.

²⁵ Herbert Lionel Adolphus Hart, *The Concept of Law* (Clarendon Press, 1961) 89-96.

²⁶ See Leslie Green, 'Legal Positivism' (2009) *The Stanford Encyclopedia of Philosophy* <<http://plato.stanford.edu/archives/fall2009/entries/legal-positivism/>>.

democracy or the rule of law but rather is determined by the presence of the structures of governance that give the law its legitimacy.²⁷ The laws in force are dependent on 'the social standards its officials recognize as authoritative for example legislative enactments, judicial decisions or social customs'.²⁸ The implication of this is that for legal positivism, the essence of law is that it exists and the existence of the rules is regarded as unproblematic.

A concept of law as described above does not provide an objective or external basis on which the law may be evaluated but rather provides a standard by which its legitimacy may be determined. Understood thus, legal positivism would be presenting only internal standards for determining the law's validity while leaving little or no space for evaluation of the content of the rules against external standards or reality including the principles included in the notion of sustainable development. Adopting this approach reduces the space for sociological enquiry restricting it to whether a 'certain logically stable and describable legal order is actually operative and by and large, efficacious over the territory for which it purports to be valid and binding.'²⁹ Such an approach to law has led to the critique of legal positivism as being too formalist. As noted in the introduction to this thesis, the very nature of the subjects investigated in this research, that is legal frameworks in the context of customary law, common property governance systems and water for sustainable development, would fall outside the scope of such a perspective of law.

Recent articles on legal positivism have sought to respond to this critique of legal positivism as being a formalist doctrine. Green, for example, seeks to clarify the position of legal positivism cautioning against what in his view are misconceptions of the statement that law is a matter of social facts.³⁰ He argues that while some interpret this statement to mean that legal positivism is a formalistic doctrine which postulates that law however pointless or wrong must be applied by law enforcers and obeyed by subjects, this is not the case and none of the leading positivists ascribe to this perspective.³¹ This clarification suggests that legal positivism does not negate the possibility of an evaluation of law to determine if indeed it

²⁷Ibid.

²⁸Ibid, 1.

²⁹Neil MacCormick and Ota Weinberger, *An Institutional Theory of Law: New Approaches to Legal Positivism* (D Reidel Publishing, 1986), 2

³⁰Green, above n 26.

³¹ Ibid.

should be enforced or obeyed. Such an exposition of legal positivism blurs the traditional distinction between legal positivism and natural law legal theory.

Proponents of contemporary natural law legal theory contend that, contrary to a common misconception, these theories do not maintain that there is a necessary connection between law and morality.³² It is argued that the only connection that natural law theorists assert is 'the connection which cannot be denied without taking a moral position on moral grounds, that is, without making legal theory a part of moral theory.'³³ These clarifications from contemporary natural law theorists and legal positivists demonstrate the similarity in perspective on the relation of law to morality by the two schools of jurisprudence. In contemporary jurisprudential literature, what is in contention with respect to the concept of law is its epistemological foundation, that is, the theory of knowledge and concept of reason underlying the concept of law as a product of reason.³⁴

As noted in the above section, the history of legal positivism is closely linked to certain theories of knowledge including rationalism, empiricism and logical positivism. Hobbes' political philosophy which influenced contemporary legal positivism was based as noted earlier on a rationalism that sought to incorporate geometry and other logical-linguistic constructs to legal theory. Hume's empiricism, which as discussed was also influential in the development of legal positivism, held the view that rationally acceptable propositions could only be known or justified through experience. The merging of positivism with rationalism and empiricism contributed to the development of logical positivism whose characteristic feature is the view that scientific knowledge (understood as empirical or theoretical science) is the only type of factual knowledge. Contemporary legal theory is arguably founded on logical positivism.

However, some legal positivists maintain that the theory does not necessarily adhere to logical positivism despite their 'historical connections' and 'commonalities of temper'.³⁵ It is argued that, the proposition that the existence of law depends on social facts, does not necessarily mean that the method of investigating such social facts must be the method proper

³²Finnis, John, 'Describing Law's Foundation' (2011) UCL *Colloquium* 26 January 2011,8.

³³ Ibid, 9.

³⁴ See for example, Neil MacCormick, *Practical Reason in Law and Morality* (Oxford University Press, 2009), John Finnis, *Reasons in Action*, Collected Essays (Oxford University Press, 2011), Ana Marta González, *Contemporary Perspectives on Natural Law: Natural Law As a Limiting Concept* (Ashgate, 2008).

³⁵ See Green above n 26.

to natural sciences. Such a view suggests that a legal positivistic theory of law is compatible with the method used for practical sciences, which as was noted earlier was opposed by the fathers of legal positivism particularly Hobbes. Contemporary legal positivism seems to have returned to the notion of practical reason as distinct from theoretical reason, as evidenced by its admission of the possibility of evaluation of the content of rules making up law. The only difference between this contemporary legal positivism and contemporary natural law theory is that legal positivism still maintains that such evaluation must be value free.³⁶

From the foregoing, this thesis concludes that contemporary legal positivist theories and natural law legal theories seem to have merged into a shared conception of law as practical reason with their differences being related to the understanding of practical reason. In the following section, the relation of custom, law and reason in legal positivism is investigated further.

4 *Relation of Law, Reason and Custom in Legal Positivism*

Common law jurisprudence developed from 1600 onwards adopted a different position from that of classical jurisprudence regarding the relation between law, reason and custom. The discussion following on the notion of custom prevalent at the birth of modern common law jurisprudence demonstrates how and why the notion of custom and by extension customary law, lost pre-eminence in common law systems.

Before 1800, lawyers in the common law realm regarded law as a product of reason.³⁷ The resources of this discipline of reasoning referred to by Hale as the three ‘formal constituents’ of common law were: usage and custom, Acts of Parliament and decisions of the courts of justice.³⁸ During this period, most common law lawyers would have been comfortable with the assertion that ‘the law of England standeth upon diverse general customs of old time used through all the realm: which have been accepted and approved by our sovereign lord the king and his progenitors and all their subjects.’³⁹ Most lawyers in this period thus shared the view

³⁶MacCormick, above n 22.

³⁷Siegel, above n 14, 20.

³⁸Matthew Hale, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971), 44.

³⁹C St German (ed), *St German’s Doctor and Student* (Selden Society, 1974), 45.

that common law could be defined as ‘reasonable usage’ which notion implied both common custom and common reason.⁴⁰

Some writers from this period distinguished between ‘local or particular custom’ and ‘general custom’ which was current throughout the realm and which was thus granted direct judicial notice.⁴¹ In the context of this distinction, only general custom was referred to as common law, while evidence of local or particular custom had to be proved as well as its applicability to the case in question and its reasonableness.⁴² Despite this distinction, common law jurisprudence continued to give importance to the role of custom in common law as demonstrated in the postulation: ‘For the common law of England is nothing else but the custom of the realm.’⁴³ Despite the appreciation of the importance of custom, this thesis argues that some of the prevailing views on custom and its relation to law and reason during this period, contributed to the misconception of the notion in legal positivism.

One of these prevalent views regarding the basis of common law, and by extension of custom, was the notion of immemorial usage.⁴⁴ Several influential writers of the period including Edward Coke (1552-1634) and John Davis (1550-1605) were of the view that the essence of common law was to be found in its immemorial usage. This view tended to associate the notion of custom with immemorial usage. Davies for instance affirmed that:

*[C]ustom which hath obtained the force of a law, is always said to be ius non scriptum (unwritten law); for it cannot be made or created, either by Charter, or by Parliament, which are acts reduced to writing, and are always matter of record; but being only matter of fact and consisting in use and practice, it can be recorded and registered nowhere, but in the memory of the people.*⁴⁵

This marked the beginning of the association of custom with antiquity and continuity. Supporters of this view granted centrality to custom, arguing that the greatest asset of

⁴⁰Gerald J Postema, 'Classical Common Law Jurisprudence (Part 1)' (2003) 2(2) *Oxford University Commonwealth Law Journal*, 155, 157.

⁴¹*Ibid*, 168.

⁴² On the distinction between general custom and local custom see T Hedley, 'Speech in Parliament on Royal Impositions ' in ER Foster (ed), *Proceedings in Parliament 1610* (Yale University Press 1966) , 175-176, Matthew Hale, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971)17 and 30.

⁴³John Davies, 'Irish Reports' in A Grosart (ed), *The Works in Verse and Prose ... of Sir John Davies* (Blackburn, 1876), vol 2, 255.

⁴⁴ Postema refers to this view as the Cokes-Davies position. Postema above n 40, part D.

⁴⁵Davies above n 43, 252 and 255.

common law lay in its wisdom and experience; that is, in its custom.⁴⁶ According to this perspective the validity of law was evidenced by its immemorial usage which they argued was more important than the deliberation of Parliament or of the wisest judges.⁴⁷

This view substituted classical common law's understanding of the essence of common law as reasonable usage, to common law as immemorial usage. This de-linking of custom from reason contributed to the dichotomy of traditionalism versus rationalism prevalent in the Weberian sociological foundation of law.⁴⁸ This dichotomy represents the underlying tension in modern legal systems, which regard law as stated rules about social mores enacted by the state and custom as norms of behaviour that are neither posited nor reflected upon.⁴⁹ Modern legal systems thus associate law with reasoned principles and doctrines as opposed to being 'enslaved to customary habits and laws'.⁵⁰ Consequently, in many common law legal systems recognising some form of customary law or indigenous rights, the requirement for such recognition is subject to proof that the traditions are reflective of a distant past and that they have not been subjected to material alteration.⁵¹ This approach has permeated the recognition of customary or indigenous rights to water in many common law jurisdictions.⁵² Such a perspective of custom provides an inadequate framework for the recognition of indigenous or customary claims over water.⁵³

⁴⁶ See, eg, Edward Coke, *First Institute of the Laws of England* (Garland first published 1628, 1979); T Hedley, 'Speech in Parliament on Royal Impositions ' in ER Foster (ed), *Proceedings in Parliament 1610* (Yale University Press 1966); John Davies, 'Irish Reports' in A Grosart (ed), *The Works in Verse and Prose ... of Sir John Davies* (Blackburn, 1876).

⁴⁷T Hedley, 'Speech in Parliament on Royal Impositions ' in ER Foster (ed), *Proceedings in Parliament 1610* (Yale University Press 1966) 175.

⁴⁸Max Weber (ed), *On Law and Economy in Society* (Harvard University Press, 1954).

⁴⁹Mancur D Olson, 'Articulating Custom. The Politics and Poetics of Social Transformations in Samoa' (2000) 45(19) *Journal of Legal Pluralism & Unofficial Law* 19, 19.

⁵⁰Amanda Perreau-Saussine and James Bernard Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) 1.

⁵¹Deborah Bird Rose, *Nourishing terrains : Australian Aboriginal views of landscape and wilderness* (Australian Heritage Commission, 1996), 42. This was the position taken in *Mabo v Queensland* (No 2) (1992) 175 CLR 1.

⁵²*Commonwealth v Yarmirr* (2001) 208 CLR 1.

⁵³ The challenges faced by Indigenous groups in Australia relying on Native Title rights, confirms this. See Poh Ling Tan, 'A review of the legal basis for indigenous access to water' (Griffith Law School, 2009) <<http://waterplanning.org.au/wp-content/uploads/2009/02/pl-tan-indigenous-water-forum-report-11-feb09.pdf>>

Other common lawyers, recognising that the common law had not remained unchanged, rejected the view that the essence of law lay in its immemorial usage.⁵⁴ They argued that the key to understanding common law lay in the incorporation of individual rules and doctrines into the body of law.⁵⁵ For Matthew Hale (1609-1676) one of the proponents of this view, the incorporation element crucial to common law had two dimensions, that is, the integration of rules and norms into the working body of common law; and the accommodation of the rules to the 'frame' and 'disposition' of the subjects of the law.⁵⁶ According to Hale, the integration of rules and norms was a practical and historical exercise and not a purely logical issue.⁵⁷ The accommodation occurred through long experience and use and this ensured the incorporation of the law into the very temperament and manner of the people.⁵⁸ Hale held that the incorporation and accommodation which were at the heart of common law was the work not of an 'invisible hand', as suggested by the immemorial usage argument, but rather the product of a disciplined and experienced judiciary trained to exercise prudence and deliberative judgement.⁵⁹ While the argument that the essence of the common law is custom in the sense of immemorial usage erred in so far as it laid too much emphasis on custom at the expense of reason, the Selden-Hale argument contributed to the over-emphasis on incorporation at the expense of custom .

The views described above, constitute the concepts of custom and common law that Hobbes, Bentham and other positivists inherited as classical common law jurisprudence and thus criticised. Hobbes, presuming that reason and custom, were distinctive elements in common

⁵⁴Hale, Matthew, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971);J Selden, 'Notes on Sir John Fortescue, De laudibus legum Anglie ' in *J Selden Works* (T Wood, 1726) . For a discussion of Hale and Selden's views see, Gerald J Postema, 'Classical Common Law Jurisprudence (Part 1)' (2003) 2(2) *Oxford University Commonwealth Law Journal*, 155.

⁵⁵Gerald J Postema, 'Classical Common Law Jurisprudence (Part 1)' (2003) 2(2) *Oxford University Commonwealth Law Journal*, 155, 174.

⁵⁶Hale, Matthew, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971)30.

⁵⁷Gerald J Postema, 'Classical Common Law Jurisprudence (Part 1)' (2003) 2(2) *Oxford University Commonwealth Law Journal*, 155, 174.

⁵⁸Hale, Matthew, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971).

⁵⁹Matthew Hale, 'Reflections by the Lord Chiefe Justice Hale on Mr Hobbes His Dialogue of the Lawe' in W Holdsworth (ed), *A History of English Law* (Methuen 1956) vol 5, 505.

law, argued that reason was the more superior motive for action.⁶⁰ He thus affirmed that 'custom of itself maketh no law...if custom were sufficient to introduce a law, then it would be in the power of everyone that is deputed to hear a cause to make his errors law.'⁶¹

The notion of the modern day state has its origin in the Hobbesian Leviathan. Hobbes argued that law based on authority is more certain and preferable to a concept of law based on accumulated wisdom, experience and diverse opinions. His view of the human person in a state of nature was that he/she was so directed by self-interest that laws based on a system dependent on the human person's capacity to reason would be subject to manipulation. This is because the human person would not hesitate to decide against reason where this was against his/her self-interest. Hobbes predicted that such system would be open to endless strife and eventually physical force would become the only remedy.⁶² To forestall this danger, Hobbes created an 'artificial person', the leviathan and justified the existence of this sovereign through the social contract. The sovereign thus established acquired the authority and power to make laws.

As a consequence, for Hobbes laws are commands of the Sovereign and not the product of custom, wisdom or experience.⁶³ For Hobbes, 'reason' in this context referred not to the classical notion of 'artificial reason' but rather to the 'human reason' of the sovereign.⁶⁴ This Hobbesian notion of 'human reason' of the sovereign was ultimately not distinguishable from the will of the sovereign, demonstrating the deviation of his notion of reason from the classical notion of practical reason that shall be discussed in greater detail in chapter eight.

Austin's work which as noted, sought to prove the scientific rigour of the discipline of law, also seems to have reacted against the notion of common law as essentially popular wisdom.⁶⁵ In the absence of the clear connection between custom and reason, he argued that common law represented the implicit commands of the sovereign, in so far as they were

⁶⁰Thomas Hobbes (ed), *A Dialogue between a Philosopher & a Student of the Common Laws of England* (University of Chicago Press, 1971), 53-57.

⁶¹James B. Murphy, 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007), 71 citing Hobbes.

⁶² Thomas Hobbes, *Leviathan* (Fontana, 1976).

⁶³ Ibid.

⁶⁴Thomas Hobbes, Thomas (ed), *A Dialogue between a Philosopher & a Student of the Common Laws of England* (University of Chicago Press, 1971)53-57.

⁶⁵ Austin and Rumble, above n 7.

permitted by the sovereign even though they did not directly originate from the sovereign.⁶⁶ He is thus credited with establishing a more top-down ‘imperium-oriented’ approach to law in contrast with the ‘community-approach’ to law that had characterised classical common law jurisprudence.⁶⁷ The community approach to law was based on the prevailing views on custom.

This thesis argues that the separation of the notion of custom from reason during the period of the birth of modern common law jurisprudence described above, has contributed to the significance given to custom by legal positivism. Consequently, in modern legal frameworks, custom is associated with antiquity and immemorial usage. Further, the separation of custom from reason explains the dichotomy of traditionalism versus rationalism referred to earlier and which underlies the perspective of modern legal frameworks towards custom and custom-based normative systems.

The effects on modern law of the legal positivist concepts and theories described above are discussed in the following section.

B *Effects of Legal Positivism on Modern Law*

1 *Customary Law in Legal Positivism*

As discussed in the foregoing section, the legal positivist notions of law have contributed to the contradistinction of custom and reason. Law in modern legal systems is considered a product of reason and as custom is not related to reason customary rules and norms are not considered as law. Law is conceived as consisting of enacted rules emanating from the state while custom in contrast is viewed as consisting of norms of behaviour which are for the large part not enacted and not the result of a reasoned and reflective process.⁶⁸ This contrast of law and reason on the one hand and custom on the other implies that customary law is not reasonable and thus cannot be considered as law. This view reflects to a great extent the perspective taken by legal positivism towards customary law. Hart, expounding on the positivist definition of what constitutes law, argues that the ordering of primitive societies cannot be considered as law.⁶⁹ This position is consistent with the theory of knowledge

⁶⁶ Ibid.

⁶⁷ Roger Cotterrell, *The Politics of Jurisprudence: A Critical Introduction to Legal Philosophy* (LexisNexis, 2nd ed, 2003), 21.

⁶⁸ Olson, above n 49, 30.

⁶⁹ Hart, Herbert Lionel Adolphus, *The Concept of Law* (Clarendon Press, 1961)89-91.

underlying legal positivist theory which has been described as a Hobbesian-Humean-Kantian approach to law and reason.⁷⁰

However, due to the resilience of custom, many legal systems acknowledge the status of the customary in their frameworks though as pointed out by Morss, they do so reluctantly 'as if with a silent *and of course custom is always with us*'.⁷¹ As pointed out by Perreau-Saussine, the prevalent view is that the level of reliance on customary rules and practices is a measure of the coherence and consistency of a legal system, so that a heavy reliance implies inadequacy.⁷²

Although it is customary, for most modern legal systems to recognize customary law to some extent, it is difficult to justify such an inclusion on the basis of the legal positivist theory. As Morss argues, given its conception of law, it is odd that legal positivism should recognise custom at all.⁷³ This is because legal positivism requires that rules seeking the status of law demonstrate certain features that serve as signs or evidence for legal normativity. In the course of the development of legal positivist theory, its various proponents identify different characteristics as essential features.⁷⁴ According to Austin this would be authoritative power, while for Kelsen the rules must seek validity of source in the basic norm. For Hart, the rules must withstand the test of a formal, that is, rule-regulated systematic articulation. None of these features can be demonstrated by customary law. Apart from this general reluctance to recognise it, even in cases where contemporary legal systems recognise it, customary law is regarded as a thing of the past and not on an equal footing with statutory law.⁷⁵

As a result of the above, customary practices and traditions governing the management of natural resources among individuals of a community are in many cases not recognised as an

⁷⁰John M. Finnis, 'On Hart's Ways: Law as Reason and as Fact' (2008) No.7 *Oxford Legal Studies Research Paper*<<http://ssrn.com/paper=1100170>>, 12.

⁷¹John R Morss, 'Can Custom Be Incorporated in Law - On the Place of the Empirical in the identification of Norms' (2008) 53 *American Journal of Jurisprudence* 85.

⁷²Perreau-Saussine, above n 50, 1.

⁷³John R Morss, 'Can Custom Be Incorporated in Law - On the Place of the Empirical in the identification of Norms' (2008) 53 *American Journal of Jurisprudence*, 85.

⁷⁴*Ibid*.

⁷⁵Perreau-Saussine, above n 50, ch 1.

integral part of the formal legal system.⁷⁶ In some countries attempts have been made by the formal statutory legal systems to recognise customary law as a source of law.⁷⁷ However, it is argued that in even these cases, most forms of recognition of customary law are founded on the assumption that customary rights are second order rights which should be recognized but only after the statutory rights have been considered thus undermining the potential for recognition of customary law in natural resource management.⁷⁸ This is evident in most post-colonial states including Kenya, where despite the formal recognition in the legal system of customary law as a source of law, it is subordinated to statutory law and its application limited to a few instances specified by written law.⁷⁹

This tendency of legal systems to regard law as written law and to distinguish it from custom, has influenced the development of legal systems in Kenya as observed by Okoth-Ogendo, who wrote extensively on land tenure systems in Kenya.⁸⁰ He identified certain assumptions, held by development agencies and thus embraced by government, that form the basis of reform of legal systems for land.⁸¹ Though referring to land, Okoth-Ogendo's observations provide useful insights for understanding the recent reforms of water governance in Kenya.

The first of the assumptions is that informality is primarily a problem for developing countries. As developing countries are poor, a cause-effect association of poverty and informality is established and the conclusion is thus made that informality causes poverty.⁸² This assumption is partly true, in so far as in most developing countries, a strong informal

⁷⁶Marco Ramazzotti, 'Customary Water Rights and Contemporary Water Legislation Mapping Out the Interface' (2008) (76) *FAO Legal Papers Online*<<http://www.fao.org/Legal/prs-ol/lpo76.pdf>>.

⁷⁷JN Matson 'The Common Law Abroad: English and Indigenous Laws in the British Commonwealth' (1993) 42 *The International and Comparative Law Quarterly* 753.

⁷⁸ See Donna Craig et al, *An Agreement Approach that Recognises Customary Law in Water Management* (Land & Water Australia, 2009).

⁷⁹ The Constitution affirms its supremacy in *Constitution 2010* (Kenya) s 2(4) and the Judicature Act confirms the place of African Customary Law in the hierarchy of laws to be applied in Kenya *Judicature Act 1967* (Kenya) s 3.

⁸⁰ See for example HWO Okoth-Ogendo, *Property Theory and Land-use Analysis: An Essay in the Political Economy of Ideas* (Institute for Development Studies, University of Nairobi, 1974)HWO Okoth-Ogendo, *Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya* (ACTS Press, 1991).

⁸¹HWO Okoth-Ogendo, 'Formalising "Informal" Property Systems. The Problem of Land Rights Reform in Africa' (2006) <http://web.undp.org/legalempowerment/reports/national%20consultation%20reports/country%20files/15_kenya/15_4_property_rights.pdf>.

⁸²Ibid.

sector presence is evident.⁸³ However informality, understood as the tendency of individuals to develop social norms outside the statutory legal framework to govern certain aspects of societal life, is common in other parts of the world too. Robert Ellickson, reflecting primarily on the experience in the United States of America has observed this tendency in the context of the norms governing households.⁸⁴ Nazer critically reflects on this tendency in the context of the social norms developed by surfers to govern the sharing of waves in beaches in different parts of the world including Los Angeles and Western Australia.⁸⁵

A further assumption underlying legal systems and arising as a consequence of the one above is that formality in the case of law implies written laws and principles. As the legal positivist conception of law is about enacted law, which is often written and codified law, legal systems are considered formal if they can demonstrate evidence of written laws and principles. This is based on the presumption that the fact of enacting, writing and codification necessarily gives a normative character to the system.⁸⁶ In this context, a system of governance based on unwritten or non-codified norms and values is regarded as informal. This is despite the fact that such a system may have a greater obligatory force over its subjects than its formal counterpart.

The above assumptions result in a conceptualization of the rule of law as the 'rule of written laws'.⁸⁷ The implication of this is that any conduct of relations using norms not defined by written laws is regarded as extra-legal and not legitimate. In keeping with the rule of law theory of development, which bases economic development on the existence of the rule of law, developing countries are urged and seek to formalize the informal normative frameworks or sectors.⁸⁸ The rationale being that the act or process of formalization will automatically stimulate economic growth by providing greater security and legitimacy in the economic environment.

⁸³Tushar Shah, 'Issues in Reforming Informal Water Economies of Low-Income Countries: Examples from India and Elsewhere' in John Butterworth Mark Giordano Barbara Van Koppen (ed), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CAB International, 2008).

⁸⁴Robert C Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991).

⁸⁵Daniel K Nazer, 'The Tragicomedy of the Surfers' Commons' (2004) 9(2) *Deakin Law Review*.

⁸⁶Okoth-Ogendo above n 81.

⁸⁷ Ibid.

⁸⁸ Frank Upham, 'Mythmaking in the Rule of Law Orthodoxy' (2002) *Rule of Law Series*.

In light of the foregoing, this thesis argues that due to the separation of the notion of custom from reason in law, legal positivism has contributed to the relegation of customary law. Further, as a consequence of identifying law with enacted and written law, customary laws are considered as operating in an extra-legal environment. The effect of this is a lack of integration of customary law and statutory law in the development of legal frameworks for water governance.

2 Centrality of State in Legal Positivism

As noted in the previous section, a characteristic feature of legal positivism and thus of modern law, is the central place accorded to the state and the importance of state sovereignty.

Society today is primarily organised on the basis of sovereign states. Such a statement may be challenged given the increasing influence of international and regional bodies within territorial sovereignties and in some cases extending across territorial states in recent years. Further, the universal nature of issues such as human rights, and other political, social, economic and environmental concerns transcending national boundaries have given rise to the emergence of political and economic structures that extend beyond the territorial boundaries suggesting the reduced role of the state. However, despite these developments, the state continues to be a primary actor in regulation of social relations and is thus assigned a central role in the development of legal and institutional frameworks.⁸⁹ As observed by Ellickson, the 20th century has witnessed the growth of increased role of government in regulation of societal organisation.⁹⁰ The prevalent view of organised society solely in the context of the sovereign state has led to the undermining of other social groupings that pre-existed the modern day states, as well as the governance systems of these groupings.⁹¹

The state centrism discussed above is evident in the development of legal frameworks for water resource governance both at the international and national levels as shall be demonstrated in chapter four. In the following section, the concept of property and legal theories influencing common law property governance systems are examined.

⁸⁹Christian Brüttsch and Dirk Lehmkuhl, *Law and Legalization in Transnational Relations* (Routledge, 2007) 202.

⁹⁰Robert C. Ellickson, 'Taming the Leviathan: Will the Centralizing Tide of the Twentieth Century Continue into the Twenty-first?' (2000) 74(1) *Southern California Law Review*. Although Ellickson refers primarily to the situation in the United States, this observation is applicable in many other jurisdictions.

⁹¹ For a discussion of the misnomer of the concept of nation-state in countries in Africa see Leon Sheleff, *The Future of Tradition Customary Law, Common Law and Legal Pluralism* (Fank Cass 1999).

C Legal Property Theories and Concepts

1 Water Rights as Property

One of the most important components of modern legal systems for water resource governance is the rights regime adopted by the system. The legal rights regime determines the relationship between the users of water resources and the water as well as the relations of users among themselves and with others. The primary task of legal frameworks for water resource governance is thus to establish rules for the allocation and regulation of water rights. In most modern water governance frameworks, water rights are created through an administrative process that grants the holder usufructory rights over water resources.⁹² The creation of water rights through an administrative act and the nature of the rights granted to the holders, distinguishes these rights from traditional property rights. This raises questions regarding the extent to which these rights can be regarded as property rights.⁹³

In the context of common law legal theory, property is defined as a general term for the rules that govern people's access to and control of resources and which rules define not only the power exerted over the resource but also the relationship with other individuals with claims to the resource.⁹⁴ Traditionally, legal property theory regards property as a 'bundle of rights' that is the package of legally recognised rights held by an individual in relation to others and with respect to the object in question.⁹⁵ Although, there is controversy regarding the composition of the bundle, the right to exclude, the right to transfer and the right to use and possess have been regarded as the most important 'sticks' in the bundle of rights making up property.⁹⁶

Most modern legal frameworks of water governance regard water rights as property rights. Some water statutes explicitly or implicitly define the rights granted under the Act, as property rights. Kenya's Water Act for example vests ownership of every water resource in the State subject to any rights of user granted under the Act.⁹⁷ The Act further provides that:

⁹²Stephen Hodgson, *Land and Water- The Rights Interface*, FAO Legislative Study (FAO, 2004) 15.

⁹³Samantha Hepburn, 'Statutory Verification of Water Rights: The 'Insuperable' Difficulties of Propertising Water Entitlement' (2010) 19(1) *Australian Property Law Journal* 1.

⁹⁴Jeremy Waldron, 'Property' in Edward N. Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Fall 2008 ed, 2008).

⁹⁵John G Sprankling, *Understanding Property Law* (Matthew Bender & Co, 1999) 2.

⁹⁶*Ibid* 5.

⁹⁷*Water Act 2003* (Kenya) s 4.

*After the commencement of this Act, no conveyance, lease or other instrument shall[be] effectual to convey, assure, demise, transfer or vest any person any property or right or any interest privilege in respect of any water resource, and no such property, right, interest or privilege shall be acquired otherwise than under this Act.*⁹⁸

The language used in relation to water rights above suggests that they are in essence property rights or at the very least rights akin to property rights. This interpretation is further confirmed by the distinction made in the Act between water rights granted by permit and licences. In reference to licenses, the Act explicitly provides that there is no property in a licence and thus licences cannot be sold, leased, mortgaged, transferred, attached or otherwise assigned, demised or encumbered.⁹⁹ The absence of a similar explicit provision in relation to permits suggests that these rights are considered as property.

Despite their definition as property, the water rights granted under modern legal frameworks do not always encompass the entire bundle of rights anticipated in the traditional notion of property. Water rights are often usufructory in nature and in some cases are also subject to restrictions relating to their use and transfer. Nonetheless, these water rights are still deemed to be property. The justification for this is the argument that a property right exists where a legally defensible interest in a thing can be proved, even though such interest is incomplete.¹⁰⁰ In the context of such a definition of property, water rights need not demonstrate the entire bundle of rights to be classified as property rights. It has further been held that provided water rights are sufficiently secure and are granted for a sufficient duration of time, they are property.¹⁰¹

Given the connection of water rights systems and property in modern water law, this section investigates the concepts and theories that have influenced property legal theory in common law jurisdictions. This investigation serves as the basis for analysing the nature of the property rights systems anticipated by legal frameworks for water governance. The analysis demonstrates the extent to which modern water law accommodates the common property systems characteristic of customary law governance systems.

⁹⁸Ibid s 6.

⁹⁹Ibid 58.

¹⁰⁰Catherine Mobbs and Ken Moore (eds), *Property: Rights and Responsibilities: Current Australian Thinking* (Land & Water Australia, 2002) 1.

¹⁰¹Joseph L Sax, 'The Constitution, Property Rights and the Future of Water Law' (1990) 61 *University of Colorado Law Review*.

2 *Property in Common Law Systems*

In common law systems, law is the foundation of property rights. In the context of modern legal frameworks, property rights exist ‘only if and to the extent (that) they are recognised’ by the legal system.¹⁰² Consequently, the concept and theories that have influenced the understanding of law in common law jurisdictions have also had an effect on the notion of property. This section discusses some of the main concepts and theories that have affected the conceptualisation of property rights regimes in common law jurisdictions.

3 *Property as Exclusion and Dominion*

The roots of the prevalent notion of property can be traced back to Hobbes, for whom property was a key to political philosophy.¹⁰³ In his view, property rules are the tools that enable people to engage in activities that outstrip their ability to protect themselves using their own individual strength.¹⁰⁴ Hume, who as noted in Part A above, also influenced legal positivism, regarded property rules as creations of the sovereign state or conventions entered into by members of society for purposes of establishing the necessary stability for peaceable enjoyment of what each individual acquired by his fortune and industry.¹⁰⁵ These early legal positivist notions thus emphasised the importance of property rights in the ordering of society, the importance of the right of exclusion in property and the role of the state in endorsing property rights.

Although considered as central to the legal positivist notion of property, the right of exclusion raised a moral question. Given the widely recognised view that natural resources belong to all human beings in common, the claim to property and thus to the right to exclude others proved difficult to justify. Whereas Hobbes and Hume sought the justification for property in the universal consent granted by individuals to the state, John Locke (163-1704) used the argument of ‘original appropriation’.¹⁰⁶ Locke’s argument maintained that the unilateral appropriation of the goods gave the possessor a rightful claim over the goods as this

¹⁰²Sprankling, above n 952.

¹⁰³Hobbes, Thomas, *De Cive: The English Version [1647]* (Howard Warrender trans, Clarendon Press, first published 1647, 1983).

¹⁰⁴Waldron, above n 94.

¹⁰⁵L A Sir Selby-Bigge and P H Nidditch (eds), *Enquiries Concerning Human Understanding and Concerning the Principles of Morals by David Hume* (Clarendon Press, 1978) 489.

¹⁰⁶For an elaboration of Locke’s notion of property see John Locke, *Two Treatises of Government* (Cambridge University Press, first published 1689, 1988).

appropriation represented the effort and labour of the appropriator. His work on property greatly influenced the notion of private property and property rights in general in common law property theory.

This idea of unilateral possession as the basic tenet of property was reiterated in the case of *Pierson v Post*, an important authority in common law legal property scholarship.¹⁰⁷ The case related to an ownership dispute over a fox pelt between two individuals; one who had set up the chase and another who had fired the shot that killed the animal. The matter was settled in favour of the one who fired the shot, on the basis that killing the animal constituted an indisputable act of acquisition. Arguably, this association of ownership with acquisition continues to influence the notion of property in common law which perceives of ownership as dominion over the thing claimed.¹⁰⁸

This dominion regarded as central to the concept of property is contrasted with the stewardship required for the sustainable development of natural resources. It is argued that this emphasis on dominion as opposed to stewardship, explains the almost inherent incapacity of modern property rights to engage with nature.¹⁰⁹ Further, it has been argued that the prevalent concept of property arose in conditions of resource abundance in which there was no need to incorporate notions such as sustainability and equity.¹¹⁰ The absence of the notions of sustainability and equity – key elements of sustainable development - in the concept of property raises questions regarding the suitability of modern property regimes for natural resource governance. Some have gone as far as to describe modern property law as inherently anti-environmental.¹¹¹

However, not all forms of property rights regimes regard exclusion and dominion as central for ownership. As shall be demonstrated in the section below on common property regimes, some property governance systems do not consider ownership in terms of exclusion or appropriation. Nonetheless, the concept of property underlying modern law seems to favour

¹⁰⁷*Pierson v. Post*, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805).

¹⁰⁸Carol Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759*<http://digitalcommons.law.yale.edu/fss_papers/1759>, 19.

¹⁰⁹Carol M Rose, 'Liberty, Property, Environmentalism' (2010) *Social Philosophy & Policy*, Vol. 26, No. 1, 2009.

¹¹⁰Feeny Berkes (ed), *Common Property Resources: Ecology and Community Based Sustainable Development* (1989) 43-44.

¹¹¹John G. Sprankling, 'The Antiwilderness Bias in American Property Law' (1996) *University of Chicago Law Review* 63.

exclusion and dominion, as demonstrated by the dominance of private property regimes and the limited role granted to common property regimes. This emphasis on exclusion and appropriation in property rights is the result of the influence of classical and neo-classical economic theory on property law. In most common law systems, property law has developed within the nexus of law and economics.¹¹² The next section traces this confluence of law and economics and illustrates some of its effects on property law.

4 *Property Law and Economic Theories*

The classical economic theory whose origin is attributed to Adam Smith (1723-1740), had a significant influence on English economic thought and also on common law legal reasoning. The convergence of law and economics resulted in a perception of property rights as a tool for ensuring economic efficiency. The suitability of property rights regimes was thus dependent on how effective such regimes were in promoting economic outcomes.

One of the central tenets of Smith's theory was the assumption that human behaviour could be characterised as rationally self-interested, implying that individuals could be expected to act to maximise their personal benefit.¹¹³ According to Smith, the best possible outcome for the entire group was the aggregate of these individual rational decisions.¹¹⁴ As a tool for economic efficiency, property was thus required to provide the incentive for individuals to invest in the transformation of a particular resource. In such a context, private property rights were regarded as ideal and the right to exclusion as the most important among the rights in the traditional bundle of property rights.

The liberalist ideologies advocated by classical economics have since been redefined and replaced with neoliberalism. Neoliberalism is a contested term more commonly used by critiques of the theory than its proponents.¹¹⁵ In a broad sense, the term refers to a re-definition of liberalism that seeks to revert to a more 'right wing approach' to economic policy issues in comparison to classical liberal theories.¹¹⁶ Its proponents have defined it as

¹¹² Carol M Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759* http://digitalcommons.law.yale.edu/fss_papers/1759.

¹¹³ See Adam Smith, *The Wealth of Nations* (Digireads.com, 2009) 12-13 and in general.

¹¹⁴ Ibid.

¹¹⁵ See Noam Chomsky, *Profit over People - Neoliberalism and Global Order* (Steven Stories Press, 1999); Alain Touraine, *Beyond neoliberalism* (Polity Press, 2001) for examples of its negative connotation.

¹¹⁶ Dag Einar Thorsen, 'The Neoliberal Challenge. What is Neoliberalism' (Working Paper, Department of Political Science University of Oslo, October 2009) 10.

an ideology that favours a political economy characterised by strong private property rights, free markets and free trade with the state providing the institutional mechanisms to facilitate these characteristics.¹¹⁷

The preference, by classical and neo-classical economics, of private property rights as the more effective regime in terms of economic efficiency influenced common law property theory. Blackstone's definition of property as 'that sole despotic dominion...over the external things of the world, in total exclusion of the right of any other individual in the universe' is premised on the assumption of the rational Smithian individual.¹¹⁸ Demsetz, whose ideas have been influential in contemporary property law theory, also contextualises property institutions in the cost-benefit analysis made by individuals seeking to maximise personal benefit.¹¹⁹ Such a framework, favours private property rights over public or collective property rights and free markets. This is because, private property grants the individual exclusivity, which arguably provides the necessary incentive to invest in the development of a resource.

Apart from preferring private property, neoliberalism fosters free markets and free trade. According to this theory, apart from securing private property rights, the state ought to create and preserve the institutional structures necessary for the operation of these markets.¹²⁰ Where no markets exist, state action may be required to create the markets, though this theory maintains that the state should subsequently withdraw to allow for free trade.¹²¹ Acknowledging that certain external costs including social costs cannot be captured in the individual owner's cost structure, these theories concede that legal intervention may be necessary to remedy such situations. The use of legal intervention to resolve the problem of external costs has however been challenged within the law and economics school. It has been argued that alienable private property rights as opposed to legal regulation provide a more efficient solution to this problem. Coase, who is credited with expounding this solution, sought to demonstrate that externalities did not have to be eliminated by legal intervention

¹¹⁷Friedrich von Hayek, *Law, Legislation and Liberty: A New Statement of the Liberal Principles and Political Economy*, The Political Order of a Free People (London: Routledge, 1979).

¹¹⁸William Blackstone, *Commentaries on the Laws of England* (1979) 2.

¹¹⁹Harold Demsetz, 'Toward a Theory of Property Rights' (1967) 57 *American Economic Review* 354.

¹²⁰David Harvey, *A Brief History of Neoliberalism* (Oxford University Press, 2007) 2.

¹²¹*Ibid* 2.

but rather could be resolved through exchange in conditions of a perfect market.¹²² The argument being that in conditions of perfect competition, trading of competing uses of a resource would ultimately result in a transaction favouring the most efficient resource use.¹²³ In light of this, property rights regime favouring alienable private rights have been advocated as the suitable regimes for resource governance. It is further argued that the absence of such rights would lead to an over-utilization of natural resources as users would consider only their own cost and disregard the social cost arising from depletion of the resource.¹²⁴

The property rights theory outlined above has greatly influenced modern law. This is evidenced by the prevalence of the 'market rhetoric' in legal property scholarship. The 'market rhetoric' refers to an intellectual trend characterised by a perspective of all human-beings as profit-maximizing individuals and of all human interactions as akin to market transactions.¹²⁵ Arguably, the market rhetoric has led to 'universal commodification', that is, the perception of everything, including persons and values, as commodities.¹²⁶ These trends are evident in modern property law. Apart from the market rhetoric, modern society has to a great extent, also embraced the market paradigm. As a result, there is a tendency to model all legal, moral and political institutions on the principal of rationality of individuals advocated by Smith and a perfectly competitive market.¹²⁷ According to the market paradigm, legal property institutions modelled on these principles would represent the ideal institution in terms of economic efficiency. This market paradigm has influenced legal systems across the 'North' and 'South' divide resulting in the consideration of property as a legal institution evolving towards economic efficiency under the influence of competitive conditions.¹²⁸

In light of the above, private property rights regimes, where rights can be exchanged in conditions of a perfect market, are favoured by modern law. The law's function is understood

¹²² See Ronald H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1 in general.

¹²³ Ibid.

¹²⁴ Demsetz, above 119.

¹²⁵ Margaret Jane Radin, 'On the Domain of Market Rhetoric' (1992) 15 *Harvard Journal of Law & Public Policy* 711, 711.

¹²⁶ Margaret J. Radin and Madhavi Sunder, 'The Subject and Object of Commodification' in Martha Etman and Joan Williams (eds), *Rethinking Commodification: Cases and Readings in Law and Culture* (NYU Press, 2005).

¹²⁷ Jules L Coleman, *Risks and Wrongs* (Cambridge University Press, 1992) 11.

¹²⁸ Daniel Fitzpatrick, 'Evolution and Chaos in Property Rights Systems: The Third World Tragedy of Contested Access' (2006) 115(5) *The Yale Law Journal* 996.

as the fostering of economic efficiency, and thus the norm would be private property with government intervention restricted to exceptional cases. Modern property law is thus primarily premised on two main possibilities for property regimes: a private property rights regime or a state owned rights regime.¹²⁹ As a consequence, communal ownership or common property rights regimes are granted limited importance in modern property law. The following section examines the notion of the commons and common property regimes in the context of legal property theory.

5 *Common Property Regimes: Notion and Misconceptions*

The notion of 'commons' is an age old concept in legal theory whose definition though admitting of different nuances in law is often used synonymously with property belonging to the public and which could be unmanaged or managed communally.¹³⁰ As shall be discussed further in this section, the term 'commons' has recently been limited to managed commons, so as to avoid the confusion between limited or managed commons with unmanaged commons also referred to as open access regimes.¹³¹ The focus of this thesis is the limited commons.

Despite its lack of popularity in the prevalent property rights framework, described in the previous subsection, limited commons have demonstrated resilience as a property governance system. Kenya provides an example of the continued existence of the limited commons in a predominantly market-based property governance system. Customary notions of law and property, which tend to lay great emphasis on the commons, continue to exist in Kenya and to exert an influence on natural resource governance.¹³² These alternative notions of law and property are particularly evident in the land and water governance systems. This section explores some of the misconceptions that have led to the relegation of common property governance systems.

¹²⁹ Carol Rose, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711, 720.

¹³⁰ Carol M Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759* http://digitalcommons.law.yale.edu/fss_papers/1759, 12-13.

¹³¹ See eg, Berkes, above n 110, Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990).

¹³² Albert Mumma, 'The Role of Local Communities in Environmental and Natural Resource Management: The Case of Kenya' in LeRoy Paddock et al (eds), *Compliance and Enforcement in Environmental Law. Toward More Effective Implementation* (Edward Elgar, 2011).

(a) *The Commons: A Primitive Stage in Property Evolution*

As noted above, contemporary legal property theory has been influenced greatly by the property rights theory advocated by the law and economics school. In the context of Demsetzian's evolution of property rights, the commons represent an initial state from which property rights subsequently evolve.¹³³ According to this view, the commons ought to be approaching extinction in modern society. As states become more efficient and develop functional market economies, common property is gradually replaced by individual property rights.

This view apparently explains the reason why common property systems of natural resource governance are more common in developing countries. It is argued that, in the case of 'third world countries', the expected evolution from open access to private property rights as the value of resources rises, has failed to happen due to the failure of governance systems.¹³⁴ It is further argued that customary forms of governance, which revolve around common property regimes, may be the only option in the case of 'failed' and 'failing states' in Africa, where a market paradigm is not tenable given the absence of 'state' in these countries.¹³⁵ Kenya has been classified as a 'failed state' and thus included in the list of states for which a community based approach to water governance as opposed to the market paradigm may be the only viable solution.¹³⁶

While the co-existence of 'governance failure' and a high incidence of common property regimes of governance in Africa and other developing countries is not in dispute, the deduction of a cause-effect association is not necessarily justified. The resilience of informal common property forms of governance is observable in developed countries as well, where some aspects of resource governance remain outside the purview of the market paradigm or state regulation. For instance, in a case study on surfers in the United States of America and Australia, Nazer observes that despite the popularity of surfing and the high value placed on

¹³³Demsetz, above n 119.

¹³⁴ Daniel Fitzpatrick, 'Evolution and Chaos in Property Rights Systems: The Third World Tragedy of Contested Access' (2006) 115(5) *The Yale Law Journal* 996.

¹³⁵ Martin Chanock, 'Customary Law, Sustainable Development and the Failing State' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 338.

¹³⁶ Susan L Smith, 'Using Community Management of Water Resources to Improve Environmental Governance in Failed, Failing and Fragile States' (2009) <http://www.iucnael.org/en/documents/doc_view/400-susan-smith-community-water-resources-management.raw?tmpl=component>.

waves and their distribution among surfers, there is little or no state intervention to govern the allocation of this scarce resource. As a result, surfers have developed a fairly complex normative system referred to variously as the 'surfer's code' or 'surfer's rule' which is akin to an informal communal governance system. Case studies from other 'non fragile states' such as Norway, Greenland and Hawaii also reveal the existence of customary forms of governance indicating that the presence of these is not necessarily the result of the incapacity of the state to support the market paradigm.¹³⁷

The resilience of the commons and its communal institutions demonstrates that these property governance systems are not a passing stage in the context of the evolution of property rights. Neither should their role be limited to situations in which there is an absence of systems to support the market paradigm. Common property systems provide an alternative regime for resource governance. They enrich the two-dimensional institutional paradigm of governance characteristic of modern property law. As noted above modern law tends to anticipate property governance systems based either on private rights and markets; or on legal intervention and state regulation. An appreciation of the potential of common property regimes as an alternative, has led to their use in the governance of some forms of intellectual property.¹³⁸

(b) *The Commons as a Necessary Tragedy*

A further attack has served to disadvantage the limited commons in the field of possible property regimes and institutions for governance of natural resources. The attack on the commons in this latter case came from ecology and not from within the legal literature. However, its widespread influence on the framing of policy on natural resource framework affected the conception of property and property regimes in legal systems for natural resource governance.

In 1968 Garrett Hardin, in an essay addressing the population problem, opposed the freedom and markets proposed by the classical economics theory, arguing that in the case of the

¹³⁷David Callies, Peter Orebech and Hanne Petersen, 'Three case studies from Hawaii, Norway and Greenland' in Peter Orebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) .

¹³⁸Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001*<http://www.benkler.org/WhitePaper.pdf>.

commons such an approach led to unbridled exploitation of the shared resource.¹³⁹ Departing from Smith's 'rational individual', Hardin sought to demonstrate that in the absence of intervention from without, each individual would end up increasing their take from the shared resource regardless of the fact that such increase would be to the detriment of the continued existence of the resource. Smith had contended that if left to freely pursue their personal ends, individuals would make and adjust decisions on the basis of supply and demand with the end result of being the greatest benefit to all. Hardin countered this, arguing that as demand increased with the growing population of individuals, and supply remained constant, the Smithian individuals would be trapped in their own competitive impulses which would eventually result in ruin for the resource.¹⁴⁰ He thus concluded that the effect of giving individuals the free reign proposed by classical economics in the case of a scarce resource would be desolation and waste.¹⁴¹

Given this scenario, Hardin posited that common property governance regimes could only be justified in situations of low population density.¹⁴² The solution to this problem of the commons, according to him, was the imposition of greater control on the commons and not the 'invisible hand' of classical economics. Given the wider message of his essay he proposed the imposition of restrictions on people's freedom not just to access the commons but also to propagate and thus populate, suggesting that this could be achieved through regulation developed by the government and international agencies.¹⁴³

As noted Hardin was writing from the perspective of an ecologist. This notwithstanding the confluence of Hardin's tragic commons with the Hobbesian theory of law and the state are striking. The rational individuals of Hardin who left to their own design use the resource to exhaustion are comparable to the Hobbesian 'man in the state of nature', who in the absence of coercive rules to establish social order is in a state of war.¹⁴⁴ Further, Hardin's argument for the necessity of property rules in cases of scarcity resonates with the Humean conception of property. It is also interesting to note that Hardin's work was published in a science journal

¹³⁹Garrett Hardin, 'The Tragedy of the Commons' (1968) 162(3859) *Science* 1243.

¹⁴⁰Garrett Hardin, 'Extensions of "The Tragedy of the Commons"' (1998) 280(5364) *Science* 682, 682.

¹⁴¹Adam Smith, *The Wealth of Nations* (Digireads.com, 2009).

¹⁴²Garrett Hardin, 'The Tragedy of the Commons' (1968) 162(3859) *Science* 12431248.

¹⁴³ *Ibid.*

¹⁴⁴Thomas Hobbes, *Leviathan* (Fontana, 1976).

reflecting the tendency noted among legal positivists of blurring the distinction between practical and theoretical sciences.

Although as shall be discussed in the next sub section, Hardin's view was countered, his ideas continue to influence legal property theory.

(c) *Conceptual Confusion*

The argument of the tragedy of the commons has, since the publication of Hardin's essay, been subjected to criticism on various grounds. One of the criticisms levelled at Hardin's essay and at subsequent proponents of the theory of the tragedy of the commons is based on the argument the term 'commons' as used in the essay is a misnomer. The lack of clarity led to the term being used to refer not only to the common pool resource, in this case the pasture land which the unorganised group of users shared, but also to infer an association of the term with the open access management system that reigned in the absence of control.¹⁴⁵

It has been pointed out that the conceptual ambiguity associated with the term 'commons' is not a problem attributable solely to Hardin, as other property scholars, including legal theorists, do not use the term unequivocally.¹⁴⁶ It is argued that this lack of conceptual clarity is demonstrated by the multiple connotations attributed to the term commons in contemporary legal property scholarship.¹⁴⁷ For example, the term commons for Lessig refers to a universal open access realm which denotes a right of the public to enjoy it without need for permission.¹⁴⁸ Litman equates the commons with the notion of 'public domain', that is a sphere in which the public has an inherent right of use.¹⁴⁹ A further significance of the term is provided by Benkler who, applying it to intellectual property, refers to the commons both as the 'resource spaces available for all to utilise with neither market-clearance nor hierarchical

¹⁴⁵Edella Schlager and Elinor Ostrom, 'Common Property and Natural resources: A Conceptual Analysis' (1992) 68(3) *Land Economics* 249.

¹⁴⁶Tang, Shiu Y and Elinor Ostrom, *The Governance and Management of Irrigation Systems: An Institutional perspective*, ODI Irrigation Management Network Paper (Overseas Development Institute, 1993).

¹⁴⁷Charlotte Hess and Elinor Ostrom, 'Ideas, Artifacts, and Facilities: Information as a Common Pool Resource' (2003) 66 *Law and Contemporary Problems* 111.

¹⁴⁸Lawrence Lessig, Code and the Commons, (Keynote Address at the Conference on Media Convergence, Fordham University Law School, February 9, 1999)<<http://cyber.law.harvard.edu/works/lessig/fordham.pdf>>.

¹⁴⁹Jessica Litman, 'The Public Domain' (1990) 39 *Emory Law Journal* 965, 975.

management’, and a type of institutional arrangement distinct from state hierarchical institutions or market-based institutions.¹⁵⁰

Some authors contend that given the above multiple connotations in legal property theory, it is difficult to determine if common property refers to a given right, a non-assigned right, an unmanaged resource or just something which must exist in a democracy.¹⁵¹ This is further complicated by the equating of the commons with the ‘public domain’ which could refer to government owned property or property not owned by anyone.¹⁵² Moreover, the extension of the concept to the intellectual public domain, it is claimed, could suggest that the commons is an idea representing certain democratic processes including freedom of speech and the exchange of information.¹⁵³ To resolve this, a proposal has been made to use the terms ‘common pool resource’ and ‘common property regimes’ so as to reduce confusion between the resource and the governance systems.

The table below contains a clarification of the terms proposed by Ostrom and others in a bid to resolve the conceptual problems associated with the notion of property.¹⁵⁴

Term	Definition
Common Pool Resource*	<p>A type of resource characterised by a difficulty of developing physical or institutional means of excluding beneficiaries, for example an irrigation system.</p> <p>*These resources can be owned and governed national, regional or local government; individuals, private corporations or communal groups.</p> <p>There is no necessary association of common pool resources with a particular type of regime.</p>
Common Property Regime	A system where members of a clearly defined group have a bundle or legal rights relating to a resource including the right to exclude non-members from using the resource.

Table 1 Clarification of Concepts Related to Common Property

¹⁵⁰Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001* <http://www.benkler.org/WhitePaper.pdf>47.

¹⁵¹Hess and Ostrom, above n 147, 114.

¹⁵²Ibid 115.

¹⁵³Ibid.

¹⁵⁴Ibid.

The effort by the authors to unpack the term commons is a welcome clarification. Nevertheless, the definition of a common pool resource proposed above seems to fall into the very snare the authors seek to escape. While seeking to distinguish the thing from the institutional arrangements governing it, the definition ends up referring to characteristics influencing the arrangements for governance of the resource. This reference back to the arrangements for governance we argue is inevitable and explains the apparent ambivalence associated with the use of term commons in legal property theory.

Further the proposal to redefine the commons to refer solely to limited commons and not to unmanaged commons would be tantamount to undoing a long history of legal property theory's use of the 'commons'. As noted in the history of property theory, the term commons is used to refer not only to a limited commons where a thing is owned jointly and shared by defined group of people but also to an unlimited commons akin to an open access system.¹⁵⁵ In property texts, the reference to the 'commons' confirms that the thing referred to is not owned individually, but may be owned in common or not owned at all.¹⁵⁶ In legal property theory therefore, the term commons is one compatible with multiple meanings which fact may be difficult to change

Apart from the reasons given above, this thesis argues that the apparent ambivalence in use of the term commons is not the result of sloppiness. The nuances inherent in the term reflect the dynamics of the more generic concept of property. As Rodgers notes the suffix 'operty' is a malleable concept that fulfils a variety of social and legal functions such as the encompassing of property regimes which are the legal structures associated with ownership; and denoting property rules which are the abstract sources of legitimate entitlements.¹⁵⁷ Similarly, the use of the term commons in relation to property can thus refer to particular legal structures associated with ownership or the abstract sources of legitimate entitlements relating to certain things.

Depending on the context, the commons may refer to the thing owned so as to highlight the characteristic features that require a particular form of governance. Consequently, in legal

¹⁵⁵ Carol Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759* <http://digitalcommons.law.yale.edu/fss_papers/1759> 12.

¹⁵⁶ Carol Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759* <http://digitalcommons.law.yale.edu/fss_papers/1759> 1212-13.

¹⁵⁷ Christopher Rodgers, 'Nature's Place? Property Rights, Property Rules and Environmental Stewardship' (2009) 68(3) *Cambridge Law Journal* 550, 550.

property theory examples of commons have been given as the high seas and public roads;¹⁵⁸ highways, sidewalks, ideas and facts and cashier lanes in a supermarket;¹⁵⁹ or even beaches.¹⁶⁰ Nevertheless, despite being referred to these things, the term commons is not used as synonymous to the thing but rather as reflective of a particular relation of individual(s) to the thing and interrelations among them with the thing. In response to the critique that the prevalent use of commons does not help distinguish the resource from the governance regimes, it is useful to note that legal property theorists have frequently clarified that property is not a thing. Property is rather the relationship that an individual has with a thing or with others in relation to the thing and this clarification forestalls any risk of confusing property regimes with the resource or thing governed.¹⁶¹

Notwithstanding the foregoing, it is clear that the use of the term ‘common property systems’ may still result in confusion, with the term being understood to mean a form of property distinguished from other types of property such as private property or state property. For purposes of clarity, the term ‘common property system’ in this thesis is used to refer to a system used to manage a particular common pool resource such as an irrigation system. This system of management, though bearing the name ‘common’ is not limited to granting of common property rights. As shall be demonstrated in the context of Marakwet’s customary law system, the common property system uses a mix of both private and common property rights in the governance of the water resources.¹⁶²

6 *Non-Tragic Commons*

The universality of the prognosis made by Hardin on all common property regimes has been challenged by a myriad of case studies on common property regimes from different

¹⁵⁸ Rose, Carol, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711, 723.

¹⁵⁹ Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001* <http://www.benkler.org/WhitePaper.pdf>.

¹⁶⁰ Daniel KNazer, 'The Tragicomedy of the Surfers' Commons' (2004) 9(2) *Deakin Law Review*.

¹⁶¹ See K. Gray and S.F. Gray (eds), *The Idea of Property in Land*, Land Law: Themes and Perspectives (Oxford, 1998), 15 for a clarification of property as not being a thing.

¹⁶² See Henry E Smith, 'Semicommon Property Rights and Scattering in the Open Fields' (2000) 29 *Journal of Legal Studies*; Henry E Smith, 'Community and Custom in Property' (2009) 10(1) *Community and Property* 4 and Henry E Smith, 'Governing Water: The Semicommons of Fluid Property Rights' (2008) 50(2) *Arizona Law Review* 445. While not directly referring to customary law, Smith discusses the concept of semi-commons in which private and common property overlap and potentially interact in community systems of natural resource governance.

jurisdictions showing they can be used to govern natural resources effectively.¹⁶³ As noted in the above section, it has been argued that what Hardin presumed to be common property regimes were in fact open access regimes and that his conclusions on common property regimes were thus inaccurate.¹⁶⁴ Responding to these criticisms, Hardin in a subsequent work years later, regretted his omission of the adjective ‘unmanaged’ to qualify the commons but maintained that unmanaged commons are necessarily subject to the tragedy he had described.¹⁶⁵

However, even if applied to unmanaged commons only, the universal application of the tragedy to all commons may still be challenged. Rose, writing some years after the publication of Hardin’s essay, pointed out that the story of the commons in legal property history was not always tragic but was in some cases ‘comedic’ in the classical sense of a story with a happy ending.¹⁶⁶ This, she argued was the case where certain public property such as roads and waterways had qualities similar to ‘infinite returns of scale’ and thus their being held in common resulted not only in an infinite expansion of wealth but also enhanced the ‘sociability of the members of an otherwise atomized society’.¹⁶⁷

Further as noted above, Hardin’s conclusions are premised on the assumption that in a case of open access to resources, each individual will necessarily act as a ‘free rider’. This assumption, as noted earlier, presumes that all individuals will act in accordance with the conduct expected of the Smithian individual who considers it rational to maximise individual benefits and spread costs over the community. The evidence of many successful and resilient commons disproves this assumption. Consequently, it is now recognised that in the case of open access resource systems, there exist alternative strategies for rational individuals,

¹⁶³ See, eg, Elinor Ostrom, James Walker and Roy Gardner, 'Covenants With and Without a Sword: Self-Governance is Possible' (1992) 86(2) *The American Political Science Review* 404; Elinor Ostrom et al, 'Revisiting the Commons: Local Lessons, Global Challenges' (1999) 284(5412) *Science* 278.

¹⁶⁴ Siegfried V. Ciriacy-Wantrup and Richard C. Bishop, 'Common Property' as a Concept in Natural Resource Policy' (1975) 15 *Natural Resources Journal* 713.

¹⁶⁵ Garrett Hardin, 'Extensions of "The Tragedy of the Commons"' (1998) 280(5364) *Science* 682, 683.

¹⁶⁶ Rose, Carol, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711, 723.

¹⁶⁷ *Ibid.*

including the possibility of maximising benefits as a community and relying on what is expected of other resource users.¹⁶⁸

In light of the above, there is a growing appreciation of the potential of the commons as a governance regime framework. Consequently, a critical analysis of the concept of the commons in legal property literature is undertaken in the following section. The analysis forms the basis for determining the extent to which modern property law accommodates the commons or common property regimes in the context of resource governance.

7 Common Property Regimes in Modern Legal Frameworks

Despite a long history of usage, the commons in legal theory remains, as Benkler notes, an 'understudied institutional arrangement'.¹⁶⁹ This is because the concept of property and the legal theories underlying property law in common law jurisdictions do not favour common property regimes.

As discussed in the previous sections, the concept of property as developed in common law legal property theory lays great emphasis on the right to exclusion. In accordance with the assumptions made in the classical and neo-classical economic theories, the right to exclusion provides the necessary incentive for individuals to maximise the benefit deriving from resource use. In such a context, the commons is regarded as an antithesis of property, in so far as it does not provide the right to exclusion or secure it.¹⁷⁰ The lack of interest in and texts on common property regimes is thus logical as, if there is no property, then no claims can be made and consequently none can be understood either.¹⁷¹ This deficiency of texts in property law relating to the commons presents a challenge to scholars seeking a framework for common property regimes.

The few texts on the commons in legal property theory, particularly after the 18th century, confirm that common law tradition is not very welcoming of group rights in property,

¹⁶⁸C Ford Runge and Edi Defrancesco, 'Exclusion, Inclusion, and Enclosure: Historical Commons and Modern Intellectual Property' (2006) 34(10) *World Development* 1713, 1717.

¹⁶⁹Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001*<http://www.benkler.org/WhitePaper.pdf>.

¹⁷⁰Carol Rose, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711, 712.

¹⁷¹Carol Rose, 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759*http://digitalcommons.law.yale.edu/fss_papers/175912.

preferring individual rights or rights held by an organised public in the form of the state.¹⁷² However, in many jurisdictions with a common law tradition, group rights have continued to demonstrate resilience. As a result of finding little or no room in the institutional space created by prevalent legal systems, the commons have been relegated to the fringes of formal legal systems, thus operating in extra-legal environments. Certain common characteristics are observable in common property governance systems.

These systems tend to be based on a set of rules which though often unwritten nevertheless have an obligatory force. The term 'social norms', has been used in legal property theory to describe these unwritten but obligatory rules developed by users of a common resource.¹⁷³ Social norms are distinguished from other customs, practices or norms which affect human conduct, on the basis of their obligatory nature. The obligatory nature is confirmed by the presence of sanctions for non-compliance.¹⁷⁴ Different sanctions can be applied by various actors, ranging from mild sanctions like disapproving looks to more violent forms including jostling and beating. The sanctions may be applied by various parties including the offender who may for instance subject himself/herself to guilt; the person(s) who have suffered as a result of the non-compliance; or the group which may sanction the offender.¹⁷⁵

Common property regimes of governance tend to resort to extra-legal and in some cases illegal modes of implementing their rules and meting out sanctions. The reason for this feature of common property regimes lies in the fact that the concepts and theories underlying law do not provide space within the legal framework for common property regimes. Modern legal frameworks consider law a set of enacted rules. Unwritten rules that are not enacted are not considered as law regardless of their demonstrating an obligatory force. As a result, common property systems must rely on informal mechanisms for implementing their norms.

As demonstrated by the case study on surfing culture at beaches in the United States of America and in Australia, common property systems of governance may sometimes resort to extra-legal social sanctions including violence and physical abuse to implement their

¹⁷²Carol M. Rose, 'Invasions, Innovation, Environment' in D. Benjamin Barros (ed), *Hernando DeSoto and Property in a Market Economy* (Ashgate, 2010) 21.

¹⁷³ See Robert C. Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991).

¹⁷⁴ Ibid, 123-132.

¹⁷⁵ Ibid, 131.

norms.¹⁷⁶ The risk of use of unfair or illegal means to implement norms in common property regimes, demonstrates that these systems are not always ideal. Sometimes, groups may, in a bid to protect what is deemed as just entitlement, resort to unfair rules or use unjust means to protect their entitlements. The risk of unfairness or injustice is however not limited to common property regimes only and is also present in even the most ideal formal statutory systems.

The above challenges notwithstanding, the continued existence of the commons challenge the concepts and theories underlying modern law particularly, the concept of law as statute; its over-emphasis on state centric organisation, alienable private rights and markets. Further, the resilience of the commons and the intractability of the commons and the environment, offers an opportunity for expanding the understanding of property and its use in environmental governance.¹⁷⁷ Common property regimes may be more suited to stewardship and thus to resource governance for sustainable development, given that their underlying strategy is the maximisation of communal benefits.

D Conclusion

This chapter set out to respond to the question: what legal theories and concepts underlie the prevalent notions of law, custom, customary law and property in modern legal frameworks for water governance in common law jurisdictions such as Kenya.

An analysis of the literature on common law legal theory demonstrated that legal positivism has had a major influence on the notion of law, custom and customary law underlying modern water law. The discussion argues that in a legal positivist context, law is understood primarily as statute and the state has the primary role in developing the law. The blurring of the distinction between practical and theoretical reason, in legal positivism has influenced the legal method resulting in the adoption of a theoretical-scientific as opposed to a practical-scientific approach to the subject of law. The contradistinction of law, custom and reason in legal positivism has contributed to the opposition of rationalism and traditionalism. This together with the association of customary law with immemorial usage and antiquity has led to its undermined role in development of legal frameworks for water governance.

¹⁷⁶Daniel KNazer, 'The Tragicomedy of the Surfers' Commons' (2004) 9(2) *Deakin Law Review*.

¹⁷⁷Rose, Carol 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759*<http://digitalcommons.law.yale.edu/fss_papers/1759>12.

Legal positivism has led to the perception of property as central to law and of the state as the primary actor in the development of property rules. The centrality of the idea of exclusion and appropriation in the legal positivist conception of property has served to favour private property rights regimes. Further, the influence of classical economics and neoliberalism on property law have resulted in the dominance of private property rights regimes and markets with a limited place for state-owned property governance systems. As a consequence common property rights systems are not anticipated by modern water law.

A review of international and national freshwater governance law in the following chapter illustrates how the legal theories and concepts discussed in this chapter affect the development of legal frameworks for water governance.

IV CHAPTER 4 'MODERN WATER LAW': LEGAL FRAMEWORKS FOR FRESHWATER GOVERNANCE

In the preceding chapter, it was argued that the legal theory underlying legal frameworks in most common law jurisdictions is legal positivism. As was demonstrated the legal positivist conception of law, custom and customary law does not foster the integration of customary and statutory law systems. Further, an examination of the concept of property and the economic theories underlying property governance regimes in modern legal frameworks confirmed that these frameworks favour a model of private property regimes regulated by markets with limited state intervention. Consequently, there is little or no recognition of common property regimes in these frameworks.

A critical analysis of the international and national law on freshwater resources in this chapter illustrates the extent to which the legal theories and concepts identified in the previous chapter have influenced modern water law. The analysis of the national frameworks for water governance is based on an examination of certain features identified as common to legal frameworks for water governance across most jurisdictions.¹

An overview of international law on freshwater resources in Part A, forms the basis for determining the extent to which this law influences national frameworks for water governance, which are the focus of this research. This section also examines the arguments made in support of an emerging global water law. Part B analyses the main features of modern legal frameworks for water governance to determine the extent to which they are influenced by legal positivism, its notions of law, custom and customary law. The section also examines the rights systems incorporated in water governance frameworks to investigate the influence on these of property legal theories and concepts. An examination of the provisions for the recognition of customary water rights and the institutional arrangements for community participation in water resource management demonstrates the influence that underlying legal theories and concepts have had on these frameworks.

A International Legal Frameworks for Freshwater Resource Governance

The focus of this thesis is on the disconnect between statutory and customary law in national frameworks for freshwater resource governance and the effect of this on sustainable

¹Caponera, Dante Augusto, *Principles of Water Law and Administration: National and International* (Taylor & Francis, 2007).

development. Nevertheless, national legislation is often influenced by developments in international governance. In this section, some of the international legal instruments related to freshwater resource governance are discussed within the context of the research questions. Given the focus of this thesis, this section does not constitute a comprehensive discussion of international legal instruments for freshwater governance but rather seeks to identify the instruments which have implications on legal and institutional frameworks for water resource governance at the national level and the overarching themes of these instruments.²

Many of the world's freshwater resources traverse national boundaries with at least one third of the total two hundred and sixty three river basins being shared by more than one country.³ The risk of over-exploitation of these shared water resources and catchments have led countries to develop shared strategies and solutions to water issues. These efforts have resulted in international conventions and regional agreements; declarations of principles and resolutions of water governance by intergovernmental organizations; judicial decisions by international and regional tribunals as well as arbitral awards; and studies and declarations made by international non-governmental organisations and other publicists. All of these constitute the law used to govern the development and management of international water courses which include rivers, lakes and other underground aquifers.

1 *International Legal Instruments for Freshwater Governance*

Most of the early international water law instruments related to the navigational use of water resources for example the Convention and Statute on the Regime of Navigable Waterways of International Concern.⁴ However, international law instruments on non-navigational use of international water courses and addressing issues of conservation and sustainable use have since been developed. The main international convention relating to water governance and sustainable development is the United Nations Convention on Non-navigational Uses of International Watercourses.⁵ The Convention, which establishes minimum standards and rules for management of international freshwater courses shared by states, is premised on the

²See Caponera, above n 1 for a comprehensive discussion on the international legal instruments for freshwater governance.

³Meredith A Giordano and Aaron T Wolf, 'Sharing Waters: Post-Rio International Water Management' (2003) 27 *Natural Resources Forum* 163, 164.

⁴*Convention and Statute on the Regime of Navigable Waterways of International Concern*, opened for signature 20 April 1921, 7 LNTS 35 (entered into force 31 October 1922).

⁵*UN Convention on the Law of the Non-Navigational Uses of International Watercourses*, opened for signature 21 May 1997, [1997] 36 ILM, 700 (not yet in force).

principles of equitable and reasonable utilization and the obligation not to cause significant harm. The Convention identifies sustainable development as the goal for management of international watercourses.⁶

The Convention, though generally accepted as constituting the existing international law governing international watercourses, is controversial. The balance of the equitable and reasonable utilization of an international watercourse on the one hand and the control of pollution and protection of the environment on the other has proved difficult. As a consequence, the effectiveness of this instrument in preventing environmental damage is limited.⁷ Further, the provisions of the Convention are subject to reservation and the parties may depart from them, the effect of which is to constitute it as a framework code or guideline as opposed to a binding agreement.⁸

Apart from this Convention on Non-navigational Uses of International Watercourses, other international agreements dealing with related aspects of the eco-system also constitute relevant sources of international water law such as the United Nations Framework Convention to Combat Desertification⁹ and the Ramsar Convention on Wetlands of International Importance¹⁰ among other conventions. As noted earlier, in addition to the international conventions, other regional multilateral and bilateral treaties constitute a source of water law for states. Examples of such agreements include: The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki Convention),¹¹ the Revised Protocol on Shared Watercourses in the South African Development Community,¹² the Protocol for Sustainable Development of Lake Victoria

⁶Ibid, art 24.

⁷Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 2009), 549-553.

⁸*UN Convention on the Law of the Non-Navigational Uses of International Watercourses*, opened for signature 21 May 1997, [1997] 36 ILM, 700 (not yet in force), art 3.

⁹*United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*, opened for signature 14 October 1994, 1954 UNTS 3 (entered into force 26 December 1996).

¹⁰*Convention on Wetlands of International Importance especially as Waterfowl Habitat*, opened for signature 2 February 1971, 996 UNTS 245, (entered into force 21 December 1975).

¹¹*Convention on the Protection and Use of Transboundary Watercourses and International Lakes* opened for signature 17 March 1992, 1936 UNTS 269 (6 October 1996).

¹²*Revised Protocol on Shared Watercourses*, opened for signature 7 August 2000, SADC Depository <http://www.sadc.int/index/browse/page/159> (entry into force 22 September 2003).

Basin¹³ among others. Other non-treaty agreements related to freshwater governance include the various instruments of the International Law Association such as the Berlin Rules on Water Resources,¹⁴ and the Helsinki Rules on the Uses of the Waters of International Rivers.¹⁵

Where ratified by state parties, the above international law instruments impose obligations on states to use international or shared watercourses in accordance with the agreements and to ensure that their national legal frameworks for water governance are in accord with the requirements of the international law instruments. To this extent, the existing international water law provides useful guidance in the governance of international watercourses and transboundary freshwater resources and in the resolution of disputes between state parties. However, it does not constitute a comprehensive framework for resolving some of the pressing problems of water governance such as water scarcity and insufficient access at the national level.¹⁶

The focus of the international freshwater law framework is on rights and obligations of riparian states and not on the rights of individuals. As a consequence, while international law instrument on freshwater governance include provisions requiring states to ensure sustainable development in water governance, the focus of the instruments is inter-state relations in relation to shared watercourses. The UN Convention on Non-navigational Uses of International Watercourses though constitutes a comprehensive guideline on freshwater governance for sustainable development. However, its effect on national legal frameworks is limited as many states have yet to ratify the Convention and thus are not legally bound by the provisions of the Convention.

Recognising the challenges facing the international legal framework for freshwater resources, some have sought to distinguish international law from global law and predict that in the next few decades, a global law for water resource governance is likely to emerge.¹⁷

¹³Protocol for Sustainable Development of Lake Victoria Basin between Kenya, Uganda and Tanzania signed on 29th November 2003 (entered into force 1 December 2004).

¹⁴International Law Association, *Berlin Rules on Water Resources*, Report of the 71st Conference (2004).

¹⁵International Law Association, *The Helsinki Rules on Uses of the Waters of International Rivers*, Report of the 52nd Conference(1966).

¹⁶Knut Bourquain, *Freshwater Access from a Human Rights Perspective: A Challenge to International Water and Human Rights Law*, International Studies in Human Rights (Martinus Nijhoff, 2008), 50-54.

¹⁷ See Joseph Dellapenna and Joyeeta Gupta, 'Toward Global Law on Water' (2008) 14(4) *Global Governance: A Review of Multilateralism and International Organizations* 437; ibidand Claudia Pahl-Wostl, Joyeeta Gupta

2 Towards a Global Water Law?

The argument in support of global law in water resource governance forms part of the wider global law discourse, which is arguably replacing international law. According to this view, the dual paradigm of international and national legal orders is in the process of transformation to a new global order characterised by a unified set of legal rules and processes drawn from state practice and jurisprudence though transcending it.¹⁸ The European Union (EU) presents a model of this global post national, post sovereignty governance trend.¹⁹

The case for global governance of freshwater resources is premised on the observation that the complexity of water issues far surpasses the capacity of individual states to resolve the issues. This, it is argued, makes it necessary for states to seek the cooperation of other states and non-state actors in pursuit of solutions to these water governance issues.²⁰ As evidence that this state cooperation and shift to global governance is happening, proponents of the theory point to indicators showing the move from state-centred governance to more supranational forms. An example of an indicator is the increasing role of non-state actors such as non-governmental organisations (NGOs), multilateral institutions and private corporations in water resource governance demonstrating the contracting power of the nation state.²¹ The proliferation of institutions such as the Global Water Partnership (GWP),²² the International Water Management Institute (IWMI),²³ and the International Water Association (IWA)²⁴ confirm the increasing role of non-state actors in water governance.

and Daniel Petry, 'Governance and the Global Water System: A Theoretical Exploration' (2008) 14(4) *Global Governance: A Review of Multilateralism and International Organizations* 419.

¹⁸ See in general Giuliana Ziccardi Capaldo, *The Pillars of Global Law* (Ashgate, 2008).

¹⁹ See Christopher J. Borgen, 'Whose Public, Whose Order? Imperium, Region, and Normative Friction' (2007) 32 *Yale Journal of International Law* 331.

²⁰ Timothy William Waters, 'The Momentous Gravity of the State of Things Now Obtaining': Annoying Westphalian Objections to the Idea of Global Governance' (2009) 16(1) *Indiana Journal of Global Legal Studies* 25.

²¹ Claudia Pahl-Wostl, 'A Conceptual Framework for Analysing Adaptive Capacity and Multi-level Learning Processes in Resource Governance Regimes' (2009) 19 *Global Environmental Change* 357.

²² Global Water Partnership (GWP), *About GWP* (2012) GWP <<http://www.gwp.org/en/About-GWP/>>.

²³ International Water Management Institute (IWMI), *About IWMI* (2012) IWMI <http://www.iwmi.cgiar.org/About_IWMI/Overview.aspx>.

²⁴ International Water Association (IWA), *IWA- The Global Network for Water Professionals* (2012) <<http://www.iwahq.org/1nb/home.html>>.

Predictors of the emergence of global water law argue that a new global order characterised by 'porous borders and power-sharing among states, non-state actors, and new geographic or other functional entities' is already visible in international economic governance.²⁵ This argument is supported by examples of states ceding governance to institutions such as the World Trade Organisation (WTO) in matters of trade and the International Monetary Fund (IMF) and the World Bank in financial and development policy issues.²⁶ On the basis of the above observations some argue that a systemic shift from the Westphalian state system is in process.²⁷ The replacement of the state by these international institutions is arguably manifest in countries categorized as 'failed states' or 'failing states'.²⁸

While conceding that there is a greater recognition of multiple actors in international governance, this thesis supports the view that in most cases, states continue to be the primary actors in the creation, interpretation and implementation of international rules.²⁹ There is strong evidence to suggest that in many aspects of governance especially economic governance, the trend is precisely the opposite. Rather than an emerging global law, there continues to be a dominance of sovereignty.³⁰ This tendency in international governance, referred to as state centrism, has been acknowledged by other scholars.³¹ The prevalence of state centrism particularly in the implementation of international environmental law, demonstrates a boundary within which international law has developed. International law is founded on the principle of *pacta sunt servanda* which obliges states to comply with

²⁵Brian N Winchester, 'Emerging Global Environmental Governance' (2009) 7(22) *Indiana Journal of Global Legal Studies* 7, 22.

²⁶Joseph S Nye and John D Donahue, *Governance in a Globalizing World. Visions of Governance for the 21st Century* (Brookings Institution Press, 2000), 20.

²⁷Claire A Cutler, 'Critical Reflections on the Westphalian Assumptions of International Law and Organization: A Crisis of Legitimacy' (2001) 27 *Review of International Studies* 133.

²⁸ A Failed State Index based on various indicators is now published annually. See The Foreign Policy Group, *Failed States. An Eighth Annual Collaboration between Foreign Policy and Fund for Peace* (2012) <http://www.foreignpolicy.com/failed_states_index_2012_interactive>.

²⁹ See Jose E. Alvarez, 'The Return of the State' (2011) 20 *Minnesota Journal of International Law* 223; Waters, Timothy William, 'The Momentous Gravity of the State of Things Now Obtaining': Annoying Westphalian Objections to the Idea of Global Governance' (2009) 16(1) *Indiana Journal of Global Legal Studies* 25.

³⁰ Alvarez, Jose E., 'The Return of the State' (2011) 20 *Minnesota Journal of International Law*.

³¹ See, eg, Bjorn-Oliver Magsig, 'Overcoming State-Centrism in International Water Law: 'Regional Common Concern' as the Normative Foundation of Water Security' (2011) 3(1) *Goettingen Journal of International Law* 317; Waters, Timothy William, 'The Momentous Gravity of the State of Things Now Obtaining': Annoying Westphalian Objections to the Idea of Global Governance' (2009) 16(1) *Indiana Journal of Global Legal Studies* 25.

obligations imposed by agreements and treaties entered into by the states. However, this principle has been interpreted in international law as an exercise of sovereignty as opposed to a relinquishing of sovereignty.³²

This reluctance to cede sovereignty, some argue, explains the fragmentation in the international legal framework for freshwater governance which is characterised by multiple international law instruments addressing various aspects of water governance, but no legally binding overall agreement.³³ According to this view, the failure to establish a comprehensive binding legal instrument is not reflective of a failure of the international legal capacity to develop regulations but rather the result of conscious efforts by states to avoid supranational regulation which may threaten state centrism.³⁴ Supporters of state centrism argue that the proliferation of international institutions is not evidence of the weakening of the state but rather a new form of exercise of state power, with these institutions constituting new hierarchies of state sovereignty.³⁵ It is argued that even in the case of 'failed states' in which the state is apparently absent, the alternatives provided through international intervention do not overcome state centrism but rather restore the status quo through creations which resemble the state.³⁶

Notwithstanding the above challenges of overcoming state centrism in the establishment of an international legal framework for freshwater governance or a global water law, efforts to bring water governance issues into the field of international human rights law are in progress.

B *National Legal Frameworks for Freshwater Governance*

Despite the variety in legal frameworks for water resource governance at the national level, certain common traits or trends are observable across jurisdictions. In most countries, the primary tools used by the public authorities to develop legal systems for water resource

³² Alvarez, above n 30, 223 Citing *SS Wimbledon*, [1923] PCIJ (ser A) No 1. On the right to enter into international agreements as an act of sovereignty.

³³ Eyal Benvenisti and George W. Downs, 'The Empire's New Clothes: Political Economy and the Fragmentation of International Law' (2007) 60 *Stanford Law Review* 595.

³⁴ Ibid.

³⁵ Jean L. Cohen, 'Whose Sovereignty? Empire Versus International Law' (2004) 18(3) *Ethics and International Affairs* 1.

³⁶ Alvarez above n 30, 263.

governance are legislation, regulations and standards.³⁷ Water legislation encompasses the statute(s) and implementing regulations governing the administration of water resources.³⁸ Apart from legislation, legal frameworks for water resource governance also include policy and supporting institutional mechanisms.

Ideally, the process by which legal systems are developed or reformed begins with the articulation of societal goals in the form of policy, enactment or reform of legislation, implementation and enforcement.³⁹ Most countries around the world have in the last three decades undertaken substantive reviews of their legal systems for water resource governance. Policy goals identified as the drivers for change include: addressing conflicts between sectors (Chile); widespread frustration with government bureaucracy and unsupervised spending (State of Victoria); resolving past injustices (South Africa); or the need for consistency of direction and purpose in provincial water programmes (Argentina); or sustainable management and control of water resources (Uruguay).⁴⁰ In the case of Kenya, the reform process was driven primarily by the need to separate resource management from water service management so as to protect water regardless of service requirements.⁴¹

Notwithstanding the differences in legal systems of countries and the particular policy definitions, the reforms have in all cases been ultimately motivated by the pressure caused by the escalating economic, social and environmental demands on the finite stock of freshwater resources. Water policy has moved from a focus on water supply to sustainability of water resources. As a result of this common purpose, the substance of the legislative reforms across countries is largely comparable.⁴²

³⁷Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59.

³⁸Caponera, Dante Augusto, *Principles of Water Law and Administration: National and International* (Taylor & Francis, 2007) 53.

³⁹International Development Law Organization, 'The Legal Framework of Water Resource Management. Lessons learned from the IDLO Seminar on Legal Framework of Water Resource Management Conducted on September 11-22, 2006 in Rome' (2006) (6) *Development Law Update*4.

⁴⁰Jessica Vapnek, et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 4-5.

⁴¹Ministry of Water and Irrigation (Kenya), *Water Sector Reform in Kenya and the Human Right to Water* (Ministry of Water and Irrigation, Kenya, 2007).

⁴²Stefano Burchi and Ariella D'Andrea, 'Preparing National Regulations for Water Resources Management. Principles and Practices' (2003) *FAO Legislative Study* 80.

The following section identifies some of the common features of modern legal systems for water resource governance that are relevant for analysing the research questions identified in chapter one of this thesis.

1. Centrality of State and Statute in Development of Water Law

Due to the structure and function of the Westphalian state model, the state through its various organs plays a central role in the process of law reform. In most jurisdictions, law is understood primarily as legislation which refers to positive law, written and in most cases promulgated under the procedures defined in the constitution of the country as the legitimate means of promulgation.⁴³ Law thus includes the Constitution, statutes, delegated legislation and judicial decisions. For public authorities charged with the development of legal frameworks the terms law and legislation are often considered synonymous, confirming the underlying premises of the legal positivist notion of law discussed in chapter three.

In most jurisdictions around the world, water law reform has been characterised by the three-fold process of articulation of policy; reform of legislation and implementation and enforcement.⁴⁴ The tendency to equate law with legislation identified above is prevalent in water law where the task of preparing national frameworks for water governance is defined in terms of enactment of statutes and subsidiary legislation.⁴⁵ As a consequence, recent water reforms in many countries, including Kenya, have focused on statutory legal systems for water resource governance with little or no reference to the reality of the plural legal systems that govern land and water resources.⁴⁶ Mumma argues, with reference to Kenya's Water Act, that it is founded on a presumption of a legal framework that is 'monolithic and uniform' and 'essentially state-centric'.⁴⁷

Shah observes the same tendency in India and other countries, where water law practitioners and scholars delimit the water sector to the three pillars of water law, water policy and water

⁴³Caponera, Dante Augusto, *Principles of Water Law and Administration: National and International* (Taylor & Francis, 2007)49.

⁴⁴International Development Law Organisation, above n 39, 3.

⁴⁵Burchi, Stefano and Ariella D'Andrea, 'Preparing national regulations for water resources management. Principles and Practices' (2003) *FAO Legislative Study* 80.

⁴⁶University of Dar-es-Salaam, International Water Management Institute and Natural Resource Institute, 'Implications of Customary Laws for Implementing Integrated Water Resources Management' (Department for International Development, 16 September 2011 2004).

⁴⁷Mumma, Albert, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' in Mark Giordano, Barbara Van Koppen and John Butterworth (eds), (CABI, 2008).

administration.⁴⁸ He further demonstrates how literature on institutional change has also limited its scope to government bureaucracies, international agencies and legal and regulatory systems, failing to take into account the ‘humanly devised rules-in-use’ referred to as ‘Institutional Arrangements’ that affect water economies.⁴⁹ The institutional arrangements are also described as structures that humans impose on their dealings with each other and are prevalent in water economies across both low and high income countries.⁵⁰ However, the ratio of these institutional arrangements to the formal structures is higher in the low income countries than in high income countries. Consequently in low income countries, governments ought to take institutional arrangements into consideration in the course of developing legal frameworks for water governance if these are to contribute to sustainable development.⁵¹ This state-centrism is not limited to water law.

None of the literature cited above argues that the state should not play an important role in the development of national frameworks for water governance. It is widely acknowledged that central governments ought to retain the overall responsibility and control over certain key functions in water governance such as information collection and monitoring.⁵² The literature though makes the case for the recognition by the state of the pluralistic legal environment in which rules and institutions governing water resources are developed.⁵³ The recognition of the importance of locally initiated rules and institutions supports the application of the principle of subsidiarity in the development of legal frameworks for water governance. Subsidiarity is a principle of organization that requires the conduct of affairs to be handled at the lowest level possible or by the least centralized authority.

⁴⁸Shah, Tushar, 'Issues in Reforming Informal Water Economies of Low-Income Countries: Examples from India and Elsewhere' in John Butterworth Mark Giordano Barbara Van Koppen (ed), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CAB International, 2008).

⁴⁹ Ibid, 65.

⁵⁰Douglass C North, *Institutions, Institutional Change and Economic Performance (the Political Economy of Institutions and Decisions)*. (Cambridge University Press, 1990).

⁵¹ Shah demonstrates using the case of India the effect of these IAs in a low water economy. Shah, above n 48.

⁵²Jessica Vapnek, et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 79.

⁵³Barbara Van Koppen, Mark Giordano and John Butterworth (eds), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CABI, 2008). This work includes a compilation of studies from different jurisdictions supporting this position.

Subsidiarity which has gained popularity, since its adoption as the underlying principle of the European Union Law, has been applied to the water governance discourse.⁵⁴ The International Union for the Conservation of Nature (IUCN) has advocated for the inclusion of the principle in water governance, recommending its application particularly to basin management and devolution of authority.⁵⁵ Modern national legal frameworks incorporate the principle of subsidiarity through provisions allowing for participation of relevant stakeholders in water governance particularly at the local level. However, despite these provisions for stakeholder participation, most national frameworks for water governance are primarily state centric.

As argued in chapter three, most common law jurisdictions are based on a legal positivist theory that was influenced by the thought of Hobbes, Kant and Hume. The notion of law advocated under this theory grants the state a primary role in the establishment and implementation of law, which this thesis argues may explain the state centrism evident in national frameworks for water governance. The fact that these legal frameworks are state centric does not per se constitute a structural flaw, but it could be prejudicial where it results in the failure of the legal frameworks to accommodate other normative and institutional systems of governance.

Apart from the state centric approach, the concept and theory of property underlying modern law has contributed to the adoption of a 'restricted philosophy of property rights' in legal frameworks of natural resource governance.⁵⁶ The effect of the notion and theory of property underlying modern law is discussed in the next section.

2. *Property Governance Systems in Modern Water Law*

In chapter three of this thesis, it was argued that the concept and theory of property underlying modern law has contributed to the perception of property governance systems primarily in the context of a two dimensional institutional space. Consequently, the law considers property governance systems in terms of a choice between either one of two

⁵⁴*Treaty on European Union*, opened for signature 7 February 1992, [2009] OJ C 115/13 (entered into force 1 November 1993); R. Andreas Kraemer, 'Governing Water - International Law Development - The Principle of Subsidiarity' in Charles Buchanan, Paula Vicente and Evan Vlachos (eds), *Making the Passage through the 21st Century: Water as a Catalyst for Change* (Luso-American Foundation, 2009) 233.

⁵⁵International Union for Conservation of Nature, *Rule: Reforming Water Governance* (Island Press, 2009), 81 and 124.

⁵⁶Jonathan M Lindsay, 'Creating a Legal Framework for Community-based Management: Principles and Dilemmas' (1998) *Decentralization and Devolution in Forestry*<<http://www.fao.org/docrep/x3030e/x3030e09.htm>>, 6.

institutional regimes the ownership and regulation by the state or through the grant of private rights and regulation using markets.⁵⁷ This thesis argues that this view has influenced the development of legal frameworks for water governance. The question guiding reforms of national legal frameworks for water governance has been articulated in the following terms:

*'Should laws embodying participatory environmental management aim to supplement mainly administrative strategies with opportunities for public input, or should they allocate legal rights to environmental resources, thus fostering mainly private ordering?'*⁵⁸

The above confirms that modern water law anticipates two main forms of institutional arrangements for water resource governance; state-based institutional regimes or the private rights market-based regulatory regime.

State-based institutional arrangements are characterised by vesting of water rights in the state which then regulates the use of the resource. These state-based institutional systems of water management were popular in the period after the 1950s in many countries including Australia, the Western United States and Kenya.⁵⁹ The development of state managed legal frameworks of water governance is premised on the argument that the vital social importance of water conservation necessitates the intervention of the state to prevent the unbridled exploitation of the resource.⁶⁰ This view is consistent with the theory of the tragedy of the commons discussed in the previous chapter.⁶¹ A further argument made in support of public ownership and state control is that water has an essentially public character and thus the legal framework developed for its governance must accord with this public character.⁶² As has been discussed before, the assumption underlying this argument is that resource governance regimes should reflect the nature of the resource.

⁵⁷Yochai Benkler, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law*, March 2001 <http://www.benkler.org/WhitePaper.pdf>.

⁵⁸ Francois du Bois, 'Water Rights and the Limits of Environmental Law' (1994) 6 *Journal of Environmental Law* 73, 74.

⁵⁹Ruth Meinzen-Dick, 'Beyond Panaceas in Water Institutions' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15200, 15200.

⁶⁰Dante Augusto Caponera, *Legal and Institutional Aspects of Water Resources Development in Africa*, Background Paper. Legislation Branch FAO (FAO, 1976).

⁶¹Garrett Hardin, 'The Tragedy of the Commons' (1968) 162(3859) *Science* 1243.

⁶²Joseph L Sax, 'The Limits of Private Rights in Public Waters' (1989) 19 *Environmental Law* 473.

Following the failure of state-based institutional frameworks to meet the expectation of efficient resource allocation and conservation, many jurisdictions phased out these systems from the 1970s and 1980s. With the growing influence of neoliberal ideas on law, private ordering was favoured over public ownership and state control of water resources. This led to the reform of water laws in most countries to reflect this shift. Further, the fact that international aid agencies such as the World Bank supported these neoliberal ideas contributed to the reform in this direction of many water laws of developing countries.⁶³

Despite this shift to private ordering, modern water laws continue to demonstrate the state-centric approach discussed in the preceding section. Consequently, though most modern water law frameworks are primarily based on a rights regime and market-based regulatory system, the state still retains overall control. The state-centrism is demonstrated by provisions such as the one now common in many water laws that vests ownership of all water resources in the state.⁶⁴ As a consequence of this provision, the state is recognised as the primary holder of all water rights and thus private rights to water originate from and can therefore also be extinguished by the state. However, unlike the case with state-based institutional management of water resources, in modern water law, the role of the state is considered as that of facilitator. Consequently, while the state holds rights of ownership over water resources, these rights are allocated to private individuals to allow their trade in a free market. In such systems, state intervention is limited to instances of market failure or for purposes of enforcing environmental rights.

Modern national frameworks of water governance are thus developed in the context of the two dimensional paradigm of either a state-based regulatory regime or a private rights system or a system that combines elements of both state-based regulation and market regulation. Consequently, modern water law frameworks are hinged on a rights regime that forms the basis for the allocation and use of water resources. These modern water rights regimes are discussed in the next section.

3. *Modern Water Rights Regimes*

The fluid nature of water, its multiple uses, the high cost of measuring and monitoring these uses and the difficulties associated in predicting flows of water over time make it a

⁶³Paul Holden and Mateen Thobani, *Tradable Water Rights: A Property Rights Approach to Resolving Water Shortages and Promoting Investment* (The World Bank, 1996).

⁶⁴Barton H. Thompson Jr, 'Environmental Policy and State Constitutions: The Potential Role of Substantive Guidance' (1996) 27 *Rutgers Law Journal* 863, 884-886.

challenging resource to regulate through the use of property rights.⁶⁵ Various approaches and rights regimes have been adopted by legal frameworks for water governance in different countries. The main rights regimes presently used in common law systems are: the riparian rights model and the modern water rights model.

In the common law tradition, riparianism is regarded as the earliest form of property rights regime for water resource governance. Riparian regimes of property are founded on the recognition of a right to reasonable use of water by the owners of land abutting watercourses and a right to prior appropriation.⁶⁶ The riparian right is closely connected to property rights in land with riparian land owners sharing the rights arising from having land adjacent to a water course.⁶⁷ Legal systems of water resource governance in most common law countries were initially based on riparian doctrines. Most common law jurisdictions have since replaced the riparian regime though, in some jurisdictions some form of riparianism still exists. The use of riparian water rights as a governance model has come under considerable criticism on various grounds.⁶⁸

From the perspective of the efficiency as a property rights regime for water resource governance, riparianism has been criticised for its failure to grant secure or certain property rights.⁶⁹ This is because riparian rights are correlatively defined, and thus are likely to change with the shift in uses of water by other riparians. This, it is argued, not only inhibits investment but also undermines the development of a water rights market.⁷⁰ In so far as conservation of water resources is concerned, riparianism is charged with failing to prevent excessive diversions by riparian land owners or to maintain minimum streams for the public.⁷¹ To this could be added a failure to ensure the maintenance of minimum flows for ecosystem health. The system has also been described as inequitable given its tendency to

⁶⁵ Henry E Smith, 'Governing Water: The Semicommons of Fluid Property Rights' (2008) 50(2) *Arizona Law Review* 445.

⁶⁶ Ibid 447.

⁶⁷ Olivia S. Choe, 'Appurtenancy Reconceptualized: Managing Water in an Era of Scarcity' (2003-2004) 113 *Yale Law Journal* 1909, 1911.

⁶⁸ Ibid 1911-1912.

⁶⁹ Robert H. Abrams, 'Water Allocation by Comprehensive Permit Systems in the East: Considering a Move Away from Orthodoxy' (1990) 9 *Virginia Environmental Law Journal* 255, 259.

⁷⁰ Choe, above n 67, 1911-1912.

⁷¹ William Goldfarb, *Water Law* (Lewis Publishers, 2 ed, 1988), 25.

favour private agrarian interests over public use.⁷² Finally, riparianism is criticised for lacking procedural mechanisms for re-allocating rights in times of scarcity.⁷³ As a result of these criticisms and the influence of neoliberal ideas, many countries sharing the common law tradition, have moved from riparianism to modern water rights regimes.

Modern water rights do not, as was the case with riparian rights, originate from a relationship with land. Instead these rights are created by an administrative agency through the use of a legal instrument issued by the relevant water administration.⁷⁴ As a consequence, a prerequisite for the establishment of a modern water rights regime is the vesting of ownership of all water resources in the state. In most cases the transfer of all rights over water resources to the state has been achieved through the passing of a primary legislation as in most jurisdictions particularly in the common law, such a provision did not exist.⁷⁵ The rationale for granting the ultimate right of ownership of water resources to the state is that such a system constitutes a more rational approach to water allocation based on principles of availability and equity.⁷⁶ Once granted ownership of all water resources, the state can assign rights to users. The instruments used for this purpose include licences, permits/permissions, authorizations, consents and concessions.⁷⁷

Under modern water rights law, water rights are defined as:

*'authorized demands to use (part of) a flow of surface [or] ground water, including certain privileges, restrictions, obligations and sanctions accompanying this authorization, among which a key element is the power to take part in collective decision making about system management and direction.'*⁷⁸

These modern water rights are administrative use or usufructory rights and as noted do not necessarily run parallel to land rights. This thus raises questions as to whether they constitute

⁷²Lynda L. Butler, 'Allocating Consumptive Water Rights in a Riparian Jurisdiction: Defining the Relationship Between Public and Private Interests' (1985) 47 *University of Pittsburg Law Review* 95, 99.

⁷³Joseph W. Dellapenna, 'The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century' (2002) 25 *University of Arkansas at Little Rock Law Review*, 249.

⁷⁴ See Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice*; Samantha Hepburn, 'Statutory Verification of Water Rights: The 'Insuperable' Difficulties of Propertising Water Entitlement' (2010) 19(1) *Australian Property Law Journal* 1. Distinguishing between modern water rights and riparian water rights.

⁷⁵Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006)37-38.

⁷⁶Choe, above n 67, 12.

⁷⁷ Hodgson and FAO, above, n 75, 46

⁷⁸Lily Beccar, Rutgerd Boelens and Paul Hoogendam, 'Water Rights and Collective Action in Community Irrigation' in Rutgerd Boelens and Paul Hoogendam (eds), *Water Rights and Empowerment* (Uitgeverij Van Gorcum, 2002) 1, 3.

property rights. Hodgson has argued that the fact that the rights come into existence through an administrative or regulatory procedure does not preclude them from being property rights, and that provided they are secure for a sufficiently long duration, they are indeed a form of property rights that exist independently to land tenure rights.⁷⁹ In most countries, water rights have legal status. They are enforceable as against third parties including individuals, corporations and even the government. Defined as such, the link between water rights and property rights is better appreciated though the question as to whether a statutory entitlement constitutes a property right still depends on legislative intent and the social and environmental context of the relevant jurisdiction.⁸⁰ As shall be demonstrated in chapter five, the above the rights regime adopted in national frameworks for water governance differs from that anticipated in customary law systems for water governance.

It has been argued that, modern water rights regimes have an advantage over riparian regimes due to their capacity to support markets and their anticipation of environmental allocations. These aspects of the water rights regimes are discussed in the following subsections.

(a) *Markets and Modern Water Rights*

One of the main justifications for the creation of modern water rights is that the establishment of individual and alienable water rights allows for the possibility of exchange of these rights and thus for the creation of a water rights market. Underlying the argument in favour of creation of water rights markets, is the theory of market environmentalism, which holds that the use of private rights and markets for water governance results in positive economic and environmental outcomes.⁸¹

The shift to market-based regulation is often characterised by some level of commodification of water resources, privatization and commercialization.⁸² Commodification refers to the conversion of a resource in this case water, into an economic good.⁸³ It is a necessary

⁷⁹See Sax, Joseph L, 'Property Rights and the Economy of Nature: Understanding *Lucas v. South Carolina Coastal Council*' (1993) 45(5) *Stanford Law Review* 1433.

⁸⁰Samantha Hepburn, 'Statutory Verification of Water Rights: The 'Insuperable' Difficulties of Propertising Water Entitlement' (2010) 19(1) *Australian Property Law Journal* 1.

⁸¹Terry Lee Anderson and Pamela Snyder, *Water Markets: Priming the Invisible Pump* (Cato Institute, 1997).

⁸² See Noel Castree, 'Neoliberalising Nature: Processes, Effects, and Evaluations' (2008) 40(1) *Environment and Planning A* 153 in general.

⁸³Karen Bakker, 'Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales' (2005) 95(3) *Annals of the Association of American Geographers* 542, 544.

prerequisite of the proper working of a market. Different methods are used to achieve commodification including pricing. The grant of private rights in water or rights akin to private property, also results in the acquisition by water of an economic value. Legal frameworks for water governance create tradeable water rights, through the grant of licenses. Other market-based regulation instruments used to bring water into the realm of economic goods include taxes, financial incentives or permit trading schemes.⁸⁴

Apart from commodification, water law frameworks have also sought to commercialize the water sector. Commercialization though related to commodification, is different in so far as it entails the introduction into water management of commercial principles, methods and objectives such as efficiency, cost-benefit analysis and profit maximization respectively.⁸⁵ England's water sector reforms of the early 1980s provide examples of commercialization characterised by the adoption of a business model in the running of water agencies, tighter financial controls, price increases and a greater emphasis on economic as opposed to technical performance indicators.⁸⁶

Privatization relates to a change in organizational structure and the transfer of water management agencies from the public to the private sector. Most modern water law frameworks incorporate some elements of privatization. However, different jurisdictions have taken varied approaches to privatization. In England, a comprehensive privatization strategy of water supply and sewerage services resulted in ten regional water utilities being floated on the stock exchange in 1989.⁸⁷ The apparent success of England's privatisation contributed to similar trends in other jurisdictions.⁸⁸ In the case of developing countries, pressure mounted by international financial agencies to privatise water sectors so as to curb corruption contributed to privatization of some aspects of the water sector. In the Philippines for instance, the previously state-owned Manila's Metropolitan Waterworks and Sewage System was privatized and handed over to the Manila Water Company, a private water and

⁸⁴Jessica Vapnek, et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 77.

⁸⁵Collins Leys, *Market-driven Politics: Neoliberal Democracy and the Public Interest* (Verso, 2001).

⁸⁶ Karen Bakker, 'Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales' (2005) 95(3) *Annals of the Association of American Geographers* 542, 549.

⁸⁷Karen Bakker, *An Uncooperative Commodity: Privatizing Water in England and Wales* (Oxford University Press, 2003).

⁸⁸Magda Lovei and Bradford S Gentry, *The Environmental Implications of Privatization: Lessons for Developing Countries*, World Bank Discussion Papers (World Bank, 2002).

wastewater concessionaire in 1997.⁸⁹ In Kenya, several urban and municipal water utilities were in the latest water law reforms handed over to private companies though the municipalities still retain a percentage of ownership in the private company.

The effectiveness of market-based regulation of water rights has been contested. A primary argument against this system is that its fundamental assumption, that markets would ensure a gravitation of water towards higher value-uses is not sound.⁹⁰ This is because such an assumption is premised on conditions that may not always apply to water markets. Firstly, it presumes that water like other economic goods can be easily commodified. However, due to its multiple uses and the high cost associated with measuring and monitoring these uses as well as the difficulties in predicting flows from one year to the next, water is very difficult to define in terms of a private right and thus to commodify.

Further, the gravitation of water in a market towards most efficient uses is based on a presumption that ultimately, only two uses are in competition in a particular transaction, whereas in the case of water its multiple uses create complex transactions that cannot be reduced to the two use transaction model anticipated by the Coasean model.⁹¹ Coase, whose influence on law and economics had an effect on property theory in common law jurisdictions, argued that in situations of perfect competition, no legal intervention is required to achieve efficient resource use as conflicting use of the resource would necessarily result in a transaction reflecting the most efficient use of the resource.⁹² As water is fluid, competition often involves multiple uses giving rise to several sets of conflict which cannot be reduced to the equilibrium anticipated by the Coasean model of two transactions representing all conflicts. In situations where water supplies are fully allocated, water markets may not guarantee that holders of the rights will use the water most sustainably. This is because, as new water users cannot be accommodated in such a system, the existing users have little or no incentive to conserve water.

The market model of water rights anticipated in many modern frameworks for water governance has the potential to contribute to sustainable use of water resources, though not

⁸⁹The World Bank, 'Sustaining Water for All in a Changing Climate. World Bank Group Implementation Progress Report of the Water Resources Sector Strategy' (2010), 85.

⁹⁰Bois above n, 58, 76.

⁹¹ Ibid.

⁹²Ronald H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1.

without challenges. As shall be demonstrated in a subsequent chapter, the incorporation of market models in national water laws has implications on pre-existing customary law governance systems. The survival of customary rights and governance systems in such a context is dependent upon their capacity to integrate into the market environment. The inequities associated with imperfect water markets could adversely affect these systems.

(b) *Environmental Allocations*

A further justification for establishment of modern water rights regimes is their capacity to allow for environmental allocations.⁹³ Modern water law frameworks establish a system of allocation of water rights based on the measurement of the volumes of water already abstracted or used.⁹⁴ This practice facilitates the process of keeping an account of how much water is obtained from a given course or aquifer and thus how much water should be left so as to maintain the health of the eco-system. Environmental allocations provide a means of maintaining flows for eco-system health.

Allocation of water for environmental purposes is achieved through the establishment of a statutory definition of minimum flows that must be taken into consideration in the issuance of new water rights or by the designation of a reserve for environmental purposes.⁹⁵ In some cases, where a minimum flow cannot be preserved due to the fact that all water rights have already been exhausted, innovative ways are being explored including the partial or complete cancellation of water rights or the buying back of water rights by the water administration for environmental purposes.⁹⁶

The inclusion of environmental rights in modern water rights regimes constitutes an important potential tool for balancing environmental needs with social and economic demands in water resource governance.

⁹³Hodgson and FAO, above, n 75, 88.

⁹⁴ As indicated in chapter 2, the term abstraction refers to the act through which water is removed from its source for a specified use. See Amit Kohli, Karen Frenken and Cecilia Spottorn, 'Disambiguation of Water Use Statistics' (2010) <<http://www.fao.org/docrep/013/al815e/al815e00.pdf>> 4.

⁹⁵Hodgson and FAO, above n 75, 88.

⁹⁶ The Australian Commonwealth Government has rolled out a scheme in which irrigators relying on the Murray Darling Basin water can sell their water rights to the government for purposes of environmental allocation. See Australian Commonwealth Government, 'Restoring the balance in the Murray-Darling Basin' (2010) *Water for the Future*<<http://www.environment.gov.au/water/publications/mdb/pubs/restoring-balance.pdf>>.

(c) *Irrigation Systems in Modern Water Rights Regimes*

The nature of the rights of users of irrigation systems and the extent to which these can be described as water rights is contested. Most national frameworks for water governance distinguish between rights relating to the abstraction or extraction of water, from the rights relating to the supply of water for irrigation.

As observed by Hodgson, in the context of modern water rights regimes, water rights and irrigation rights are ‘legally, conceptually and operationally’ different.⁹⁷ In his view, irrigation rights relate to the right to the supply of a specified quantity of water for a specific duration and thus they are contractual or quasi-contractual rights.⁹⁸ He argues that a modern water right strictly speaking relates to the right to remove water from the natural environment, while contractual water rights grant the holder an entitlement to receive delivery water through some artificial structure that has been previously been removed from the natural source.⁹⁹ In contrast with this view, some jurisdictions adopt a more generic definition of the term ‘water rights’ and thus water access rights, irrigation rights as well as water delivery rights are all considered as water rights and may be tradeable.¹⁰⁰

Notwithstanding the different views on the nature of irrigation rights, modern water law regimes adopt a different approach to water rights from that of customary law governance systems. Modern water rights regimes are premised on a the distinction between land and water rights as well as between water access rights relating to abstraction and rights of supply of water including irrigation rights. For most customary law systems, land and water and other natural resources tend to be perceived as an integrated system for purposes of governance. For instance, for the Marakwet, the land which abuts the stream from which irrigation water is diverted is considered communal land. Nevertheless, the right to divert water for irrigation is not considered independently of the communal right to land. Further, the irrigation scheme is regarded as being owned by the community and this forms the basis of each clan’s right to the supply of irrigation water through their allocated furrows.

⁹⁷ Hodgson and FAO above n 75, 7.

⁹⁸ Ibid.

⁹⁹ Ibid 7-8.

¹⁰⁰ See, eg, Government of Australia, ‘Water Rights’ (2011) *National Water Market* <<http://www.nationalwatermarket.gov.au/about/rights.html>>.

The above discussion confirms that the rights regime anticipated in most national frameworks for water governance is different from the regime underlying customary law systems, which as shall be demonstrated in the next chapter, is grounded on a common property system with a different conception of ownership and rights over water resources. The differences in perception of ownership, property, rights and governance systems of modern water law and customary law confirms the disconnect between statutory and customary law systems of water governance. In spite of these differences, modern national frameworks for water governance include provisions that may be used to redress this disconnect between customary and statutory law systems of water governance. These include the provisions recognising customary rights and participation of local communities in water governance.

In the following section, these provisions in modern water frameworks are analysed as a basis for exploring the space provided in these legal frameworks for the accommodation of customary law.

4. *Recognition of Customary Water Rights by Statute*

As noted earlier, in many jurisdictions, customary law systems of water governance predate the recently developed legal frameworks for water governance. Consequently, many of the modern water law frameworks include provisions relating explicitly to customary rights over water or to pre-existing rights over water resources which include customary rights.

Modern water laws have taken various approaches to pre-existing rights over water resources ranging from the inclusion of provisions that continue pre-existing uses on a deemed basis;¹⁰¹ the replacement of pre-existing rights through transition provisions;¹⁰² or the cancellation of all pre-existing common law rights.¹⁰³ In most jurisdictions, the law's primary concern has been with pre-existing rights under common law or other written law. However, apart from pre-existing rights of use under common law or under other written laws, in many countries, there are also customary rights to water which in many cases pre-date all other rights.

From a statutory legal perspective, the intersection of statutory rights with customary rights has been regarded in a negative light, being considered a problem in the transitional phase of

¹⁰¹ See for example the *Water Resource Act 1963* (UK).

¹⁰² See for example *Water Act 1989* (Victoria), s 7(9).

¹⁰³ See for example *Water Resources Act 1997* (South Australia).

implementation of new legal regimes and a potential source of conflict.¹⁰⁴ Consequently, while modern water legal frameworks concede the importance of taking into account customary rights, the statutory legal systems regard this interface as a necessary but temporary means of avoiding the social tension that would arise from acting otherwise. As a result, reforms in the water sector have resulted in the enactment of a new water legislation that permits a transitional period. This transitional period is considered as a temporary phase during which an intense interaction of new and old sets of legally binding rules relating to water resources occurs and mutual adjustment is generally achieved.¹⁰⁵ The transitional provisions relating to pre-existing rights over water resources thus become void once the mutual adjustment has been achieved. Considering the legal positivist theoretical basis underlying modern legal frameworks discussed in chapter 2, the above perspective is to be expected.

Contrary to the expectation by statute of a transitional phase in which pre-existing rights merge or are extinguished, in some cases, customary rights to water have demonstrated resilience. In such cases, it is acknowledged that these rights and the customary law systems on which they are based become a force for the statutory legal system to reckon with.¹⁰⁶ In the context of modern legal frameworks for water governance, three options are envisaged as modes of dealing with the resilient customary law systems: the recognition of the customary water rights; the reconciliation of customary rights, practices and institutions with statutory systems or the use of judicial and statutory mechanisms to deal with any conflict arising from the interaction of customary and statutory rights.¹⁰⁷

In accordance with the approach of recognition, some jurisdictions, have sought to safeguard customary rights to water by including provisions in the water statute recognising these rights. For instance, Guyana's water law includes a provision recognising 'any right, privilege, freedom or usage possessed or exercised by law or by custom by any

¹⁰⁴Stefano Burchi, 'The Interface between Customary and Statutory Water Rights – A Statutory Perspective' (2005) (45) *FAO Legal Papers Online* <<http://www.fao.org/Legal/prs-ol/lpo76.pdf>>.

¹⁰⁵Stefano Burchi, 'The Interface Between Customary and Statutory Water Rights – A Statutory Perspective' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005), 2.

¹⁰⁶*Ibid.*

¹⁰⁷Marco Ramazzotti, 'Customary Water Rights and Contemporary Water Legislation Mapping Out the Interface' (2008) (76) *FAO Legal Papers Online* <<http://www.fao.org/Legal/prs-ol/lpo76.pdf>> 1.

person'.¹⁰⁸ While this legislation does not define the exact scope of the provision, the law provides that for a use to qualify as customary, the community claiming the right must prove that the use is 'ancient, certain, reasonable and continuous'.¹⁰⁹ These criteria of proof are in accord with the concept of customary law underlying modern water law frameworks as discussed in chapter three.

In an attempt to reconcile statutory and customary rights, Ghana's water law vests ownership of all water resources in the State and includes a provision allowing all holders of pre-existing water rights to stake their claim within twelve months of the coming into force of the new law.¹¹⁰ The law further provides that the government would investigate such claims and on ascertaining a right, 'it would take such action as it considers appropriate.'¹¹¹ This provision arguably provided pre-existing customary right holders the opportunity to integrate their rights into the statutory framework. The approach taken confirms the state-centrism that this thesis argues is prevalent in national legal frameworks for water governance. This broadly defined provision allows the state unlimited discretion in determining how to resolve a conflict over water rights vested in the state and other customary rights. The fact that there were no claims filed in the case of Ghana or any administrative action taken in pursuance of this provision further confirms that such an approach does not provide an appropriate avenue for accommodating pre-existing customary right holders.¹¹²

In many jurisdictions reconciliation of customary and statutory rights has been achieved through a statutory grant of usufructory type rights to the pre-existing customary right holder; an administrative recognition and safeguarding of the existing right; or a combination of both.¹¹³ The Nigerian water law, for instance, safeguards through a statutory grant, the usufructory right to take water from any watercourse to which the public has free access for

¹⁰⁸*Water and Sewerage Act 2002* (Guyana), s 94.

¹⁰⁹Burchi, Stefano, 'The Interface Between Customary and Statutory Water Rights – A Statutory Perspective' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005), 2.

¹¹⁰*Water Resources Commission Act 1996* (Ghana).

¹¹¹Burchi, Stefano, 'The Interface Between Customary and Statutory Water Rights – A Statutory Perspective' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005), 3.

¹¹²G A Sarpong, 'Going Down the Drain? Customary Water Law and Legislative Onslaught in Ghana' (2004), 8.

¹¹³Burchi, Stefano, 'The Interface Between Customary and Statutory Water Rights – A Statutory Perspective' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005), 3.

domestic purposes and for watering livestock as well as the right to use the water for fishing, provided that such use is not inconsistent with any other law in force.¹¹⁴ Further, this water statute recognises a customary right of occupancy of land to draw water from the ground or an adjacent stream for domestic purposes for watering livestock and for personal irrigation.¹¹⁵ While these provisions arguably serve to safeguard customary rights of access to water, they do so in a restricted fashion. As shall be demonstrated through the case study, these and similar provisions do not provide a suitable basis for the realization by customary law systems to achieve sustainable development objectives.

The above confirms that the provisions for recognition of customary rights included in modern national frameworks for water governance constitute a window of opportunity. Nevertheless, the opportunity is granted by the statute on a temporary basis requiring holders to take particular steps to have their rights formally acknowledged by the new statute or else lose all rights once the window closes. From a statutory perspective, recognition of customary rights is thus a process in which customary rights are, subject to conditions set by statute, brought into the realm of the statutory legal framework. This does not provide a suitable approach for the mutual cooperation of statutory and customary systems of water governance in achieving sustainable development.

Apart from the statutory provisions for the recognition of customary rights discussed above, modern water laws arguably provide alternative channels for the participation of customary institutions in water governance. Water User Organizations (WUOs) arguably provide customary institutions of governance with the opportunity of obtaining recognition by the water law framework and participating in the management of water resources at the local level. The extent to which these WUOs constitute an opportunity for customary law systems is discussed in the next section.

5. *Water User Organisations (WUOs) and Customary Institutions*

In many countries policies for natural resource governance now recognise that apart from the enactment of water laws, the participation of all stakeholders and the decentralization and strengthening of civil society institutions in water resource governance are important for

¹¹⁴ *Water Resources Decree 1993* (Nigeria), s 2(a)(i) and (ii).

¹¹⁵ *Ibid*, s 2(a)(iii).

achieving sustainable development.¹¹⁶ The Dublin Principles, which constitute a global consensus of the fundamental principles of sustainable water resource management, also emphasize the importance of such participation.¹¹⁷ Consequently, water sector reforms worldwide have resulted in a shift from centralized water administrations to devolved water management structures.¹¹⁸

Statutory legal frameworks for water governance in many countries have thus established water management structures at the catchment, river basin or aquifer levels through which stakeholders including water users may be involved in water management. In some countries, such as South Africa and Kenya, this has been achieved through the devolution of management tasks at the local level to catchment management agencies whose boards include water users. The main tasks of these devolved management agencies include planning, administration of rights, the enforcement of water law and rights, the monitoring of water quality and quantity and the organization of stakeholder participation.¹¹⁹

The devolution of management tasks is particularly evident in the case of irrigation, where governments in many countries around the world have through their water laws promoted the transfer of responsibility for the operation and maintenance of irrigation and other water management infrastructure to self-financing water user organizations (WUOs).¹²⁰ Different terminologies are used in the various jurisdictions to refer to these WUOs created by statute. These include 'Water User Associations' (WUAs), 'Water Resources User Associations' (WRUAs), and 'Farmer Managed Irrigation Schemes' (FMIS). In this thesis, the term Water User Organisations (WUOs) is used to refer to these organizations in general.

The concept of WUOs is not novel, user-initiated associations for management of water resources, have existed for many years in different parts of the world.¹²¹ This thesis uses the

¹¹⁶Bryan Randolph Bruns and Ruth S. Meinzen-Dick, 'Water Rights and Legal Pluralism: Four Contexts for Negotiation' (2001) 25(1) *Natural Resources Forum* 1, 1.

¹¹⁷*The Dublin Statement on Water and Sustainable Development*, United Nations International Conference on Water and the Environment, (Adopted 31 January, 1992).

¹¹⁸Jessica Vapnek, et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 79.

¹¹⁹ Hodgson and FAO, above n75, 43.

¹²⁰ Hodgson, Stephen, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law ' (2009) (100) *FAO Legislative Study* 1.

¹²¹Salman, Salman M A, *The Legal Framework for Water Users' Association: A Comparative Study*, World Bank Technical Paper No. 360 (The World Bank, 1997).

term ‘organic WUOs’ to distinguish these organizations from the statutory creations. Many of these organic WUOs are governed using customary normative and institutional structures as opposed to formal or statutory based rules and institutions. Despite their prevalence in many jurisdictions, the role of WUOs was for several decades relegated to small-scale decision making, as national policy favoured state-centric water management and irrigation systems.¹²² However, this changed as research based on case studies from many jurisdictions demonstrated that user managed irrigation systems were outperforming state-run irrigation schemes.¹²³ The research prompted a policy shift favouring a return to WUOs, though not the organic WUOs, but rather statutorily created WUOs.

The statutorily created WUOs are modelled on the organic WUOs. However, unlike the organic WUOs statutory organizations originate from an enabling law and not as the result of a decision by local water users to associate. In most cases the WUOs are established under the country’s water legislation. In some jurisdictions, they are established not by the main water statute but by related legislation or special rules and regulations. The mandate, procedural rules and other structural mechanisms for these WUOs are determined by the law creating them. In the case of Kenya, Ethiopia and Tanzania, WUOs are incorporated at the bottom of the institutional hierarchy and more specifically at the catchment basin level as mechanisms for enhancing stakeholder participation.¹²⁴

In modern legal frameworks for water governance, WUOs are considered as the primary tool for ensuring participation of the beneficiaries.¹²⁵ The inclusion of WUOs in water law has also been driven, especially in developing countries, by the realization that implementation and enforcement of water governance rules cannot be achieved solely by water administrations and requires water users to self-police and self-implement.¹²⁶ The importance of WUOs at the micro-level of water resource management has also been advocated by

¹²² Ashok Subramanian, Vijay N Jagannathan and Ruth Meinzen-Dick, *User Organizations for Sustainable Water Services* (World Bank, 1997).

¹²³ See, eg, NT Uphoff, *Improving International Irrigation Management with Farmer Participation* (Westview, 1986); E W Coward (ed), *Irrigation and Agricultural Development in Asia* (Cornell University Press, 1980).

¹²⁴ See *Ethiopian Water Resources Management Proclamation (2000)*; *Water Act 2003* (Kenya) and *Water Resources Management Act 2009* (Tanzania).

¹²⁵ Salman, above n 121.

¹²⁶ International Development Law Organization, ‘The Legal Framework of Water Resource Management. Lessons learned from the IDLO Seminar on Legal Framework of Water Resource Management Conducted on September 11-22, 2006 in Rome’ (2006) (6) *Development Law Update*, 6.

international financial agencies as a useful medium for operationalizing cost recovery procedures.¹²⁷

Under most modern water law frameworks, WUOs are either granted or required to have legal personality and must maintain a not for profit status so as to prevent a conflict of interest. In order to ensure representation of all stakeholders, the legislative provisions for WUOs may require equitable distribution of members and office holders.¹²⁸ In most cases the water resource management authority has an oversight role over the organisations. While the water law recognises the objective of WUOs as primarily the benefit of its members, the law seeks to balance their rights to self-governance with the rights of other water users and the principles of good water management.¹²⁹

From the above, it may be argued that the provisions allowing for participation of users and specifically the provisions for WUOs in modern water law frameworks provide an opening for customary institutions of water governance especially those involving irrigation systems. In Tanzania, the use of WUOs created by the water statute has been explored as a means of building upon pre-existing customary management approaches in formal water governance.¹³⁰ The use of legal WUOs in integrating pre-existing traditional governance forms in rural South Africa has also been explored.¹³¹ This literature demonstrates the many challenges arising from the attempts to use WUOs to recognise or integrate customary law governance systems.

Research on the working of WUOs in different jurisdictions around the world has also demonstrated some of the challenges these organisations face.¹³² The sustainability of these organizations depends on a delicate balance of regulation of the WUOs by the formal legal system while providing the necessary space for these WUOs to retain the features of the organic WUOs on which they are modelled. Lindsay and Hodgson use the term 'legal space'

¹²⁷World Bank, *Water Resources Sector Strategy: Strategic Directions for World Bank Engagement* (2004).

¹²⁸Vapnek, above n 118, 85.

¹²⁹Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 85.

¹³⁰Abraham Mehari, et al, 'Integrating Formal and Traditional Water Management in the Mkoji Sub-catchment, Tanzania: Is it Working?' <http://www.bscw.ihe.nl/pub/bscw.cgi/d2607619/Mehari.pdf>.

¹³¹Farai Kapfudzaruwa, and Merle Sowman, 'Is There a Role for Traditional Governance Systems in South Africa's New Water Management Regime?' (2009) 35(5) *Water SA* 683.

¹³²Stephen Hodgson, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law ' (2009) (100) *FAO Legislative Study*.

to refer to the balance of flexibility and protection that water law should provide in order for local communities to exercise their right to associate for purposes of water management in a way that reflects their unique circumstances.¹³³ The determination of how much legal space is necessary for the effective working of these organizations is a complex one in which the potential of law reform should be considered not as a search for a correct answer but rather as a search for processes by which stakeholders can negotiate and re-negotiate rules.¹³⁴ Some of the challenges faced in the attempt to use statutory WUOs for the recognition of customary law institutions for water governance will be demonstrated in a later chapter in the context of Marakwet's customary law system and Kenya's water law.

This thesis argues that the legal theoretical framework on which modern water law is founded restricts the capacity of statutory legal frameworks for water governance to accommodate customary law systems of governance through the use of WUOs. This is because, as argued in the previous chapter, these frameworks regard law as primarily statutory law with the state being the primary actor in the development of legal rules. In the context of such a framework, the WUOs created by statute limit the role of members to participation in water management with little or no recognition of the potential of users to develop and implement their own water management rules. This further demonstrates the disconnect between the provisions availed in statutory frameworks for participation of local communities and the reality of customary law governance systems.

C Conclusion

This chapter set out to determine the effect that the legal theories and concepts identified in chapter three as underlying modern law, have had on the legal frameworks for water governance and their effect on these systems' capacity to integrate customary and statutory law systems for water governance.

The analysis undertaken demonstrates that a limited number of international and regional conventions and treaties exist on freshwater governance. However, other non-binding international legal instruments on freshwater governance provide the basis from which

¹³³Lindsay, Jonathan M, 'Creating a Legal Framework for Community-based Management: Principles and Dilemmas' (1998) *Decentralization and Devolution in Forestry*<http://www.fao.org/docrep/x3030e/x3030e09.htm>; Stephen Hodgson, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law ' (2009) (100) *FAO Legislative Study*.

¹³⁴Lindsay, Jonathan M, 'Creating a Legal Framework for Community-based Management: Principles and Dilemmas' (1998) *Decentralization and Devolution in Forestry*<http://www.fao.org/docrep/x3030e/x3030e09.htm>, 15.

customary international law on freshwater resource governance could be developed. This notwithstanding the focus of international water law is on the rights and obligations of states and thus the law does not address issues related to individual or community rights and obligations in relation to water resources. While acknowledging the existence of some form of global water law in relation to certain aspects of water governance, it was noted that states continue to uphold the principle of sovereignty which favours state centrism in international law including international water law.

An examination of the main features of national frameworks of water governance proved that legal positivism and the property legal theory underlying modern legal frameworks have influenced the development of national water governance frameworks. Evidence of state centrism, dominance of private property rights, the absence of common property regimes and limited recognition of customary law systems of water governance confirm this. This proves that the legal theories and concepts contribute to the disconnect between statutory and customary law in development of water governance frameworks.

The next chapter explores customary law systems of governance and seeks to develop on the basis of the existing literature on these systems the extent to which they can contribute to sustainable development in water resource governance.

V CHAPTER 5 CUSTOMARY LAW SYSTEMS AND SUSTAINABLE DEVELOPMENT

As noted in the preceding chapter, the water sector reforms undertaken in many countries over the last three decades have consisted of establishing a formal system that facilitates the rational use of water via written rules, state agencies and other statutory legal mechanisms. Even in African countries, where customary systems of water management play a significant role in poverty alleviation, particularly in rural areas, the focus of water reform has been on statute with little or no mention of customary law.¹

This section examines the extent to which customary law systems continue to exist in the context of water resource governance and their effectiveness in the management of water governance for sustainable development. As customary law systems for water resource governance in the context of law continues to be an understudied area, this chapter draws on the wider area of customary law and natural resource governance as well as the growing literature on common property systems and their role in sustainable development.

A *Nature of Customary Law*

Modern water law tends to consider customary systems for water governance as the simple traditional approaches to water resource management used with some level of success. While these systems continue in parts of the world, particularly in rural areas, their relevance is limited and it is presumed that with time they will become obsolete.² This view is in consonance with the understanding of customary law as antiquated, relating to immemorial use and unchanging that was described in the chapter three as underlying modern legal frameworks for water governance. However as shall be argued in this section, such a definition of customary law is not accurate.

1 *Re-defining Customary Law Systems*

Although customary law systems often revolve around a set of rules and norms that are closely associated with the customs of the people, customary law ought not to be reduced to past customs. A study of African customary law systems in the context of Kenya for instance, indicates that though some of the norms demonstrate the features of antiquity and

¹This is the case in Zimbabwe, Tanzania and South Africa. See University of Dar-es-Salaam, International Water Management Institute and Natural Resource Institute, 'Implications of Customary Laws for Implementing Integrated Water Resources Management' (Department for International Development, 16 September 2011 2004), 11.

² See Hodgson and FAO, above n 75, 94.

immemorial usage, many others reflect the dynamics of an evolving societal community.³ Customary law systems are not frozen in time but rather adapt to changes in the social, economic and environmental circumstances. Alternative notions of customary law, providing a more dynamic perspective to the term, have thus been sought.

The definition of non-state legal orders used by the International Council on Human Rights Policy provides a good alternative description of what in this thesis is deemed to be a customary law system:

*[N]orms and institutions that tend to claim to draw their moral authority from contemporary to traditional culture or customs, or religious beliefs, ideas and practices, rather than from the political authority of the state. We use 'legal' to acknowledge the fact that these norms are often viewed as having the force of law by those subject to them.*⁴

The terms customary, custom, community-based, informal and local all of which have different connotations are often incorporated into this more dynamic notion of customary law systems.

In this context, customary law or custom law is thus defined as a reality that emerges and evolves from social practices of a community and which the community eventually accepts as obligatory.⁵ It is a 'living law', one that is adaptable, evolving and innovative.⁶ It consists of the 'values, principles and norms that members of a cultural community accept as establishing standards for appropriate conduct, and the practices and processes that give effect to community values.'⁷ Customary law systems thus signify a locally inspired, informal system in contrast with the existing statutory arrangements for governing water resources. The notion of customary law in these definitions transcends the boundaries set by legal positivism to customary law which include proof of antiquity and immemorial usage.

3Brett L. Shadle, 'Changing Traditions to Meet Current Altering Conditions': Customary Law, African Courts and the Rejection of Codification in Kenya, 1930-60' (1999) 40(3) *The Journal of African History* 411.

4International Council on Human Rights Policy, *When Legal Orders Overlap: Human Rights, State and Non-state Law* (2009) 43.

5Tom Bennett, 'Comparative Law and African Customary Law' in Mathias Reimann and Reinhard Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press, 2006) 641-2.

6Werner Menski, *Comparative Law in a Global Context: The Legal Systems of Asia and Africa* (Cambridge University Press, 2nd ed, 2006) 470.

7 The term 'custom law' is used instead of customary law to avoid the misconceptions associated with customary law including its restriction to traditional norms, norms recognised by statute as custom or any rules governing behaviour. See New Zealand Law Commission, *Converging Currents. Custom and Human Rights in the Pacific*, Study Paper 17 (New Zealand Law Commission, 2006) 47 [4.26].

Extending the above to the realm of water resources, a customary law system for water governance can be defined as the set of obligatory norms and institutions developed and enforced by a community sharing a particular water resource. While the origin of some of these norms and institutions could be linked to past traditions and customs, their subsequent evolution is influenced by a myriad of external factors. The above definitions of customary norms and institutions more accurately reflect the term customary law system as used in this thesis.

Granted that the existence of extra-legal norms and customs, and their influence in society is undeniable, the question of whether these norms constitute law still remains. The above definitions of customary law are criticised on the basis that they do not clearly determine how social norms or customs acquire the status of law. This thesis agrees with the view that not all social norms and customs qualify as law. The addition of the noun 'law' to these norms implies the introduction of a further status to the customs. According to the positivist view of law explicated earlier, these norms and customs are not law unless they include a further custom of recognition for example through codification or other means of acknowledgment or recognition of the customs as forming part of the law of the land.⁸

However, it has been argued that even independently of this formal recognition, social norms and customs may acquire the status of law.⁹ Such a view implies a notion of law distinct from that adopted by legal positivism. An example of a notion of law distinct from that of legal positivism is provided by Craig et al who argue that law is the body of rules recognised by a society as binding and thus in so far as communities regard customary governance as binding, then such systems can be referred to as customary law.¹⁰ For the community, the 'sets of rules, established through the process of socialization, that enable members ... to distinguish acceptable from unacceptable behaviour' are often binding, meaning that in accordance with the above definition of law, these constitute customary law.¹¹ From a legal positivist perspective, such a notion of law is inadmissible as it does not meet the criteria set by the law

⁸John R Morss, 'Can Custom Be Incorporated in Law - On the Place of the Empirical in the identification of Norms' (2008) 53 *American Journal of Jurisprudence*, 85.

⁹Leon Sheleff, *The Future of Tradition Customary Law, Common Law and Legal Pluralism* (Fank Cass 1999).

¹⁰Donna Craig et al, *An Agreement Approach that Recognises Customary Law in Water Management (Land & Water Australia, 2009)* 5.

¹¹Asad Bilal, Huma Haque and Patricia Moore, *Customary Laws Governing Natural Resource Management in the Northern Areas* (IUCN, Environmental Law Programme, 2003) xii.

for recognition as social fact. As noted in chapter three, in modern law recognition as social fact implies statutory enactment.

The above argument of validity of customary law outside of formal recognition by statute is strengthened by analogical arguments on customary international law. Drawing on the mode through which customary international law acquires validity, it has been argued that custom in general could acquire the status of law when it carries a popular perception of valid legal obligation.¹² The rule of international customary law traditionally referred to using the Latin maxim '*opinio juris sive necessitatis*', can thus be applied in national law to determine the extent to which custom can become law. The maxim which is loosely translated as the claim to the legally permissible or obligatory nature of a conduct or of its necessity forms the basis for validity of international customary law.¹³ By extending its underlying premise to customary law, it is argued that the key to determining whether a custom constitutes customary law is to check if the public acts in relation to the custom, as if its observance were legally obligated.¹⁴ In this case, a custom may have the status of law even if not recognised formally by the legal system, in so far as it is perceived as a legal obligation by the public.

The present work acknowledges the above arguments in support of the existence of valid customary law in the absence of legal recognition. This thesis further argues that the problem of acquisition of legal status by customary law is a problem created by the legal positivist notion of law. As shall be demonstrated in chapter 9, in the context of an alternative legal conceptual and theoretical framework, the existence of customary law systems as autonomous legal systems independently of their recognition by statute would not be as problematic.

2 Existence and Relevance

Customary law plays an important role in water management in many countries especially at the community level where certain aspects of water resource management fall outside the ambit of state law and agencies.¹⁵ In some cases, the continued existence of customary law

¹² See, eg, Fisher, Douglas, *The Law and Governance of Water Resources: The Challenge of Sustainability*, New Horizons in Environmental Land Energy Law Series (Edward Elgar 2009).

¹³ Tim Hillier, *Sourcebook on Public International Law* (Cavendish, 1998) 80-1.

¹⁴ Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 17.

¹⁵ Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 75.

systems in water management is the result of a voluntary decision on the part of the state to provide space for local communities in accord with the principle of subsidiarity. However, in many other cases, the customary rules function regardless of not having official recognition or being sanctioned by the formal legal system.

In the developing world, greater ambits of water resource governance fall outside the statutory legal systems, particularly in rural areas and informal urban and peri-urban settlements, where customary law provides a substitute.¹⁶ The governance of water resources by the local community in these countries is thus a self-help mechanism to compensate for the failure or incapacity of the state to implement the existing statutory legal system for water governance.¹⁷ In many parts of rural Africa and especially in Sub-Saharan Africa, a significant proportion of water resources are governed through systems run by local communities, some of which pre-date colonial rule. These systems continued in existence despite the establishment of colonial states with centralized governments.

Various reasons have been put forward to explain the resilience of these systems. Some legal scholars, such as Chanock, argue that the reason for the resilience of the systems in post-colonial Africa is historical.¹⁸ He argues that the reliance by the British colonial government on customary governance systems was a strategy to make up for its administrative incapacity, which in his view was inherited by post-colonial governments.¹⁹ Regardless of the reason for this state of affairs it is now recognised that these systems deeply rooted. While, customary law is undoubtedly more prevalent in developing countries, particularly in Africa, the role of customary law in water resource governance in other jurisdictions including in some developed countries is now recognised. A 2008 study of the water laws from Argentina, Canada, Ecuador, Ghana, Guyana, Nigeria, Peru and Philippines, concluded that customary laws continue to exert a significant influence on the management of water resources in these

¹⁶Shah, Tushar, 'Issues in Reforming Informal Water Economies of Low-Income Countries: Examples from India and Elsewhere' in John Butterworth Mark Giordano Barbara Van Koppen (ed), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CAB International, 2008).

¹⁷Mumma, Albert, 'The Role of Local Communities in Environmental and Natural Resource Management: The Case of Kenya' in LeRoy Paddock et al (eds), *Compliance and Enforcement in Environmental Law. Toward More Effective Implementation* (Edward Elgar, 2011).

¹⁸Chanock, Martin, 'Customary Law, Sustainable Development and the Failing State' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 338.

¹⁹ Ibid.

countries.²⁰ Further, research in countries with minority indigenous populations such as Canada, USA and Australia, confirms the existence among the indigenous peoples of particular beliefs and assumptions relating to social organisation, political authority and property rights that influence resource use and management.²¹ The beliefs and normative and institutional systems used for the governance of resources by these indigenous peoples are considered as indigenous or customary law. A research on the Anmatyerr people in Central Australia for example, confirms that for this particular community the protocols and rules governing the care for land and water are considered as customary law.²²

The growing literature on governing of common property systems has also confirmed the continued relevance of customary law systems. Common property regimes of governance are usually local in origin, often inter-twined with the custom, social life and livelihoods of the users and operate without the intervention of the state. The common property regimes thus, represent a parallel form of governance that is distinct from the state mechanism.²³ Legal property scholars have also recognised the continued relevance of limited commons managed by customary practices and institutions.²⁴ Given the definition of customary law systems adopted in this thesis, the normative and institutional frameworks established by these common property systems constitute forms of customary law.

While legal property scholars have contributed to the subject of common property systems and the normative arrangements surrounding these, a significant part of the literature in this area has come from political science and geography.²⁵ This research confirms that in many parts of the world, common property systems continue to play a significant role in natural

²⁰ See Marco Ramazzotti, 'Customary Water Rights and Contemporary Water Legislation Mapping Out the Interface' (2008) (76) *FAO Legal Papers Online* <<http://www.fao.org/Legal/prs-ol/lpo76.pdf>> 1. For summary of the legal status of customary rights in different countries and their interface with the respective statutory legal systems.

²¹ Sue Jackson and Cathy Robinson, 'Indigenous Customary Governance' (CSIRO, 2009).

²² Donna Craig et al, *An Agreement Approach that Recognises Customary Law in Water Management* (Land & Water Australia, 2009) 5, 6.

²³ René Kuppe et al, *Law & Anthropology: Natural resources, Environment, and Legal Pluralism* (Martinus Nijhoff, 1997).

²⁴ Carol Rose, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711.

²⁵ See, eg, Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990) Thomas Dietz, Elinor Ostrom and Paul C. Stern, 'The Struggle to Govern the Commons' (2003) 302(5652) *Science* 1907; Robert V. Andelson (ed), *Commons without Tragedy: The Social Ecology of Land Tenure and Democracy*, (Centre for Incentive Taxation, 1991).

resource management.²⁶ The research has also contributed to an understanding of the nature of customary law systems for natural resource governance and their role in sustainable development of water governance.

B Customary Law Systems and Sustainable Development

The burgeoning literature from political science and anthropology on common property regimes has led to the identification of certain features common to most customary law systems. This literature has also demonstrated that some of these features explain why certain customary law systems of resource governance result in positive outcomes for sustainable development. Examples of this research include a study of the management of traditional common lands in Japan;²⁷ the common property management system of hill forests in Nepal;²⁸ the management of grazing land in Sudan;²⁹ and irrigation management systems in Nepal,³⁰ among many others.³¹ The research acknowledges that not all customary law systems contribute to sustainable development, as portrayed by those with a nostalgic view of customary law as the harmonious living of indigenous peoples with nature.³² However, certain features of customary law systems contribute to their potential of fostering sustainable development in natural resource governance.³³

²⁶ Ciriacy-Wantrup, Siegfried V. and Richard C. Bishop, 'Common Property' as a Concept in Natural Resource Policy' (1975) 15 *Natural Resources Journal* 713.

²⁷ Margaret A. McKean, 'The Japanese Experience with Scarcity: Management of Traditional Common Lands' (1982) 6 *Environmental Review* 63.

²⁸ J E M Arnold and J Gabriel Campbell, 'Collective Management of Hill Forests in Nepal: The Community Forestry Development Project' (Paper presented at the Common Property Resource Management, Washington, DC, 1986).

²⁹ Roy H Jr Behnke, *Open-range Management and Property Rights in Pastoral Africa: A Case of Spontaneous Range Enclosure in South Darfur, Sudan* (Overseas Development Institute, 1985).

³⁰ Paul Benjamin et al, *Institutions, Incentives, and Irrigation in Nepal, Decentralization: Finance & Management Project Report* (Associates in Rural Development, 1994).

³¹ See Elinor Ostrom and Charlotte Hess, 'Private and Common Property Rights' (2007) *SSRN eLibrary* for a review of bibliography of case studies on common property systems of natural resource governance.

³² See Fred Bosselman, 'The Choice of Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 434, 438 arguing that such a view is inaccurate and not sustainable in the context of modern technology and progress.

³³ See for example Elinor Ostrom, 'A Diagnostic Approach for Going beyond Panaceas' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15181; Amy R Poteete, Marco A Janssen and Elinor Ostrom, *Working Together: Collective Action, the Commons, and Multiple Methods in Practice* (Princeton University Press, 2010).

1 *Chthonic Nature*

One of the fundamental characteristics of customary law systems irrespective of their particular circumstances is their ‘chthonic or home-grown nature’. The term ‘chthonic laws’ is used to describe the characteristic of customary laws being founded on an internal criteria and process as opposed to being developed and imposed from without.³⁴ In addition to being user developed, these systems also rely on users to manage, monitor compliance and enforce the rules of the system. Consequently, they may contain provisions requiring community service for the maintenance of the water resource and other institutional arrangements for resource management.³⁵

Due to the nature of its genesis from the living fabric of life, customary law systems have been described as ‘a bottom-up uprising against the top-down tyranny of the judgement of right and wrong’ claimed by statutory law.³⁶ Customary law is, in this context, likened to the Roman law ‘lex naturae’ that referred to the rationalization of factual observation which when common to different people became ‘ius gentium’.³⁷ While customary law systems are composed of customs and practices of the peoples and developed through a bottom-top approach, the resulting normative system is not necessarily simplistic as some have argued.³⁸ As a study of customary law for natural resource management in the Northern Area of Pakistan concludes, customary law is ‘a sophisticated system with many of the same mechanisms as statutory systems’ such as permits, user fees, administrative and criminal penalties for unauthorised use, rangers, wardens and judges.³⁹

This chthonic feature of customary law systems has been identified as one of the features of these systems that is linked to positive outcomes of sustainable development. Research on irrigation systems from various jurisdictions around the world, demonstrates that resource

³⁴H.Patrick Glenn, *Legal Traditions of the World: Sustainable Diversity In Law* (Oxford University Press, 2007).

³⁵Asad Bilal, Huma Haque and Patricia Moore, *Customary Laws Governing Natural Resource Management in the Northern Areas* (IUCN, Environmental Law Programme, 2003) xiii.

³⁶Peter Ørebech, ‘Customary Law and Sustainable Development’ (Paper presented at the Workshop in Political Theory and Policy Analysis, Bloomington, Indiana, 6 March 2006) fig 1A.

³⁷Ibid, fig 1A.

³⁸See, eg, Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006) 94 arguing that customary law systems for water management represent traditional management practices which cannot work in the context of contemporary water management characterised by high demand and technological capacity for efficient abstraction.

³⁹Bilal, Haque and Moore, above n 35, v.

users with relative autonomy in the design of the rules governing their resource system often achieve greater success in terms of economic benefit, equity and sustainability than where the rules are developed by experts.⁴⁰ Various reasons have been put forward to explain why this is the case.

Resource users or participants are the best placed to develop a working rule system to govern their resource as they have a better understanding and experience on what rules work. A study of irrigation systems in Nepal over a period of twenty-five years for instance demonstrates how difficult it is to develop a system with the right combination of rules that work in the particular setting and how this often occurs through a process involving adjustments to ensure workability and success in implantation.⁴¹ This process involves communication among users and thus implies that the users have sufficient interest in the resource to motivate their participation in the rule making and implementation process.

A further explanation why self-developed water governance systems are more effective relates to implementation and enforcement. One of the challenges faced by statutory systems of natural resource governance has been implementation.⁴² Customary governance systems are often based on customs and practices developed over time by the community. As a result they tend to be perceived by the people as their own. Due to this autochthonous nature they elicit more cooperation from the people than would statutory systems implemented through a top-bottom approach.⁴³ Further, it has been argued that user developed and driven governance systems are less costly and thus more efficient in terms of maintenance and implementation.⁴⁴ This argument is strengthened by evidence from the study of social norms in general which demonstrates that these norms can solve difficult collective action and coordination problems

⁴⁰ See for example Arun Agrawal and Krishna Gupta, 'Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai' (2005) 33(7) *World Development* 1101; James M. Acheson and University Press of New England, *Capturing the Commons: Devising Institutions to Manage the Maine Lobster Industry* (University Press of New England, 2004) .

⁴¹ Arun Agrawal and Krishna Gupta, 'Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai' (2005) 33(7) *World Development* 1101.

⁴² See Lee Paddock et al (eds), *Compliance and Enforcement in Environmental Law: Toward More Effective Implementation*, The IUCN Academy of Law series. (Edward Elgar, 2011) in general.

⁴³ Elinor Ostrom, 'A General Framework for Analyzing Sustainability of Social-Ecological Systems' (2009) 325(5939) *Science* 419.

⁴⁴ See, eg, for argument that in rural Kenya, community-based normative systems for water governance are more efficiently implemented than the norms of the statutory legal system.

cheaply through the application of informal and decentralized mechanisms as opposed to relying on formal law.⁴⁵

Notwithstanding the above, the home-grown nature of customary law could be regarded as a disadvantage in the context of application of customary law to wider social groups. The fact that the norms of customary law often emerge in the context of agreements amongst members of a close-knit community means that the system is efficient for the community members but not necessarily for the society at large.⁴⁶ This raises issues of justice and fairness considering the inappropriateness of binding actors to customs or practices to which they may not have consented.⁴⁷ However, this is not a challenge restricted to customary law systems. In the realm of natural resources, statutory frameworks of countries sharing transboundary resources may come into conflict with the frameworks of other countries. Just as statutory legal frameworks develop mechanisms of resolving transboundary conflicts, customary law systems may also devise mechanisms for dealing with potential conflict.

2 *Sui Generis Conceptualisation*

A further feature of customary law systems that distinguishes them from statutory law systems relates to conceptual framing. Customary law systems' understanding of concepts such as ownership and property rights is distinct from that of customary law systems. The term *sui generis* is used to denote the original and unique character of the conceptualisation in these systems.

In modern water law, water is understood as an economic good capable of being traded in market conditions. Customary law systems do not define water in purely economic terms. In customary law systems of the South African communities for example, water is regarded as a God-given common pool resource which thus cannot be owned individually.⁴⁸ Among Aboriginal Australian communities, water is considered as a feature of the Indigenous cultural landscape with an economic significance, but it is also accorded a symbolic,

⁴⁵ Robert C Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991); Mark West, 'Legal Rules and Social Norms in Japan's Secret World of Sumo' (1997) 26 *Journal of Legal Studies* 165.

⁴⁶ Robert C Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991), 167-183.

⁴⁷ See Smith, Henry E, 'Community and Custom in Property' (2009) 10(1) *Community and Property* 4.

⁴⁸ Penny Bernard, 'Ecological Implications of Water Spirit Beliefs in Southern Africa: The Need to Protect Knowledge, Nature and Resource Rights' (2003) 27 *USDA Forest Service Proc RMS* 148.

metaphorical and cultural significance.⁴⁹ Certain Indigenous law systems also attribute to water a religious meaning, recognising its importance in ceremonial uses, as a symbol and in some cases as an object of worship.⁵⁰ The combined symbolic, cultural and economic value of water makes it difficult for customary law systems to conceive of water as a commodity. Water in these systems is regarded as a value and not just a thing with an economic value.

This difference in perception of water in customary law systems also results in a different view on water rights. As noted in the preceding chapter, the concept of property in modern water law systems is perceived in the two dimensional context of state management or private ownership with a growing emphasis on market mechanisms for regulating the resource. In contrast, customary law systems of water governance as will be demonstrated by the case of Marakwet admit of common property ownership regimes as well as semi-commons and though recognising an economic value of water recognise its multiple values.

A further distinction in the framing of water governance in customary law systems relates to the separation of land and water. Most customary law systems are based on an integrated perspective of natural resources. As a consequence, the distinction between land and water resources made by statutory legal systems is almost inexistent in customary law systems.⁵¹

3 Localism

Customary law systems tend to operate within a relatively small and well defined boundary.⁵² Due to their origin and evolution, the constitutive norms of a customary law system often embody a wealth of experience and are particularly suited to the local situation, livelihoods, cultures and social mores of the people.⁵³

The development of a normative and institutional governance framework for the natural resource is borne of an appreciation of the importance of the shared resource for the community. This phenomenon of localisation arguably contributes to sustainable development of the resource as the effects of unsustainable conduct have an immediate effect

⁴⁹Karen Hussey, Stephen Dovers and CSIRO (eds), *Managing Water for Australia: The Social and Institutional Challenges* (CSIRO, 2007) 26.

⁵⁰Rhett BLarson, 'Holy Water and Human Rights: Indigenous Peoples' Religious-Rights Claims to Water Resources' (2011) 2 *Arizona Journal of Environmental Law and Policy*.

⁵¹Sue Jackson and Cathy Robinson, 'Indigenous Customary Governance' (CSIRO, 2009) 3.

⁵²Elinor Ostrom, *Crafting Institutions for Self-governing Irrigation Systems* (ICS Press, 1992).

⁵³Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 75.

on the livelihoods of the community. This argument has been used in support of a preference of customary law systems for natural resource governance over centralized statutory governance systems.

Richardson makes the same case for customary law, in his proposal of the proximity principle as a potential mode of overcoming the limits of environmental law in fostering sustainable development of natural resources.⁵⁴ Founding his argument on evolution psychology, he holds that human beings are not inherently sustainable but that the proximity of the negative effects of their unsustainable conduct can elicit a change in behaviour.⁵⁵ This argument continues that of Ellickson, showing how individuals living in close communities have a capacity to resolve the problems of unsustainable use of shared resources through self-developed mechanisms of order without the need for formal legal rules.⁵⁶ The success of these communities is, in Richardson's view, the result of the proximity of the community with the environmental burden, which proximity he argues triggers the needed 'deep-seated evolutionary, cognitive and emotional response that fuels empathy and compassion for other species and nature generally'.⁵⁷

The above notwithstanding, it has been contended that localisation results in benefits for the immediate community whose interest are well represented, but not for outsiders. As a consequence, some hold that intra-community governance systems have a limited effectiveness given their incapacity to govern the relations between the community and other water users outside the group.⁵⁸

4 *Inherent Sustainability*

It is argued that customary governance systems tend to be versatile and flexible reflecting the prevalent social, economic, cultural, political and ecological circumstances.⁵⁹ To this extent

⁵⁴ Benjamin J. Richardson, 'A Damp Squib: Environmental Law from a Human Evolutionary Perspective' (2011) *SSRN eLibrary*.

⁵⁵ *Ibid.*

⁵⁶ Robert C Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991), 167-183.

⁵⁷ Richardson, above n 54.

⁵⁸ Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006) 94, note 64.

⁵⁹ See for example Australian Law Reform Commission, *The Recognition of Aboriginal Customary Laws*, ALRC 31 (1986) for the Australian Aboriginal experience and Rajendra Pradhan (ed), *Legal Pluralism and Unofficial Law in Social, Economic and Political Development, Papers of the XIIIth International Congress, 7-10 April, 2002* (ICNEC Kathmandu, 2002) 409-446 for experience from India.

they contain an inherent adaptive mechanism that makes them suitable for natural resource management. This is because the social, economic and ecological factors surrounding natural resources are also in a state of constant flux and consequently, an ideal system of managing these resources must be capable of adapting itself to these changing conditions.⁶⁰

While the popularisation of the concept of sustainable development is recent, its underlying idea of sustainability is not and is in fact as old as humanity.⁶¹ For as long as human beings have inhabited the earth they have learnt how to utilise natural resources for their livelihood, a skill necessary for the very survival of the community. It is argued that human beings recognise the probability and unpredictability of environmental change and thus have learnt to adopt a precautionary principle, sacrificing immediate gratification to future uncertainty.⁶² Custom has played an important part in this process of sustainable natural resource governance. This is because communities develop customs and practices to govern natural resource use based on an accumulated wealth of knowledge and experience of living in harmony with the ecosystem.⁶³ Customary law systems thus constrain unsustainable exploitation of common pool resources through taboos, superstition or other cultural and social norms.⁶⁴

However, some customary law governance systems or common property systems have failed to prevent unsustainable use of resources. For instance, Polynesian customary law systems did not prevent the destruction of the Rapanui (Easter Island).⁶⁵ Case studies of fishing communities in Mexico have also shown how, despite having the capacity and freedom to

⁶⁰Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

⁶¹Klaus Bosselmann and David Grinlinton (eds), *Environmental Law for a Sustainable Society*, New Zealand Centre for Environmental Law Monograph Series (New Zealand Centre For Environmental Law, 2002) 81.

⁶²Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 21.

⁶³Fisher, Douglas, *The Law and Governance of Water Resources: The Challenge of Sustainability*, New Horizons in Environmental Land Energy Law Series (Edward Elgar 2009).

⁶⁴Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 21.

⁶⁵Pole Atanraoi et al, *Customary land tenure and sustainable development: complementarity or conflict?* (South Pacific Commission Noumea and Institute of Pacific Studies University of the South Pacific, 1995) 5.

self-organise, some communities such as Kino Bay fishers failed to develop governance systems fostering sustainable development.⁶⁶

In light of the above, some authors have, through multiple case study analysis, sought to specify the conditions upon which groups of users of a common pool resource will self-organise and sustainably govern their shared resources.⁶⁷ Although, this research provides a useful basis for comprehending common property systems and their potential for sustainable resource governance, they are not contextualised in law. Most of the research is based in political science, economics and geography and more recently in the specific discipline of institutional analysis and design.⁶⁸ As a consequence, this work has tended to focus on the institutional aspects of the common property governance systems, with little emphasis on the normative aspect or customary law used by these institutions. Ørebech et al have in their book on customary law and sustainable development, sought to apply some of the insights from this literature on common property to law.⁶⁹ Building on this work and on the insights from some of the common property literature, this thesis proposes an analytical framework for investigating the association between customary law systems of resource governance and positive outcomes of sustainable development.

C *An Analytical Framework for Investigating Customary Law Systems of Water Governance that Foster Sustainable Development*

Natural resource systems are complex systems as can be deduced by the adoption of sustainable development as the goal for such systems. Consequently, the governance model adopted for such systems must be capable of operating with the complexities and uncertainties associated with the system. Research on governance models for complex systems from different disciplines including management, law, ecology and economics has identified adaptability as an indispensable principle for the development of a successful

⁶⁶Xavier Basurto and Elinor Ostrom, 'Beyond the Tragedy of the Commons' (2009) 52(1) *Economia delle fonti di energia e dell ambiente* 35.

⁶⁷See, eg, Elinor Ostrom, 'A Diagnostic Approach for Going beyond Panaceas' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15181; Elinor Ostrom, and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*; Elinor Ostrom, Larry Schroeder and Susan Wynne, 'Analyzing the Performance of Alternative Institutional Arrangements for Sustaining Rural Infrastructure in Developing Countries' (1993) 3(1) *Journal of Public Administration Research and Theory* 11.

⁶⁸ See Elinor Ostrom, 'Institutions and the Environment' (2008) 28(3) *Economic Affairs* for the institutional analysis design methodology.

⁶⁹Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

governance model for complex systems.⁷⁰ Adaptability refers to the inherent capacity of a system to deal with the present conditions, but also to continue being relevant in the future which implies a capacity to adjust to changing conditions.

In light of the above, it is argued that, in order for a legal framework for natural resource governance to foster sustainable development, the system of law on which it is founded must be ‘an open and flexible system in continual communication with societal development’.⁷¹ This is because the factors involved in sustainable development of natural resources, such as the precautionary principle; intergenerational equity; eco-system health and climate change, are unpredictable, complex and constantly changing.

As noted in section A of this chapter, customary law systems of resource governance are a popular normative pattern reflecting the common understanding of valid compulsory rights and obligations relating to the resource. Customary law systems for natural resource governance thus evolve in response to the need to transform the ‘unlimited commons’ into a ‘limited commons’.⁷² Consequently, most common property governance regimes are based on a customary law system. This connection between customary law systems and common property regimes is corroborated by other researchers.⁷³

As a result of their genesis and nature, customary law systems have the potential to develop adaptable resource governance systems that contribute to sustainable development. Fred Bosselman takes this argument a step further and makes a link between sustainable customary law systems and positive outcomes of sustainable development.⁷⁴ He identifies five main characteristics that demonstrate adaptability of a customary law system and

⁷⁰See Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 246-252. For a review of literature on resilience from the different disciplines.

⁷¹Peter Ørebech, 'Sustainable development by means of market distribution mechanism' (Paper presented at the Econometrics of Environment and Transdisciplinary : LIst International Conference, Lisbon, Portugal, April 10-12, 1996 1996), 906.

⁷²Peter Ørebech and Fred Bosselman, 'The Linkage between Sustainable Development and Customary Law' in P Ørebech et al (eds), *The Role of Customary Law in Sustainable Development*, (Cambridge University Press, 2005) 12, 23.

⁷³ See, eg, Eric Kwa et al, 'Indigenous Governance of Natural Resources within Melanesia: A Project to Develop Legal Capacity-Building Strengthening Community-Based Institutions, Customary Laws and Environmental Management Approaches' (Macquarie University, 2005); Erika J Techera, *Law, Custom and Conservation: The Role of Customary Law in Community-based Marine Management* (PhD Thesis, Macquarie University, 2009).

⁷⁴Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

demonstrates how these features enable the customary law system to attain positive outcomes with respect to sustainable development.⁷⁵

Building on the features developed by Bosselman and drawing on the insight gained from Ostrom and Basurto's proposed analytical tool for studying rules and norms of customary law systems in a dynamic environment,⁷⁶ this thesis proposes an analytical framework for investigating customary law systems of natural resource governance. The framework identifies some of the features of customary normative systems that strengthen their adaptability and thus improve their potential of resulting in positive outcomes for sustainable development.

The framework identifies five main indicators of successful systems all of which are dependent on the users enjoying some level of autonomy to develop the system. These indicators are discussed in greater detail in the following subsections. The diagram below represents the main features of the framework for analysis of customary law system.

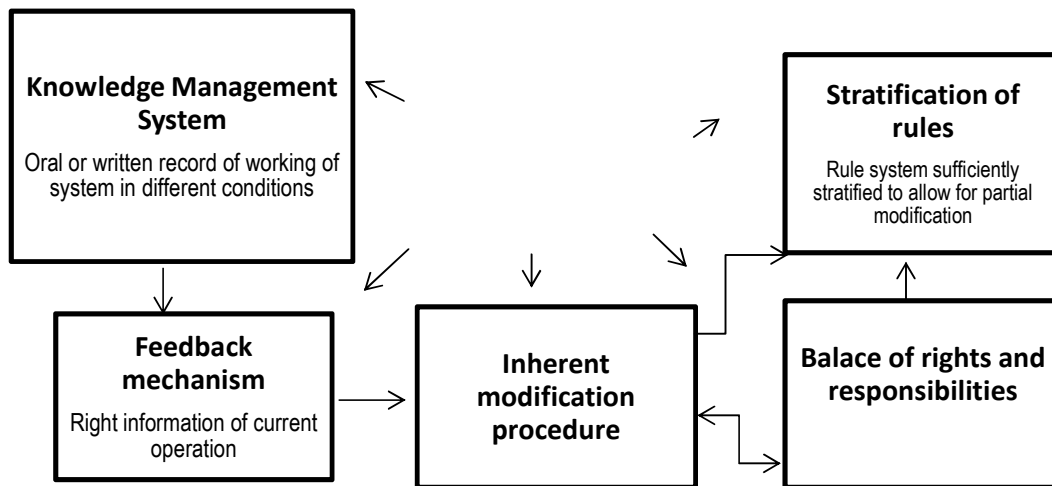


Figure 4 Framework for Analysing Customary Law Systems of Water Resource Governance

1 Knowledge Management System

Bosselman argues that one of the fundamental questions to ask about any customary law system for natural resource governance is whether it is possible to review the system's experience in responding to environmental change.⁷⁷ The rationale of framing this question

⁷⁵Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 245-281.

⁷⁶Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*.

⁷⁷Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 253.

would be that the presence of a record of past experiences implies a conscious effort of the system to gather knowledge of the system. This thesis argues that apart from a record of past adaptations, a successful system ought to have a form of a knowledge management system. Such a system would ensure that information is gathered on the factors affecting the social, economic and environmental aspects of natural resource management and that this information is used to generate knowledge which is preserved within the system.

Ostrom and Basurto point out that a strong knowledge base is dependent on experience of frequent biophysical changes providing the participants with the tested experience of dealing with change.⁷⁸ This thesis notes that the resilience of the system over several years is often indicative of some form of knowledge system that may explain the continued survival through biophysical changes which are often cyclic. While an effective knowledge management system facilitates sustainability, it may not provide a guarantee where environmental changes in the future are novel or exacerbated by anthropogenic activities for example the adverse effects of climate change. The uncertainty of predicting the effects of such activities and changes or the resulting unprecedented environmental changes makes sustainability a challenge. In such circumstances of uncertainty including in scientific knowledge, developing sustainable governance systems becomes a problem not just for customary law systems but also for statutory legal systems.

2 *Feedback Mechanism*

A second feature of potentially successful customary law systems is the presence of a feedback mechanism in the system.⁷⁹ The proper working of the feedback mechanism is dependent on the knowledge management system which ensures that relevant information is captured by the system and used to drive adaptation to change. Bosselman focusing on the adaptation to environmental changes explains that a successful system must have ways of ensuring that accurate information is promptly fed back into the system so that the information can be used in the decision making process.⁸⁰ Apart from information on environmental change, the feedback mechanism should ensure that a wider base of knowledge including economic and social conditions of the society is generated and used to

⁷⁸Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*14, 4.

⁷⁹Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 257.

⁸⁰ Ibid.

drive decision making as well as rule modification. Ostrom and Basurto illustrate how such a feedback mechanism can operate arguing that the success of the system is dependent on a social and economic environment that facilitates learning from successes and failures of others.⁸¹

3 *Inherent Rule Modification Procedure*

Bosselman's third feature is borrowed from Ostrom's work on rules and game theory in the context of institutional arrangements for natural resource management.⁸² Ostrom argues that one of the features that can be used to diagnose a successful institutional arrangement for natural resource management is the presence of a procedure for improving the rule system to ensure its continued relevance in the context of changing circumstances.⁸³ The maintenance of an open-minded attitude to rule making by those involved in designing and modifying the rule system assures the continued congruence between the rule system and the local conditions. In the context of modern legal systems, this would appear to be an inaccessible feature for customary law systems, as custom and customary are often associated with inflexibility and antiquity.⁸⁴ However, this misconception of traditional as meaning inflexible adherence to the past has been clarified and the dynamic nature of customary law systems recognised.⁸⁵ In fact customary law systems may be more adaptable in this regard given their tendency to provide most participants with a voice to propose or decide rule changes.⁸⁶ As noted earlier, the risk of elite capture and corruption exists in customary law systems but this risk can be overcome through the inclusion of checks and balances in the system and as shall

⁸¹Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*14.

⁸²Elinor Ostrom, Roy Gardner and James Walker, *Rules, Games, and Common-pool Resources* (University of Michigan Press, 1994).

⁸³Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*9-11.

⁸⁴ See, eg, Melanie Durette, 'A Comparative Approach to Indigenous Legal Rights to Freshwater: Key Lessons for Australia from the United States, Canada and New Zealand' (2010) 27 *Environmental and Planning Law Journal* 297. On requirement for unbroken connection with resources in the recognition of Native Title in Australia.

⁸⁵Daryl Stump, '"Ancient and Backward or Long-Lived and Sustainable?" The Role of the Past in Debates Concerning Rural Livelihoods and Resource Conservation in Eastern Africa' (2010) 38(9) *World Development* 1251.

⁸⁶Peter Ørebech, 'The Place of Customary Law in Democratic Societies' in P Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) ; Peter Ørebech, 'Customary Law and Sustainable Development' (Paper presented at the Workshop in Political Theory and Policy Analysis, Bloomington, Indiana, 6 March 2006).

be seen later on through integration within the statutory legal system, which avails checks and balances accountability and fairness.

4 *Stratification of Norms*

One of the conditions for ensuring that the feedback mechanism effectively uses the rule changing procedure is an internal requirement for the rule system to be sufficiently stratified which feature Bosselman refers to as ‘fine graininess’.⁸⁷ A rule system whose rules are sufficiently stratified can be easily modified as partial changes can be made without having to affect the entire system. This feature we argue guarantees the sustainability of the rule system more than guaranteeing the sustainability of the resource system. Nevertheless, the success of the legal system in achieving sustainable development is indisputably dependent on the survival and resilience of the system in itself. A system with a great potential to deliver sustainable development outcomes would be useless if it were to fail in its actual operation as a rule system. An example of such a failure would be a system whose design requires an entire overhaul each time a single rule is changed.

5 *Balance of Rights and Duties*

Bosselman identifies as a final feature the capacity of the system to achieve consensus on changes in rules which is dependent on the rules addressing and balancing a wide range of rights and responsibilities.⁸⁸ This feature which is more specific to the property rights regime than the entire rule system shall be discussed in the next section.

Ostrom and Basurto have identified other features not explicitly included in Bosselman’s indicators for successful customary law systems. They argue that rule systems are likely to be successful: when most participants have a voice in proposing rule changes; when the payoff for participants’ is high and directly proportionate to the transaction costs associated with rule changing procedures for better outcomes; and where the rule system balances the autonomy of those making rules with their accountability.⁸⁹ These features together with the need for negotiation and consensus identified by Bosselman in the course of discussing his final feature are all directed at ensuring that the rule system is imbued with principles of

⁸⁷Fred Bosselman, ‘Adaptive Resource Management through Customary Law’ in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 259.

⁸⁸ Ibid 262.

⁸⁹Elinor Ostrom and Xavier Basurto, ‘The Evolution of Institutions: Toward a New Methodology’ (2009) *SSRN eLibrary*14.

democracy. The present research thus argues that a further characteristic of successful customary law systems is their operation on the basis of democratic principles.

6 *Autonomy*

As Okoth-Ogendo rightly observed, the multiplicity of factors that influence the outcome of environmental governance systems make it difficult to develop effective legal systems of governance and thus the only way to guarantee that legal rules and institutions will ensure positive outcomes is to ensure they are integrated into the social, environmental, economic as well as cultural psyche of those managing the environmental resources.⁹⁰ This observation is backed by empirical evidence from many jurisdictions around the world. Research on user managed irrigation systems from different world regions has proved that resource users who enjoy relative autonomy in designing the rule system for the governance of their shared resource frequently achieve better economic and equitable outcomes than when the rule system is designed externally.⁹¹

The fact that the outcomes are more positive when rules are designed by the users does not necessarily imply that users have all the knowledge necessary to deal with the complexities associated with natural resource governance. Nevertheless, the participation of the users in the development and operation of the normative system grants it legitimacy. Further, such an approach to the development of law is in accord with the discursive process proper to practical reason which, as shall be argued in chapter nine of this thesis, is the essence of law and legal science. This thesis thus argues that autochthony is the most essential principle for a successful customary law system or any other legal system. This primary importance is based on the fact that all the other features of successful law systems, discussed above, depend on this principle.

The above indicators provide indicators for investigating the potential of customary law systems of resource governance to achieve positive outcomes in relation to sustainable development. In the preceding chapter the issue of recognition of customary legal systems for

⁹⁰ Okoth-Ogendo argues this in the context of environmental governance of the Kenyan agrarian sector. See HWO Okoth-Ogendo, 'Managing the Agrarian Sector for Environmental Sustainability' in Charles Okidi, Patricia Kameri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers Ltd, 2008) 222.

⁹¹ Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990); Arun Agrawal and Krishna Gupta, 'Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai' (2005) 33(7) *World Development* 1101; Schlager, Edella and Elinor Ostrom, 'Common Property and Natural resources: A Conceptual Analysis' (1992) 68(3) *Land Economics* 249.

water governance from the perspective of modern water laws was reviewed. In light of the nature and features of customary law systems discussed above, the next section revisits the issue of recognition of customary law systems in modern legal frameworks and critically analyses the adequacy of the approaches anticipated.

D *Recognition of Customary Law*

As noted in the previous chapter, modern water law considers customary law systems only in so far as the new statutory water system ought not to penalise, harm or deprive pre-existing customary rights of water access as this would undermine its implementation.⁹² The possibilities for recognition of customary law in water resource governance depend on the legal system's framework for recognition of customary law or customary rights in general.

1 *General Provisions for Recognition of Customary Law in Statute*

In many settler colonies, the recognition of indigenous rights to water resources is linked to treaties and subsequent laws recognising indigenous rights over land. In Australia, Canada, the United States and New Zealand for instance, indigenous water rights accompanying native title are limited to rights that are customary in nature, the effect of which is to restrict their content and scope to non-economic rights.⁹³ In the context of such frameworks indigenous peoples seeking to use customary law in the management of their water resources are often faced with the challenge of how to give meaning to their rights in a statutory legal framework of a narrowly defined rights-based discourse.⁹⁴ This is because the broader property rights framework, in which legal frameworks for water governance operate, consider indigenous rights and their right to use customary law systems of governance as 'second order rights to be assessed through broad policy objectives after others have been guaranteed or assigned their more concrete rights'.⁹⁵ Such approaches do not provide the adequate space necessary for customary arrangements to work effectively and thus contribute to the economic livelihoods of indigenous peoples and the integration of natural resources required

⁹²Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 75.

⁹³Melanie Durette, 'A Comparative Approach to Indigenous Legal Rights to Freshwater: Key Lessons for Australia from the United States, Canada and New Zealand' (2010) 27 *Environmental and Planning Law Journal* 297.

⁹⁴Donna Craig and Michael Jeffery, 'Recognition and Enforcement of Indigenous Customary Law in Environmental Regimes and Natural Resource Management' in Lee Paddock et al (eds), *Compliance and Enforcement in Environmental Law* (Edward Elgar Cheltenham, 2011) 535.

⁹⁵Donna Craig, and Elizabeth Gachenga, 'The Recognition of Indigenous Customary Law in Water Resource Management' (2010) 20 *Water Law* 278, 280.

to achieve sustainable development.⁹⁶ The fact that such approaches are incompatible with the fundamental feature of customary law systems which is their autochthonous nature renders them inappropriate channels for the operation of customary law systems for water governance in the wider statutory legal framework.

In Africa, where due to colonization, a duality of African traditions and elements of western modernity is evident, legal systems have adopted varied approaches towards customary law. Hinz summarises the approaches taken by different African countries into five models: strong modern monism where customary law and institutions are abolished; unregulated dualism in which the state explicitly or implicitly ignores customary law and institutions but tolerates their existence; regulated (weak or strong) dualism where the state confirms to differing degrees customary law as a separate semi-autonomous system; weak modern monism in which the state recognises customary law and institutions but not as a semi-autonomous system but rather as a possible candidate for incorporation; and finally strong traditional monism in which customary law is the law of the state.⁹⁷

In the context of the above model, Kenya can be described as having adopted a regulated weak dualism. Kenya's legal system recognises customary law as a source of law in the country albeit as subordinate to all other written laws and subject to the proviso that its application ought not to be repugnant to justice and morality.⁹⁸ In the context of such a framework, the state recognises some realms in which customary law operates particularly in matters of personal law such as marriage and succession. However, in other realms such as commercial law, customary rights and systems of governance are not directly addressed. The effect of this approach on Kenya's statutory legal framework for water governance and its interaction with customary governance systems shall be investigated in greater detail in later chapters.

Despite the limited scope for recognition of the right to use customary law governance systems in the general statutory legal frameworks of many jurisdictions, most frameworks for water governance arguably provide options through which communities can exercise their

⁹⁶Lisa Chartrand, 'Accommodating Indigenous Legal Traditions in Canada' (2005)
<<http://www.indigenousbar.ca/pdf/Indigenous%20Legal%20Traditions.pdf>>.

⁹⁷Manfred O Hinz, 'Traditional Governance and African Customary Law: Comparative Observations from a Namibian Perspective' in N Horn and A Bösl (eds), *Human Rights and Rule of Law in Namibia* (Macmillan, 2008)

⁹⁸*Judicature Act 1967* (Kenya) s 3.

rights. As discussed in the previous chapter, most modern water laws include provisions granting users the right to participate in the management of their natural resources. In the following section, the effectiveness of this right to participate is analysed from the perspective of the customary law systems.

2 Participation

Research in natural resource governance demonstrates the advantages of fostering participation in natural resource governance for sustainable development.⁹⁹ Participation provides an important avenue for indigenous peoples to take part in the governance of their natural resources.¹⁰⁰ As noted in the analysis of national legal frameworks for water governance, the provisions for stakeholder participation in the water laws are considered as useful channels for the participation of indigenous peoples and institutions in the management of their water resources. However, the use of participation mechanisms as an avenue for recognition of customary rights and institutions raises issues from a customary law perspective.

The powers assigned to customary institutions in modern water laws are described as the right 'to participate in planning and implementing water development projects'.¹⁰¹ Given that customary rights and governance systems precede statutory legal frameworks this elicits the question, on what basis the statute grants this right. Further, in light of the nature and features of customary law systems discussed above, the extent to which the participation provisions anticipated in statute can be considered a power or right is questionable from the perspective of customary law systems. While appreciating the varied degrees of participation anticipated in different legal frameworks for natural resource governance, participation provisions in water law frameworks still falls short of the pre-existing right of communities to develop and implement their own customary law system for governing their water resources. The limitation of this statutory provision for participation is further demonstrated by the proposed use of statutorily created Water User Organisations (WUOs) to accommodate customary law

⁹⁹Michael Jeffery and Donna Craig, 'Non-Lawyers and Legal Regimes: Public Participation for Ecologically Sustainable Development' in David Leary and Balakrishna Pisupati (eds), *The Future of Environmental Law* (UNU Press, 2010) 103.

¹⁰⁰Rose Mwebaza, *The Right to Public Participation in Environmental Decision-making: A Comparative Study of the Legal Regimes for the Participation of Indigeneous People in the Conservation and Management of Protected Areas in Australia and Uganda*. (Doctor of Philosophy Thesis, Macquarie University, 2007).

¹⁰¹Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 76.

systems. Although described as water management institutions, the experience in jurisdictions where they have been enacted indicates that, WUOs serve as institutional mechanisms for combining resources of interested parties but they do not actually effect water management.¹⁰²

The above observations do not imply that participation of indigenous peoples and their customary norms and institutions in water resource management should not be fostered. Rather, it suggests that care should be taken in determining how such participation can be implemented to achieve better outcomes for customary governance systems. In modern water law, notions such as participation and co-management are often watered down and used to mask a compromise strategy to avoid the more complex claim for political development of indigenous self-determination.¹⁰³ Consequently, these provisions for participation must be critically analysed and not only from a statutory perspective but also from the perspective of indigenous peoples, their customary law and governance institutions and their expectations with respect to integration with the statutory legal frameworks.

A common factor considered as central for customary law governance systems is the right to self-determination. Experience from Australia indicates that from the point of view of indigenous peoples', living on their lands and taking primary responsibility constitutes a necessary condition for them to observe their customs.¹⁰⁴ This primary responsibility is not incompatible with other non-indigenous uses, access, or even tenure but being primary it is argued that it precedes any co-management and forms the framework determining how such management ought to proceed.¹⁰⁵ These or similar sentiments have been echoed by indigenous peoples from other parts of the world including Canada as demonstrated in the following statement:

*We did and still insist that our people are involved with management decisions based, on respect and application of our traditional laws...to ensure resources are being used sustainably and properly - it is part of our right and responsibility for self-government - and necessary for our survival.*¹⁰⁶

¹⁰² AJ James, 'Institutional Challenges for Water Resources Management: India and South Africa' (2003) *Water, Households and Rural Livelihoods (WHIRL) Project Working Paper 7* <<http://www.nri.org/whirl>>.

¹⁰³ Donna Craig, 'Best Practice Models and Approaches for Indigenous Engagement in the Murray Darling Basin. Research Report Prepared for Murray Darling Basin Commission for the Development of the Indigenous Action Plan' (Macquarie University Centre For Environmental Law, 2004).

¹⁰⁴ Sue Jackson and Cathy Robinson, 'Indigenous Customary Governance' (CSIRO, 2009) 3.

¹⁰⁵ *Ibid*, 3.

¹⁰⁶ Statement by Neil Sterrit of the Gitksan Tribal Council quoted in *ibid*, 4.

In the course of the fieldwork conducted by the researcher similar views were expressed by the participants of the focus group discussion with clan elders:

*The government should consult with the people of the community before planning...the laws (statute) are written by people who live far away and have never been here in Marakwet and do not understand how things work.... Our laws have sustained us this far so if they want to change...they should consult us. If they do not consult then they should stay with their laws and the community stays with theirs.... the land and our security are from the government but consultation is necessary as we are the custodians of the resource.*¹⁰⁷

This thesis argues that the notion of law underlying modern legal systems is culpable for the shortcomings of existing modes of formal recognition of customary law systems discussed above. In the context of modern law's conceptual and theoretical framework, formalization of custom inevitably results in the 'stripping out of its dependence on community context as it becomes general law'.¹⁰⁸ This is because the legal systems consider statute as the only legitimate source of rules and state governments as the primary source of authority. This is demonstrated by the experience of India where the common law's perspective of Indian customary law perceived of custom in the context of legality as opposed to authority. Consequently, though recognised as a source of law, custom had to be sanctified by statute or declared by the state and then assessed by the judiciary for legality and justice.¹⁰⁹ This approach which underlies most common law frameworks undermines their capacity to effectively recognise customary water governance systems.

In order for customary law systems to be recognised by these formal systems, they must lose a feature identified as most fundamental to their existence and sustainability that is, their chthonic nature. As noted by the analysis of the indicators of successful customary law systems, this feature is fundamental for the effectiveness of the systems in contributing to sustainable development. The importance of safeguarding true nature and effectiveness of customary law systems of natural resource governance has led to the search for alternative paradigms for indigenous governance and natural resource management.

¹⁰⁷Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District-Kenya, February 10 2010).

¹⁰⁸Smith, Henry E, 'Community and Custom in Property' (2009) 10(1) *Community and Property* 4, 7.

¹⁰⁹M S Vani, 'Customary Law and Modern Governance of Natural Resources in India- Conflicts, Prospects for Accord and Strategies' (Paper presented at the Legal Pluralism and Unofficial Law in Social, Economic and Political Development International Congress, Chiang Mai, Thailand, 7 to 10 April 2002), 14.

E *Conclusion*

This chapter set out to develop a framework for responding to the research questions to be investigated by the case study in the next two chapters.

Firstly, the chapter analysed the existing literature on customary law systems, to determine the nature and features of these systems. This analysis provides a basis for responding to the question does customary law continue to exist in the context of water resource management and more specifically in the context of the Marakwet. Customary law, defined in the sense of a living reality that emerges and evolves from social practices of a community and which the community eventually accepts as obligatory, continues to exist in many jurisdictions. Although these customary law systems are localised and thus reflective of particular circumstances, literature on the subject identifies certain common features of these systems. The features discussed in this chapter will be used to analyse the Marakwet's water governance system to determine the extent to which a customary law system of water governance continues to exist in their case.

Based on existing literature on common property systems and customary law systems, and their potential to result in positive outcomes for sustainable development, this chapter developed an analytical framework for investigating the potential of customary law systems to contribute to sustainable development. This framework provides a tool for responding to the questions how effective are customary law systems in water resource governance and what principles do these systems demonstrate that indicate potential positive outcomes for sustainable development.

Finally, this chapter examined some of the main approaches taken to recognition of customary law systems in some common law jurisdictions. This section concludes that the approaches to recognition of customary law do not provide a suitable framework for the integration of customary and statutory law systems. This is because, the provisions for recognition of customary law are limited by the legal positivist notions of law and customary law which, as argued in preceding chapters, set the parameters within which modern law operates.

VI CHAPTER 6 MARAKWET'S WATER RESOURCE GOVERNANCE SYSTEM

Using the theoretical and analytical framework for customary law systems discussed in the previous chapter, the present chapter analyses Marakwet's customary water resource governance system. The objective of this chapter is to determine if a customary law system for water resource governance continues to exist in the case of the Marakwet community and if so to what extent it is effective in the contemporary management of water resources. The case study also provides the opportunity for critically analysing the potential of Marakwet's customary water governance systems to contribute to sustainable development.

A *Nature of Marakwet's Customary Water Governance System*

Customary law, as was defined in the previous chapter, relates to norms and institutions that claim their authority from contemporary to traditional culture, customs or religious beliefs, ideas and practices rather than from the political authority of the state. To this extent, societal life in Kaben location in Marakwet District can be described as being governed primarily by customary law. Most of the participants interviewed during the field work, frequently spoke of 'the law of our forefathers' referring to the law governing their water resources and community life in general.¹ An interview with the area Chief who is an administrative officer appointed by the government also confirmed this.² He explained that most aspects of life in the community, including the use of land and water resources, are governed by customary law. Due to its location and size, Kaben has few state administrative offices and no law court. As a result, most of affairs of the community are governed by their customary normative and institutional structures.

There is no written record of the customary law of the Marakwet and since its inception it has been passed on orally from one generation to the next. Discussion with the representatives of the elders who are the custodian of customary law reaffirmed that all land and water resources in the district are subject to customary law. They explained that though they do not have a written record of this law, its existence is not disputable. According to tradition, the origin of the customary law dates back to the time of their forefathers. In describing the genesis of the customary law for water governance, the elders pointed out that this law was

¹ In discussions with various members of the community, reference was often made to 'sheria ya mababu wetu' which is Swahili for the law of our forefathers.

² Interview with Joseph Yego Lokanda, Chief of Kaben Location (Marakwet District-Kenya, 22 November 2010).

developed following the construction of irrigation furrows to provide water to alleviate scarcity caused by drought. They explained that the law was the result of negotiation among clan elders who had been involved in the furrow construction and who represented the entire community.

The customary law of water governance is composed of rules on allocation of water, management of the furrows and preservation of water quantity and quality. Examples of rules on allocation include the application of different rules for water for irrigation and water for domestic use. While there are no restrictions on where and how much water can be collected for domestic use, there are strict restrictions on use of furrows for irrigation based on clan lines. Some rules relating to quantity of water extend to the use of land and other resources. For example one of the rules included in the water law, is the prohibition of felling of trees near the Embobut River, the source of the irrigation furrows. This prohibition which dates back to the origin of the system extends to felling of trees or cutting of vegetation even for use in the construction of furrows which as explained by the elders interviewed often means that the material for furrow construction has to be sourced from elsewhere.

The customary law system also includes rules on quality of the water. An example of a rule relating to water quality is the general prohibition against bathing or washing in the furrow. Apart from the rules, there also many taboos associated with the furrows, all of which the clan elders interviewed indicated demonstrate the importance of water and the need to preserve it by respecting the customary water law.

The community members' description of their laws suggests that it is closely linked with traditional customs. Many of these traditional customs and practices are still in force today, which seems to confirm the argument that customary law consists primarily of antique rules of immemorial usage. However as shall be demonstrated later, an investigation of the rules and structure of the institutions for governance demonstrated that changes have been made and are being made to the system to adapt it to contemporary circumstances. Further, due to the fact that the rules are not written and their implementation is subject to consultation and discussion among community members, customary practices though retaining some essence of the past, are reflective of changing circumstances in community.

1 Features

According to the literature on customary law systems discussed in the chapter five, one of the primary characteristics of a customary governance system is its chthonic or home-grown

nature.³ During the field work, the researcher sought to determine the extent to which Marakwet's customary law system for water governance could be considered chthonic.

As noted above, the community members interviewed all indicated that their customary water law was originally developed by their ancestors. In the course of the discussion with representatives of the clan elders, they explained that the rules relating to allocation of water rights to clans have been changing. The changing rules are determined through a consultative process in which clan elders and male members of the community discuss and agree on proposed allocation rules. Each clan in the community has about ten elders who represent the clan in the customary governance institution. The elders are responsible for the preservation of customary law including the law on water resource management. The consultative meetings in which allocation rules are determined are commonly held after maintenance work on furrows. Apart from these meetings after furrow maintenance, the community members explained that most community affairs are determined through a consultative process. While the Chief is often invited to customary law consultative meetings, he is not considered an elder and his role is deemed advisory.

The demographic distribution of respondents was planned so as to ensure the representation of views from a cross section of age brackets and an almost equal percentage of male and female respondents.⁴ All the respondents of the water user questionnaire concurred that water resource governance in the community is governed by their customary law.⁵ The fact that women are not represented in the council of clan elders and that they do not participate in the determination of customary rules did not seem to impact on their views regarding the autochthonous nature of the community's customary law.

A further feature of customary law systems is that these tend to be user developed but also user maintained and enforced. The respondents confirmed that under Marakwet's customary law, water resource management is the responsibility of the clan elders or council members charged with furrow issues. The clan elders allocate water to the various users and ensure compliance with the rules on allocation. They are also responsible for imposing sanctions for non-compliance. Sanctions imposed range from social sanctions such as peer remonstration

³Patrick H Glenn, *Legal Traditions of the World: Sustainable Diversity in Law* (Oxford University Press, 2007) ch 3.

⁴ 49 per cent of the respondents of the water user questionnaire were female.

⁵ In their responses most users spoke of 'sheria ya maji' (Swahili for water law) to refer to the rules governing the use of water from the furrows.

to monetary fines, curses and in severe cases destruction of the offender's property and that of other clan members.⁶

Some of the sanctions imposed for failure to abide by customary water governance rules relate to the sanctions for failure to contribute to furrow maintenance. Male members interviewed explained that according to customary law, all male adult male members are required to contribute to furrow maintenance work. A male adult who fails to do so for no good reasons would often be 'disciplined' by his peers. Traditionally, the discipline involved a physical beating in public. Presently, this form of punishment is often replaced with 'compensation' which may involve the offender treating his peers to a meal and drinks at his cost. For violation of other rules, monetary fines are imposed which are paid to council elders in the form of cash or more often in kind for example through the forfeiture of farm animals often goats. Certain rules relating to water quality are considered so central to the community, that non-compliance even if unobserved is believed to result in a curse on the offender. Some of those interviewed narrated to the researcher anecdotal evidence proving this.⁷ While the responsibility of the administration of furrow management issues is delegated to the clan elders, all community members have a responsibility to conserve the furrows and to report furrow overflows or blockages to the elders.

Water is considered a sacred resource by the Marakwet. According to the community, water resources are not owned by anyone in so far as water is a naturally occurring resource provided by God. However, they believe that every member of the community has a right to use the waters of the Embobut River given the proximity of the resource to their land.

As is the case with other customary law systems, the Marakwet customary law system for water governance does not consider water resources independently of land in terms of governance. As a result, furrow or water laws include norms governing land access and use. The community members interviewed and clan elders indicated that land in the area is subject to customary tenure which recognises community land and also individually owned land. They explained that despite the absence of beacons or fences demarcating boundaries, each clan is aware of the land belonging to clan members and this is respected by the entire

⁶ One of the water users interviewed, explained that in the past, incorrigible offenders would be punished by a form of 'death penalty' and it was the responsibility of the offender's relatives particularly his uncles to implement the punishment. He clarified that this form of punishment is no longer used.

⁷ One of the examples given, was of a man who had suffered multiple family misfortunes due to a violation of a customary rule related to the furrows.

community. While such customary tenure may be effective within the community, it does not provide secure tenure for purposes of acquiring statutory legal rights associated with ownership of land. As shall be discussed in a subsequent chapter, this raises a potential problem in relation to the community members' capacity to acquire a permit for the abstraction of water. Under the new water regime in Kenya permits run with the land.⁸

According to the Chief, under the prevailing statutory land framework most of the land in the area is Trust Land.⁹ The origin of Trust Lands in Kenya goes back to the colonial native lands which were excised from the crown land and vested in a Native Land Trust Board that had been established by the Native Lands Trust Ordinance of 1938. Native Lands became trust lands at independence and were vested in county councils to hold them in trust for the benefit of the person residing thereon.¹⁰ The Chief explained that despite this being the position under statute, many of the community members are against the classification of their land as trust land as this in their view does not accord with their customary tenure system.¹¹

The recently promulgated Constitution includes provisions recognising community land. Such land is deemed to be land lawfully held as trust land by the county governments and which it provides shall vest in and be held by the communities identified on the basis of ethnicity, culture or similar community of interest.¹² At the time when the field work was conducted it was not clear whether land in Marakwet District would be defined as community land as provided by the 2010 Constitution. Neither is it clear at this stage, if Embobut River will fall within the definition of community land considering that public land under the new Constitution is defined to include water bodies.

⁸Mumma, Albert, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' in Mark Giordano, Barbara Van Koppen and John Butterworth (eds), (CABI, 2008).

⁹ The national land framework in Kenya is undergoing reform following the promulgation of the 2010 Constitution.

¹⁰ See Migai-Akech, 'Land, the Environment and the Courts in Kenya. Background Paper for the Environment and Land Law Reports. A DFID/KLR Partnership' (2006). For a detailed discussion of trust lands and problems associated with this regime of land ownership in Kenya.

¹¹ See Constitution of Kenya Review Commission, 'Verbatim Report of Constituency Public Hearings, Marakwet East Constituency. Held at Tot Centre on 1st July 2002. ' (CKRC, 11 July 2002) corroborating this lack of popularity of trust lands.

¹²*Constitution 2010* (Kenya) arts 63(1) and (2)(d)(iii).

2 *Relevance*

All the respondents of the water user questionnaire confirmed that their main source of water for both agriculture and domestic use is the furrow system, which is governed by the community's customary law. The Chief indicated that most of the farming occurring in the location is subsistence farming with the exception of a growing trend in which some community members are commercially farming mangoes. The researcher's stay in Kaben confirmed this, as daily trucks came through the otherwise deserted all-weather road to collect the sheaves of mangoes for transportation to urban trading centres. Mango farming does not require large supplies of water and thus most of those engaged in the trade indicated that this business had not resulted in an increase in demand for furrow water.

(d) *Water Quantity*

While almost 99 per cent of those interviewed indicated satisfaction with the customary governance of the water resources, 81 per cent of the respondents indicated that they at times experience shortages in relation to supply of water particularly for irrigation. This is despite the fact that most of the farming in the area is not commercial but subsistence farming.¹³ The reasons identified for the shortages included drought, deforestation and poor infrastructure. Clan elders and community members interviewed referred to the problem of deforestation occurring in catchment areas that are outside the district and thus beyond the scope of the customary law norms. During the focus group discussion, the elders pointed out that they have noted a marked decrease of rainfall since the 1950s which they attributed to the deforestation occurring in the catchment areas outside the community. They also have indicated that pollution of water resources from factories upstream has undermined the quality of water. A recent study using satellite data confirms these concerns demonstrating that over the last 23 years, a 14 per cent decrease of forest cover has occurred in the district representing the clearing of 4,419 hectares of forest.¹⁴

Despite the appreciation by the traditional leaders of the need to stop the deforestation, they acknowledged their customary law system's limited capacity to govern the conduct of upper riparian users of the River Embobut, some of whom belong to other communities and thus not bound by the community's law. Clan elders interviewed expressed their frustration in this

¹³ This was confirmed by the Chief and also by most of the respondents.

¹⁴ Naemi Gunlycke and Anja Tuomaala, 'Detecting Forest Degradation in Marakwet District, Kenya Using Remote Sensing and GIS' (2011) http://www.natgeo.lu.se/ex-jobb/exj_200.pdf.

regard and recognised the importance of government intervention to help preserve catchment areas. Some of the users also expressed their concern over deforestation and were of the view that government support is essential if the trend is to be stopped.

As discussed in chapter five, it has been argued that a primary challenge facing customary law systems for natural resource governance is their incapacity to cope with novelties such as increased population, ecological changes caused by climate change and other socio-economic changes such as urbanisation and the erosion of traditional authority systems.¹⁵ Marakwet is no exception in this regard, with population of the community rising, more young people obtaining formal education and thus seeking employment in urban and peri-urban centres and increased risk of drought with changing rainfall patterns. The researcher also observed that some community members were engaging in commercial farming. The clan elders indicated that at present there is no prohibition of use of furrow water for commercial farming and neither is there an extra charge or requirement for more labour. However, it is not clear whether this would be sustainable in the event of larger scale commercial farming.

The possibility of more people being drawn into commercial farming exists as was confirmed in an interview with an official of the Kerio Valley Development Authority (KVDA).¹⁶ KVDA is a parastatal company whose corporate mission is to realise sustainable and equitable socio-economic development in the region. In the interview, the respondent explained that KVDA has been running projects in conjunction with community members in the region. The objective of the projects is to improve productivity of irrigated farming. KVDA helps community members achieve this by providing seeds and fertilizers to the farmers which can help increase productivity and for which they can pay with produce or gains made from the produce. He also explained that KVDA has contributed to the repair and construction of furrows by donating materials and technical support. KVDA has for the purposes of demonstrating good farming practices, been granted a tract of land and access to water from the furrow system. The respondent explained that for purposes of the project, KVDA had increased the primary water in-take from the source to the furrow so as to ensure that there was no reduction in the amount of furrow water available for other users. There are many non-governmental organisations running different projects in the area, and one of KVDA's roles is to coordinate regional development by working with these groups.

¹⁵ See, eg, Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006).

¹⁶ Interview with Joseph Rono (Kerio Valley Development Authority, Tot Office- Marakwet District, 12 February 2011).

While customary law systems may have limited access to the information generated by scientific research, these systems as noted earlier are in many cases founded on a strong traditional knowledge. In the case of the Marakwet, the elders explained that the representatives of the clans chosen as elders are selected on the basis of their knowledge and understanding of furrow issues. Such knowledge is based on experience as opposed to formal training. They explained that the norms and rules surrounding land and water use are based on a system of traditional knowledge of rainfall patterns. Traditional knowledge is well guarded and is not disseminated to all. During the focus group discussion reference was made to elders, who well versed in traditional knowledge, could predict rainfall patterns and thus propose norms governing land cultivation in a particular season. In times of expected drought the elders allow community members to cultivate closer to the furrows. However the areas cultivated are smaller than in times of good rainfall when cultivation is restricted to areas further from the furrows but covers larger tracts of land.

One of the community members interviewed currently works in the Nairobi, Kenya's capital city, though still spends some time in his home district. He argued that while their customary law has norms fostering sustainability for example the taboos prohibiting farming in catchment areas or on non-arable land, customary laws on sustainability tend to be reactionary as opposed to preventive. He argued that their customary law does not have norms anticipating the implications on land and water resources of the growing population of the community.

As indicated, most water users interviewed noted that infrastructural problems contribute to the water shortages experienced. This was also confirmed by the clan elders participating in the focus group discussion. An informal discussion with a researcher in hydro-geology working in the area during the period of the field work confirmed the same.¹⁷ She explained that the current furrow system is inefficient from a technical perspective. The system used for tapping water and transmitting it result in high losses through evaporation. This is a recognised disadvantage of flood irrigation systems which are estimated as losing 45 per cent of the water applied to deep soil drainage and surface runoff.¹⁸ However, research has also

¹⁷Informal discussion with researcher working with Hydro-geologists Without Borders (Nairobi University, 24 January 2011).

¹⁸Mohammed Karrou et al, 'Yield and Water Productivity of Maize and Wheat under Deficit and Raised Bed Irrigation Practices in Egypt' (2012) 7(11) *African Journal of Agricultural Research* 1755, 1755.

shown that depending on the nature of grain supported by the irrigation system, alternative irrigation methods that are more water efficient could have an adverse effect on yield.¹⁹

Further challenges that may affect the continued relevance of the customary systems for water governance relate to the finances needed to realise the tapping drainage potential. It is estimated that Kenya has a drainage potential of about 60,000 ha but that only 3 per cent of this drainage potential has been developed.²⁰ One of the reasons for the under-development is financial constraints. The cost of irrigation development materials and construction varies depending on terrain, water source, conveyance system and distance. This notwithstanding the cost is high estimated to range from US\$500 to US\$1500 for gravity-fed surface irrigation with operation and maintenance costs estimated at 3.5 per cent of the project cost.²¹ Approximately 70 per cent of the water user questionnaire respondents indicated that their income range fell in the lowest bracket of between US\$ 55 and US\$ 220 per month. Consequently, financial constraint is a major hindrance of the community's capacity to develop the irrigation system to its full potential. However, as noted in an earlier chapter, the government also faces problems of financial constraints.

(e) *Water Quality and Sanitation*

A recent report on the status of the Millennium Development Goals relating to water indicate that about 900 million people still do not have access to improved drinking water sources and another 2.5 billion are yet to have access to improved sanitation.²² Most of those affected fall in the category of the rural poor. As a consequence, this research sought to determine the Marakwet's customary law system for water resource governance's capacity to address this challenge of water quality and sanitation

Most of the respondents of the water user questionnaire were of the view that the quality of the water used for domestic supply from the furrows is not satisfactory. There is no separate

¹⁹ See *ibid.* This is demonstrated using a comparative study of the use of flood irrigation against deficit irrigation and raised bed irrigation. The study confirms that while deficit irrigation and raised bed irrigation reduce water application and improve water productivity, the methods adversely affect the yield of water stress crops like maize.

²⁰ FAO, 'Country Fact Sheet Kenya' (2012) *Aquastat* http://www.fao.org/nr/water/aquastat/data/factsheets/aquastat_fact_sheet_ken_en.pdf.

²¹ *Ibid.*

²² The World Bank, 'Sustaining Water for All in a Changing Climate. World Bank Group Implementation Progress Report of the Water Resources Sector Strategy' (2010).

canal system for water for domestic use. As the water travels along the open furrows from the river, the risk of contamination and pollution is high and despite rules formulated to maintain the hygiene and water quality. Several respondents indicated that incidence of water borne diseases is very high in the area, a further manifestation of compromised water quality.

The community elders interviewed indicated that they are aware of the problem of water quality. This, they explained, was the rationale for some of the rules against bathing or washing in the furrows that have been passed down as part of the water law. However, the rules are not sufficient for ensuring maintenance of water quality. The problem is further exacerbated by the fact that there is no proper sanitation system in the area. One of the respondents explained that despite a recent government sponsored program encouraging people to construct earth toilets or pit latrines, many households had not done or so did not maintain those constructed. In response to the problem of water quality, several non-governmental agencies have set up projects to develop a piped water supply to trading centres or schools. There is an ongoing government project to provide water for domestic supply. During the field work, the researcher was shown the piping system which runs from the Embobut River. The idea is to provide the community members with treated water for domestic purposes. There are a few sources of treated water provided freely by the government in the trading centres.

Apart from these government efforts, other non-governmental organisations running projects in the area have sought to improve water supply and sanitation by tapping ground water. Several boreholes have been drilled particularly in schools, health centres and churches. One of the organisations is seeking funding for a project to drill boreholes as well as tap stream water through a piping system and install centralized tanks to provide potable water.²³ Although some of the clan indicated they were aware of the existence of these projects, there was no evidence of rules or norms in the customary law system related to ground water sources. This may raise challenges in future as water scarcity increases.

While indicating an awareness of the availability of treated water for domestic use, of those interviewed 40 per cent said they hardly source water from these sources. The reason for the continued use of furrow water despite the risk of contamination was convenience. A good number of the female respondents explained that the piped water tanks are few and located

²³Informal discussion with researcher working with Hydro-geologists Without Borders (Nairobi University, 24 January 2011).

only in certain areas and thus the water is not easily accessible. Many of them thus prefer to rely on furrow water for some domestic chores and in some cases for cooking and drinking. Some of the respondents indicated that before using furrow water for cooking and drinking they would treat it using locally purchasable products or would boil it, but a significant proportion indicated they do not as the purification process costs in terms of money, energy and time. A few of the older respondents were of the view that the furrow system of supplying water had been the source of domestic water for their forefathers and thus there could be no problem with the quality of the water. However, this view was not shared by the majority who recognised that the incidences of pollution are much higher today.

(f) *Gender and Marakwet's Customary Law System*

One of the strongest criticisms directed at customary law systems is their support of status quo in the case of existence of rules, norms and customs that discriminate against women. Some of the customary practices that apparently disempower women include: the patrilineal succession excluding female children; the notion that property ultimately belongs to the husband; the perception of daughters as transient 'passers-by' and wives as 'comers in' to the family with no durable interest in the family resources; and the notion that the labour of wives or female children is owned by their husband or fathers respectively.²⁴ Marakwet is a patriarchal society and as a consequence many of the observations made above seem to apply with women having little or no say in social settings.

An apparent manifestation of this was experienced in the process of recruiting female participants for the focus group discussion. It was difficult to find a group of older women willing to meet and discuss furrow issues as they felt this was not an issue concerning women. Eventually, seven women aged approximately between 60 and 80 years of age agreed to participate, albeit reluctantly. At the beginning of this focus group discussion, one of the clan elders, seemed reluctant to allow a discussion of furrow issues with women only but eventually he conceded and though not attending the discussion observed it from a distance. The reluctance to participate was also experienced in trying to recruit female respondents for the questionnaire to water users. Initially, the researcher sought to recruit users randomly at the Sambalat trading centre. This method worked for male community members but most women stopped were not willing to participate. Eventually, this problem

²⁴Celestine Nyamu-Musembi, *For or Against Gender Equality? Evaluating the Post-ColdWar "Rule of Law" Reforms in Sub-Saharan Africa*, Occasional Paper- UNRISD (United Nations Research Institute for Social Development 2005).

was overcome by visiting women at their homesteads where most were willing to participate in the questionnaires.

This reluctance to participate either as focus group discussants or as respondents to questionnaires on water use is due to the cultural taboos and sanctions associated with women's exclusion from furrow management issues. This seems to confirm the view that customary laws discriminate against women. However, it has been argued that the problem of gender inequality is not entirely the fault of customary law.²⁵ The complex interaction between competing interests including various articulations of custom, aspects of formal law that do not foster gender equity and socio-economic changes that increase the pressure on resources have resulted in new forms of exclusion of and disempowerment that are referred to as 'custom' in a bid to justify them.²⁶ There was evidence of this in the course of the field work. One of the questions in the questionnaire required respondents to give examples of customary law rules relating to water use and many of them gave as an example the prohibition of women from bathing in the furrows. When asked what was the rationale of the rule many associated it with taboos regarding the association of women with furrow issues. However, in the course of the focus group discussion with clan elders, it was clarified that the rule prohibits all, men and women from bathing in the furrows. It seems that the limitation of the rule to women only is the result of the manipulation by some of a customary rule.

Further, the experience with the two focus group discussions with women indicated a changing trend in perceived roles even among women. Whereas the participants of the senior women's focus group were quick to clarify that they were born after the construction of the furrows and so knew little about the furrow system, the younger women offered an account of its origin similar to that proffered by the council representatives. Both groups of women confirmed that they have no say at all with respect to decision making on furrow issues as it is the responsibility of the male members of the community and more specifically representatives of clans. Nevertheless, the younger women upon learning of the possibility of registration of water user associations under the statutory water law indicated an interest in participating in such organisations as these in their view would not be directly furrow law and so would not fall within the taboos associated with women and furrow management.

²⁵ Celestine Nyamu, 'How Should Human Rights and Development Respond to Cultural Legitimation of Gender Hierarchy in Developing Countries?' (2000) 41(2) *Harvard International Law Journal* 381.

²⁶ Celestine Nyamu-Musembi, *For or Against Gender Equality? Evaluating the Post-Cold War "Rule of Law" Reforms in Sub-Saharan Africa*, Occasional Paper- UNRISD (United Nations Research Institute for Social Development 2005), 18.

As is common in many other traditional societies, there is a strong gendered division of labour among the Marakwet. However, this division of labour does not, according to the participants of the questionnaire and focus group discussion, preclude the cooperation between men and women. Women are not allowed to participate in the construction or repair of furrows. When asked if they are satisfied with this division of responsibility on gender basis, the female participants indicated that they were and expressed their view that the system ought to remain as it has always been. Considering that the primary right to water allocation is connected to contribution of labour for furrow management, the customary law system appears on the face of it to be discriminatory against women.²⁷ However, in the course of discussion with the women, it was observed that many have no problem accessing water, even those with no male family members as the labour contribution due can be substituted with a cash payment. As more women now have an alternative source of income from commercial farming of mangoes they have no problem paying for access to water if necessary. The role of women in the community is changing as many more acquire income from commercial farming of mangoes and other small scale businesses. Education has also brought an increased independence among women and the youth as evidenced by the fact that the current Member of Parliament of the area is a Marakwet woman.

The discussion above indicates that customary law continues to govern the management of water resources in Marakwet District. It also confirms that, as is the case with many rural communities in Kenya, life in the district is changing due to socio-economic and political changes occurring in the district as well as the pressures on the water caused by the growing population and the reduced rainfall due to deforestation. As discussed in the previous chapter, the continued relevance of the customary law system of water governance of the Marakwet and its potential to contribute to sustainable development is dependent on its capacity to adapt to the changes.

B *Marakwet's Customary Law and Sustainable Development*

In this section the analytical framework developed in the previous chapter is used to critically analyse the capacity of the customary law of the Marakwet to adapt and thus contribute to the sustainable development of the community's water resources.

²⁷ See Watson, Elizabeth E, William M Adams and Samuel K Mutiso, 'Indigenous Irrigation, Agriculture and Development, Marakwet, Kenya' (1998) 164(1) *The Geographical Journal* 550, 720-723.

1 *Knowledge Management System*

One of the features identified as indicative of a successful customary law system is the system's possession of a form of knowledge management system.

There is documented research on the physical construction of the furrow systems of the Marakwet escarpment.²⁸ The data collected from the focus group discussions and interviews with community members confirmed the information existing on the technical aspects of the irrigation system. The community leaders explained that the origin of the system dates back to more than two centuries ago. According to an oral historical account, the first four furrows of their community belonging to the Lakeno, Kapterit, Shaban and Kabishoi clans were constructed in 1882. The construction of the furrows was motivated by a drought in the region which led some community leaders to survey the Embobut River which lies on the Kerio Escarpment and propose the use of furrows to provide water to community members living in the floor of the valley.

The clan elders explained that it was no easy task to bring water out of the Embobut River to the valley floor which lies more than 1000m below the escarpment. The furrows were constructed by the community members using locally available materials such as wooden trunks, mortar, and sticks. This was confirmed by the researcher in the course of a hike whose itinerary followed one of the furrow lines from the valley floor to the source of the Embobut River. The researcher confirmed the description of Widgren, that water is led through dams into the furrows along the escarpment face, using hollow tree trunks supported by wooden scaffolding along in some cases almost vertical cliffs and how the canals are constructed and bounded with rocks, boulders, logs and brushwood, reinforced by soil and grass.²⁹

It was observed though that currently many of the canals and works have been fortified using concrete and plastic to improve efficiency. The clan elders explained that the techniques used to construct the furrows represent local knowledge passed on through generations. They also explained that after the initial construction of the first set of furrows, the elders determined a set of norms which were used to govern allocation and management of the furrows. This law has been handed down to the community through clan elders.

²⁸Robert C Soper, 'A Survey of the Irrigation Systems of the Marakwet' in Benjamin E Kipkorir, Robert C Soper and Joseph W Ssenyonga (eds), *Kerio Valley: Past Present and Future* (University of Nairobi, Institute of African Studies, 1983).

²⁹Mats Widgren et al, *Islands of Intensive Agriculture in Eastern Africa: Past & Present* (British Institute in Eastern Africa, 2004) 19.

Fred Bosselman argues that one of the features which determines the potential of a customary law system to contribute to sustainable development is the system's record of how it has responded to environmental change in the course of history.³⁰ In the case of the Marakwet, the oral account given by the elders and corroborated in the other two focus group discussions with the women indicates the awareness of the circumstances including the environmental conditions surrounding initial construction of the furrows. Further, there was among the community members and particularly among the clan elders an awareness of the need to alter the norms governing cultivation of land in response to rainfall patterns. As noted earlier, the clan elders are presently concerned about the decreased flow of water due to the deforestation occurring along the escarpment and in catchment areas. While they as yet seem to have no clear solution to the problem, the general awareness of the problem and a consensus of the need to seek government help in developing and enforcing norms to prevent deforestation, indicate a record of possible response to environmental change.

As there are no written records, the clan elders rely on transmission of knowledge through oral accounts and apprenticeship. This system seems to have served the community well as the researcher observed that furrow councils included clan elders as well as younger men who would work closely with elders with expertise on technical and normative aspects of the irrigation system. Further, most respondents demonstrated an appreciation of the need to conserve the irrigation furrows and thus to comply with the norms governing its use, as they recognise that the irrigation system constitutes their life line.

However, the sustainability of this mode of transmission of knowledge is not assured. As observed and confirmed by some of the respondents, more youth are leaving the district for formal education and in some cases for employment making it harder to involve them in the furrow management and to transmit knowledge on the ecosystem. The absence of these community members for prolonged periods of time also means that they cannot be actively involved in cultivation or management of the furrows. The lack of a working knowledge may thus in future undermine the existing traditional knowledge management system.

³⁰Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 253.

2 *Effective Feedback Mechanism*

A successful customary law system for resource governance has a feedback mechanism that allows for relevant information to be put back into the system.³¹ This is deduced from the observation that effective systems of natural resource governance are those in which accurate feedback of information relating to environmental changes is obtained and used to guide the decision-making process.³² Such a feedback mechanism enables consequences of earlier decisions to influence the next set of decisions making adaptation possible.³³ In order to obtain all the relevant information, an effective natural resource governance system ought to view the resource governance system from a larger temporal spatial scale and allow for extensive community involvement.³⁴ It has been argued that most customary law systems tend to approach natural resource governance in this way adopting the perspective described above akin to eco-system management.³⁵

Feedback on ecological conditions plays an important role in the many customary law systems though the connections are not always evident. In some cases, the related rules and norms may be encoded within a sacred religious system.³⁶ Examples of this include taboos and prohibitions which foster ecological conservation. A study of the traditional knowledge system of the Marakwet demonstrates the presence of conservation strategies, an example of which is the custom of planting of indigenous trees, which are regarded as sacred, around rivers and streams, the underlying objective being to reduce the direct interference of human beings and livestock with water sources.³⁷ A further example of an effective feedback system observed in New Guinea, where local farmers would experiment with new crops to test their

³¹Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005), 257.

³²Norman L Christensen, 'The Report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management' (1996) 6(3) *Ecological Applications* 665, 670.

³³Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 257.

³⁴ Ibid.

³⁵Fikret Berkes, Johan Colding and Carl Folke, 'Rediscovery of Traditional Ecological Knowledge as Adaptive Management' (2000) 10(5) *Ecological Applications* 1251, 1251, 1253-1256.

³⁶J Stephen Lansing, *Perfect Order: Recognizing Complexity in Bali*, (Princeton University Press, 2006).

³⁷Grace Cheserek, 'Indigenous Knowledge in Water and Watershed Management: 'Marakwet' Conservation Strategies and Techniques' (2005) 3 *FWU, Topics of Integrated Watershed Management – Proceedings*.

tolerance and requirements as opposed to simply following customary practices by rote.³⁸ This flexibility related to ecological conditions was also observed among the Marakwet in the course of field work. While commercial mango farming was not customary, many women in the community are currently involved in the business which is proving successful given the higher tolerance of mangoes to drier climates. Further, some of the respondents indicated that they are testing the feasibility of commercial farming of green grams.

Informal social learning is recognised as an effective feedback mechanism. Ostrom and Basurto have argued that where participants are in an environment in which they can share experiences of failures and successes for example in regular meeting places where problems can discuss problems being faced with the managers of the system, then the system is likely to produce better outcomes and be sustainable.³⁹ An observation of community habits demonstrated that trading centres, particularly Sambalat trading centre provides a hub where community members consult and share experiences including matters affecting their irrigation system. Many of the respondents also confirmed that often the implementation and enforcement of customary norms is a consultative process.

The project officer from KVDA indicated that several community members had participated in projects run in conjunction with Moi University, JICA, Kenya Seed Company, the Ministry of Agriculture and the Ministry of Water and Irrigation to try new seeds, better farming techniques or fertilizers to increase productivity. In the interviews and focus group discussions, community members indicated their willingness to work with these organisations, though in the focus group discussion with the younger women, concern was raised regarding accountability and transparency in the collaboration between community members and external organisations. An interview with a local church leader, provided insight into the nature of the problems alluded to.⁴⁰ He explained that the community members had rejected one of the projects of KVDA upon discovering that it included the building of a dam which was to be used to supply water to Eldoret, an urban city in the region. He also explained that some of the externally funded projects though well intentioned

³⁸Chris Healey and Eugene Hunn, 'The Current Status of TEK: Papua New Guinea and North America' in Nancy M. Williams and Graham Baines (ed), *Ecologies for the 21st Century: Traditional Ecological Knowledge, Wisdom for Sustainable Development*, Report of the Traditional Ecological Knowledge Workshop, Centre for Resources & Environmental Studies (Australian National University, 1993) 43, 27, 28.

³⁹Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*14.

⁴⁰Interview with Parish Priest of Tot (Endo, Markwet District 21 November, 2010).

had proved unsustainable as community members lacked the financial resources and technical capacity required. He further indicated that due to previous negative experiences, such as corruption among officers running externally funded projects, the community members had become mistrustful of external assistance. The community's customary law system is thus constantly changing to reflect not only the changing ecological conditions but also changes in the socio-political and economic conditions.

3 *Inherent Modification Procedure*

One of the conclusions drawn from research on successful common property governance systems was that in order for a management system to be resilient it had to have good procedural rules for changing the substantive rules.⁴¹ The procedural rules ensure that the system can develop new rules to match new circumstances, including the diverse environmental and strategic threats common in dynamic systems such as natural resource systems.⁴²

Effective procedural rules include an attitude of open-mindedness of rule-makers to adopt alternative ways of thinking that may result in better outcomes or that may be necessary given the change in social, economic or ecological conditions.⁴³ This attitude was observed to some extent among the clan elders of Marakwet. As was indicated earlier, the custodian of the customary law system was traditionally a group of clan elders selected on the basis of their knowledge and experience of the furrow system. The clan elders were responsible for governance issues in the community including the governance of the irrigation system. However, presently the community recognising the value of formal education received by younger community members has begun to incorporate in the clan council younger members of the community who though lacking in experience are resourceful particularly in relations with external organisations and with new technologies. The researcher observed that among the participants of the focus group discussion with clan council representatives there was a mix of elders and relatively younger men who have been co-opted into the council on the basis of their knowledge of the furrows systems and of other opportunities available to the community.

⁴¹Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990) 193-202.

⁴²Elinor Ostrom *Crafting Institutions for Self-governing Irrigation Systems* (ICS Press, 1992).

⁴³Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 255.

While the use of taboos, curses and other religious sanctions may be effective ways of ensuring compliance with rules fostering conservation, this could also be a hindrance to adaptability.⁴⁴ Experience has shown how for instance a permanent ban on a particular species intended to preserve the species resulted in such a high pressure on other species leading to an over-turning of an ecological process.⁴⁵ The risk of this occurring has often led to the disregard of taboos and religious sanctions by formal systems. However, a study of taboos indicates that in many cases these are often embedded in a wider social context which justifies their existence and which in some cases provides for their eventual phasing out.⁴⁶ Community participation in the rule-making process also facilitates the revision of these taboos and religious sanctions where the continued existence ceases to be justified.

The Marakwet customary law system for water resource governance contains certain taboos. For example there is a taboo associated with women drawing water from furrows for three to five months after child birth. During this period, they must rely on their spouses or other relatives to bring them water and failure to obtain this norm is associated with breaks in the flow of water for their furrow. In the course of the focus group discussion, the clan elders explained that the rationale for this norm was to require the husband and male relatives of new mothers to assist with what would ordinarily be a woman's chore. One participant explained that the reason behind the taboo associated with women participating in the construction of furrows. The work of construction is physically challenging and thus to require women to do this apart from their other household tasks was traditionally regarded as being oppressive to women and likely to displease the 'gods'. Nevertheless, women were required to contribute to the task by providing food to the men involved in the construction or repair of furrows.

However, there was no clear rationale offered for other taboos such as the prevention of a man whose wife has delivered twins or a child in the amniotic sac, from participating in furrow repair before undergoing a cleansing ritual, or the taboo of proceeding with a trip to repair a furrow after sighting of a hawk which is considered a bad omen. However, the clan elders interviewed indicated that the participants indicated that some of these taboos and

⁴⁴ Ibid, 256.

⁴⁵ Kenneth Ruddle, 'Local Knowledge in the Folk Management of Fisheries and Coastal Marine Environments' in Christopher L. Dyer and James R. McGoodwin (eds), *Folk Management in the World's Fisheries: Lessons for Modern Fisheries Management* (University Press of Colorado, 1994) 161, 181-192.

⁴⁶ Johan Colding and Carl Folke, 'Social Taboos: "Invisible" Systems of Local Resource Management and Biological Conservation' (2001) 11(2) *Ecological Applications*, 584, 586-591 and 594.

norms are intended to instil in the community members a respect for the water resources and the appreciation of the fact that water is crucial and thus the need to respect the laws related to water resource governance.

4 *Stratification of Rules*

One of the features of an effective customary law system is that the rule system must be sufficiently stratified to allow for partial modification. Fred Bossleman refers to this quality as the system's possession of fine-grained rules arguing that a rule is fine grained if it is capable of being modified in small increments.⁴⁷ A successful customary law system is thus one that defines rules and individual entitlements in such a way that these can be adjusted without having to overhaul the entire rule system.⁴⁸

While most of the rules of Marakwet's water resource governance system sampled are broadly defined, the implementation process being consultative makes these rules subject to negotiation and modification with relative ease. For instance, the elders confirmed that one of the important rules with respect to water allocation is that households whose male members did not contribute to furrow maintenance and repair are not entitled to water. However, they pointed out that before this rule is implemented, often there will be a process in which the 'offender' is given an opportunity to make his case. Depending on the reason, other sanctions can be applied to avoid inconveniencing the entire household. The younger members explained the offender sometimes receives a personal punishment either in the form of a physical beating from his peers or a fine. Further, this requirement to provide labour for maintenance of the furrows at present can be substituted for money. This modification of the rule is based on the appreciation of the changing circumstances. Young clan members may at times be unavailable for furrow work due to their attending school or work outside the community. In such cases, the system recognises the usefulness of the alternative occupation and substitutes the contribution of physical labour required with monetary compensation.

A further example of a stratified modification of an aspect of the customary law system was observed in the enforcement systems currently in use. Although the primary responsibility of meting out sanctions for non-compliance and enforcing these lies with the customary

⁴⁷Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

⁴⁸Carol M Rose, 'Common Property, Regulatory Property, and Environmental Protection: Comparing Community-based Management to Tradable Environmental Allowances' in Elinor Ostrom, National Research Council (U.S.) and Committee on the Human Dimensions of Global Change (eds), *The Drama of the Commons* (National Academy Press, 2002) .

institution, the clan elders indicated that they have sometimes sought the help of the Chief and used state mechanisms to punish defaulters.

5 *Balance of Rights and Responsibilities*

The success of the customary law rule system depends on the extent to which the rules address a wide range of rights and responsibilities relating to all aspects of the ecological system,⁴⁹ as well as the wider social and economic environment. The payoffs must be large and the stakes high enough to motivate the resource users to invest in the transaction costs associated with the search, debate and learning about better options involved in the rule making and modification process.⁵⁰ This requires the establishment of the right balance between rights and responsibilities by the rules so as to ensure that no resource users are granted rights without responsibilities or vice versa by the rule system.⁵¹

Research on various self-organised natural resource governance systems has demonstrated that the balance of rights and responsibilities is achieved through complex interactions of property rights. For instance some rule systems, permit proprietors to develop clear boundary rules to exclude non-contributors; establish authority rules to allocate withdrawal rights; device methods for monitoring conformance; and use graduated sanctions against non-complying users.⁵² In some farmer-managed irrigation systems in Nepal, Philippines and Spain the rule system has established transferable shares to the systems, with access, withdrawal, voting and maintenance responsibilities allocated on the basis of the amount of shared owned.⁵³ The sustainability of these systems thus depends on the capacity to create a balance of rights and responsibilities thorough the use of different mixes of property rights.

The Marakwet customary law system for water resource governance demonstrates a complex mix of property rights. As noted earlier, the land management system of the Marakwet

⁴⁹Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 262.

⁵⁰Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*14.

⁵¹Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 262.

⁵² Charlotte Hess, and Elinor Ostrom, 'Ideas, Artifacts, and Facilities: Information as a Common Pool Resource' (2003) 66 *Law and Contemporary Problems* 111.

⁵³Arthur Maass and Raymond L. Anderson, . . . *and the Desert Shall Rejoice: Conflict, Growth, and Justice in Arid Environments* (MIT Press, 1986); Edward G Martin, *Resource Mobilization, Water Allocation, and Farmer Organization in Hill Irrigation Systems in Nepal* (Ph.D Thesis, Cornell University, 1986); Robert Y. Siy, Jr. , *Community Resource Management: Lessons from the Zanjera* (University of the Philippines Press, 1982).

includes a combination of private and communal property rights. Land is held both communally and privately. Communally held land is found lower in the valley floor and is cultivated communally for subsistence crops. However, the classification of the land as communal land does not preclude individual ownership and despite the lack of individual formal title, the customary system has a clear system of demarcating boundaries and community members respect these boundaries. Apart from the communal land, each household privately owns the land in which their homestead is located. The participants reported that most of the owners do not hold title as they have not undertaken the process of having the land surveyed and titles issued. However, this for the community does not present problems for the community, they explained, as there is consensus on ownership. Under the formal water legal regime, permits for abstraction of water ran with the land and thus land tenure systems affect water rights.

With respect to the irrigation system, as noted the system has clear ways of withholding access of furrow water to those who do not contribute to furrow management. The furrow system is designed in such a way that the managers can start or stop the flow of water, thus controlling access. However, the clan elders explained that no restriction is placed on water for domestic use. As indicated earlier, the management responsibilities which constitute the right to share in the use of the furrow water for irrigation can be transferred in exchange for monetary compensation. Clan elders also explained that the rights of access to furrow water among clan members are often transferable through local arrangements in response to higher demand or on social equity considerations. They explained that the rules of allocation may in some cases be altered to give certain users water on more days where the state of their crops requires it. The balance of rights and responsibilities is achieved through a consultative process.

6 *Autonomy*

As was discussed in chapter five, evidence from research on irrigation systems from different countries around the world has demonstrated that autonomy of resource users in the design, operation and modification of rules governing their water resource, ensured better and more equitable outcomes.

The customary law system of the Marakwet is based on norms developed by the community. The operation and implementation of the rules is in the hands of the community. The autonomy in design of the rules is considered sacrosanct as was evidenced in the focus group discussion with the clan elders. One of the participants in the discussion referring to the

unacceptability of the imposition of externally developed rules stated: ‘There is no law that will come to tell us who will or how we will use the water. The water is for us and for our children from our elders. No one will tell us how to use it’⁵⁴

C Conclusion

From the above discussion it may be concluded that Marakwet’s customary law system of water governance demonstrates some of the indicators of successful user managed systems of water governance. However, as demonstrated the system is also facing challenges particularly with respect to domestic water supply and sanitation, as well as infrastructure to improve efficiency of the furrow system and thus agricultural productivity.

As the clan elders and community members participating in this research indicated, some of these challenges could be resolved through cooperation with state systems and resources. The clan elders interviewed indicated that they do not view the customary and formal system as being mutually exclusive in the water resource governance, but rather as ideally operating as a unit to ensure sustainability of water resources. In the next chapter, this thesis explores the provisions of the legal statutory water framework for Kenya to determine the extent to which such mutual cooperation with Marakwet’s customary law system for water resource governance can be achieved.

⁵⁴Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District-Kenya, February 10 2010).

VII CHAPTER 7 KENYA'S STATUTORY FRAMEWORK AND CUSTOMARY LAW SYSTEMS OF WATER GOVERNANCE

The preceding chapter demonstrated that customary law systems for water resource governance continue to exist in the context of rural Kenya as demonstrated by the case study on water governance in Marakwet District. This chapter explores the possibilities provided in Kenya's statutory framework for the recognition of customary law systems of water governance and the extent to which the statutory framework effectively accommodates customary law systems for water resource governance that have a potential to contribute to sustainable development. The analysis helps demonstrate the extent to which it can be affirmed that there is a disconnect in the statutory legal framework for water resource governance between statutory and customary law.

A Place of Customary Law in Kenya's Legal System

The accommodation of customary law systems for water governance in Kenya's statutory framework for water resources is dependent on the extent to which customary law is recognised in the general legal framework. In this section a brief overview of the place of customary law in Kenya sets the context within which customary law systems for water governance may fit into the statutory legal frameworks.

During colonialism, Kenya adopted the English common law system, which marked the beginning of the relegated role of customary law. As noted earlier, the underlying legal theory of the common law imported to the colonies was a legal positivism in which custom and customary law was distinguished from reason and thus from law. Under the new legal regime, customary law did not automatically qualify as law. While customary law was to some extent recognised by the colonial legal system, its application was limited to native courts and to a limited population, thus representing an exception as opposed to recognition of a parallel legal system.¹ Further, in order to be recognised by statute, it had to demonstrate criteria required by statute for its validity including immemorial usage, antiquity, uniformity, invariability, continued usage, certainty, reasonableness, notoriety as well as not being

¹ See A N Allott, 'What is to be done with African Customary Law?' (1984) 28(1-2) *Journal of African Law* 56 for a discussion on the role of customary law and native courts in British colonies in Africa.

contrary to justice or morality. The imposition of these criteria for validity of customary law was common across English colonies.²

As the political wind of independence began to blow its gale towards East Africa in the 1950s, the question of what was to become of African customary law in the independent legal regimes, arose. The 1959 'Conference on the Future of Law in Africa' brought together a group of legal scholars, practitioners, judges and anthropologists to discuss the problem of duality faced by many African states at the brink of independence given the parallel existence of the common law system and customary law systems.³ The consensus of the participants may be surmised in the words of Lord Denning: 'uniformity of law would undoubtedly make a valuable contribution to the administration of law and is therefore desirable in principle'.⁴ The rationale for this position was that the establishment of the rule of law required unity of not only the different communities' customary laws but also the unification of the common law and the local customary law.⁵

This preference for a unified national legal system was influential in the development of Kenya's post-independence legal and institutional frameworks. This may explain the relegation of customary law which was regarded as a potential divisive factory in an already precarious unity of ethnic communities seeking to become a nation. In this context, customary law was recognised as a source of law in Kenya by the Judicature Act, but ranking below the Constitution, statutes and any other written law, common law and principles of equity.⁶ The Independence Constitution, the supreme law of the land, also confirmed this relegated place of customary law, making few references to African customary law.⁷ The net effect of this was the establishment of a legal system in Kenya in which customary law is recognised as a source of law but its application is limited to civil cases where one or more of the parties is subject to or affected by it and provided it is not repugnant to justice and morality or inconsistent with any other law.

²Kane P.V., 'Hindu Customs and Modern Law. Sir Lallubhai A. Shah Lectures (1944)' in (University of Bombay, 1950) 44-86.

³Editor, 'Customary Law: Its Place and Meaning in Contemporary African Legal Systems' (1965) 9(2) *Journal of African Law* 82.

⁴John A. Harrington and Ambreena Manji, "Mind with Mind and Spirit with Spirit": Lord Denning and African Legal Education' (2003) 30(3) *Journal of Law and Society* 376.

⁵Allott, A N, 'What is to be done with African Customary Law?' (1984) 28(1-2) *Journal of African Law* 56.

⁶*Judicature Act 1967* (Kenya) s 3.

⁷*The Constitution (Repealed) Act 1964* (Kenya).

It has been argued that plurality of laws would be detrimental to national unity was a misconception arising from the confusion of political unity with 'uniformity'.⁸ Whereas the need for political unity was essential for the cohesion of the different ethnic communities to form a Kenyan nation, the existence of diverse ethnic customary laws was not detrimental to this objective. The development of legal systems that would embrace plurality and still foster political unity would have been possible with time, but instead haphazard and hasty developments of 'uniform' legal systems characterised many post independent African states, including Kenya.⁹

The above circumstances may explain the limited significance accorded to customary law by the Independence Constitution. Further, the Independence Constitution was drafted with limited participation of Kenya's public which may explain its failure to recognise the importance of customary law and customary governance systems in the various aspects of societal life. This Independence Constitution has recently been repealed and a new Constitution promulgated in its place.¹⁰ The process of drafting the new Constitution has taken the country close to ten years with great efforts taken to make the process consultative. The drafts of the Constitution were disseminated throughout the country and civic education imparted so as to create awareness and collect feedback on the provisions of the law. Further, the document was subjected to a national referendum twice. Given this process, the resulting Constitution is undeniably a more 'home grown' and deliberated document than the Independence Constitution was.

In spite of the promulgation of a more 'home-grown' Constitution, as with its predecessor, the new law makes limited reference to customary law with the few references made relating primarily to the limits of customary law. The absence of references to customary law in the Constitution are not due to a lack of interest in customary law or its having become obsolete, rather this reflects the sensitivity and complexity arising from the association of customary law in Kenya with a history of politicised ethnicity. Political parties in Kenya have taken the approach of associating the government with the presidency and with the narrow ethnic interests of the ethnic communities whose members are co-opted in the cabinet or in key

⁸Yash Ghai, 'Review of The Place of Customary Law in the National Legal Systems of East Africa by William Twining ' (1964) 2(4) *The Journal of Modern African Studies* 613.

⁹Ibid.

¹⁰*Constitution 2010* (Kenya).

government positions.¹¹ As a result references to customary law often raise tensions among different ethnic communities each seeking to redress perceived exclusion from political power. This was evident in the Constitution making process, where efforts to address the issue of customary law were abandoned when controversy arose over the listing of the various ethnic communities existent in Kenya.¹² The inclusion of customary law in the Constitutional drafts was also opposed by some women advocacy groups on the basis that customary law fosters a gender-biased normative and institutional system.¹³ This explains the inclusion of provisions such as Article 2(4) which provides that: ‘Any law, including customary law that is inconsistent with this Constitution is void to the extent of the inconsistency, and any act or omission in contravention of this Constitution is invalid.’¹⁴

In some aspects, the new constitution seems to adopt a less accommodating approach to customary law than its predecessor. For example, the independence constitution provided for the possibility of county councils holding land for the benefit of persons resident on the land. In such a case, the county council was allowed to give effects to rights, interests and other benefits vested under the African customary law.¹⁵ While recognizing the existence of community land, the new Constitution lays greater emphasis on legislation enacted by Parliament as opposed to customary law in determining the use to which community land is to be put.¹⁶ Further, one of the tasks of the National Land Commission, which is charged with the management of land issues in the country, is to encourage the application of traditional dispute resolution mechanisms in land conflicts.¹⁷ However, the Constitution includes

¹¹ See Migai-Akech, *Institutional Reform in the New Constitution of Kenya* (International Centre for Transitional Justice, 2010) for a discussion on ethnicity and politics in the Kenya’s constitutional regime.

¹² Interview with Yash Pal Ghai Chairman of the Constitution of Kenya Review Commission (Nairobi 24 November 2010).

¹³ See Federation of Women Lawyers - Kenya (FIDA-Kenya) and Georgetown University Law Center International Women’s Human Rights Clinic, ‘Kenyan Laws and Harmful Customs Curtail Women’s Equal Enjoyment of ICESCR Rights’ (2008) *A Supplementary Submission to the Kenyan Government’s Initial Report under the ICESCR, scheduled for review by the Committee on Economic, Social, and Cultural Rights during its 41st session (Nov. 3-21, 2008)* <<http://www2.ohchr.org/english/bodies/cescr/docs/info-ngos/FIDAKenya41.pdf>>.

¹⁴ *Constitution 2010* (Kenya) art 2(4).

¹⁵ *The Constitution (Repealed) Act 1964* (Kenya) art 115.

¹⁶ *Constitution 2010* (Kenya) art 63.

¹⁷ *Ibid* art 67(2)(f).

provisions to ensure that customary laws that discriminate against women or that are inconsistent with human rights are rendered void.¹⁸

Consequently, although implying the existence of a customary law governing land, the focus of the provisions in the Constitution seems to be negative in so far as the emphasis is on limitation of such law in cases where it may result in inequities. The approach taken in the Constitution is intended to rectify previous flaws in the law resulting in the protection of customary laws that were discriminative of women and in some cases constituted abuses against human rights in general.¹⁹ Some examples of these instances where statutory laws permit discrimination or abuse of human rights by customary law include matrimonial laws permitting the marriage by custom of girls of 13 years old and other discriminatory customary laws relating to adoption, marriage, divorce, burial and succession.

Kenya's legal framework in relation to customary law can be described as a weak regulated dualism given the limited recognition provided for customary law.²⁰ The effect of this general legal framework is that it provides a limited basis for supporting customary normative systems and institutions of governance. For instance, Kenya's Constitution has no provisions for recognition of customary or traditional institutions of governance comparable to those provided for in the South African Constitution.²¹ Neither are there are explicit references in the law on recognition of customary rights to natural resources or rights of governance of these resources. Despite the absence of explicit provisions recognising customary law, there are opportunities created by statute for the integration of communities and thus the integration of their customary institutions. The section below investigates the opportunities available for integration of customary normative systems and institutions in the statutory framework for water governance.

B *Kenya's Statutory Water Framework and Customary Law Systems*

As noted in the chapter on national frameworks for water governance, water laws are developed to meet identified policy objectives. In Kenya, the policy goals for water

¹⁸Ibid art 60(1)(f) and art 2(4).

¹⁹ Yash Pal Ghai, 'Proposed Constitution of Kenya- An Analysis' (2010) <<http://www.mediafire.com/view/?8m9w1oowjdcoite>>.

²⁰See Hinz, Manfred O, 'Traditional Governance and African Customary Law: Comparative Observations from a Namibian Perspective' in N Horn and A Bösl (eds), *Human Rights and Rule of Law in Namibia* (Macmillan, 2008).

²¹*Constitution of the Republic of South Africa Act 1996* (South Africa) ss 211-212.

governance have evolved, reflecting the wider social, political and economic circumstances of the country.

1 *Policy Goals and Community Participation*

In the pre-colonial period, the traditions and cultures of communities were replete with rules relating to use of water and ecological stewardship intended to preserve water for domestic use, agriculture and pastoralism.²² The colonization of Kenya resulted in the adoption of the common law system and in a reorganisation of societal life. This had an impact on the societal goals with respect to natural resources. An important goal during this period was the expansion of imperialism through the use of natural resources.²³ In the process of achieving this goal, many indigenous Kenyans were dispossessed of their land and water resources by the colonial government and the resources reallocated to entrepreneurial settlers or to the crown.

According to a former Permanent Secretary in the Ministry of Water, post-colonial water policy in the country reflected the above described colonial government attitude.²⁴ There was an assumption among the populace that just as the colonial government had acquired land and water resources for the settlers, so too would the independent government avail these resources freely to the Kenyan people.²⁵ As a consequence, one of the first policy documents on 'African Socialism and its Applicability to Planning' in Kenya, underlined the government's primary role in redistribution of natural resources including water, so as to eliminate illiteracy, disease and poverty.²⁶ The 1974 National Water Master Plan Initiative which bore the slogan: 'Water for all by the year 2000' also reflected this view. Under the plan, the government ambitiously undertook to ensure availability of potable water at a reasonable distance to all households by the year 2000.²⁷ This target was to be achieved through the development of water supply systems and the provision of water to consumers

²²Benson Owuor Ochieng', 'Institutional Arrangements for Environmental Management in Kenya' in Migai Akech, Patricia Kameri-Mbote and Charles O. Okidi (eds), *Environmental Governance in Kenya: Implementing the Framework Law* (East African Education Publishers, 2008) 183, 195.

²³Ibid, 186.

²⁴Susanne Wymann von Dach, Interview with Engineer Mahboub Maalim, Permanent Secretary of the Kenyan Ministry of Water and Irrigation, (InfoResources, Berne, Autumn 2007).

²⁵Ibid.

²⁶Government of Kenya, Sessional Paper No. 10 of 1965 .

²⁷Ministry of Water and Irrigation Kenya, *National Water Master Plan* (1980) .

with the government assuming responsibility for the management and financing of the projects.

As confirmed by the above, the focus of water policy in the period between independence and the 1990s was thus the provision of water which was recognised as a key factor for the development of all sectors of the economy.²⁸ Although there was reference to conservation and proper use of water resources and the need for catchment management, the policy focus was primarily demand-driven.²⁹

By the late 1990s, it was evident that the government was far from meeting the target of provision of water services. The government's inability to meet its expectation of providing water to its population can be attributed to various factors including budgetary constraints inefficient management and corruption. By 1999, in response to a dissatisfaction among water users and encouraged by the development strategy shift adopted by international financial institutions, the government adopted a new policy with respect to water resource management.³⁰ This policy document served as the blue print for reforms to the country's legal system for water resource governance.

The main policy objectives outlined in the Sessional Paper No. 1 of 1999 included the preservation, conservation and protection of available water resources; the sustainable, rational and economic allocation and apportionment of water resources; the supply of adequate amounts of quality water to meet acceptable standards; establishment of an efficient and effective institutional policy and legal framework to achieve sustainable development and management; to ensure safe wastewater disposal for environmental protection and safeguard ecological processes and to develop a sound and sustainable financial system for effective water resource management, water supply and water borne sewage collection, treatment and disposal.³¹ Sustainable development was thus adopted as a key policy objective in the new policy and legal framework for water resource governance. The National Water

²⁸Migai-Akech, 'Governing Water and Sanitation in Kenya' in Charles O Okidi, Patricia Kameri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya. Implementing the Framework Law* (East African Educational Publishers, 2008) 305, 315.

²⁹ See World Water Assessment Programme, *Water a Shared Responsibility* The United Nations World Water Development Report 2 (UNESCO, 2006) citing the focus on water demand in the Water Master Plan of 1992.

³⁰Government of Kenya, *The National Water Policy on Water Resource Management and Development*, Sessional Paper No 1 of 1999.

³¹Institute of Economic Affairs, *A Rapid Assessment of Kenya's Water Sanitation and Sewerage Framework* (IEA, 2007), Annex 2.

Services Strategy for 2007 to 2015 reaffirms this, indicating that the overall objective of the Ministry of Water and Irrigation is to improve water supply and sanitation services as the basis for sustainable development in the country.³²

An important preliminary process regarded as key to the success of legislative reform of water sectors, is the consultation and education of stakeholders.³³ Different jurisdictions implementing water sector reform through legislative and institutional changes adopt various approaches to stakeholder consultation. In common law jurisdictions, this process often involves circulation across other ministries, state agencies and civil society, of a 'green paper' setting out the proposed changes and subsequently of a 'white paper' where further consultation is needed before proposal of a new law to the legislature.³⁴

The new water policy and law formulation process in Kenya was headed by technical employees in consultation with other relevant ministries. According to the Ministry of Water and Irrigation, stakeholder consultation workshops were held at the provinces and district level with existing water user associations between 2000 and 2002.³⁵ The dates suggest that the policy document driving the reforms preceded the consultative process but that it may have influenced the drafting of the Water Act which was enacted in 2002.

In the course of the field work, the researcher determined that though the new Water Act has already been in force for about eight years, the community members interviewed had no knowledge of its existence. In the focus group discussion with clan elders, they indicated that they had not taken part in any consultative meetings with respect to the Water Act. The clan elders indicated that they have been involved in other law reform processes such as the consultative meetings on the draft Constitution but that they were certain that no meetings had been held to discuss the new water law. They were thus unaware of the policy goals contained in the national water policies developed by the Ministry of Water and Irrigation.

In order to achieve the policy goals set out, the 1999 policy advocated for the review of the existing legislation on water, the Water Act Chapter 372 of the Laws of Kenya. The main objective of this review would be to effect the normative and institutional changes identified

³²Ministry of Water and Irrigation (Kenya), 'The National Water Services Strategy (NWSS) 2007-2015' (2007).

³³Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006) 31.

³⁴ *Ibid*, 31.

³⁵Susanne Wymann von Dach, Interview with Engineer Mahboub Maalim, Permanent Secretary of the Kenyan Ministry of Water and Irrigation, (InfoResources, Berne, Autumn 2007).

by the policy as crucial to the improvement of the country's legal system for water governance. One of the fundamental changes proposed by the policy was the separation of the functions of management and regulation from service provision. The government's role was to be mainly regulatory while service provision was to be assigned to local authorities, private entities or local communities in the case of rural water supply.

The establishment of the legal framework for the transition took several years due to the lack of consensus on the actual process and implications of handing over.³⁶ The process eventually culminated in the repeal of the Water Act Chapter 372 and enactment of a new Water Act which came into effect in 2003.³⁷ The implications of the new water law on pre-existing customary law systems of water governance such as that of the Marakwet are discussed in the section below.

2 Kenya's Water Law and Marakwet's Customary Law System

One of the main recommendations of the 1999 Water Policy was that the existing Water Act be reviewed in accord with policy recommendations and in particular the re-definition of the role of the government as regulator as opposed to service deliverer.³⁸ Consequently, Kenya's Water Act Number 8 of 2002 was enacted to repeal the old Water Act.

The 2002 Water Act is intended to be the primary statute regulating water resource governance in the country. The objective of the statute as indicated in its title is to:

*provide for the management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water; to provide for the regulation and management of water supply and sewerage services; to repeal the Water Act (Cap. 372) and certain provisions of the Local Government Act; and for related purposes.*³⁹

However, apart from the statute there are other laws currently in force in Kenya which contain provisions relating to freshwater resource governance and whose provisions in relation to water resource governance need to be harmonised with the provisions of the Water Act. These include: the Environmental Management and Coordination Act (EMCA), the Irrigation Act, the Registered Land Act, the Forest Act, the Local Government Act and the

³⁶Mumma, Albert, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' in Mark Giordano, Barbara Van Koppen and John Butterworth (eds), (CABI, 2008).

³⁷Water Act 2003 (Kenya).

³⁸Government of Kenya, *The National Water Policy on Water Resource Management and Development*, Sessional Paper No 1 of 1999, 19.

³⁹Water Act 2003 (Kenya), long title.

Agriculture Act.⁴⁰ During the drafting process, the Water Act was not harmonised with these other statutes with a mandate over water resources and as a consequence, there are conflicts in the institutional mandates as well as in regulatory requirements across these statutes.⁴¹ Further, the enactment of the Water Act was to be followed by the articulation of a comprehensive irrigation policy and the review of the existing Irrigation Act. The present Irrigation Act is dated with its scope limited to state-owned irrigation schemes, many of which are no longer functional.

Apart from these conflicts with other statutes, the Water Act contains provisions which may be a source of potential conflict with some provisions on water resources included in the Constitution of 2010.⁴² The failure of the water statute to address these conflicts has been described as a fundamental flaw that is likely to undermine its capacity to achieve its policy objective of integrated water resource management.⁴³

From the perspective of customary law governance systems, the multiple mandates and conflicting regulatory requirements make integration into the statutory system a more onerous task. The duplication of certain water resource management functions to various state agencies in the existing statutory legal framework makes the task of seeking a coordination of state institutional frameworks with traditional institutions difficult. Some of the state agencies with a mandate over management of water resources under Kenya's statutory framework include the Water Resource Management Authority (WRMA), the National Environment Management Authority (NEMA), the Ministry of Agriculture, and the various county authorities. Further, the delay in issuance of an updated irrigation policy and reform of the Irrigation Act to reflect the changes in water policy creates uncertainty for customary irrigation systems seeking recognition within the statutory legal framework.

Apart from the challenges identified above, the statutory legal framework established under the Water Act is, as shall be demonstrated below, premised on certain principles which are

⁴⁰*Environmental Management and Coordination Act 1999 (Kenya); Forest Act 2007 (Kenya); Irrigation Act 1966 (Kenya); Local Government Act 1963 (Kenya); Registered Land Act [Repealed by Act 3 of 2012] 1963 (Kenya) and Agriculture Act 1963 (Kenya).*

⁴¹ Migai-Akech, 'Governing Water and Sanitation in Kenya' in Charles O Okidi, Patricia Kimeri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya. Implementing the Framework Law* (East African Educational Publishers, 2008) 305,322.

⁴²*Constitution 2010 (Kenya).*

⁴³Migai-Akech, 'Governing Water and Sanitation in Kenya' in Charles O Okidi, Patricia Kimeri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya. Implementing the Framework Law* (East African Educational Publishers, 2008) 305, 323.

fundamentally distinct from the principles underlying customary law systems of water governance. The effect of this incongruence is to create a disconnect between statutory and legal systems for water governance which if not adequately addressed adversely affects the capacity to achieve sustainable development.

(a) *Ownership of Water Resources*

One of the primary goals of a legal system for water resource governance is the determination of ownership of the water resources. The issue of ownership of water resources under Kenya's statutory legal framework is not entirely clear.

Under the recently promulgated Constitution of Kenya, all rivers, lakes, and other water bodies are defined as being part of public land.⁴⁴ The inclusion of rivers, lakes and other water bodies in the definition of public land implies that the ownership of freshwater natural resources is subject to the provisions in the Constitution on ownership of public land. The Constitution provides that all land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals.⁴⁵ Rivers, lakes and water bodies which as noted form part of public land, are thus according to the Constitution, held by the national government in trust for the people of Kenya and are to be administered on their behalf by the National Land Commission.⁴⁶ The Constitution further safeguards public land by providing that it shall not be disposed of or otherwise used except in terms of an Act of Parliament specifying the nature and terms of that disposal or use.⁴⁷

The position of the Water Act on ownership of water resources is not the same as that of the Constitution. The Water Act vests the State with the ownership of all water resources subject to any rights of user granted under the Act or under any other written law.⁴⁸ This provision of the Water Act suggests absolute ownership of water resources by the state with no mention of the doctrine of trust. The Constitution on the other hand asserts the ownership of all resources by the Kenyan people with the National government holding the resources in trust. Unlike the

⁴⁴ *Constitution 2010* (Kenya) art 63.

⁴⁵ *Ibid* art 62 .

⁴⁶ *Ibid* art 63(3).

⁴⁷ *Ibid* art 62(4).

⁴⁸ *Water Act 2003* (Kenya) s 3.

case with the Constitution, the Water Act makes no relation between water resource and public land.

There has been no judicial determination addressing the possible conflict between the two laws. Given the provisions confirming the supremacy of the Constitution, it is likely that the Water Act provision would be interpreted in a manner to avoid conflict between the Water Act and the Constitution.⁴⁹ Further, this apparent conflict and the other conflicts discussed in earlier section are likely to prompt the reform of the water statute to harmonise it with the Constitution and with other laws.

As was discussed in the preceding chapter, Marakwet's customary law system of management of water resources considers water as a God-given resource and thus not subject to ownership in the strict sense. As a result, the question included in the water user questionnaires and focus group discussions relating to who owns the water resources elicited various responses including: God, everybody, nobody and the community. Only one of the respondents attributed ownership to the government. Another respondent attributed ownership to clan elders but in the course of explaining such ownership clarified that the elders hold the water resources in custodianship for the community. The participants of the focus group discussion with clan elders indicated that they were unaware of the provision of the Water Act vesting the State with the ownership of all water resources.

According to the Hobbesian notion of law and state, the ownership of water resources by the State is justifiable on the basis of the social contract between the people and the state. Further, on the basis of the tragedy of the commons, the vesting of all water resources in the State would be the way to stop the unbridled exploitation of these resources. The customary law perspective of resources is distinct as demonstrated by the case of the Marakwet. The community members found it hard to understand how the State could claim absolute ownership of water resources, given that the resources are God-given. Some of those interviewed could relate with the notion of custodianship by the State but maintained that the control of the source of the irrigation water ought to remain with the community. From the perspective of the community therefore, the Constitutional notion of trust seems closer to their notion of ownership of water resources.

⁴⁹ *Constitution 2010* (Kenya), art 2(1) and (4).

(b) *Water Rights*

Under the Water Act, the primary right of use is granted to the Minister except where such right is alienated by the Act or by any other law and it could be argued that the expression ‘or any other law’ includes the alienation by the provisions of the Constitution providing otherwise.⁵⁰ The law explicitly states that water rights can only be acquired in accordance with the provisions of the Act.⁵¹ Under the Act, the right of control over all water resources including user rights is thus granted to the Minister.⁵²

The effect of the above provisions is to extinguish any pre-existing rights including pre-existing customary rights to water. The Act contains provisions dealing with pre-existing rights. Section 5 of the Act refers to the protection of rights granted under ‘any other written law’ and other transitional provisions under this Act. The transitional provisions include the guaranteeing of pre-existing rights to water granted under previous statutes, by the government or ‘by agreement or otherwise’.⁵³ Section 114 also recognises the rights of ‘water undertakers’ under the Local Government Act who had rights before the coming into force of the Act.

Potentially, these provisions provide a basis for the protection by customary law systems of their pre-existing rights to water. However, on examination of the provisions, none seem to apply to customary rights. This is because the provisions protect rights under written law, while the rights of ownership and management claimed by customary law systems are de-facto rights. Discussion with clan elders interviewed revealed that they had not sought to protect their customary rights to water resources, as they were unaware of the existence of the Water Act and of the effect of its provisions on ownership of water resources.

Under the Water Act, rights to abstract or use water are granted through permits obtained from the Water Resource Management Authority (WRMA). With respect to abstraction and use of water from surface or groundwater sources, the Act provides that a permit shall be required for any use of a water resource unless the use falls within the exceptions provided under section 26. These exceptions include inter alia, the abstraction of water from a water

⁵⁰*Water Act 2003 (Kenya)* s 3.

⁵¹*Ibid* s 6.

⁵²*Ibid* ss 4-6.

⁵³*Ibid* s 112.

source for domestic purposes without the use of ‘works’.⁵⁴ The diversion of water for the furrows from the River Embobut does not fall within the exception provided and thus, the clan elders would require a permit to continue channelling the water to their irrigation furrows. Participants of the focus group discussions were unaware of this requirement and thus had not made any application for a permit to continue withdrawing water for their irrigation furrows.

Under the Act, permits are to be issued at a charge calculated to compensate the cost of processing the application and to include a premium on water use representing its economic value. This means that communities abstracting and allocating water covered by section 25 would not only have to apply for a permit but would have to pay a fee to continue abstracting. As indicated earlier, the customary law system does not anticipate the charging of tariffs though community members contribute to the maintenance of the furrows. In the course of the discussions and interviews with community members, many showed reluctance towards an abstraction fee. In their view the water resource does not belong to the government and the community have always had a right of use at no cost. Some did indicate that they would have no objection to paying a reasonable cost for the supply of treated water to their households.

The Water Act explicitly states that a licence under the Act does not constitute a property right and consequently, a licence cannot be sold, leased, mortgaged, transferred, attached or otherwise assigned, demised or encumbered.⁵⁵ However, in the wider context of property law, licences constitute a contractual right in so far as they grant the licensee the right to provide water services under the conditions of the licence. The water statute provides that application for licences can only be made by a Water Services Board (WSB) and the application is made to the Water Services Regulatory Board (WASREB).⁵⁶ The effect of these provisions is that licences for the supply of water, under Kenya’s water law, can only be held by Water Service Boards. This means that under this regime, Marakwet’s customary law system for water governance which, as noted supplies the community with water for domestic use and irrigation cannot hold a licence.

While the Act states that water services authorised by a licence shall be provided by an agent of the Board, it nevertheless holds that WSBs are responsible for the efficient and economical

⁵⁴Ibid s 26.

⁵⁵Ibid s 58(2).

⁵⁶Ibid s 57 (1).

provision of water services authorised by the licence.⁵⁷ An agent of the WSB for this purpose is referred to as a Water Service Providers (WSP).⁵⁸ The powers exercised by the WSPs are under the Act deemed to be powers exercised under the authority of the licence despite the fact that the WSP does not, as observed, hold the licence.⁵⁹ This implies that though Marakwet customary law system may not be eligible for the application of a licence under the Act, they may be in a position to act as agent or WSP and obtain rights of provision of water services.

The Act further prohibits any person, within the limits of supply of a licensee, from providing water to more than twenty households; or supplying more than twenty-five thousand litres of water a day for domestic purposes; or more than one hundred thousand litres a day for any purpose except under the authority of a licence.⁶⁰ Under Marakwet's customary law, the clan elders have a right to divert the water and also a duty to allocate the water to the community members. The researcher observed that the infrastructure system developed by the community does not measure the rate of abstraction. While it could not be determined if the water quantity supplied, which as noted is also used for domestic purposes, was more than the limit of twenty thousand litres a day, it was confirmed that the furrows supply water to more than twenty households. This would mean that under the Act the community leaders would need to act under a licence to continue supplying water. The institutional implications of the above provisions shall be discussed in the subsequent section.

The water rights model underlying Marakwet's customary law system differs from the model anticipated in Kenya's statutory legal framework. Marakwet's system is founded on a structure common in most customary water law systems in Africa, which is a pattern of stable core entitlements rigidly protected from outside competition but circumscribed by rules enforcing a regime of sharing.⁶¹ The fact that the Marakwet community developed the infrastructure for their canal irrigation system grants them, under customary law, core entitlement rights over the resource, a right which is protected from outsiders. During the

⁵⁷Ibid s 53.

⁵⁸Ibid s 2.

⁵⁹Ibid s 55(6).

⁶⁰Ibid s 56. However, this provision is subject to some exceptions such as provision of water services to hospitals, factories schools or other institutions.

⁶¹Francois du Bois, 'Water Rights and the Limits of Environmental Law' (1994) 6 *Journal of Environmental Law* 73, 78.

focus group discussion, the researcher asked the participants if there have been conflicts with other communities over water resources, or if as claimed the conflict with the neighbouring Pokot community was a conflict over water resources. The participants indicated that they have had no inter-community conflicts over water resources and that neither were the conflicts with the neighbouring Pokot community some years ago over water resources.

Studies on African water laws of different communities, demonstrate that despite the core entitlements, there often exist customs providing exceptions to the exclusive entitlements. For instance in the case of the Tswana people of Southern Africa, communities that dug wells or constructed dams were granted private rights, though outsiders passing through the area were by custom allowed to water their cattle from these sources provided they did not remain on the land.⁶² Individuals too could not be denied water for personal needs.⁶³ Similarly, the clan elders participating in the focus group discussion explained that the entitlement rules constitute rights akin to private rights and there are sanctions applicable for non-compliance, for example by using irrigation water from a furrow belonging to another clan. However, these rules do not extend to water for personal use which can be sourced from any stream or furrow.

It has been argued that for many African communities, customary rights are distinct from the statutory notion of property rights, the former constituting a 'functional disaggregation of the bundle of rights usually taken to constitute property.'⁶⁴ However, neither does the concept of modern water rights fit into the classical notion of property as a bundle of rights. Despite this, modern water rights are recognised by the statutory legal framework as property rights or at least as rights akin to property rights. This demonstrates the capacity of statute to accommodate distinctive or sui generis forms of water rights where this is appropriate for the sustainable development of water resources, showing that statutory systems could accommodate customary rights over water.

In the case of customary water rights, a mix of private, individual and collective rights is balanced so as to ensure that the core entitlement is protected from claims similar to those of the original right holder but without excluding individual and collective rights that do not

⁶²Isaac Schapera, *A Handbook of Tswana Law and Custom* (LIT Verlag Münster, 1938).

⁶³Ibid.

⁶⁴Francois du Bois, 'Water Rights and the Limits of Environmental Law' (1994) 6 *Journal of Environmental Law* 73, 79.

undermine the core entitlement. The rationale for this flexibility is the recognition of the fluid nature of water resources, its multiple uses and importance for human and eco-system health. Although providing a rigid system of entitlement rights, Kenya's Water Act contains provisions allowing for mitigation against the effects of the permitting systems. Permits are not required for certain water uses such as the abstraction or use of water without employment of works for domestic use, the development of ground water where none of the works are situated within one hundred meters of any surface water body and storage or abstraction of water from a dam not constituting a watercourse for the purposes of the Act.⁶⁵ The provision though protects the capacity of the Act to derogate from these exceptions through the enactment of rules preventing or requiring permits for any of the excepted uses.⁶⁶

The flexibility of the provisions in relation to permitting under the Act provide some form of 'wiggle room' similar to that provided by Marakwet's customary law with respect to personal water use. In the case of Marakwet's customary law system, clan elders interviewed indicated that despite the strict application of the entitlement rules, the elders retain the discretion to make exceptions to the rules, for example by reallocating water entitlements to help farmers whose crops are at greater risk. Kenya's statutory legal framework to some extent establishes a water rights framework similar in some ways to the framework of Marakwet's customary law system. The exceptions under section 26 and the discretion allowed to exclude certain uses from permit requirements arguably demonstrate statutory flexibility in maintaining some level of public rights to water resources. However, the customary law institutions have an advantage in the exercise of this discretion, given that they are socially embedded in the community which allows for a greater appreciation of the issues affecting the community.

As has been evidenced, in other jurisdictions, the introduction by statute of new water law models has in many cases led to the demise of customary water rights as these systems tend to set up a hierarchy that does not recognize or favour customary rights.⁶⁷ Kenya's Water Act as noted from the above discussions acts in a similar manner. The legal framework provided makes no explicit reference to customary rights. The transitional provisions included in the Act for the protection of pre-existing rights do not extend to customary rights.

⁶⁵Water Act 2003 (Kenya) s 26.

⁶⁶Ibid s 26(4).

⁶⁷Francois du Bois, 'Water Rights and the Limits of Environmental Law' (1994) 6 *Journal of Environmental Law* 73, 80.

The result of this is that customary law systems have no direct basis for asserting their pre-existing rights to water resource governance under the Water Act.

The next section investigates the possibilities available for the recognition of Marakwet's customary institutions in the legal institutional framework established by the Act.

3 *Institutional Framework under Kenya's Water Act*

The success of modern water rights frameworks depend on the effectiveness of monitoring and enforcement of these water rights by the institutions set up for this purpose.⁶⁸ Further, the effective working of these rights requires not only constant measurement and monitoring but also coordination of all institutions engaged in water resource management down to the local levels. A primary objective of the water law reforms undertaken in Kenya was to improve coordination of institutional agencies in the water sector.

Prior to the establishment of the Act, several sectoral ministries, including the Ministry of Water, Ministry of Agriculture, Ministry of Livestock and the Ministry of Local Government, all had mandates extending to water resource policy formulation, regulation and service provision. The involvement of these multiple agencies in water resource management was characterised by institutional weaknesses, poor organizational structure, institutional gaps, conflicting or overlapping functions and responsibilities, excessive bureaucracy, inadequate funds, lack of skilled personnel and a shortage of essential infrastructure.⁶⁹

The water law reforms thus sought to remedy this through the establishment of a comprehensive institutional framework comparable to the frameworks adopted in many other jurisdictions adopting the Integrated Water Resource Management (IWRM) approach. These institutional frameworks are based on a drainage basin approach to water resource management which is considered as the suitable method from a hydrological perspective. The institutional frameworks seek to develop state agencies for water resource management at the national, regional and local level. The finances, technical capacity and human resources required to effectively achieve this, make it a high cost venture. Given the financial challenges faced by the governments of developing countries such as Kenya's, the suitability

⁶⁸Stephen Hodgson, and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006) 44.

⁶⁹Ministry of Water and Irrigation (Kenya), 'The National Water Resources Management Strategy (NWRMS)' (2006) 12.

and effectiveness of replicating this institutional model in their frameworks for water governance has been questioned.⁷⁰

As noted, one of the challenges facing the institutional agencies under the old water law regime was the shortage of qualified staff. Upon creation of the new state agencies, 7,200 employees of the Ministry of Water and Irrigation and another 1,300 employees of the National Water Conservation and Pipeline Corporation (NWPC) were deployed to the new institutions to meet the staffing needs.⁷¹ The effectiveness of the new agencies is dependent on the implementation of the plan for capacity building of the staff. In the absence of qualified staff, the new agencies created under the Act risk being ineffective.

The diagram below provides a schematic outline of the institutional framework established under the Water Act.

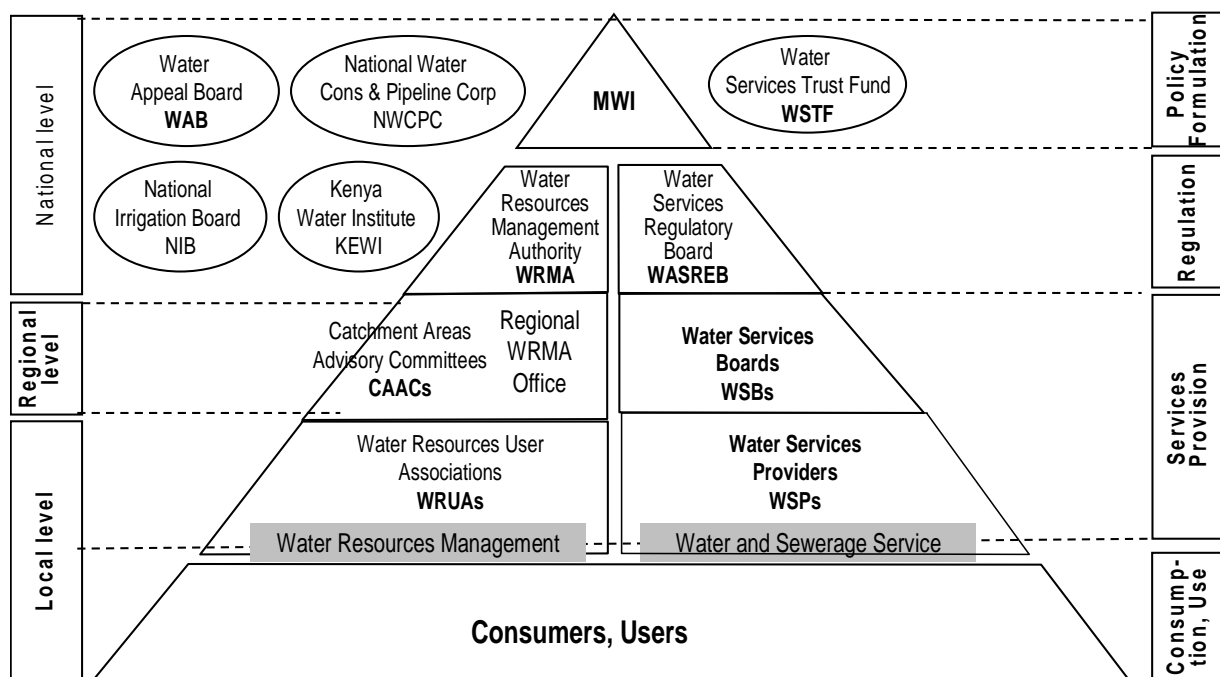


Figure 5 Institutional Framework Established under Kenya's Water Act. Source: Ministry of Water and Irrigation Kenya, National Water Services Strategy 2007-2015

⁷⁰ Aditi Mukherji and Tushaar Shah, 'Groundwater Governance in South Asia: Governing a Colossal Anarchy' (2002) *Water Policy Research Highlight No. 13*, IWMITATA Vallabh Vidyanagar.

⁷¹ Institute of Economic Affairs, A Rapid Assessment of Kenya's Water Sanitation and Sewerage Framework (IEA, 2007).

One of the most radical changes introduced by the Water Act was the institutional restructuring of water management agencies as illustrated in the diagram. As noted earlier, the Water Act vests the ownership of all water resources in the State and grants the Ministry of Water and Irrigation, rights over all water resources.⁷² The Ministry is also vested with the overall responsibility for the development of legislation, policy formulation, sector coordination and guidance, and monitoring and evaluation in the water sector.⁷³

The institutional framework under the Act is designed to ensure the separation of the functions of regulation and management from the functions of service provision. The Water Act thus establishes the Water Resource Management Authority (WRMA)⁷⁴ and the Water Services Regulatory Board (WASREB)⁷⁵ as autonomous entities responsible for water resource management and water and sanitation service provision respectively. The rationale for the separation of functions is to increase the accountability of institutions. In the previous water law regime, the power to regulate was vested in the same body that was charged with service provision resulting in a conflict of interest in the discharge of the two roles.

(a) *Management Function*

WRMA's functions under the Act include: planning, management, protection and conservation of water resources; allocation apportionment, assessment and monitoring of water resources; issuance of water permits, management of water rights and enforcement of permit conditions; regulation of conservation and abstraction structures; catchment and water quality management; regulation and control of water waste; and coordination of the IWRM plan.⁷⁶ In accordance with the National Water Resource Management Authority, WRMA is also charged with the designation of certain areas from which rainwater flows into a water course as catchment areas. The Authority is under the Act required to formulate a catchment management strategy for the management, use, development, conservation, protection and control of water resources within the area.⁷⁷

⁷²Water Act 2003 (Kenya) s 3.

⁷³Ministry of Water and Irrigation (Kenya), 'The National Water Services Strategy (NWSS) 2007-2015' (2007).

⁷⁴Water Act 2003 (Kenya) s 7.

⁷⁵Ibid s 46.

⁷⁶Ministry of Water and Irrigation (Kenya), 'The National Water Services Strategy (NWSS) 2007-2015' (2007).

⁷⁷Water Act 2003 (Kenya) s 15.

The Act establishes Catchment Area Advisory Committees (CAACs) to assist WRMA with management functions at the catchment or regional level.⁷⁸ Membership of the CAACs is drawn from a wide variety of stakeholders including representatives of ministries, regional development authorities, local authorities, farmers and pastoralists in the catchment area, business communities operating in the area, NGOs and other competent persons.⁷⁹ Arguably, CAACs provide an opportunity for the Marakwet community members to participate in the water resource management functions in the statutory framework. However, none of the clan elders interviewed were members of the relevant CAAC nor were they aware of the existence of such an opportunity.

The catchment management strategy for each area should, in accord with the national water resources strategy, take into account the class of water resources and resource quality objectives of water in the area, prescribe principles, objectives and institutional arrangements of the Authority for management of the area, contain water allocation plans and principles for such allocation and very importantly provide mechanisms and facilities for enabling the public and communities to participate in managing the water resources within each catchment area.⁸⁰ The Act further specifies that one of the modes of achieving participation of the public and communities in management of water resources within the catchment areas is through the establishment and operation of WRUAs.⁸¹ The provision clearly indicates that it is not intended to undermine the generality of subsection 3 implying that WRUAs are not the sole vehicles for involving the public or communities.

Although the Act does not define the term, it can be deduced from the context in which they are established that WRUAs are envisaged as groups of users or community groups who form a legally recognised association for purposes of cooperative management of water resources and conflict resolution.⁸² The Water Management Rules enacted after the Act have further developed the concept and working of WRUAs.⁸³ The rules define a WRUA as:

⁷⁸Ibid s 16.

⁷⁹Ibid s 16(3).

⁸⁰Ibid s 15(3).

⁸¹Ibid s 15(5).

⁸²Ibid s 15(5).

⁸³Water Resource Management Authority, *Water Resource Management Rules*, Legal Notice No. 171 (28th September 2007).

*an association of water users, riparian land owners, or other stakeholders who have formally and voluntarily associated for the purposes of cooperatively sharing, managing and conserving a common water resource.*⁸⁴

The Rules further provide that WRUAs must be legally registered entities in order to be considered for registration by WRMA.⁸⁵ The effect of this is to require pre-existing community based or customary institutions for water resource governance seeking to use WRUAs as vehicles for recognition under the statutory framework to obtain registration.

Neither the Act nor the rules provide the specific form of registration for WRUAs. The rules define a legally registered entity as ‘an organisation, corporate body or person that has legal status.’⁸⁶ WRUAs can therefore be registered as companies, societies, trusts or NGOs. The rationale for this registration is to bring them within the formal framework which provides benefits to WRUAs. Registration of WRUAs, for example, allows the association to access the funding opportunities provided by the Water Services Trust Fund (WSTF). The WSTF is a pro-poor basket fund established by the Act for purposes of financing water services in underserved parts of the country such as rural areas.⁸⁷

(b) *Service Function*

WASREB, as noted, is the agency responsible for water and sanitation service provision in the institutional framework developed under the Act. As indicated earlier, the Act provides that the right to provide water and sanitation services can only be obtained through the grant of a licence by WASREB to a WSB.⁸⁸ Further, under the Act, only WSBs are mandated to provide water and sanitation services through WSPs.⁸⁹ A WSP is defined as a company, non-governmental organization or other person or body that provides water services in accordance with a licence agreement.⁹⁰ The relation between WSBs and WSPs is regulated through a

⁸⁴Ibid, rule 2.

⁸⁵*Water Resource Management Rules 2007 (Kenya)* rule 10.

⁸⁶Ibid, rule 2.

⁸⁷*Water Act 2003 (Kenya)* s 83.

⁸⁸Ibid s 57 (1).

⁸⁹Ibid s 53(2).

⁹⁰Ibid s 2.

Service Provision Agreement (SPA). Four categories of SPAs are anticipated under the framework:

- a. Category I for medium to large WSPs applies to service providers incorporated as limited liability companies or trusts. Where registered as companies, they tend to be owned by one or more local authority. WSPs under this category provide both water and sewerage services;
- b. Category II relates to community water supplies managed by WSPs which are often registered as WUAs by the Registrar of Societies;
- c. Category III covers community projects operated by third parties, These are private WSPs which include NGOs or private organizations; and
- d. Category IV applies to bulk water supply.⁹¹

Since the enactment of the Act several WSBs have been set up. The Lake Victoria North Water Service Board (LVNWSB) is the relevant WSB for Marakwet District. As an official from the Board explained, WSBs are set up in accord with catchment areas.⁹² Regional WSBs cover large geographical areas, with the LVNWSB for instance, covering a geographical area of approximately 14,000 square kilometres which includes 12 districts. Although several WSPs have been approved by the LVNWSB, few of these are located in the area under study. As noted from the results of the interviews and focus group discussion, water for irrigation and domestic use for the community under study is sourced mainly from the furrow system.

The largest WSP of the LVNWSB is the Eldoret Water and Sanitation Company. A discussion with an employee from ELDOWAS highlighted some of the challenges associated with registration and operation of WSPs in the region.⁹³ He explained that ELDOWAS has about 39,000 connections mostly around the urban and peri-urban areas of Eldoret, generating revenue of approximately AUD\$ 350,000 per month. Given the size of the company and the operation costs, this revenue is barely sufficient. The low return on investment in water service provision, he explained, has led smaller WSPs operating in some peri-urban parts of Eldoret to shut down. ELDOWAS coverage does not extend to Marakwet district.

⁹¹Water Sector Reforms: Five Years On' (2008) *Kisima. A Forum for Analysis and Debate on Water and Sanitation Issues in Kenya*, 5.

⁹²Interview with Mr.Munene Muigai (Lake Victoria North Water Services Board Regional Office Eldoret, 6th February 2011).

⁹³Interview with Jacob Turot (ELDOWAS Company Limited, Eldoret, 12 February 2011).

In recognition of the lack of water supply services to rural areas, the LVNWSB has set up a Community Development Section whose core function is to support communities to develop water and sanitation services.⁹⁴ The section gives support to communities in the form of preparation of proposals for funding from the WSTF. One of its long-term goals is to develop an investment fund to consolidate the WSTF efforts.⁹⁵ Presently, the WSTF has a program referred to as the Community Project Cycle (CPC) through which communities can present rural water supply services proposals for financing of water and sanitation facilities by the WSTF.⁹⁶ One of the objectives of the CPC is to help community based organisations (CBOs) in rural areas wishing to obtain financing for water and sanitation service provision to develop WUAs which are legally recognized organizations that can enter into SPAs with the relevant WSB. The CPC's objective is to eventually build the capacity of WUAs for the provision of sustainable water services in rural areas.

(c) Opportunities for Marakwet's Customary Law Institutions

The institutional restructuring process described above, did not explicitly address the issue of customary institutions involved in water governance at the local level. As noted earlier, the community members participating in the focus group discussions and interviews had no knowledge of the transition in institutional set up of the water framework and indicated that they did not participate in the policy and law formulation process.

In the absence of explicit provisions recognising customary rights or institutions in the Act, the institutions established for water resource management at the local level, constitute the only opportunity for integration of customary institutions of governance seeking to exercise their right to water governance. Consequently and as noted earlier, in other jurisdictions such as Tanzania and South Africa, the statutorily created WUOs have been explored as possible vehicles for recognition of pre-existing traditional or customary institutions of water governance.⁹⁷ In the following section, the opportunities created by WRUAs, WSPs and

⁹⁴Lake Victoria North Water Service Board (LVNWSB), *Community Development Section* (2012) <<http://www.lvnwsb.go.ke/documents/CommunityDevelopmentSection.pdf>>.

⁹⁵Ibid.

⁹⁶Ministry of Water and Irrigation (Kenya), *An Overview of the Community Project Cycle (CPC)* (Ministry of Water and Irrigation, Kenya, 2007).

⁹⁷Abraham Mehari, et al, 'Integrating Formal and Traditional Water Management in the Mkoji Sub-catchment, Tanzania: Is it Working?' <http://www.bscw.ihe.nl/pub/bscw.cgi/d2607619/Mehari.pdf>; Farai Kapfudzaruwa, and Merle Sowman, 'Is There a Role for Traditional Governance Systems in South Africa's New Water Management Regime?' (2009) 35(5) *Water SA* 683.

WUAs for recognition of customary institutions are explored in the context of Marakwet's customary law system.

The statutory support for WRUAs is premised on the recognition of the fact that WRUAs could facilitate the conservation of water catchments as information on the status of water resources is shared and users are exhorted to manage the resources properly. From the foregoing, it would appear that customary institutions of water governance would benefit from registering WRUAs under the Water Act. The researcher thus sought to determine if the Marakwet community members had considered the option of seeking registration of their customary institution as a WRUA.

Less than 10 per cent of the water users were aware of the existence of WRUAs and even among these it was evident that there was confusion between WRUAs and other water groups. This confusion between WRUAs and other forms of water user organisations such as WUAs is not limited to Marakwet community members. Due to the separation of management and service functions under the Act, WRUAs are not service organizations and are empowered rather through the participation of their members in management functions which distinguishes them from other WUAs that may be engaged in service provision.⁹⁸ Despite this clear difference, there was a lack of clarity in terminologies used during the reform process.⁹⁹ The confusion was exacerbated by the use in different policy documents of similar terms as for instance the National Water Resource Management Strategy's references to the need for WRMA to encourage the formation of 'river water users associations'.¹⁰⁰ In the interview with the LVNWSB official, a clarification was sought on WRUAs, WUAs, WSPs and water supply schemes. According to the official, WRUAs are charged with monitoring and management issues and WSPs with service provision. WUAs are provided under WASREB but are distinct from water schemes which he described as similar to water providers.¹⁰¹ This implies that, as noted earlier, despite the similarity of the terms, WRUAs

⁹⁸Water Services Trust Fund (WSTF), *The Water Resources Users Association Development Cycle (WDC)* (2012) <http://www.wstfkenya.org/index.php?option=com_content&task=view&id=55&Itemid=66>

⁹⁹ See Kenya, *Parliamentary Debates*, House of Representatives, 18 July 2002, 1762 (Mr. Nooru). A question on the distinction of WRUAs from the already existing concept of WUAs was raised during debate on the Bill but no clarification seems to have been made.

¹⁰⁰Ministry of Water and Irrigation (Kenya), 'The National Water Resources Management Strategy (NWRMS)' (2006), 75.

¹⁰¹Interview with Mr. Munene Muigai (Lake Victoria North Water Services Board Regional Office Eldoret, 6th February 2011).

are distinct from WUAs and that the WUAs falling under WASREB are distinct from the general notion of water user associations which have a long history in Kenya.

Apart from this confusion of WRUAs with WUAs, the representatives of the clan elders also indicated that they had not sought to register either WUAs or WRUAs. The participants of the focus group discussion with younger women explained that though they have informal women groups they had not heard of the possibility of registration of water user associations provided under the Water Act. When the possibility of registration of such associations and their role in the management of water resources as anticipated in the Water Act was explained to them, the women showed interest and indicated that they would like to participate in such fora. In the course of the focus group discussion, some explained that they were aware that there was a need to take steps to gain recognition of their customary law system within the statutory framework, but they were not certain about the form and implications of the registration. One of the participants of the focus group discussion with clan elders indicated that he was aware of a registration requirement relating to social services. Another participant thought that they had registered their customary system but was not certain in what capacity.

The lack of registration of a WRUA by the community members participating in this field work seems to confirm the arguments made by Mumma that the complexity of the registration process makes it inaccessible to community institutions operating in poor rural areas.¹⁰² He argues that the registration process contrasts with the simpler and inexpensive system existing previously in which there was no requirement for formal registration of customary institutions and these were simply recognised as CBOs without legal status.¹⁰³

Apart from the complexity of the registration process, the statutorily created WRUAs contain features that render them inadequate as potential vehicles for the recognition of customary law systems of water governance such as that of the Marakwet. Membership to the WRUA is voluntary whereas, in the case of the customary law systems, the fact of belonging to a community necessarily brings one within the realm of the customary law system and thus within the mandate of the customary institutions of governance. While members of a

¹⁰²Mumma, Albert, 'The Role of Local Communities in Environmental and Natural Resource Management: The Case of Kenya' in LeRoy Paddock et al (eds), *Compliance and Enforcement in Environmental Law. Toward More Effective Implementation* (Edward Elgar, 2011).

¹⁰³Albert Mumma, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005, 2005).

proposed WRUA are, under the Act, left free to determine the constitution and functions of their WRUA, the statutory framework for WRUAs recommends the inclusion of riparian members, abstractor members, non-consumptive members as well as observer members.¹⁰⁴ This composition differs fundamentally from the composition of customary law systems of water governance, where members are often all insiders with an interest in the common resource. Given the difference in nature and composition of the statutory creations and customary law systems of water governance, the latter provide a limited tool for accommodation of customary law systems into statutory frameworks.

Further in accordance with this separation of functions, WRUAs are anticipated in the context of water resource management and so come under WRMA. Consequently, WRUAs cannot engage in provision of water services, whereas customary law systems of water governance, like the Marakwet's, engage in both management and service provision. This distinction in functions, necessitating the separation of WRUAs and WSPs makes it difficult to use these statutorily created institutions as vehicles for recognition of customary law systems of governance. To fit into the statutory legal institutional framework, while maintaining its management and service provision functions, Marakwet's customary law system would have to consider registration of both a WRUA and WSP.

The inappropriateness of the use of WRUAs to accommodate Marakwet's customary law system was also expressed by the ELDOWAS official interviewed in the course of the field work.¹⁰⁵ He was of the view that in the case of the Marakwet, the community would benefit from the registration of a rural water supply scheme which, in his view, is distinct from a WRUA or WUA. He observed that in the long run, the Marakwet could benefit from registering a WSP as this would allow them to charge a fee and improve their services as well foster sustainability.

The Water Act does not include references to water schemes, a terminology which existed in the regime of the previous Act. However, the Water Act includes provisions for state schemes and community projects.¹⁰⁶ Marakwet's irrigation system has not been classified as a state scheme and thus the state scheme provisions would not be applicable. The Act defines a community project as a project approved by WRMA and operating under a permit for the use

¹⁰⁴ This is the recommended composition for WRUAs seeking to access funding from the WSTF.

¹⁰⁵ Interview with Jacob Turot (ELDOWAS Company Limited, Eldoret, 12 February 2011).

¹⁰⁶ *Water Act 2003* (Kenya) s 19.

of water or drainage of land within a defined area for community purposes and which has been declared, by notice published in the Gazette, to be a community project for the purposes of the Act.¹⁰⁷ The provisions for community projects thus provide an option in which the Marakwet customary law system can seek recognition under the Act. However, this would still imply the application for a permit and the approval of the Minister for Water and Irrigation subject to the conditions set out under the Act.¹⁰⁸

As noted under the CPC programme, the community could apply to the LVNWSB for approval to operate as a WSP. Given the nature of the customary law system used for service provision, the community's application would likely fall into Category II or III which relate to community water supplies managed by WSPs registered as WUAs or as private organizations.

Apart from the provisions on management of water resources in the Water Act, the Constitution too contains provisions on water resource management. As was noted earlier in this chapter, water resources are classified as public land under the Constitution and to that extent fall within the mandate of the National Land Commission. The Constitution provides that the general management of surface and ground water is in the hands of the National Government while the management of water and sanitation services is the mandate of county governments.¹⁰⁹ The implementation of Constitutional provisions is yet to be completed and thus it is not clear how these provisions will be harmonised with those of the Water Act. However, county governments are likely under the Constitution to acquire mandate of management of water resources at community level, increasing the number of state agencies involved in the management of water resources. Depending on the mode of devolution adopted by the government, the county level offices may provide an opportunity for Marakwet community members to participate in governance in general and thus implement their water governance system.

It may be concluded from the above that the Water Act provides channels through which customary institutions may participate as stakeholders in WRUAs; may undertake water service provision as WSPs; or may seek approval for the continued running of their water system as a community project. While these provisions arguably provide space for the

¹⁰⁷Ibid s 19.

¹⁰⁸Ibid ss 23 and 24.

¹⁰⁹*Constitution 2010 (Kenya) Fourth Schedule.*

interface of customary and statutory laws and institutions in water governance frameworks, the adequacy of the space provided is questionable.

C Integration of Customary Law Systems in Water Governance Frameworks

The importance of customary law systems for water governance lies in their potential to contribute to sustainable development. As demonstrated in chapter five, not all customary law systems contribute to sustainable development. Based on the analytical framework used in this thesis, several features inherent in some customary law systems have been identified as essential to the potential of these systems to contribute to sustainable development of natural resource governance. Consequently, this thesis argues that the adequacy of the legal space provided for customary law systems of water governance in a statutory water framework is determined by the extent to which these features of sustainability are not compromised or undermined. The adequacy of the space provided in Kenya's Water Act for Marakwet's customary law system is thus analysed in the context of the extent to which the space provided allows the system to maintain its features of sustainability.

One of the fundamental features for a customary law system to demonstrate positive outcomes in sustainable development of resources is the capacity of members to self-organise. The right to organise the normative system and institutional structures as discussed in the previous chapter, enables the resource users to develop a resilient and adaptable governance system.

As noted above, the policy and law formulation process leading to the Water Act and the institutional reform established by the Act was to a large extent a top-down exercise. Marakwet community members participating in this research indicated that they were not involved in the process. There was little evidence of appreciation among resource users and managers of the statutory systems for water resource governance. Most of the users interviewed had neither heard of the Water Act nor of its provisions. In relation to Constitutional provisions relating to water resources, many indicated that they were aware of the promulgation of the Constitution and had been involved in the civic education programmes before its promulgation. Nevertheless, these sessions did not in their opinion deal with issues of water resource management. Some of the participants explained that the

civic education on the Constitution had unfortunately ended up becoming politicised by some local leaders who saw in it an opportunity to gain political mileage.¹¹⁰

The custodians of the customary law system interviewed thus indicated that there was a lack of adequate consultation in the water law reform process. In the absence of such consultation, they believed it unlikely that the laws developed would cater for their interests. One of the discussants expressed his frustration with such a law as follows:

...the laws are written by people who live far away and have never been here in Marakwet and so do not understand how things work.

Arguably, the provisions in the Water Act allowing for stakeholder participation and particularly for community participation at the local level provides opportunity for the Marakwet to get involved in the development of rules on management and allocation. As noted through membership in CAACs, the clan leaders could be involved in the development of the catchment strategy for their area. In reality, the location of the regional office and the mode of operation of participation of stakeholders in CAACs do not facilitate the participation of clan elders. Most of the clan elders interviewed indicated that they had received no formal education but had rather gained life skills through apprenticeships. As noted their knowledge of the furrows and ecosystem is based on transmitted traditional knowledge. As discussed above, the registration of community members as a WRUA also presents challenges.

The option of application for approval as a community or rural water supply scheme seems the most feasible option under the Water Act for the community to protect their right to continue providing water services to their users. As noted such approval would be regulated by a SPA between the community and the LVNWSB and would bring the community within the mandate of WASREB. The extent to which community members could maintain their right to develop the normative and institutional systems governing their water resources would be limited though this risk could be mitigated through their negotiating SPAs that protect this right. As indicated, community members interviewed were yet to engage LVNWSB in seeking such an approval. The accessibility of funding from the WSTF and

¹¹⁰ The process of developing a new Constitution in the country was politically charged. The initial efforts were frustrated and ended up resulting in a rift that defined the political alliances for the 2007 parliamentary elections. With the coalition government the process was re-started but again resulted in a rift between the coalition government and opposition leaders. A national referendum eventually led to the adoption of the new Constitution.

other sources may help the community acquire bargaining power and so preserve their autonomy. However, the effectiveness of this approach is yet to be tested by the community.

The presence of a knowledge management system in a customary law system has also been identified as an important indicator of a customary law system's capacity to contribute to sustainable development. As noted in the previous chapter there is evidence that Marakwet's customary law system is based on traditional knowledge of the area's ecosystem and an appreciation of the social, cultural and economic circumstances of the community. This is further corroborated by the ELDOWAS official interviewed who observed that:

*The management system in Marakwet is based on critical thinking over time. Although based on simple infrastructure, the system is self-conserving as evidenced by rules protecting surrounding forests and reducing conflicts. This system has ensured access of water for domestic use and irrigation. The furrow system is very entrenched and therefore the new (water) laws will find it difficult to interfere with the system.*¹¹¹

While appreciating that the Water Act provides opportunities for integration of some aspects of Marakwet's customary law system of water governance, the official notes that the customary law system is more entrenched. The accommodation provided by statute thus ought not only to appreciate the embedded knowledge base of the system but also build on this where possible. Experience from the East Cape Province of South Africa indicates that traditional leaders play an important role in the implementation of catchment strategies and thus a failure to involve them from the beginning results in contradictions between the structure and values of the statutory framework and the customary governance system.¹¹²

The above supports the inclusion of customary institutions in earlier planning stages rather than solely at the implementation stage at the local level as appears to be the approach taken by the institutional framework under Kenya's Act.

As discussed earlier, successful customary systems incorporate mechanisms for ensuring accurate information on the environment changes and the economic and social conditions are fed back into the system to facilitate the decision making process.¹¹³ A further characteristic of successful systems, related to above feature, is the presence of an effective procedural

¹¹¹Interview with Jacob Turot (ELDOWAS Company Limited, Eldoret, 12 February 2011).

¹¹²Farai Kapfudzaruwa, and Merle Sowman, 'Is There a Role for Traditional Governance Systems in South Africa's New Water Management Regime?' (2009) 35(5) *Water SA* 683, 687.

¹¹³Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 257.

mechanism for changing rules and developing new ones to match the changes in circumstances.¹¹⁴ The connections of the way in which rules are affected by these ecological, economic and social conditions is not always evident and as is the case with the Marakwet, the norms may be encoded within a sacred-religious context. The adoption of statutory institutional forms often implies a reduced reliance on these types of mechanisms. In the absence of replacement of these feedback mechanisms by the statutory governance systems, this feature which contributes to sustainable development may be undermined.

A successful customary law system, as noted earlier, defines rules and individual entitlements in such a way that these can be adjusted without having to overhaul the entire rule system.¹¹⁵ Marakwet's customary law despite comprising of broadly defined rules on water allocation also includes other ad hoc rules relating to allocation schedules, maintenance work plans and quality control which are re-defined frequently and are subject to consultation. Statute and the subsidiary legislation developed by such statute are not as easily modifiable as the informal rules governing Marakwet's customary law system. The Constitutions of WRUAs or WUAs or potential SPAs with LVNWSB that the Marakwet would use would imply the loss to some extent of the flexibility accorded to the system with respect to developing and using stratified or fine grained rules.

Customary law systems that incorporate rules creating a wide range of rights and responsibilities related to the economic, social and ecological aspects of the use of a resource are more likely to foster sustainable development.¹¹⁶ Marakwet's customary law system, as noted, extends to all aspect of societal life which facilitates the creation of this wide scope of rights and responsibilities. Further, the fact that the sanctions applicable for non-compliance with water rules have far reaching social implications makes the payoffs large and the stakes high enough to motivate resource users in the community to participate in the development

¹¹⁴Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990) 193-202.

¹¹⁵Carol M Rose, 'Common Property, Regulatory Property, and Environmental Protection: Comparing Community-based Management to Tradable Environmental Allowances' in Elinor Ostrom, National Research Council (U.S.) and Committee on the Human Dimensions of Global Change (eds), *The Drama of the Commons* (National Academy Press, 200).

¹¹⁶Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 262.

and implementation of the system.¹¹⁷ Due to the nature of statutory legal frameworks, the rules and laws created by the system are not intertwined with other social economic and cultural aspects of the community. As a result, the changes that Marakwet's customary law system may have to make to fit into the institutional forms of WRUAs, WSPs or Community WSS may result in the loss of this characteristic of entrenchment.

The above discussion confirms that, though the statutory framework for water governance provides some legal space for Marakwet's customary law system of water governance, the space provided would require a restructuring of the customary system. The restructuring or adaptation required may, in some cases identified above, result in the compromise of some of the features of sustainability inherent in Marakwet's customary law system.

In the course of the field work, the researcher sought to obtain the views of the community members' on the interface that should exist between the statutory water framework and their customary law system. The clan elders indicated that though they were unaware of the import of the Water Act, they would be interested in understanding the provisions and the relation of these with their water resources. They proposed that government consult the community prior to the development of rules affecting their water resources. Such consultation would enable them to develop an effective cooperation and, in their view, if no consultation is made then the customary law system would operate independently of the provisions of statute. The reason for the reluctance to embrace statutory provisions at the expense of their customary law is that the latter has sustained the community for many years.

From the discussion on the perceived ideal interface, the researcher gathered that the community members are not opposed to the integration of the customary system in the statutory framework and in fact are aware of benefits that could arise from such integration. For instance, one of the clan elders was of the view that mutual cooperation of customary institutions and state agencies in enforcing rules on water use and quality would contribute to sustainable development. Further, as noted earlier, the community appreciates the role of the government in helping them access funding and technical capacity to improve the domestic water supply and sanitation services.

¹¹⁷ As was noted this is one of the features demonstrated by successful user managed irrigation schemes in Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary* 14.

D Conclusion

The above analysis of Kenya's statutory legal framework for water governance confirms that, Kenya's water law is modelled on the premises of modern water law. Consequently, the law demonstrates many of the features described in chapter four as common to national legal frameworks of water governance in many jurisdictions. The conception of the terms law, customary law and property in the statutory framework for water governance is similar to that described in chapters three and four. Water law is thus regarded in the context of statute with little recognition accorded to customary law on water. The state plays the primary role in development and implementation of water governance frameworks. The water rights system anticipated by Kenya's water law does not accommodate common property rights.

Although the institutional framework established under the Act contains provisions allowing for the participation of community members in water management, the framework does not adequately accommodate customary law systems of water governance. This is because, the statutorily created institutions through which community members can participate in water management, are essentially distinct in nature and composition from customary law normative systems and institutions. Consequently, customary law institutions seeking recognition through registration under these institutional frameworks, risk losing their nature and inherent features which would not be ideal as these features are what enable the systems to contribute to sustainable development.

In light of the above, it can be concluded that modern water law, as illustrated also by Kenya's Water Act, is influenced by legal positivism and thus by this theory's conceptions of law, customary law and property, as well as its perception of the role of the state in law. The legal theories and concepts underlying modern law result in the development of legal frameworks for water governance that do not adequately accommodate or integrate customary law systems. This proves the hypothesis put forward by this thesis that there is a disconnect between customary and statutory law in the development of legal frameworks of water governance. As customary law systems of water governance can contribute to sustainable development, their accommodation and integration with statutory law systems would result in the development of water governance frameworks that foster sustainable development.

The next chapter explores the use of the human rights based approach as a legal strategy for improving integration of customary law and statutory law in water governance for sustainable development.

VIII CHAPTER 8 HUMAN RIGHTS-BASED APPROACH (HRBA): STRATEGY FOR INTEGRATION OF CUSTOMARY AND STATUTORY LAW IN WATER GOVERNANCE FOR SUSTAINABLE DEVELOPMENT

The preceding chapters demonstrate the disconnect between statutory and customary law in modern legal frameworks for water governance. A critical analysis of customary law systems in general and Marakwet's customary law system in particular, shows evidence of the potential of customary law to contribute to sustainable development in water governance. Consequently, the effective integration of customary and statutory law in water governance systems would improve the capacity of these systems to achieve sustainable development. The examination of the main features of modern water law, and more specifically of Kenya's water law, reveals that although modern water law contains provisions for the recognition of customary law or the accommodation of customary law institutions, these provisions are inadequate.

The present chapter thus seeks to explore the use of the human rights-based approach (HRBA) as a legal strategy to redress the problem of the lack of integration of statutory and customary law systems of water governance in the development of water governance frameworks for sustainable development. A brief introduction of the notion of the HRBA helps in identifying its significance and the potential value of using the approach. Section B analyses the human right to water and the proposed use of the HRBA in water governance for sustainable development. This analysis demonstrates the extent to which the HRBA could be used by communities to protect their freedom to use customary law systems of water governance to realise their human right to water. Section C discusses the potential of using the right of indigenous peoples to self-governance as a legal basis for protecting their right to use customary law systems for water governance. The potential problem of conflict of laws arising from the integration of statutory and customary law systems is discussed in Section D. Finally, this chapter addresses some of the theoretical challenges that threaten the effectiveness of the HRBA.

A *The Human Rights-based Approach*

The HRBA has been described as 'a conceptual framework for the process of human development that is normatively based on international human rights standards and

operationally directed to promoting and protecting human rights.’¹ The HRBA emerged as an alternative approach to development. In practice, the HRBA represents the attempt to address development problems by analysing and redressing the inequalities and discriminatory practices that are at the root of these problems. The objective of the framework is to bring human rights to the core of development so as to ensure the primacy of human well-being in the determination of development goals.²

Proponents of this approach argue that the HRBA is, legally and morally, the right approach, given that development problems are in essence problems of human rights.³ Further, the HRBA has been advocated as an effective method for achieving sustainable human development outcomes on various grounds. Firstly, contextualising development issues in an environment of rights helps to highlight the effect of development problems on individuals who have the right to have the problems redressed. Secondly, the focus on individual’s rights also emphasises the need for their participation in finding solutions and facilitates monitoring of development efforts. Thirdly, the HRBA allows for the adoption of a holistic view as human rights cut across the various aspects of development. Finally, the introduction of development issues into the realm of international and national human rights law enables users of the HRBA to take advantage of established human rights legal instruments, institutions and mechanisms to pursue and implement development goals.⁴

This shift in the approach to development has been applied to water governance. In the context of water resource governance, the HRBA is described as a paradigm that seeks to direct all water management systems towards a guarantee of the basic human need for water and that provides the individual water user with the instruments to enforce this need for water.⁵ It is argued that such an approach is more effective at resolving the prevailing global problems of water and sanitation. Due to its focus on the human right to water and the obligations of states to ensure the realisation of this right, the HRBA provides an opportunity

¹Office of the United Nations High Commissioner for Human Rights, 'Frequently Asked Questions on a Human Rights-Based Approach to Development Cooperation' (2006) <<http://www.ohchr.org/Documents/Publications/FAQen.pdf>>, 15.

²Celestine Nyamu-Musembi and Andrea Cornwal, 'What is the “Rights-Based Approach” All About? Perspectives from International Development Agencies ' (2004) *IDS Working Paper* 234.

³Office of the United Nations High Commissioner for Human Right, above n 116.

⁴ See *ibid* for detailed discussion of these potential benefits of the HRBA.

⁵Knut Bourquain, Freshwater Access from a Human Rights Perspective: A Challenge to International Water and Human Rights Law, *International Studies in Human Rights* (Martinus Nijhoff, 2008)12.

for individuals and communities such as the Marakwet to use the human right to water to enforce state obligations towards them arising from this right.

Apart from water governance, this thesis recognises a further potential application of the HRBA in the context of indigenous peoples' use of customary law systems for self-governance. The 2007 Declaration on the Rights of Indigenous Peoples affirms the right of indigenous peoples to self-governance through the use of their customary law systems.⁶ Arguably, this right coupled with the human right to water, can be used by communities, such as the Marakwet, that rely on a customary law systems for water governance to enforce their right to govern their water resources using a customary law system that contributes to sustainable development.

In the following sections, a critical analysis is undertaken of the human right to water, the right of indigenous peoples to self-governance and the effectiveness of applying the HRBA in these two contexts. The analysis serves as the basis for determining the extent to which the HRBA provides an effective legal strategy for redressing the disconnect between customary and statutory law in the development of water governance systems for sustainable development.

B The HRBA in Water Governance for Sustainable Development

A fundamental requirement for the use of the HRBA as a legal strategy is the existence of a human right to water in international and national law. The following section traces the development of the recognition of the human right to water in the context of international human rights law and more specifically, in Kenyan law.

1 Recognition of the Human Right to Water

The formal recognition of the human right to water and sanitation was made by the United Nations General Assembly in July 2010, through a Resolution of the General Assembly.⁷ The Resolution recognises the right to water and sanitation as essential to the realisation of all human rights.⁸ Consequently, it calls upon states and the international community to provide

⁶*United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007).

⁷*The Human Right to Water and Sanitation*, GA Res 64/292, UN GAOR, 64th sess, 108th mtg, Agenda Item 48, Supp No 49, UN Doc A/64/L.63/Rev.1 (26 July 2010).

⁸*Ibid* [1].

the financial resources necessary to help developing countries, in the provision of safe, clean and accessible and affordable drinking water and sanitation to all.⁹

The United Nations Human Rights Council, in September 2010, affirmed that the human right to safe drinking water and sanitation is derived from the right to an adequate standard of living and that it is inextricably linked to the right to the highest attainable standard of physical and mental health as well as the right to life and human dignity.¹⁰ This Resolution by the Human Rights Council also reaffirms that the primary responsibility for the realisation of all human rights, including the right to water and sanitation, lies with the state and therefore delegation to third parties does not exempt the state from its human rights obligations.¹¹ States are thus encouraged to put in place the mechanisms necessary for the progressive achievement of the human rights obligations related to this right with an emphasis on the unserved or underserved areas.¹²

Although the formal declaration of the right to water and its explicit link to international human rights law was made in 2010, its foundation and acknowledgement as a derivative right goes further back in time. The primary foundation for this right, as the case with all international human rights, lies in the Universal Declaration of Human Rights (UDHR).¹³ Article 22 of the UDHR laid the foundation for the economic, social and cultural rights which forms the basis for the right to water and other related rights.¹⁴ Further, the UDHR recognised the right to a standard of living adequate for the health and wellbeing of the individual and of his family,¹⁵ which right, as noted above, is inextricable from the right to water and sanitation. The human right to water and sanitation is thus now formally recognised at the international level. The right is also widely recognised in the national legal frameworks of water governance of most countries. In some jurisdictions, the right to water is included in

⁹Ibid [2].

¹⁰*Human Rights and Access to Safe Drinking Water and Sanitation*, Human Rights Council Res 64/292, UN GAOR 15th sess, 108th plen mtg, Agenda Item 3, UN Doc A/HRC/15/L.14 (30 September 2010) [3].

¹¹Ibid [6].

¹²Ibid [8].

¹³*Universal Declaration of Human Rights*, GA Res 217A (III) UN GAOR, 3rd sess, 183rd plen mtg, UN Doc A/810 (10 December 1948).

¹⁴See *ibid*, art. 22 which provides for the right of every person ‘to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality’.

¹⁵Ibid, art 25(1).

the Constitution, as is the case in Congo, Ethiopia, Ecuador, and South Africa.¹⁶ In others, the right is recognised in the water statute.

The Constitution of Kenya includes among the economic and social rights, the right of all Kenyans to clean and safe water in adequate quantities.¹⁷ The Constitution further requires the government to take affirmative action to ensure that minorities and marginalized groups have reasonable access to water.¹⁸ Apart from these explicit provisions relating to the right to water, other Constitutional provisions related to the environment and natural resources may have implications on the right to water. The Constitution also grants all Kenyans a right to a clean and healthy environment which includes the right 'to have the environment protected for the benefit of present and future generations through legislative and other measures particularly those contemplated in article 69'.¹⁹ Article 69, sets out the obligations of the State with respect to the environment and includes the duty of all to cooperate with State organs in protecting and conserving the environment and ensuring ecologically sustainable development and use of natural resources.

The Constitution includes some progressive provisions with respect to the enforcement of these environmental rights. Article 70 provides that where a person's right to a clean and healthy environment under Article 42 'has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to court for redress in addition to any other legal remedies that are available in respect to the same matter.' The provision includes an anticipated guard against the problem of legal standing, by providing that 'for the purpose of this Article, an applicant does not have to demonstrate that any person has incurred loss or suffered injury'.²⁰ Water resources are part of the environment and thus these provisions can be invoked to protect the right water resources.

A further provision on natural resources requires the ratification by Parliament of the grant of a right or concession including by the national government for the exploitation of any natural resource in Kenya, where the agreement is entered into on or after the effective date and

¹⁶International Development Law Organization, 'The Legal Framework of Water Resource Management. Lessons learned from the IDLO Seminar on Legal Framework of Water Resource Management Conducted on September 11-22, 2006 in Rome' (2006) (6) *Development Law Update*2.

¹⁷*Constitution 2010* (Kenya) art 43(1)(d).

¹⁸*Ibid* art 56(e).

¹⁹*Ibid*, art 42 (a).

²⁰*Ibid*, art 70 (3).

relates to a class of transaction subject to ratification.²¹ The Article provides that Parliament shall enact legislation providing the classes of transactions subject to ratification.²² The term natural resource is defined to include surface and groundwater.²³

In light of the foregoing, it can be concluded that a human right to water exists both in international law and in the context of Kenya's law. Marakwet community members thus have a human right to water that is recognised by international law and also by the Kenyan Constitution. Although, the existence of the human right to water is not disputable, its questions have been raised regarding its normative content and justiciability.

2 *Normative Content and Justiciability*

While not contending that the right to water and sanitation is a basic human right, the meaningful implementation of the right is dependent on its having a clear normative content.²⁴ The normative content makes the right justiciable, that is, subject to the possibility of adjudication by a third party with remedies available for non-compliance with the right.²⁵ This view is consistent with a strict legal positivist perspective which considers some form of justiciability, an indispensable quality of a right.²⁶ According to this view, the inclusion in national legal frameworks for water governance of the human right to water does not of itself make the right justiciable. Its justiciability is dependent on the existence of standards specifying issues such as how much water, at what rate - per person, or per area, the accessibility required, the quality of the water, etc.

According to this strict legal positivist view, the fact that the human right to water is recognised in the Kenyan Constitution does not of itself make this right enforceable by individuals or communities. The justiciability of the right would be dependent on the definition within Kenya's legal framework of a normative content of the right specifying

²¹Ibid, art 71(1).

²²Ibid, art 71(2).

²³Ibid, art 260.

²⁴Note, "What Price for the Priceless? Implementing the Justiciability of the Right to Water" (2007) 120 *Harvard Law Review* 1067, 1067.

²⁵Michael Dennis and David P. Stewart, 'Justiciability of Economic Social and Cultural Rights: Should There Be an International Complaints Mechanism to Adjudicate the Rights to Food, Water, Housing and Health?' (2004) 98 *American Journal of International Law* 462, 494.

²⁶Philip Alston, 'Making Space for New Human Rights: The Case of the Right to Development' (1998) 1 *Harvard Human Rights Year Book* 3, 33. Citing Bentham and Kelsen.

issues such as: what constitutes clean and safe water; whether this right is determined on the basis of health assessments only or an economic cost-benefit analysis; what exactly constitutes an adequate quantity and how this is to be determined; whether there is a requirement for the right-holder to share the expense related to making the water accessible, etc. In the case of the proposed use of the right by rural communities such as the Marakwet, the normative content of the right raises more questions. In the absence of an urban water supply scheme, what would be an adequate quantity of water and how would it be guaranteed? Further, how would conflicting claims between different users and uses including domestic, agricultural and industrial be resolved?

The issues on the normative content of the human right to water raised above bring to the fore some of the challenges facing the economic, social and cultural rights in general. International human rights law has traditionally distinguished economic, social and cultural rights from civil and political rights. While civil and political rights were traditionally understood as establishing duties for the state parties, socio-economic and cultural rights were considered as not establishing duties but rather requiring positive action from the state.²⁷ As a result of this distinction, there has been a tendency to regard economic, social and cultural rights as 'second class' rights that are not justiciable.²⁸ Some of the arguments put forward in support of the classification of these rights as non-justiciable include: that the rights are too vague;²⁹ that courts lack the democratic legitimacy and capacity to intervene in issues relating to social policy which are often complex;³⁰ and that the rights are too amorphous and impractical to implement.³¹

However, in recent times, this traditional distinction has been challenged by scholars, international human right bodies and even courts.³² In reality, economic, social and cultural

²⁷ Antonio Cassese, *Human Rights in a Changing World* (Temple University Press, 1990), 59-63.

²⁸ Note, "What Price for the Priceless? Implementing the Justiciability of the Right to Water" (2007) 120 *Harvard Law Review* 1067, 1075.

²⁹ Steve Charnovitz, 'The Globalization of Economic Human Rights' (1999) 25 *Brook Journal of International Law* 113, 122.

³⁰ Jr. Ronald J. Krotoszynski, "'I'd Like to Teach the World to Sing (In Perfect Harmony)": International Judicial Dialogue and the Muses - Reflections on the Perils and the Promise of International Judicial Dialogue' (2006) 104 *Michigan State Law Review* 1321, 1322-23.

³¹ This view is also expressed in United Nations Economic and Social Council, Commission on Human Rights, *Report by the Special Rapporteur on the Right to Food*, U.N. Doc. E/CN.4/2002/58 (Jan. 10, 2002).

³² See, eg, United Nations Commission on Human Rights, *Report on the Workshop on the Justiciability of Economic, Social and Cultural Rights*, 57th sess, Agenda 10, E/CN.4/2001/Add.2 (22 March 2001) ; Philip

rights are closely intertwined with civil and political rights, as evidenced by the association of economic and social disparities with a lack of political and civil freedoms. As a consequence the fulfilment of economic, social cultural rights is a condition for the full realization of other rights including the civil and political rights. The United Nations confirms this in the Declaration on the Right to Development in which it is stated that 'all human rights and fundamental freedoms are indivisible and interdependent; equal attention and urgent consideration should be given to the implementation, promotion and protection of civil, political, economic, social and cultural rights.'³³ Despite the clarification of the indivisibility of the rights, the question of what constitutes the content of the economic, social, cultural rights still prevails.

The concept of minimum core has been used to establish a minimum legal content for the economic, social and cultural rights. The United Nations Committee on Economic and Social Rights, which has extensively articulated the concept, defines the minimum core as the minimum essential levels of each of the socio-economic rights, whose satisfaction is incumbent upon every state party.³⁴ Once established for each right, the minimum core represents a presumptive legal entitlement or non-derogable legal obligation.³⁵

The issue of the minimum core of the human right to water has been addressed by the United Nations Committee on Economic and Social Rights (the Committee) in their General Comment 15 on the Right to Water.³⁶ The Committee provides that the minimum core refers to the minimum obligations in relation to the right to water which states are required to meet and which therefore if not met could result in an adjudication by a party against the

Alston and Gerard Quinn, 'The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights' (1987) 9(2) *Human Rights Quarterly* 156; *Government of the Republic of South Africa v Grootboom* [2001] 1 SA 46 (Constitutional Court).

³³ *Declaration on the Right to Development*, UN GAOR, 97th Meeting, Un Doc A/Res/41/128 (4 December 1986) annex art 2.

³⁴ Committee on Economic, Social and Cultural Rights, *General Comment 3: The Nature of State Parties' Obligations*, 5th sess, UN Doc E/1991/23 (14 December 1990) 10.

³⁵ Catherine G Young, 'The Minimum Core of Economic and Social Rights: A Concept in Search of Content' (2008) 33 *The Yale Journal of International Law* 113, 113.

³⁶ Committee on Economic, Social and Cultural Rights, *General Comment 15: The Right to Water*, 29th sess, Agenda Item 3, UN Doc E/C.12/2002/11 (29 November 2002).

state.³⁷ The core content of the right to water is defined as the access to adequate water for basic needs.³⁸

The Committee refers to existing international covenants on freshwater resources and on human rights as the legal basis for the rights and obligations arising from the human right to water.³⁹ The Committee points out that:

*The right to water contains both freedoms and entitlements. The freedoms include the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies. By contrast, the entitlements include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.*⁴⁰

On the basis of the above, it can be argued that the human right to water includes the freedom of individuals or communities to maintain access to existing water supplies, where such supplies are necessary for the realisation of their right to water. This arguably, grants the Marakwet community a basis for maintaining their customary law system of water governance given that their water supply is based on this customary law governance system. The freedom could also provide a legal basis for the community members to insist that the statutory framework of water governance accommodate or integrate their existing customary law system for the same reason.

Further, the right to water includes the freedom to realise this right without interference. As was demonstrated in chapter six, the community rely almost entirely on the existing furrow system for the provision of water for subsistence farming and domestic use. The furrow system therefore, provides the means for their realisation of the human right to water. In view of this, the community could challenge the implementation of statutory rules on water governance that interfere with the effective working of the furrow system. Whether the requirement of permits for abstraction; licences for service provision; registration of Water Resource Users (WRUAs), Water Service Providers (WSPs) or Community-Based Projects and other such rules could be deemed as interfering with the realisation by the community of their right to water is debatable.

³⁷Ibid 37.

³⁸Ibid 5.

³⁹Ibid 2-4.

⁴⁰Ibid 4.

The successful reliance by the Marakwet community on the right to water and its constituent freedoms and entitlements, is dependent on the extent to which they can prove that their existing customary law system provides an effective means for the realisation of the right to water in terms of quantity, quality and accessibility of water for basic needs.

In determination of the quantity of water required for the realisation of the right, General Comment 15 makes reference to the World Health Organisation (WHO) guidelines⁴¹ and to an independent study by Gleick.⁴² The references suggest a quantity of 20-25litres per person, per day as a standard for adequacy, though General Comment 15 cautions against narrow interpretations based on volumetric quantities.⁴³ The content of the right with respect to the quality of water required may be determined from the following guideline:

*The water required for each personal or domestic use must be safe, therefore free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person's health. Furthermore, water should be of an acceptable colour, odour and taste for each personal or domestic use.*⁴⁴

The right also includes the requirement that the water be accessible to everyone without discrimination, both in terms of physical and economic accessibility. These guidelines on the required quantity, accessibility and quantity provide a standard that courts can use in determination of the realisation of the right.

The standards set above could thus serve as the basis for determining the extent to which it can be argued that Marakwet's customary law system, through its furrow system, provides the means for the realisation of the human right to water in terms of quantity, quality and accessibility. As was noted in chapter six, the current furrow system of water supply does not include the infrastructure necessary to determine the volumetric quantities of water supplied to each individual or family per day. Nevertheless, most of the water users interviewed confirmed that the water supply system catered for their basic needs. From the interviews, there was no indication of problems related to physical or economic accessibility under the existing furrow system. However, as was noted in chapter six, most of the respondents agreed

⁴¹Jamie Bartram and Guy Howard, 'Domestic Water Quantity, Service Level and Health: What Should Be the Goal for Water and Health Sectors' (2002)
<http://www.who.int/water_sanitation_health/diseases/WSH0302.pdf>.

⁴²Peter Gleick, 'Basic Water Requirements for Human Activities: Meeting Basic Needs' (1996) 21 *Water International* 83.

⁴³Committee on Economic, Social and Cultural Rights, *General Comment 15: The Right to Water*, 29th sess, Agenda Item 3, UN Doc E/C.12/2002/11 (29 November 2002) 5.

⁴⁴*Ibid* 5.

that the quality of water supplied from the furrow system was inadequate. Subject to these problems of quality, the community can thus argue that the furrow system does constitute the adequate means for the realisation of their human right to water. Further, in the absence of a state supply scheme, their customary law system constitutes the only viable method for realising their human right to water.

Despite the case made above for the potential justiciability of the human right to water, the jury is still out on how courts in Kenya, would in practice deal with such claims. Case law from other jurisdictions, on the adjudication of the human right to water has so far focused on claims made by individuals or communities seeking to enforce the human right to water as against the State. Consequently, the remedy sought in these cases has been provision of adequate water and sanitation to the individuals or communities. The South African Constitutional Court has in several cases addressed the issue of the human right to water as well other economic, social and cultural rights. While the decisions of the Court are not in any way binding to courts in the common law jurisdictions, they provide useful insight into how Kenyan courts are likely to respond.

3 *Practical Application of the HRBA*

The South African Constitutional Court recognised the justiciability of economic, social and cultural rights through its decision in *Republic of South Africa v Grootboom* (*Grootboom case*).⁴⁵ In this case, the Court had to consider whether the right to housing protected by the Constitution⁴⁶ entitled citizens to approach a court to claim a house from the state from which they had been evicted. The Court recognised that the right to housing imposes a positive obligation on the state to take reasonable legislative and other measures progressively to realise the right of access to adequate housing within available resources.⁴⁷ In support of its decision that section 26 does not impose an obligation on the state to provide every citizen with a house immediately, the court rejected the argument that the social and economic rights in the Constitution contain a minimum core determining rather than the enforcement of these rights is a difficult issue that should be dealt with on a case by case basis.⁴⁸ This reluctance to

⁴⁵ *Government of the Republic of South Africa v Grootboom* [2001] 1 SA 46 (Constitutional Court).

⁴⁶ *Constitution of the Republic of South Africa Act 1996* (South Africa) s 26.

⁴⁷ *Ibid* s 26(2).

⁴⁸ *Government of the Republic of South Africa v Grootboom* [2001] 1 SA 46 (Constitutional Court) [32].

establish a minimum core obligation was re-affirmed in the *Treatment Action Campaign Case No. 2*.⁴⁹

Although relating to the right to housing, the application of the right to housing in this case demonstrates some similarity with the proposed use of the right to water by a community such as the Marakwet to protect their customary law system of water governance. The applicants in this case sought to recover a house from which they had been evicted on the basis of the right to housing. This arguably demonstrates the possibility of using the human right to water to require the state not to interfere with an existing realisation of the right as opposed to the more common use of the rights to seek to enforce positive obligations of the state in relation to realisation of socio-economic rights.

A more recent case before the South African Constitutional Court, relating specifically to the right to water, has demonstrated opportunities and challenges arising from a proposed use of the right. In *Mazibuko v City of Johannesburg (Mazibuko case)* five residents from Phiri in Soweto brought an application against the city of Johannesburg, the Johannesburg Water Pty Ltd Company and the National Minister for Water Affairs and Forestry.⁵⁰ The claim related to the interpretation of the constitutional right providing that everyone has the right to have access to sufficient water.⁵¹ The application sought to determine the extent to which the respondent's Free Basic Water Policy fell within the bounds of reasonableness and was thus not in conflict with the constitutional right to water and the national water law. The applicants also sought a determination on the lawfulness of installation of pre-paid meters in Phiri.

The nature of the parties, the arguments made and the circumstances surrounding the case provide a useful indication of the potential of sustaining claims based on the human right to water and thus of the application of a HRBA to water governance. The capacity of the HRBA to open issues of water governance to a wider forum of stakeholders is evident in this case. An international NGO was permitted to act as *amicus curiae* in this case.⁵² A university research centre formed part of the legal team for the applicants.⁵³ Further, the fact that the

⁴⁹ *Minister of Health and Others v Treatment Action Campaign and Others* [2002] 5 SA 721 (Constitutional Court) [34].

⁵⁰ *Mazibuko v City of Johannesburg* [2009] ZA 28 (Constitutional Court).

⁵¹ *Constitution of the Republic of South Africa Act 1996* (South Africa) s 27(1)(b).

⁵² The Centre on Housing Rights and Evictions (COHRE).

⁵³ The Centre for Applied Legal Studies (CALS) University of Witwatersrand.

case arose as a result of social mobilization efforts of a civil society movement⁵⁴ is indicative of the potential benefits of the HRBA as an avenue for the assertion of the rights of an individual or group of individuals to access safe water and sanitation. Arguably, the HRBA provides the opportunity for the communities such as the Marakwet to partner with other human rights organisations in the proposed use of the right to protect their customary law systems of water governance.

However, the decision of the Constitutional Court demonstrates some of the challenges this approach faces. The Court found the City's Free Basic Water Policy reasonable and not in conflict with the constitutional right to water and also found that the installation of pre-paid meters was lawful. The court held that the proper interpretation of the constitutional right to water recognises an obligation of the state to ensure progressive realization of the right but does not confer a right to claim from the state sufficient water immediately.⁵⁵ The Court reiterated that the Constitutional right to water does not contain a minimum core as decided in the *Grootboom Case*. The court thus rejected the applicants' proposal that the court ought, on a reasonable basis, to determine the quantity of water which would constitute the content of the right to water.⁵⁶

Apart from the reluctance to specify the content of the right to water, the court in this case also highlighted an argument that is likely to undermine the potential of the HRBA as a tool for enforcement of rights against the state. Citing the separation of roles of the different arms of government required for the democratic working of the post-Westphalian State, the court held that 'it is institutionally inappropriate for a court to determine precisely what the achievement of any particular social and economic right entails and what steps government should take to ensure progressive realisation of the right.'⁵⁷

The Court sought to delimit the scope of court intervention in relation to constitutional rights such as the right to water. The decision identifies three instances where court intervention would be justified, that is if the government: takes no steps to realise the right; adopts unreasonable measures; or fails to review its policies to ensure the achievement of the right is

⁵⁴ Coalition Against Water Privatization (CAWP).

⁵⁵ *Mazibuko v City of Johannesburg* [2009] ZA 28 (Constitutional Court) [57].

⁵⁶ *Ibid* [56].

⁵⁷ *Ibid* [61].

progressively realized.⁵⁸ Even in these situations, it was held that the court's role would not be to supplement the role of the executive or legislative but rather to require the government to take action.

From the discussion above, it can be argued that the human right to water could be used in support of claims by a community, such as the Marakwet, seeking to enforce their right to continued access to water resources under a customary governance system threatened by statutory interventions. As demonstrated in the *Mazibuko* case, the HRBA provides right-holders with the opportunity to seek the support of human rights agencies and other human rights organisations. This makes the HRBA an accessible avenue for communities such as the Marakwet which may otherwise lack the resources required to protect their right. The decision and arguments made in the case however demonstrate that the outcome depends on the interpretation accorded by the courts to the right.

Judicial claims relating to the right to water have so far focused on the enforcement of the obligations of the state in relation to the realisation of the right as demonstrated by the *Mazibuko* case. The feasibility of the proposed use of the human right to water to maintain the right to use a customary law system of water governance as noted is yet to be tested. As noted in the previous section, in order to apply the HRBA to protect the right to maintain a customary law system of water governance, the Marakwet community would have to prove that a particular action or omission by the state is not only adverse to their right to maintain a customary law system of water governance but also that this constitutes a derogation from the human right to water.

Arguably, the possibility of successfully using the HRBA in this way could be strengthened by recourse to the internationally recognised right of indigenous peoples' to self-governance. This right and its potential use as a legal strategy is analysed in the following section.

C *The HRBA in Recognition of Indigenous Peoples' Right to Self-governance through Customary Law Systems*

A legal basis for the right of indigenous peoples' to self-governance has been sought in several international human rights law instruments. The right to self-determination is enshrined in the International Covenant on Civil and Political Rights (ICCPR)⁵⁹ as well as its

⁵⁸Ibid [67].

⁵⁹*International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) art 1.

counterpart, the International Covenant on Economic, Social and Cultural Rights (IECSCR).⁶⁰ A legal basis for this right has also been sought in the Convention on the Elimination of All Forms of Discrimination,⁶¹ the International Labour Conventions Concerning Indigenous and Tribal Peoples in Independent Countries and a whole range of other international law conventions.⁶² However, the adoption of the United Nations Declaration on the Rights of Indigenous Peoples in 2007 provides the most significant elaboration of the right in the wider context of the rights of indigenous peoples.⁶³

1 *Content and Scope of the Right*

As is the case with other declarations in international law, the United Nations Declaration on the Rights of Indigenous Peoples does not bind states in the same way as conventions and treaties would. Nevertheless, it reflects the commitment of states towards the principles set out and to that extent represents the direction in which international law relating to indigenous peoples' rights is likely to develop in future. At its adoption, 144 states voted in favour, 4 voted against (Australia, Canada, the United States and New Zealand) and 11 states, including Kenya, abstained from voting. However, the four countries that had voted against the Declaration have since endorsed it. Some authors argue that the Declaration, or at least some of its provisions, reflects existing customary international law, though this view is debatable.⁶⁴ Notwithstanding its status in international law, the Declaration provides useful insights on the right of indigenous peoples to self-governance.

The Declaration, which defines the association between states and indigenous peoples who are citizens of the state, identifies the right to self-determination as the basis for all other indigenous peoples' rights.⁶⁵ The Declaration provides that by virtue of this right, indigenous

⁶⁰*International Covenant on Economic, Social and Cultural Rights*, opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976) art 1.

⁶¹*International Convention on the Elimination of All Forms of Racial Discrimination*, opened for signature 21 December 1965, 660 UNTS 195 (entry into force 4 April 1969).

⁶²*International Labour Organization, Convention Concerning Indigenous and Tribal Peoples in Independent Countries*, 1650 U.N.T.S. 383 (June 27, 1989).

⁶³*United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007).

⁶⁴Claire Charters, 'Indigenous Peoples and International Law and Policy' in Benjamin J. Richardson, Shin Imai and Kent McNeil (eds), *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Hart, 2009) 175.

⁶⁵*United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007) art 3.

peoples ‘freely determine their political status and freely pursue their economic, social and cultural development’.⁶⁶ Although the implication of this provision on self-determination is debatable, it can be argued that the right entitles indigenous peoples to determine their relationship with the state and in particular be involved in the development of governance structures. The Declaration explicitly recognises the right of indigenous peoples to choose to maintain ‘their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.’⁶⁷

Other provisions in the Declaration connect the right to self-determination of indigenous peoples with the right to maintain their own institutional structures and legal systems in accordance with their customs and traditions.⁶⁸ Unlike the frozen form of customary law which as was argued in chapter three is characteristic of modern legal frameworks, the Declaration recognises the fact that customary law systems are dynamic.⁶⁹ By acknowledging a notion of customary law that is more akin to customary law as it exists in reality today, the Declaration provides a suitable basis for upholding the right of indigenous peoples to use customary law systems.

The Declaration does not contain a definition of the term ‘indigenous peoples’. This deliberate omission was due to the lack of consensus, between representatives from African states and those representing indigenous peoples from other countries, on the significance of the term.⁷⁰ Though not defining the term, the Declaration recognises that the situation of indigenous peoples varies across regions and countries and that these differences in circumstances should be taken into consideration.⁷¹ While this approach allows the protection of a wide variety of interests, it could raise questions as to who constitute right-holders under the Declaration.

⁶⁶Ibid art 3.

⁶⁷Ibid art 5.

⁶⁸ See ibid 20, 33-35.

⁶⁹Ibid art 34 which includes the right not just to maintain customary law systems but also to develop these systems.

⁷⁰ See, eg, Claire Charters and Rodolfo Stavenhagen (eds), *Making the Declaration Work: The United Nations Declaration on the Rights of Indigenous Peoples* (IWGIA, 2009).

⁷¹ *United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007) preamble.

The foregoing confirms the existence of an international right of indigenous peoples' to self-governance, thus providing a basis for the application of the HRBA to development issues related to customary governance. Arguably, the right provides communities using a customary law system of water governance, with a legal basis for maintaining these systems of governance. This is provided the communities can be deemed to fall within the notion of indigenous peoples implied in the declaration or existing in customary international law.

The extent to which the right and the application of the HRBA would work in the case of the Marakwet is debatable. As noted, Kenya abstained from the vote that saw the adoption of the declaration by the United Nations General Assembly. Kenya's Constitution contains provisions determining the extent to which international law is applicable in the country. The Constitution provides that the general rules of international law form part of the law of Kenya.⁷² Further, the Constitution states that treaties or conventions ratified by Kenya shall by virtue of this provision form part of the law of the country.⁷³ There is no specific legislation on indigenous peoples in Kenya. The applicability of the Declaration in the country is thus dependent on the extent to which its provisions are deemed to constitute general rules of international law.

Despite the absence of a specific law on indigenous peoples, the Constitution contains references to indigenous communities. Although not defined, the term 'indigenous community' is used in the Constitution to refer to communities which have retained and maintained a traditional lifestyle.⁷⁴ Under the Constitution the term is associated with communities dependent on a hunter and gatherer economy, pastoralists, nomadic pastoral communities or settled communities that are isolated because of relative geographic location and which therefore experience only marginal participation in the integrated social and economic life of the country as a whole.⁷⁵

In light of the above, it is not clear if the United Nations Right of Indigenous Peoples to Self-governance can be applied to a community such as the Marakwet. As noted, the applicability of the Declaration is dependent on the extent to which its provisions are considered as having

⁷²*Constitution 2010* (Kenya) art 2(5).

⁷³*Ibid* art 2(6).

⁷⁴*Ibid* art 260.

⁷⁵*Ibid* art 260.

acquired the status of general rules of international law. Further, the extent to which the Marakwet fit into the classification of indigenous communities under the Constitution is also debatable. Nevertheless, the right presents a potential legal strategy for redressing the disconnect between customary and statutory law in water governance frameworks in future.

2 *Potential Conflicts between Customary Law and Human Rights Law*

The potential use of the HRBA in the context of the right of indigenous peoples to self-determination has however been opposed by the argument that such recognition would result in a conflict of laws. This argument is premised on the assumption that customary law systems are inimical to human rights. Consequently, the recognition of the right of indigenous peoples to self-governance through customary law by a state would result in the existence of two opposing laws customary law and human rights law. Evidence of human rights abuses in customary law systems have been used to support the argument that the right to use customary law systems cannot be sustained given that customary law is often in conflict with other universal human rights. The aspects of customary law most cited as offending against human rights include customary law's treatment of women and its lack of fair trial mechanisms.⁷⁶

Literature exploring the intersection between customary law and human rights law, demonstrates that contrary to the above view, the issues surrounding apparent human rights abuses by customary law are often much more complex. In many cases, the abuses of human rights among indigenous peoples are not the result of legitimate customary law application.⁷⁷ Further, a critical analysis of these situations demonstrates that the relation between customary law and international human rights law calls for a complex balance between cultural relativism and universal human rights.⁷⁸ This suggests that the solution in these cases is not to reject the entire customary law on the basis of these conflicts.

Even when conflicts between human rights law and customary law exist, the rejection of customary law on the basis that its recognition would result in a conflict of laws is not

⁷⁶Robin Perry, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71 101-103.

⁷⁷ See in general Megan Davis and Hannah McGlade, *Background Paper on International Human Rights Law and the Recognition of Aboriginal Customary Law* Background paper (Law Reform Commission of Western Australia) ; No. 10 (March 2005) (Law Reform Commission of Western Australia, 2005).

⁷⁸*Ibid* 46.

justifiable. This is because firstly such an argument fails to distinguish between the aspects of customary law systems that undermine human rights, and the right to use customary law systems in general.⁷⁹ The aspects of customary law systems that are or seem to be averse to human rights represent internal restrictions and thus occur at the level of intra-group relations. In contrast, the right to use customary law systems pertains to an external protection and occurs in the realm of inter-group relations.⁸⁰ Consequently, a flaw in the rules on intra-group relations does not necessarily mean that the right to use customary law systems is thus opposed to human rights law. Not all customary law rules are inimical to human rights. A distinction between the offending aspects and rules and the other legitimate aspects permits the recognition of the right to use customary law systems without condoning intra-group restrictions that constitute offences against human rights.

The above position is taken by the Declaration, which acknowledging the risk of these conflicts between customary law systems and other human rights, limits the scope of the right and provides that the right must be exercised in accordance with international human rights standards.⁸¹ As cautioned earlier though, the apparent abuses of human rights by customary law must be understood in context. Consequently, judgements on whether some aspects of customary law offend against human rights ought to take into account the evolving nature of customary norms, the risk of distortion of customary law as well as the particular social, cultural, economic and political circumstances of the community.

A further method based on the notion of ‘building of rights’ has been proposed for the resolution of potential conflicts between customary law and human rights law.⁸² This method departs from the premise that although there is no panacea, it is possible to develop a framework that can be applied to promote the harmonization of customary law systems and

⁷⁹Robin Perry, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71, 100.

⁸⁰ See Will Kymlicka, *Multicultural Citizenship: A Liberal Theory of Minority Rights* (Oxford University Press, 1996) where this distinction is made and the term ‘group-oriented claims’ is used to refer to the internal restrictions.

⁸¹*United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007) art 34.

⁸²Robin Perry, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71, 105-113.

international human rights law.⁸³ The framework would consist of guidelines that can be used to balance the competing interests of pluralism and the common good.⁸⁴ The framework proposed treats rights in the context of a hierarchy as opposed to equally competing rights that must be subjected to balancing or trading off.⁸⁵ In this hierarchy the right to self-determination is identified as the most fundamental human right and as a consequence no other rights can or ought to override it.⁸⁶ Consequently, where conflicting rights pertain to self-government then such rights should not acquiesce.⁸⁷

Proponents of this view concede that such an approach may lead to the right to self-determination defeating other individual rights which ought to be defended.⁸⁸ However, given that the customary law systems are dynamic and evolving, it is argued, that this would only be temporary. This is because through consultation and negotiation, and community participation, harmonisation of the conflicting rights would eventually occur resulting in a consensus but built on a culture-specific conception of human rights'.⁸⁹

Apart from the solutions proposed above to the problem of the potential conflict between customary law and human rights law, a further argument has been used to demonstrate that the conflict of laws does not constitute an insurmountable problem. Other areas of law, such as private international law, have had to deal with the problem of conflict of laws. Consequently, it has been argued that there exists in law, sufficient legal principles for resolving potential conflicts of laws, which principles can be applied to resolve conflicts between customary law and state law or human rights law.⁹⁰ This approach of using the

⁸³Leigh McDonald, 'Can Collective and Individual Rights Coexist?' (1998) 22 *Melbourne University Law Review* 310, 327-328.

⁸⁴*Ibid*, 327-328.

⁸⁵Robin Perry, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71, 105-113.

⁸⁶Makau Mutua, *Human Rights: A Political and Cultural Critique* (University of Pennsylvania Press, 2002).

⁸⁷McDonald, Leigh, 'Can Collective and Individual Rights Coexist?' (1998) 22 *Melbourne University Law Review* 310, 330.

⁸⁸ *Ibid*, 324.

⁸⁹Robin Perry, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71, 107.

⁹⁰Donna Craig and Michael Jeffery, 'Recognition and Enforcement of Indigenous Customary Law in Environmental Regimes and Natural Resource Management' in Lee Paddock et al (eds), *Compliance and Enforcement in Environmental Law* (Edward Elgar Cheltenham, 2011)535.

principles of conflict of laws provided for in private international law, to resolve conflicts between state and indigenous law, is not novel. In American history, questions of Native customary law arising in cases otherwise subject to the jurisdiction of state courts have been resolved by the state courts applying private international law to Aboriginal custom and thus considering it akin to elements of foreign legal systems.⁹¹

The arguments above thus demonstrate that the recognition of the right of indigenous peoples to self-determination provides a legal strategy that may be used to integrate customary and statutory law governance systems in water governance. However, as noted, the application of the strategy would not be without challenges including that of dealing with potential conflicts of law. At the root of the problems relating to the application of the HRBA in the recognition or accommodation of customary law systems of governance is the legal positivist notion of law. As shall be discussed in the following section, the legal positivist conception of law challenges the very foundation of human rights.

D *Limits of the HRBA in a Legal Positivist Framework*

Contemporary international human rights law is founded on the UDHR.⁹² The UDHR was drafted after the Second World War, which saw some of the greatest aberrations of human rights perpetrated by states against the citizens of other nations and in some cases against their own citizens. The objective of the drafters was thus to enshrine a set of universally recognised basic human values transcending the limits of state sovereignty.⁹³ The UDHR concept of right was thus based not on the consent of member states but rather on fundamental principles relating to human dignity. The concept of right developed was thus akin to the notion of fundamental or natural rights of the natural law tradition.⁹⁴

Modern human rights are also based on this UDHR framework. Consequently, the right to a healthy environment, the right to development, the right to water and the right of indigenous peoples' to self-determination using customary law systems are not derived from the act of recognition of the right by the state. Rather they are envisaged as rights deriving from the

⁹¹M Walters, 'The "Golden Thread" of Continuity: Aboriginal Customs at Common Law and Under the Constitution Act 1982' (1999) 44 *McGill Law Journal* 711, 718.

⁹²*Universal Declaration of Human Rights*, GA Res 217A (III) UN GAOR, 3rd sess, 183rd plen mtg, UN Doc A/810 (10 December 1948).

⁹³Anton, Donald K and Dinah L Shelton, *Environmental Protection and Human Rights* (Cambridge University Press, 2011), 121.

⁹⁴ *Ibid.*

dignity of the human person and thus regarded as such basic rights that, not even the state can purport to deny its citizens the rights.⁹⁵

The concept of 'right' underlying the UDHR transcends the positivist notion of law. This is because the UDHR approach to rights interferes with the sacrosanct line drawn by legal positivism between what the law is and what the law ought to be. Legal positivism regards the state as the exclusive source of authority and consequently legal rules are the positive enactments of the state.⁹⁶ Law therefore ought to be justified without reference to the extra-legal, mysterious, ideal or moral.⁹⁷ From a legal positivist perspective, international law derives its legitimacy from the consent of states, either through ratification or confirmation through state practice of international customary law.⁹⁸ By extension, international human rights law would have as its basis the consent of states. However, given their nature, the basis of human rights must lie outside the statutory laws or customary rules recognised by the statutory legal system.

On the basis of the above, this thesis argues that though modern legal frameworks may recognise human rights, their foundation in legal positivism undermines the effectiveness of the HRBA as a legal strategy for integration of customary law and statutory law in water governance for sustainable development. This confirms that the legal conceptual and theoretical context within which modern water law is developed contributes to the disconnect between customary and statutory law and thus the application of legal strategies to redress this problem would also require a re-consideration of the legal theories and concepts underlying modern water law and in particular its notions of law, customary law and property; and its legal method and thus approach to the policy goal of sustainable development. The next chapter demonstrates how a re-contextualization of law in the classical legal theory may provide more suitable legal theories and concepts on which to found a water governance framework that integrates customary and statutory law and effectively adopts the policy goal of sustainable development.

⁹⁵ Ibid 207.

⁹⁶ Ibid.

⁹⁷ Philip Allott, *The Health of Nations: Society and Law Beyond the State* (Cambridge University Press, 2002) 47.

⁹⁸ Anton, Donald K and Dinah L Shelton, *Environmental Protection and Human Rights* (Cambridge University Press, 2011, 207.

IX CHAPTER 9 EXPLORING ALTERNATIVE LEGAL THEORIES AND CONCEPTS FOR WATER GOVERNANCE FRAMEWORKS

As argued in the preceding chapters, legal frameworks for water governance are developed within the parameters and limits set by legal positivism. Legal positivism and particularly its conception of law, customary law and property contributes to the disconnect between customary and statutory law in water governance frameworks. As customary law systems contribute to sustainable development, the redress of this disconnect would have a positive influence on the achievement of sustainable development in water governance.

In light of the above, this chapter examines alternative legal theories that could facilitate a more integrated approach to the operation of customary and statutory law in legal frameworks for water governance. The chapter begins with a critical analysis of legal pluralism, examining the extent to which it may be considered a legal theory. This is followed by an investigation of classical legal theory that is, the legal theory founded on classical philosophy and prevailing before the birth of modern common law in the 17th century. This chapter examines the notion of law and the nexus between law, custom, nature and reason in classical legal theory. The examination provides the basis for the argument that this legal theory provides a more suitable basis for the integration of customary and statutory law in the development of legal frameworks for water governance. This section also seeks to demonstrate how classical legal theory's conception of law as practical reason, supports a legal method more adept at dealing with the policy goal of sustainable development.

A *Legal Pluralism*

As evident from preceding chapters, despite the centrality of the state in the creation of norms for societal governance, in various aspects of societal organisation normativity does not reside only in the state but rather in a multitude of norm-generating communities.¹ As has been observed, legal positivism regards this multiplicity in norm creating systems as unproblematic in so far as the 'other' systems are regarded as operating in a distinct social field that is, an extra-legal context. A legal positivist view regards the possibility of convergence of the two systems as a rare occurrence which if it occurs, is merely transitory.

¹Franz von Benda-Beckmann, 'Who's Afraid of Legal Pluralism?' (2002) 47 *Journal of Legal Pluralism and Unofficial Law* 37; Robert C Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991); Daniel KNazer, 'The Tragicomedy of the Surfers' Commons' (2004) 9(2) *Deakin Law Review*.

This was observed in modern water law's perception of pre-existing customary rights to water, where new water statutes were shown to often include transitory provisions intended to harmonise any pre-existing norms with the statute. While this approach of legal positivism provides an apparent solution, it does not recognise the reality of legal pluralism. Such an approach leads to an unbalanced analysis of law in so far as it ignores the reality of rule creation and replication that happens outside the context is defines as 'legal'.²

Given this and other shortcomings of legal positivism discussed in previous chapters, legal pluralism has been proposed as an alternative theoretical framework for developing natural resource governance systems that acknowledge and integrate informal or customary law systems.³ While legal pluralism as a condition referring to the simultaneous operation or co-existence of several systems of law in the same general field is now widely acknowledged,⁴ its defence as a legal theory presents certain conceptual challenges discussed below.

An evaluation of scholarly literature on legal pluralism confirms that there is no univocal definition of the term. Legal pluralism has been used in multiple contexts including: state legal pluralism to refer to the recognition within a state legal system of different sources of law; legal polycentricism to refer to the use of various sources in the different sectors of a state legal system; and empirical legal pluralism to refer to the ontological reality of the existence of different and semi-autonomous legal orders within the same temporal and spatial context.⁵ From its conception, in the 1970s the term has always been associated with studies of law in colonial and post-colonial states and more specifically to refer to the incorporation or recognition of customary norms and institutions within state law.⁶

² See, eg, Franz von Benda-Beckmann, 'Law out of Context: A Comment on the Creation of Traditional Law Discussion' (1984) 28(1/2) *Journal of African Law* 28.

³ See, eg, Bryan Randolph Bruns, and Ruth S. Meinzen-Dick, 'Water Rights and Legal Pluralism: Four Contexts for Negotiation' (2001) 25(1) *Natural Resources Forum* 1; René Kuppe et al, *Law & Anthropology: Natural resources, Environment, and Legal Pluralism* (Martinus Nijhoff, 1997); Leon Sheleff, *The Future of Tradition Customary Law, Common Law and Legal Pluralism* (Fank Cass 1999).

⁴ MS Vani, 'Customary Law and Modern Governance of Natural Resources in India- Conflicts, Prospects for Accord and Strategies' (Paper presented at the Legal Pluralism and Unofficial Law in Social, Economic and Political Development International Congress, Chiang Mai, Thailand, 7 to 10 April 2002).

⁵ William Twining, 'Globalisation and Legal Scholarship' (2009) *Montesquieu Lecture* 200913.

⁶ See, eg, M B Hooker, *Legal Pluralism: An Introduction to Colonial and Neo-Colonial Laws* (Clarendon Press, 1979).

In the early years the label was common among anthropologists, but has since found a place in legal scholarship as a main theme in the re-conceptualisation of the relation between law and society⁷ and as a fundamental concept in a post-modern conception of law.⁸ In the context of legal theory, the term is used to challenge the prevailing notion of law. The prevailing notion of law based on legal positivism assumes that for a particular geo-political space there is only one law which of itself constitutes a clearly defined system with a single unifying foundation.⁹ The rejection of this centralist and singularist notion of law is the defining feature of legal pluralism.¹⁰ Understood in the above context, legal pluralism serves a useful sensitizing function of highlighting the existence of multiple legal orders in society. Nevertheless, this definition of legal pluralism by way of negation also demonstrates one of the conceptual challenges faced by those advocating legal pluralism as a theory.¹¹

A fundamental idea inherent in this definition of legal pluralism is the recognition of multiple notions of law which thus implies that any attempt at providing a univocal meaning to law would be contrary to legal pluralism. As a result, proponents of the theory concede that there are plural and sometimes opposed definitions of law within the legal pluralist schools.¹² In the absence of definitional limits, legal pluralism may be used to justify the inclusion of any norm in the domain of law. This could and arguably has resulted in constructions of law that are so broad as to result in a loss of significance of the notion of law.¹³ It further, results in the difficulty of sustaining a particular theory of legal pluralism.

It has been argued that this incapacity of legal pluralism to define law conclusively is however, not a fault unique to legal pluralism as neither have other legal theories provided a

⁷Sally Engle Merry, 'Legal Pluralism' (1988) 22(5) *Law & Society Review* 869.

⁸ See Boaventura de Sousa Santos, 'Law: A Map of Misreading. Toward a Postmodern Conception of Law' (1987) 14 *Journal of Law & Society* 279 in general.

⁹John Griffiths, 'What is Legal Pluralism?' (1986) *Journal of Legal Pluralism* 1, 3.

¹⁰Justin Rose, *The Village and the Leviathan Law, Environmental Governance and the Local Polity in the Federated States of Micronesia* (PhD Thesis, Macquarie University, 2007) 28.

¹¹Brian Z Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*.

¹²Griffiths, above n 9.

¹³Brian Tamanaha, *General Jurisprudence of Law and Society* (Oxford University Press, 2001).

suitable definition of law.¹⁴ Nevertheless, in the case of legal pluralism, the problem is particularly crucial as the very essence of the theory relies for its foundation on a non-definitional notion of law. In a bid to respond to this critique and to delimit certain boundaries for its notion of law, Griffiths one of the main theorists supporting legal pluralism has proposed the idea of law as a ‘semi-autonomous social field’, arguing that in a legal pluralist context law comprises of those social fields which have a capacity to produce and enforce rules.¹⁵ This notion of ‘semi-autonomous social field’ has its origin in the work of Moore, though in her work, the term is applied not to law but to what she refers to as ‘self-regulating, self-enforcing and self-propelling (social field) within a certain legal, political, economic and social environment.’¹⁶ The effect of defining law as a semi-autonomous social field is to bring all forms of social ordering that produce and enforce norms, in the realm of law and providing these with an equal status as state law. Critics of this legal pluralist definition of law have argued that such a definition would make law indistinguishable from any norms of social life in general. While some legal pluralists have sought to respond to this criticism by re-evaluating their use of the term law,¹⁷ others have conceded that indeed there is no clear distinction between law and the social orderings that generate and enforce rules.¹⁸ Such an approach makes it difficult to maintain the status of legal pluralism as a legal theory.

In contrast, to the above views, some proponents of legal pluralism argue that it is possible to maintain legal pluralism as a legal theory while avoiding the conceptual problems associated with it.¹⁹ This view of legal pluralism recognises the existence of multiple normative frameworks, among these being the official legal normative framework and the customary normative framework composed of ‘shared social rules and customs, as well as institutions

¹⁴ Brian Z Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*.

¹⁵ Griffiths above n 9, 35.

¹⁶ Sally Falk Moore, 'Law and Social Change: The Semi-Autonomous Social Field as an Appropriate Subject of Study' (1973) 7 *Law & Society Review* 719, 728.

¹⁷ See, eg, John Griffiths, 'The Idea of Sociology of Law and its Relation to Law and to Sociology' (2005) 8 *Current Legal Issues* 63, 64. In his later works, Griffith has used the term ‘normative pluralism’ instead of ‘legal pluralism’.

¹⁸ See, eg, Boaventura de Sousa Santos, *Toward a New Common Sense: Law, Science, and Politics in Paradigmatic Transition* (Routledge, 1995).

¹⁹ See, eg, Brian Z Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*, Part III.

and mechanisms.²⁰ Using the identified categories, this view seeks to demonstrate how issues likely to arise in a legal pluralist context can be resolved, while avoiding the conceptual questions relating to the legal status of the normative systems.²¹ According to this view, the existence of multiple normative frameworks does not necessarily imply conflict between the multiple orders, as it is possible for the different normative systems to exist in a state of complementary harmony.²²

Notwithstanding that multiple normative frameworks may operate in harmony, the clashing of systems is common, particularly where multiple normative systems claim authority, legitimacy and supremacy over similar issues.²³ In such cases, this view of legal pluralism still maintains that the conflicts can be resolved without resorting to conceptual questions of law and legal normative frameworks. It is argued that in such cases, there exist analytical frameworks developed on the basis of experience that can be used to resolve any conflicts between different normative systems. Hinz, for instance has developed an analytical framework based on how African states deal with the reality of legal pluralism and potential conflict between multiple frameworks.²⁴ He categorises the possible models of governance on the basis of the level of interaction adopted by the state ranging from strong modern monism representing the repression of customary law systems to strong traditional monism, which refers to the replacement of the state with a traditional normative framework, not a common model.²⁵ Arguably, frameworks such as the one proposed by Hinz, provide evidence of practical ways of resolving the potential conflicts arising in a legal pluralist context.

Many authors, arguing that a legal pluralist theoretical framework would be more appropriate for developing natural resource governance frameworks that integrate statutory and

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ See, eg, Helene Maria Kyed, 'The Politics of Legal Pluralism: State Policies on Legal Pluralism and their Local Dynamics in Mozambique' (2009) 59 *Journal of Legal Pluralism* 87.

²⁴ Hinz, Manfred O, 'Traditional Governance and African Customary Law: Comparative Observations from a Namibian Perspective' in N Horn and A Bösl (eds), *Human Rights and Rule of Law in Namibia* (Macmillan, 2008).

²⁵ Hinz argues that Swaziland would be an example of strong traditional monism. In the country the traditional governance model prevails at the state level. Ibid.

customary law, adopt the view described above.²⁶ This view is founded on the premise that the question of what law is cannot be resolved as law is likely to keep changing to reflect changes in society.²⁷ Hence, legal pluralism is presented as an approach for investigating non-statutory normative frameworks while avoiding the conceptual problem of what law is. The effect of this is that legal pluralism is adopted as an approach rather than as a theoretical framework within which the question of what constitutes law may be resolved.

While the adoption of the legal pluralist approach, described above, is a positive progression from the approach adopted by legal positivism, it does not entirely resolve the problem. By avoiding the conceptual problem of the law, the legal pluralist approach described fails to provide a basis for determining the legitimacy and authority of various multiple frameworks. As noted, the unifying tenet of legal pluralist theories in many cases is the negation of singularity in normative systems. However, this view of legal pluralism lacks positive unifying tenets that could be used to develop a common understanding of the notion of law or of the legal method.

Apart from legal pluralism, other theories such as the critical legal studies, feminism, critical race theory and post-modernism have been explored as a means of overcoming the limits placed by legal positivism on law. Whereas these theories provide useful frameworks for a critical analysis of law in its social context, they do not strictly speaking constitute a philosophy of law but rather also provide different approaches to law. As MacCormick explains for a theory to be considered a legal philosophy it must supply an epistemology of law, that is a theory expounding the possibility of genuine philosophy in the legal sphere, and it must also elucidate on the nature and working of practical reason.²⁸

In light of the above, this thesis argues that the classical legal theory of law, which defines law as a product of practical reason, could provide what legal pluralism and other approaches to law do not provide. Classical legal theory provides a fundamental conceptual basis for the

²⁶ See, eg, Bryan Randolph Bruns, and Ruth S. Meinzen-Dick, 'Water Rights and Legal Pluralism: Four Contexts for Negotiation' (2001) 25(1) *Natural Resources Forum* 1; Justin Rose, *The Village and the Leviathan Law, Environmental Governance and the Local Polity in the Federated States of Micronesia* (PhD Thesis, Macquarie University, 2007); Ruth Meinzen-Dick and Rajendra Pradhan, 'Implications of Legal Pluralism for Natural Resource Management' (2001) 32(4) *IDS Bulletin* 10.

²⁷ Brian Z Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*.

²⁸ Neil MacCormick, 'Contemporary Legal Philosophy: The Rediscovery of Practical Reason' (1983) 10(1) *Journal of Law and Society* 1.

notion of law and the legal method without excluding non-statutory law. The following section attempts to demonstrate how a classical understanding of law as practical reason may provide a legal theory that overcomes the limits placed on legal frameworks by legal positivism.

B *Classical Legal Theory*

In jurisprudence, classical legal theory is often described as natural law theory and contrasted with legal positivism. However, given the evolution that both legal positivism and natural law legal theory have undergone in the course of history such a dichotomy is not useful and could in fact be misleading.²⁹ Certain natural law theories have adopted a conception of practical reason that diverges from the epistemological basis or theory of knowledge on which the classical legal theory is based.³⁰ As a consequence, the classical legal theory of law referred to in this thesis is that based on the theory of knowledge and practical reason expounded by Aristotle and contrasted with the theory of knowledge and reason of Hume and Kant on which modern conceptions of legal positivism are founded.

The next section examines the notion of law as practical reason in the context of the classical legal theory.

1 *Notion of Law as Practical Reason*

As discussed in a previous chapter on legal theories and concepts underlying modern water law, Hobbes lays the foundation for the conception of law in legal positivism. His notion of law is based on a re-formulation of Aristotle's notion of practical reason. As was observed in chapter three, frustrated by the apparent concession by classical philosophy of the inexact, fallible and variable nature of knowledge derived from practical sciences, Hobbes attempted to prove that law though a practical science is predictable and in this way contributed to the blurring of the distinction between practical reason and theoretical reason; and practical sciences and theoretical sciences.³¹

²⁹John T. Valauri, 'Dialectical Jurisprudence: Aristotle and the Concept of Law' (2010) *SSRN eLibrary*As Valauri argues, the dichotomy between positivism and natural law does not provide a useful framework for understanding the notion of law.

³⁰See Martin Rhonheimer, 'Natural Law as a "Work of Reason". Understanding the Metaphysics of Participated Theonomy ' (2010) 55 *The American Journal of Jurisprudence* 4149 where he argues that new natural law theories-Finnis and Grisez- do not always distinguish between the ontological and epistemological realms in their exposition of nature as the basis of law thus departing from the classical legal position.

³¹ Stephen A Siegel, 'The Aristotelian Basis of English Law, 1450-1800' (1981) 56(18) *New York University Law Review*.

Although the Aristotelian notion of practical reason distinguishes it from theoretical reason, it clarifies the nature of the parallelism between the two. In Aristotle's exposition of his theory of knowledge, both theoretical and practical reason, arise from a single source that is, the intellectual potency or power. However, each operates in its own realm, so that the principles of practical reason are not derived from previous judgements of theoretical reason but rather in so far as they are practical they have their own starting point.³² Practical reason thus proceeds as a practical syllogism composed of a practical major premise and conclusion but with a minor premise based on a sense perception or a judgement of a theoretical reason.³³ The Aristotelian notion of practical reason is thus not totally divorced from sense perception and theoretical reason as assumed to be by Hobbes and other critics of the classical notion of practical reason. Rather, according to Aristotle, practical reason is a form of reason embedded in the dynamics of the natural inclinations and intellectual powers proper to human persons.³⁴

According to Aristotle, the objective of practical reason is to discern the most appropriate course of action in the given circumstances, from a range of possible courses of action.³⁵ The human subject is guided in such discernment by the natural inclinations as well as by the judgement of his/her intellectual power. The role of the intellectual power thus constitutes the discernment involved in practical reason as true intellectual knowledge akin to but distinct from that required for judgements related to theoretical reason.³⁶ Unlike the case with theoretical reason, the result of such judgment is practical resulting in action as opposed to knowledge. In the context of Aristotle's work therefore, it would be inaccurate to describe practical reason as merely the application of theoretical principles to practical problems such as those the law has to contend with.³⁷

Aristotle discusses the notion of law in the context of political justice, which he introduces in the fifth book of the *Nicomachean Ethics*.³⁸ He defines law as the object of justice which he

³²Rhonheimer, above n 30, 57.

³³ Ibid.

³⁴ Ibid, 55.

³⁵ Ibid.

³⁶ Ibid.

³⁷James Bernard Murphy, 'Nature, Custom, and Reason as the Explanatory and Practical Principles of Aristotelian Political Science' (2002) 64(3) *The Review of Politics* 469, 494.

³⁸Aristotle, *Nicomachean Ethics*. Translated by W D Ross (Internet Classics Archive, 350 BCE), Book V.

regards as a stable habit resulting in fair or lawful actions.³⁹ According to Aristotle, political justice refers to the justice

*'found among men who share their life with a view to self-sufficiency, men who are free and either proportionately or arithmetically equal, so that between those who do not fulfil this condition there is no political justice but justice in a special sense and by analogy.'*⁴⁰

While recognising the presence of justice in other realms such as the home (domestic justice), he holds that the rules governing relations at that level cannot strictly speaking be defined as law even though they are the result of practical reason.⁴¹ He maintains that it is only in the context of political justice, that the notion of law as practical reason is properly understood. This clarification by Aristotle provides an important basis for distinguishing legal normative orders from other social normative orders, which as discussed in the previous section, is one of the challenges facing legal pluralism.

For Aristotle, law is the result of the social interaction among individuals with the capacity of discerning what is just. Although, law as a product of practical reason is influenced by values, it cannot be regarded as a conglomeration of abstract values to be applied to particular circumstances. This clarification, distinguishes the classical legal theory of law from some of the contemporary theories of natural law.

While defining law as the result of the social interaction of individuals, the Aristotelian exposition does not thus suggest that law is entirely subjective. According to his view, law is objective in so far as it is not dependent on the subject or agent but rather transcends the agent in the search for what is just.⁴² Law in accordance with the classical notion of practical reason is thus not purely a technique that results in a pre-determined outcome but rather it is a discursive process whose essence is the search for justice.⁴³

Supporters of this theory of law as practical reason, argue that as the Aristotelian notion of reason is proper to all human subjects, it implies that practical reason can be communicated

³⁹Ibid, Book V 1 and 2.

⁴⁰Ibid, Book V, 6.

⁴¹Ana Marta González, 'Dos visiones del derecho. La epiqueya en Aristóteles y Kant [Two visions of law. The epiqueya in Aristotle and Kant]' (2002) 46 *Persona y Derecho [Person and Law]* 247.

⁴²Ibid, 241-243.

⁴³Ibid 241.

to others and is compatible with other members of society.⁴⁴ The task of legal ordering is thus a work of reason that presupposes the readiness of a group of people (the community) to live together and their capacity to identify reasons for particular rules determining their common course of action.⁴⁵ According to this view, the basis of a community is this shared set of reasons for action which is what constitutes their law.⁴⁶ While this view recognises that all human persons have the capacity to reason, it also holds that the practical reasoning involved in the determination of what is just is not spontaneous but rather requires a particular disposition on the part of the subjects. The disposition refers to a willingness to put forward reasons as well as listen to the reasons put forward by others in the pursuit of what is reasonable.

A further feature of the notion of law elaborated in Aristotle's work, is that his concept of 'law' is distinguished from that of 'laws in general', the latter referring to legislation. According to Aristotle, legislation is a part of political justice but it is not synonymous with political justice.⁴⁷ Legislation refers to the specific articulation of what is considered as just in the context of set social and historical circumstances.⁴⁸ The role of law is not limited to promulgating legislation. Rather, as noted above, its object embraces the wider scope of discerning what is just. This exposition of law as practical reason recognises the capacity of a community to discern through a process of reason what is just in the context of a given set of circumstances.

Such a definition of law admits of the possibility for normative orders other than the statutory system, provided that these represent a discursive process applying practical reason. The restriction of law to the context of political justice noted earlier ensures that this wider conception of law is not without limits. Such an approach avoids the critique directed at legal pluralist conceptions of law that adopt such wide notions of law as to render it impossible to reasonably determine what is law and what is not law.⁴⁹

⁴⁴Villey Miche, *Compendio de filosofía del derecho* (Eunsa, 1979), 225-6.

⁴⁵González, above n 41, 243.

⁴⁶Ibid, 243-4.

⁴⁷Aristotle, *Nicomachean Ethics*. Translated by W D Ross (Internet Classics Archive, 350 BCE), Book X, 9.

⁴⁸Aristotle and Benjamin Jowett, *Aristotle's Politics* (Modern library, 1943), III.

⁴⁹Sally Falk Moore, *Law as Process* (LIT Verlag Münster, 2 ed, 2000).

2 Nexus of Law and Nature, Custom and Reason

As noted earlier in this thesis, under legal positivism, law is defined as social fact and statutory enactment constitutes the most certain evidence of social fact. As argued in chapter three, such a notion of law has led to the relegation of customary law to an extra-legal realm. Some contemporary scholars have sought an alternative theoretical basis for customary law in classical legal theory.⁵⁰

As noted in the foregoing section, the Aristotelian exposition of law relates the notion of law to nature, custom and reason.⁵¹ Murphy, one of the contemporary scholars seeking a basis for customary law in classical legal theory, has expounded on the Aristotelian connection of custom, nature and reason in classical legal theory. He argues that Aristotle defines the relation between nature, custom and reason using the same logic he uses in the defining the relation between the three degrees of life- vegetative, animal and human.⁵² In the case of the latter, Aristotle stipulates that plants, animals and humans all share some commonalities while retaining some essential differences.⁵³ Consequently, the plant species is living (that is, nutritive and reproductive), the animal is living and sensitive and human persons are living and sensitive and rational.⁵⁴ In the hierarchy described, the lower faculty can exist apart from the higher one but the higher faculty necessarily presupposes the lower one. In an analogical manner, the relationship between nature, custom and reason, is such that, though nature can exist independently of custom, custom is nevertheless rooted in nature. Similarly, custom can exist without being the object of rational stipulation, but reflective stipulation necessarily presupposes custom.⁵⁵

Murphy argues that for Aristotelian political science, nature, custom and reason are principles of theoretical explanation but also principles of practical reason, thus confirming the

⁵⁰ See, eg, Gerald J Postema, 'Custom in International Law: A Normative Practice Account' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) ; Murphy, James B., 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007).

⁵¹ Aristotle and Benjamin Jowett, *Aristotle's Politics* (Modern library, 1943) 1332b 8-11.

⁵² James Bernard Murphy, 'Nature, Custom, and Reason as the Explanatory and Practical Principles of Aristotelian Political Science' (2002) 64(3) *The Review of Politics* 469, 477.

⁵³ R D Hicks, *Aristotle: De Anima* (Cambridge University Press, 1907), 335.

⁵⁴ *Ibid*, 335.

⁵⁵ James Bernard Murphy, 'Nature, Custom, and Reason as the Explanatory and Practical Principles of Aristotelian Political Science' (2002) 64(3) *The Review of Politics* 469, 477.

parallelism between theoretical and practical knowledge defended in the foregoing section.⁵⁶ He further posits that Aristotle's appreciation of the diversity and complexity of human affairs, leads to his recognition that nature, custom and reason could serve as a resource or obstacle in the quest for the right course of action by the state.⁵⁷ This implies that the achievement by the state of a just outcome in a particular case requires, a deliberation involving the theoretical explanations and practical principles of nature, custom and reason. The discursive process of practical reason from which law is produced involves the inter-relationship of nature, reason and custom.

This Aristotelian notion of law contrasts sharply with the Hobbesian notion of law as a product of reason. The Hobbesian view of nature does not support the capacity of the human person to discern the proper course of action through reason and based on accumulated wisdom, experience and diverse opinions. According to Hobbes, in the state of nature, the human person is so directed by self-interest he/she would not hesitate to decide against reason, wisdom, experience or the opinions of others, where this was against his/her self-interest.⁵⁸ Consequently, Hobbes' notion of law cannot admit of the possibility of founding law on nature, custom, or even on reason which could be subject to manipulation. A society without law, understood as the command of the sovereign would in his view be open to endless strife and eventually physical force would become the only remedy.⁵⁹ Hobbes' critique of the Aristotelian notion of law is thus warranted, given his misconception of nature, reason relationship between nature, custom and reason in law.

In contrast to this legal positivist position, in classical legal theory a more positive approach to human nature is taken. As noted earlier, according to Aristotle, the natural inclinations of human beings are shaped by custom, which in turn is tempered by reason. Applied to the context of law, the discursive process of practical reason determines, in a given set of circumstances, the proper course of action on the basis of natural inclinations, customs and reason. Proponents of this view, thus argue that custom plays an important part in the

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Hobbes, Thomas, *Leviathan* (Fontana, 1976).

⁵⁹ Ibid.

ordering of human society marking the bounds of reason in so far as good custom contains the implicit conditions of reason.⁶⁰

This thesis posits that such a notion of custom that is related to nature and reason provides a more suitable conceptual framework for understanding customary law as demonstrated in the following section.

3 *Customary Law in the Classical Legal Theory Context*

While acknowledging the distinction between custom and customary law, it is argued that the significance attributed to custom and its relation to law by legal theory determines the meaning and role given to customary law in the legal system. Some contemporary scholars have sought an alternative theoretical basis for customary law in the classical legal theory and in particular in the context of its nexus of law, nature, custom and reason.⁶¹

An analysis of Aristotle's work in search of a notion of custom and thus of a conceptual foundation for customary law, presents certain challenges, as demonstrated by Murphy.⁶² One of the challenges relates to conceptual logic used by Aristotle. As he does with other philosophical notions such as being, Aristotle does not use the term custom in a univocal but rather analogical sense. The implication of this is that in his work, the term custom is used in multiple senses, each of the different senses demonstrating similarities but also differences to the other meanings attributed to the same term. Aristotle uses two Greek words signifying the different senses in which 'custom' is used, 'ethos' referring to the habitual or implicit dimension of custom, and 'nomos' referring to its conventional aspect.⁶³

Ethos is associated with the natural inclinations or passionate nature of the person, while nomos is associated with mind and reason, implying, as observed by Murphy, its association with deliberate stipulations.⁶⁴ This notwithstanding, Aristotle subsequently uses nomos to refer to both formal legal conventions and customary conventions, thereby causing an

⁶⁰H G Gadamer, *Reason in the Age of Science* (Fredrick Lawrence trans, MIT Press, 1981), 82.

⁶¹ See, eg, James Bernard Murphy, 'Nature, Custom, and Reason as the Explanatory and Practical Principles of Aristotelian Political Science' (2002) 64(3) *The Review of Politics* 469.

⁶²James B Murphy, 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007).

⁶³ Ibid 66.

⁶⁴ Ibid 62.

apparent self-contradiction in Murphy's view.⁶⁵ He expresses the apparent contradiction as follows:

*'We can see how statutes might embody deliberate stipulation, but what about customary conventions? Such customs seem to arise from human conduct but not from any deliberate design. Yet there are a number of passages in which nomos refers broadly to convention, both customary and legal.'*⁶⁶

The contradiction expressed is only apparent, if the relation between nature, custom and reason described in the previous section is taken into account. As Murphy rightly notes with respect to Aristotle's logic of classification, reason (direct stipulation) presupposes custom and thus nomos can be legitimately applied to custom. Further, because custom presupposes nature, it seems as rightly observed by Murphy to arise from human conduct or habit.

These multiple attribution of meanings to terms is further demonstrated by Aristotle's comparison of customary conventions with statutory enactments in his contrasting of written and unwritten laws. He argues that legislators ought to enact written and unwritten laws, customary conventions and statutory enactments.⁶⁷ Murphy observes that it is not clear how Aristotle intends for the legislator to enact customs.⁶⁸ However, in the view of this thesis, it is likely that Aristotle uses the term enactment in the sense of the legislator's role in fostering custom and not necessarily in the sense of enactment resulting in transformation of custom to statute.

Murphy further observes that Aristotle in some instances suggests that custom is unwritten law and that this more important than written law.⁶⁹ Although no explanations are proffered as to why this is so, it may be deduced that unlike written laws which require forceful enforcement, unwritten laws, being founded on custom in the sense of habit, are fulfilled as second nature.⁷⁰ This further illustrates the intricate linking of nature, custom and reason in the notion of law of Aristotle.

⁶⁵ Ibid 62.

⁶⁶ Ibid 63.

⁶⁷ Aristotle and Benjamin Jowett, *Aristotle's Politics* (Modern library, 1943) 1319b 40.

⁶⁸ James B Murphy, 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) 64.

⁶⁹ Aristotle and Benjamin Jowett, *Aristotle's Politics* (Modern library, 1943) 1287b 5.

⁷⁰ James B Murphy, 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) 64.

To the consternation of those seeking conceptual clarity, Aristotle also contrasts written and unwritten law in the context of universal law and local law, the former relating to unwritten law acknowledged everywhere and the latter to the written law applying to a particular community.⁷¹ As Murphy states, Aristotle ‘moves rapidly around his circle of inter-definability’ inter-relating notions such as: custom, second nature and unwritten law; and universal unwritten law with the law of nature.⁷² Murphy concludes that this makes it difficult to determine if in a particular instance, Aristotle is referring to custom or law.⁷³ In his view, a lack of appreciation of the different senses in which custom is used has led to confusion in the conceptual foundation of customary law in common law jurisprudence.⁷⁴

While this thesis concurs with Murphy’s exposition above, it diverges in some respects to the conclusion reached on what constitutes an Aristotelian foundation of customary law. Murphy concludes that law is not the foundation of social order but rather a remedy for the deficiencies of custom.⁷⁵ In the view of this thesis, such a conclusion risks aligning itself to other historical legal theories’ conception of custom as a source of law, and more specifically, to theories claiming that custom is everything.

In our view, the Aristotelian notion of law as practical reason ought to form the foundation of the definition of customary law. Consequently, appreciating that law is defined as a form of normative deliberative practice, then customary law, would be the product of a process of thoughtful public adjusting of norms to changing circumstances through a practically oriented, discursive normative practice.⁷⁶ Such a process, as the case with practical reason in general, requires the involvement of the theories and principles of nature, custom and reason in the process of deliberation in search of the best course of action.

Customary law so defined, is distinguished from the other social normative frameworks by context and stipulation. As noted earlier, law and thus customary law arises in the context of

⁷¹W.D. Ross (ed), *Rhetoric*, Oxford Classical Texts (Oxford University Press, 1959), 1368b 7.

⁷²James B Murphy, 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007)65.

⁷³ Ibid 65.

⁷⁴ Ibid 66.

⁷⁵ Ibid 72.

⁷⁶ Postema, Gerald J, 'Custom in International Law: A Normative Practice Account' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) 289, 290.

political justice which excludes normative frameworks arising in other realms such as that of domestic justice. In the view of this thesis, the stipulation required to transform custom, nature or reason to law, is not necessarily enactment or judicial recognition but may also be tacit in so far as the social norms are recognised in the social order as obligatory and enforceable by sanction. The intricate linkage of nature, custom and reason and the different senses in which notions such as habit, convention and reason, are used in relation to written and unwritten law in the Aristotelian thought, provides a suitable framework for developing water governance frameworks that integrate customary and statutory law.

In view of the above discussion, this thesis argues that the adoption of the classical legal theory of law as practical reason provides a more suitable framework for understanding the true nature of customary law and its relation to statutory law. The next section examines the implication of adopting classical legal theory on the development of legal frameworks for water governance that foster sustainable development.

C Legal Frameworks for Water Governance in a Classical Legal Theory Context

As was discussed in chapter two of this thesis, it is now widely acknowledged that, not only is sustainable development the most appropriate goal for water governance, but water is recognised as being crucial for sustainable development.⁷⁷

Notwithstanding this, modern legal frameworks including water governance frameworks face challenges in adopting the goal of sustainable development. As was argued in chapter two, one of the challenges relates to modern law's difficulty in establishing the legal status of sustainable development. The uncertain legal status of sustainable development has hindered its effective adoption as a policy goal for the development of legal frameworks for water governance. As was alluded to in chapter two, the problem of the legal status of sustainable development, is to some extent caused by the legal theories and concepts underlying modern law.

This thesis argues that at the root of the difficulty modern legal frameworks face in adopting sustainable development as a goal for water governance, is the legal positivist perception of law as a theoretical science. This implies that legal systems for water resource governance must be developed using a methodology akin to that used for other theoretical sciences. The goal for theoretical sciences is to identify universal truths with respect to the object under

⁷⁷Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1(Re-issued on 22 June, 2012).

study on the basis of a predicted rigorous methodology, which is central to the attainment of the truths. Applied to law and more specifically to water resource governance, this would mean that legal systems for water governance depart from the premise that there is a universal model that ensures the achievement of sustainable development. This approach of searching for panaceas in the development of legal frameworks for water governance that foster sustainable development is common in contemporary water law.⁷⁸

The theoretical science methodology requires a high level of predictability and immutability of factors in order to develop universal truths or good, which in this case would be a universal model law guaranteeing sustainable development. Seeking such a level of immutability and predictability in the case of water resource governance and sustainable development is utopic.⁷⁹ As the analysis of the concept's content demonstrated, sustainable development of natural resources including water resources involves a complex and dynamic process characterised by the inter-play of conflicting values. The economic, environmental and social values that must be integrated and balanced are difficult to measure and predict. Although some ecological and economic considerations concerning water resources may be definable in precise terms using empirical techniques, the uncertainty associated with natural resource systems makes prediction even in these cases difficult.⁸⁰ Further, considerations such as intergenerational equity, social equity and the precautionary principle make it practically impossible to adopt a theoretical scientific approach to the development of legal frameworks for water resource governance and sustainable development.

In the face of the above challenges, two possible courses of action are possible. One option would be to abandon the efforts of adopting sustainable development as a goal in the design of legal systems for water resource governance given the complexities it introduces and the difficulty associated with developing predictive legal systems to ensure its achievement. In its place, less complicated concepts such as ecological sustainability, which as noted in chapter two has been proposed as a more easily serviceable legal principle, could be adopted as policy goals for legal frameworks for water governance.

⁷⁸Elinor Ostrom, 'A Diagnostic Approach for Going beyond Panaceas' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15181.

⁷⁹Meinzen-Dick, Ruth, 'Beyond Panaceas in Water Institutions' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15200.

⁸⁰Ellis, Jaye, 'Sustainable Development as a Legal Principle: A Rhetorical Analysis' (2008) *SSRN eLibrary*25.

A second option, which is that proposed by this thesis, would be to embrace the societal goal of sustainable development in the design of legal systems for water resource governance. As opposed to considering the complexity and associated uncertainty of the concept as a shortcoming, this thesis argues that these qualities ought to be regarded as a manifestation of the potential of sustainable development to transcend the limits placed by legal positivism on legal systems for water governance. As a consequence, this thesis takes the alternative approach of reconsidering the underlying theories of law inherent in legal systems and identifying those which offer a suitable framework for developing legal systems for water governance in a situation where change and uncertainty is constant.

This thesis argues that a legal theoretical framework based on the classical notion of practical reason provides a way out of the above problem. This is because the classical understanding of the method of practical sciences anticipates the possibility of the uncertainty and complexities associated with sustainable development and water governance.

As was noted in the previous section, the classical legal theory is founded on the theory of knowledge developed by Aristotle. Aristotle, as noted, distinguished between two realms of reason, theoretical and practical reason, each constituting a body of knowledge (science) and a proper method. Referring to the practical sciences, Aristotle explains that there are certain realities that cannot be correctly arrived at through the speculative/theoretical method of seeking for the universal principles of truth or good.⁸¹ For Aristotle, practical knowledge although involving the understanding of universal principles and statements about truth and good, also always involves knowledge of particulars and statements about this.⁸² Unlike universal truths and good, particular truths and good are in a state of constant flux. Universal statements cannot therefore be sought or made regarding particulars. In view of this, he argues that a different method proper to practical knowledge or science should be used to investigate practical sciences. This method departs from the basis that predetermined methods or predicted outcomes in the case of particulars are neither possible nor necessary.

The application of the method of practical sciences in the case of law would imply the following approach to the development of legal frameworks. First, the appreciation of law as the product of practical reason would ensure that law does not depart from the mistaken assumption that there exists a universal model of law or more specifically a panacea for legal

⁸¹ Aristotle, *Nicomachean Ethics*. Translated by W D Ross (Internet Classics Archive, 350 BCE) book V, 10.

⁸² R D Hicks, *Aristotle: De Anima* (Cambridge University Press, 1907) book 3, III.

frameworks of water governance for sustainable development. Secondly, the practical discursive process described as critical to the development of law would begin by taking into consideration the most customary or common modes of acting in keeping with the nexus between nature, custom and reason. As was demonstrated in the foregoing section, according to the classical legal philosophy of Aristotle, the customary or common modes of acting apart from being habits indicating natural inclinations are also often linked to reason. Thirdly, given the challenge of determining the correct mode of particularizing or concretising the just course of action and the constant change characteristic of particulars, these customary or common modes would not be considered as necessarily conclusive. A practical scientific approach to law would thus imply that the practical discursive process continues so as to determine if in the context of changing circumstances, the customary course of action is still relevant or if the new circumstances provide reasons for the adoption of a different course of action.

Aristotle points out that the difficulty in arriving at the correct mode of particularizing what is just or what the correct course of action in such circumstances is, does not demonstrate a defect of the law or the legislator (and we could add, or the legal method).⁸³ This seems to have been the view taken by Hobbes, Hume, Austin and other founders of legal positivism who sought to apply the method of theoretical sciences to law, presuming that the method of practical sciences lacked scientific rigour. The difficulty in arriving at the correct mode of particularizing the just thing to do was, according to Aristotle, the result of the nature of the human affairs/particular realities which are the subject of practical sciences such as law.⁸⁴ These realities, as noted, are complex and constantly changing and thus cannot be investigated or resolved using the method proper to theoretical sciences

Adopting the classical legal theory approach to law, as described above, allows for the development of an adaptive normative system for water resource governance that anticipates complexity and change. As was demonstrated by the analytical framework developed in chapter five, adaptability is the underlying feature of customary law systems that have demonstrated positive outcomes related to sustainable development. Given the uncertainties and complexities associated with water governance and sustainable development, an

⁸³ Aristotle, *Nicomachean Ethics*. Translated by W D Ross (Internet Classics Archive, 350 BCE) book V, 1137b 15-20.

⁸⁴ Ibid.

adaptable normative system, would provide the legal framework with the flexibility required to change rules as reasons for action change.

Classical legal theory therefore, supports development of adaptable normative structures better suited, not only to integrating customary and statutory law as argued in the previous section, but also to incorporating the uncertainties and complexities involved in water governance and sustainable development.

X CHAPTER 10 CONCLUSION

This thesis set out to explore the hypothesis that there is a disconnect between customary law and statutory law in the development of legal systems for water resource governance and that the redress of this disconnect would contribute to sustainable development. The research used a case study of the customary water governance system of the Marakwet, a rural community living in the North-Western part of Kenya to investigate the hypothesis.

This thesis has argued that, despite the debate surrounding the notion, the concept of sustainable development represents the most comprehensive articulation of the societal goals relating to water resource governance presently. A review of the state of freshwater resources globally and in Kenya, where the Marakwet community live, demonstrates that the achievement of sustainable development in water resource governance continues to be a challenge.

A *New Approaches for Investigating the Customary and Statutory Law Interface*

In light of the above, this research sought to investigate one of the factors identified as undermining the achievement of sustainable development that is, the disconnect between customary law and statutory systems of water governance. Research in the area of common property systems of natural resource governance has demonstrated that in some cases, these systems, which are often founded on customary law systems, result in positive outcomes for sustainable development.¹ Consequently, the failure to integrate customary law systems that demonstrate this potential in legal frameworks for water resource governance undermines the capacity of the water governance systems to achieve sustainable development. As was discussed, the problem of the lack of integration of customary law and statutory systems in natural resource governance has been investigated by other authors.²

However, the present research adopts a novel approach to the investigation of the problem. Firstly, this research investigates this disconnect between the two systems, on the basis of the

¹ See, eg, Peter Ørebech, et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005).

² See, eg, Lawrence Kuna Kalinoe, *Water Law and the Nature of Customary Water Rights in Papua New Guinea* (PhD Thesis, University of Wollongong, 1998); Leticia Kuchibanda Nkonya, *Drinking From Own Cistern: Customary Institutions and their Impacts on Rural Water Management in Tanzania* (PhD Thesis, Kansas State University, 2006).

legal theories and concepts underlying contemporary water law, particularly in jurisdictions with a common law system. In particular this research critically analyses the effect of legal positivism on the notion of law and the significance attributed to the concepts of law, custom, and customary law. The objective of this analysis is to determine if and how the legal positivist conception of statutory law and of customary law contributes to the disconnect prevailing between customary and statutory law.

Secondly, the present research also investigates common law jurisprudence to determine the theories that have influenced legal property theory. The legal positivist influence on the notion of property and the effect of the confluence of law and economics on legal property theory is investigated. This forms the basis of understanding how modern legal frameworks of water governance perceive of property regimes. Concretely, the analysis investigates how property legal theory in common law jurisdictions regards common property regimes which are characteristic of customary law systems of resource governance.

Thirdly, a critical analysis of the legal positivist understanding of the legal method or the science of law forms the basis of investigating the difficulty faced by modern legal frameworks of resource governance in adopting the goal of sustainable development. As was argued particularly in chapter two, sustainable development continues being a contested term with uncertainty surrounding its legal status. The analysis thus sought to determine if the method adopted by legal positivism contributes to the difficulties associated with adopting sustainable development as a goal for legal frameworks for water governance.

Apart from the novelty in the conceptual and theoretical approach summarised above, this research also presents an analysis of Marakwet's customary water governance system. Previous studies on the Marakwet provided an understanding of their irrigation furrow system from a technical and anthropological perspective.³ However, the present study provides new insights by focusing on the normative aspect of their water governance system and analysing this in the context of its relation with Kenya's water law. The data analysed was collected by the researcher in the course of field work conducted between November 2010 and February 2011. The research thus provides data for further investigation of the statutory and customary law interface in the context of Kenya's water law.

³ See, eg, Watson, Elizabeth E, William M Adams and Samuel K Mutiso, 'Indigenous Irrigation, Agriculture and Development, Marakwet, Kenya' (1998) 164(1) *The Geographical Journal* 550, 720-723; Benjamin Kipkorir and Frederick Welbourn, *The Marakwet of Kenya: A Preliminary Study* (East African Educational Publishers, 2008).

To investigate the extent to which Marakwet's customary water governance has the potential to contribute to positive outcomes for sustainable development, this thesis developed and applied a novel analytical framework. The framework is based on certain features of customary law systems and common property regimes identified as indicative of potential successful outcomes for sustainable development.⁴ The framework could be a useful tool for investigating other customary law systems for water governance and determining their potential to generate positive sustainable development outcomes.

B *Legal Theories and Concepts: Setting Parameters for Modern Water Law*

While appreciating the complex inter-play of multiple factors affecting development of modern water law in common law jurisdictions, this research identified certain legal theories and concepts as influencing the interface between customary and statutory law in legal frameworks for water governance prevalent in common law systems.

1 *Legal Positivism*

The research undertaken confirmed that the legal theory underlying the notion of law in common law jurisdictions is legal positivism. The roots of this legal positivism lie in the works of early common law lawyers and philosophers including Hobbes, Bentham, Locke, Austin and Hume.

The notion of law prevalent in common law systems has been influenced by the legal positivist notion of law. Consequently, in common law jurisdictions, law is considered as a social fact, whose legitimacy is not affected by its merit but rather by its recognition by officials on the basis of pre-determined standards. The effect of this is that the legislative process of establishing law is considered as the primary if not the sole legitimate mode through which social norms and practices acquire the status of law. Consequently, in contemporary society, law is regarded as being synonymous with legislation.

As a result of the above, the primary tool for implementing policy, including achieving sustainable development in water governance, is legislation either international or national. Legal frameworks for water governance are thus regarded as comprised primarily, if not solely of the international or national legislation relating to freshwater governance and the institutions established by such legislation. At the national level, public authorities are

⁴Fred Bosselman, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005); Elinor Ostrom and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*14.

mandated with the task of developing legal frameworks for water governance. In the context of modern law, the primary tools for governing water resources and implementing national policy are considered as national laws, regulations and standards.⁵

This legacy of legal positivism explains the relegation of customary law, which in such a context is not considered as law unless recognised by statute. Further, as noted even where recognised by statute, such an approach to law does not foster the effective integration of customary law with statutory law.

The legal positivist conception of law gives the state a pre-eminent role in the ordering of society and thus in the development and implementation of law. This has led to a state-centric approach to law in common law jurisdictions. Such an approach to law does not recognise the possibility of development and implementation of normative systems outside the realm of the state's law-making mechanisms.

The above arguments are corroborated by the nature of the water sector reforms undertaken in many jurisdictions over the last three decades. These reforms have been characterised by establishment of a formal system facilitating the rational use of water via written rules, state agencies and other statutory legal mechanisms. Despite the resilience of customary law systems for water governance in many jurisdictions, water law is considered as tantamount to statutory laws and agencies with almost no recognition given to non-statutory normative systems and their institutions.⁶

Further, even where provision is made for community participation in management of water resources, this research demonstrated that such provisions provide limited opportunities for the integration of customary law institutions. The institutions anticipated for community participation are often the result of a top-down development process established by the water statute in contrast with the bottom-top approach typical of customary law systems. The vehicles for recognition of stakeholder participation established by the water statute do not adequately accommodate the customary law institutions. As was demonstrated by the provisions in Kenya's water law, in order to gain recognition by statute, customary law systems often have to re-design their institutional frameworks and mode of operation in order to fit into the models of stakeholder participation anticipated by statute. Moreover, despite

⁵Jessica Vapnek et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009) 59, 59.

⁶ As observed this approach characterised water reforms in most of Sub-Saharan Africa, despite the strong presence of customary law systems for water governance in many rural parts of the region.

most policy documents on water law recognising the importance of devolution of water management, in reality, statutory legal frameworks for water governance, as demonstrated by the case of WRUAs in Kenya, continue to assign ultimate decision-making power to state agencies.

2 Customary Law as Immemorial Usage

Modern common law jurisprudence has contributed to the clouding of the importance of custom and customary law in modern water law. This research demonstrated how the divorcing of the concept of law from the principles of nature, custom and reason, led to the polarization of nature and custom on the one hand and reason and law on the other. This polarization laid the roots for the association of custom, and by extension customary law, with immemorial usage and antiquity in contrast with reason and law. Consequently, in common law systems customary law is defined in the context of rules associated with traditional customs and practices. Further, the recognition of customary law by statute in these systems often requires that the customary norms prove evidence of immemorial usage and antiquity. Such an understanding of customary law is inconsistent with the reality of customary law systems which are living and dynamic.

The notion of customary law in common law jurisprudence has thus led to the incongruence between the reality of customary law systems and the idea of customary law systems underlying modern law. As a result, the space provided by legal frameworks for water governance based on such the legal positivist notion cannot accommodate the reality of customary law systems. This provides further evidence of the disconnect between customary law and statutory law in legal frameworks developed for water governance.

Further, this research has shown how the dissociation of custom from reason contributed to a misconception among legal positivists, who felt obliged to choose between either custom or reason, as the basis for common law. Faced by this choice, Hobbes and other proponents of legal positivism chose reason and their effort to purify it from vestiges of anything unreasonable such as custom may explain their erring towards a notion of practical reason that was in essence no different from theoretical reason. These sentiments of custom as not being reasonable are common in modern law. As Perreau-Saussine et al observe the common view is that:

*'Modern societies and their legal systems depend not on enslavement to customary habits and laws but on reasoned principles and doctrines; customary laws grow up only where legislators have done a particularly poor job, leaving a need for elaborate statutory construction and legislative gap-filling.'*⁷

As demonstrated in this research, the above views have led to an association of customary law and informality with developing countries. Natural resource governance frameworks thus seek to fill in legislative gaps and where this is impossible they may tolerate the continued operation of customary or informal law systems in the short-term.

As a result of the above concepts and theories of customary law, most common law jurisdictions have adopted a perfunctory approach to the recognition of customary law systems including those for water governance. Such an approach undermines the true nature of customary law systems and thus hinders their capacity to realise their potential in achievement of sustainable development.

3 *Theory of Knowledge*

Law in contemporary common law systems is understood as the product of reason. Modern common law systems are founded on a notion of reason that has its antecedents in the post 17th century common law jurisprudence.

As demonstrated by this research, the notion of reason adopted by this common law jurisprudence was influenced by Hobbes' notion of practical reason. As observed, Hobbes founds his notion of law as reason on a theory of knowledge distinct from the Aristotelian theory of knowledge. The theory of knowledge underlying legal positivism was influenced by Hume and other English philosophers of the period. The effect of these influences was the merging of legal positivism with rationalism and empiricism. This thesis has demonstrated how the theory of knowledge underlying this version of law as practical reason blurs the nature of and distinction between practical and theoretical reason. The result is a legal positivism that tends towards logical positivism.⁸ As pointed out the characteristic feature of logical positivism is the view that scientific knowledge (understood as empirical or theoretical science) is the only type of factual knowledge.

⁷Perreau-Saussine, Amanda and James Bernard Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007) i.

⁸ This is notwithstanding the clarification of modern notions of legal positivism which seek to dissociate the theory from logical positivism. Green, Leslie, 'Legal Positivism' (2009) *The Stanford Encyclopedia of Philosophy* <http://plato.stanford.edu/archives/fall2009/entries/legal-positivism/>.

This thesis argues that the merging of logical positivism with legal positivism has had far reaching consequences on the approach taken to law. One of the effects is the adoption of a legal methodology that is akin to the theoretical science methodology. Consequently, as the goal for theoretical sciences is to identify universal truths using a predicted and rigorous methodology, a similar approach is adopted in the development of legal frameworks. The effect of the adoption of such an approach to modern water law has led to the presumption that there exists a panacea or universal legal framework for water governance that will ensure sustainable development. As the theoretical scientific method requires a high level of predictability and stability of factors, its application in the legal realm of water governance for sustainable development, raises insurmountable challenges. Water governance and sustainable development are associated with complex and dynamic processes in which a myriad of oft-conflicting factors come into play. In this realm, predictability is almost impossible given the scientific uncertainty and inclusion of futuristic considerations such as inter-generational equity. This reality of water governance and sustainable development renders the legal positivism founded on the Hobbesian-Humean-Kantian theory of knowledge unsuitable as a theoretical framework.

4 *Limits to Concept of Property and Governance Systems*

This research has argued that the concepts and legal theories propounded by the post 17th century common law jurisprudence have also had an effect on the notion and theory of property embraced by legal frameworks for water governance.

Due to the confluence of theories of economics, such as classical liberal and neo-liberal economic theories with law, common law considers property law as rules to govern resources for economic efficiency. As demonstrated by this thesis, the Hobbesian notion of man in a state of nature combined with Adam Smith's selfish individual lays the foundation for Hardin's tragedy of the commons and the resulting negative attitude towards common property systems.⁹ The result of this is modern water law's conception of property governance in a two-dimensional space of either state ownership and management or private property rights governed by markets. Such a rights framework leaves little room for common property regimes which, as was observed, are characteristic of customary law systems.

⁹ As pointed out the common property systems attacked by Hardin were in fact unmanaged commons akin to open access regimes.

Further, this thesis also shows how the concept of property elaborated by post 17th century common law jurisprudence is founded on notions such as dominance, acquisition and exclusion. Such an idea of property is not shared by customary law systems. As these systems are based on common property regimes, they place greater emphasis on ideals such as conservation and stewardship, which are important in the context of natural resource governance and sustainable development. Further, modern water law is based on a property rights framework that tends to commodify water resources. This is in contrast with the conceptualisation common to customary law systems where water is regarded not primarily as a commodity but rather as a resource representing multiple values.

The identification of the legal theories and concepts underlying modern law and their effects on legal frameworks for water governance, shows evidence of a disconnect between customary and statutory law in the development and operation of water governance frameworks.

C Customary Law Systems and Sustainable Development: Areas for Further Research

This research sought to determine, on the basis of a critical review of literature, the nature of customary law systems and the extent to such systems continue in existence and are relevant in contemporary society. The analysis confirmed the continued existence and relevance of non-statutory normative systems engaged in resource governance in many parts of the world. However, an analysis of the nature and features of these normative systems proves that the systems transcend the notion of customary law as related to immemorial usage and antiquity suggested by the post 17th century common law jurisprudence. Further, as demonstrated by case studies cited in this research, customary law models demonstrate complex normative systems based on rational principles reflective of traditional knowledge and influenced by the prevalent social, political and economic circumstances. These systems include institutional frameworks for implementation and enforcement of their rule systems.

This research also confirmed that in some cases, common property regimes of natural resource governance demonstrate positive outcomes for sustainable development. Building on the features identified as contributing to the potential of these systems to achieve sustainable development in resource governance, this thesis developed an analytical framework. The framework identifies certain features of the normative system that contribute to the adaptability and resilience of the system and thus its potential to achieve positive outcomes.

This model was then applied to the case study of Marakwet's customary law system for water governance. From the analysis it was concluded that Marakwet's system of water governance exhibits some of the indicators of successful user managed systems but would benefit from strengthening from formal institutions. This further strengthens the case for the need to redress any disconnect between statutory and customary law systems for achievement of sustainable development in water governance. The thesis thus sought to investigate the space provided in Kenya's legal framework for water governance for customary law systems such as that of the Marakwet.

The analysis of the legal framework established by Kenya's water statute highlighted that the law is limited by the underlying legal theoretical and conceptual frameworks underlying most common law jurisdictions and discussed above. As a consequence, no explicit recognition is made in the law for customary law systems. Arguably the provisions for stakeholder participation anticipated by the Act may offer windows of opportunity for customary law systems. However, as discussed, the integration of customary institutions into WRUAs, WSPs or other statutorily recognised forms requires some adaptation on the part of customary institutions. In the process of such adaptation, these institutions risk losing certain essential features including those that enable them achieve sustainable development in water resource governance.

One of the limitations of this research is the use of the analytical framework to investigate the potential of Marakwet's customary law system for water governance to contribute to sustainable development. The utility of using tools such as the framework developed by this thesis is limited, given the dynamic and evolving nature of customary law systems. As has been demonstrated by research in the area of common property systems, a myriad of factors influence the sustainability of these systems. The multiplicity of factors, the complexity of their interaction and the fact that the systems are dynamic and thus constantly evolving makes it a challenge to study or investigate them. Notwithstanding, the challenges, the analytical model provides a tool albeit a limited one for understanding the association between these systems and sustainable development outcomes and provides a basis for further research.

In light of the foregoing, this research sought to explore legal strategies that could be used to redress the disconnect between customary and statutory law systems in water governance and in this way contribute to sustainable development.

D *Seeking Strategies to Redress the Gap*

In light of the research outcomes, this research explored two main possibilities of redressing the disconnect between customary and statutory law systems in water governance and so facilitate the attainment of the goal of sustainable development. At the level of practical legal strategies, the use of the human rights-based approach (HRBA) is proposed. At the theoretical level, the thesis proposes a re-consideration of the classical legal theory as an alternative framework from which to develop water law.

The HRBA provides a potential solution on various grounds. The existence of an internationally recognised human right to water and a right of indigenous' peoples to self-governance, provides individuals and indigenous communities with a basis for challenging national law on the basis of international human rights law.

As was demonstrated, the human right to water grants individuals the freedom to realise the right without the interference of the state or any third party. This arguably provides communities such as the Marakwet, with the right to protect their pre-existing customary law system for water governance, from being supplanted by water statutes. Nevertheless, given the content of the human right to water, the community would also have to prove that their system provides the adequate quantity and quality of water and sanitation which may be a challenge. Further, the experience of case law from South Africa demonstrated some of the challenges likely to be faced in arguing for such claims in court.

The internationally recognised right of indigenous peoples to self-governance, gives these peoples a right to use customary law systems for self-determination. The right provides a window of opportunity for communities to advocate for the effective integration of their customary law systems of water governance in the state's water law. As was pointed out, the application of the HRBA in the case of the Marakwet would be dependent on the extent to which they can prove they fall within the category of an indigenous community.

This thesis introduces the HRBA as a potential legal strategy. However, as noted the application of the HRBA in water governance and in customary law governance is still relatively novel. The area provides a subject for further research.

Finally, this thesis briefly explores classical legal theory and the theory of knowledge on which it is founded as an alternative conceptual and theoretical framework on which law could be founded. The analysis demonstrates that the notion of law as practical reason expounded by this theory provides a more suitable framework for developing water

governance frameworks integrating customary and statutory law. Classical legal theory also expounds a legal method that is more adept at addressing issues of sustainable development. The analysis of classical legal theory and in particular of its philosophical and epistemological foundations is limited to demonstrating the potential of this theory in providing alternative notions of law, custom and customary law. Further research on the theory and its philosophical foundations would be required to determine its full potential as an alternative framework to legal positivism.

APPENDICES

Appendix 1: Questionnaire for Water Users

PROJECT TITLE: Recognition of Customary Law for Sustainable Water Resource Management: A Case Study of the Marakwet

Read the Dialogue Sheet explaining the project

CONTROL DATA

Interview No.

Name of Interviewer:

Name of interviewee:

Interview date:

Location of interview:

Time of start of interview:

A. BIO DATA

1. Sex

[1] Male

[2] Female

2. Age of Respondent

[1] 18-35

[2] 35-55

[3] 55 and above

3. Education level of Respondent

[1] Primary

[2] Secondary

[3] College

[4] Informal Education only

4. Income Level (Monthly)

[1] 5,000-20,000

[2] 21,000-50,000

[3] 50,000 and above

5. Residence

[1] Kaben

[2] Endo

[3] Koibirir

6. Household structure

[1] Children 0-14 years

[2] 15-17 years

[3] Male Adults

[4] Female Adults

- [5] Sick or elderly dependants
- [6] Total Household Members

7. Occupation of respondent

- [1] Crop Farming
- [2] Animal Husbandry
- [3] Mixed
- [4] Business
- [5] Stay home parent
- [6] Others (specify)

B. WATER USER INFORMATION

1. What are your 5 main uses of water in order of priority?

2. Where do you source water for the following needs?

Use	If furrow which one & how many share
	Distance (Hrs. walk) Quantity (Litres per day)
[1] Farming	
[2] Domestic	
[3] Other specify	

3. Who is responsible in your household for collecting or ensuring supply of water for the following uses?

- Use**
- [1] Crop Farming
 - [2] Livestock farming
 - [3] Domestic use including sanitation
 - [4] Others specify

4. Do you ever experience water shortages and if so how frequently?

5. How do you cope with these water shortages?

6. How would you describe the quality of water for domestic use?

- [1] Excellent
- [2] Good
- [3] Satisfactory
- [4] Bad
- [5] Very bad

7. Do you boil water for drinking? Give reasons for yes or no response

8. Do you ever use treated water? If so where do you source it from?

9. What type of sanitation facilities do you have access to?

- [1] Pit latrine
- [2] Water closet
- [3] Others specify

10. Do you have a water source near the facility?

11. Is soap or ash for hand wash readily available?

C. WATER RIGHTS

1. Who owns the water source(s) from which you obtain water for the various uses?

2. Do you ever pay for water used?

- [1] Yes
- [2] No

3. If answer to above is yes, how much do you pay for the following uses?

Use	Cost
Farming	
Domestic	
Others (specify)	

4. What do you think about paying for water?

5. Do you ever have conflicts surrounding water use? Give details

6. How do you resolve these conflicts?

7. Discuss any limitations in meeting water needs

8. How do you think these limitations can be overcome?

D. CONSTRUCTION AND MANAGEMENT OF FURROWS

1. Who owns the different water sources in Marakwet?

2. Who owns the irrigation furrows in the area?

3. Who determines allocation of furrows to clans?

4. Who is responsible for the allocation and distribution of water resources from these sources?

5. What is your role in construction and management of furrows?

6. Are you involved in determining supply of water from the furrows? Explain

7. Do you think the furrows are managed effectively?

8. Discuss any rules and practices in relation to water use and management which affect you

9. Are you in agreement with these customs and practices?

10. Why do you comply with these norms and customs? Incentives or prohibitive sanctions

E. INTERFACE OF STATUTE AND COMMUNITY SYSTEMS

1. What is the role of government in provision of water resources for your community?

**2. Are you aware of any government initiated water supply or treatment projects?
Request them to name**

3. What do you know about the water law (Water Act of 2002)?

4. What do you know about water resource user associations? Are you a member of any?

5. What is the ideal role of these WRUAs?

6. Have you ever participated in any the planning for any water project in your community? If so what was your role?

7. If you have never and are not participating in any project why is this?

8. Do you know about piped water tanks installed in the area?

Water System

Borehole

Water tank

Others specify

9. Have you considered sourcing water from these schemes? If so why and if not why?

10. Have you ever heard of Water Service Providers (WSPs)? Probe for understanding

11. Are you aware of the District Irrigation Office of your area?

12. If answer to above is yes what do you think is the role of this office?

13. What proposals would you make to improve the cooperation of community and government?

F. ROLE OF NGOs AND OTHER DONOR AGENCIES

1. Are you aware of NGOs or other Donor agencies working in the area in water projects?

2. Are you aware of the nature of their projects? Explain

3. Have you participated in any of these projects?

4. If so what was your role?

5. If not, why?

Time at Conclusion of Interview

FOCUS GROUP DISCUSSION GUIDELINE

A. ICE BREAKERS

1. Introductions
2. Background of participants
3. General state of community

B. N CUSTOMARY LAW

1. Explain the role of customary law in the management of your water resources
2. Discuss the following aspects of Water Resource Management
 - a. Ownership of water resources
 - b. Responsibility for allocation of water resources
 - c. Management of Water Resources: Conservation and protection of quality
 - d. Provision or allocation of water resources
 - e. Infrastructure management
 - f. Source of funding for management
 - g. Tariffs for water use
3. Who is the custodian of customary law in the community?
4. What are some of the norms and rules governing water resource management?
5. How do you know about these norms governing water and land use set by customary law?
6. Who in the community is charged with ensuring implementation of these rules?
7. Are there sanctions for failure to comply and what are these sanctions
8. Who enforces the sanctions?
9. What is the rainfall pattern in this area?
10. What are there are challenges to water availability in the area?

B. ON STATUTORY SYSTEMS FOR WATER RESOURCE MANAGEMENT

1. What is your understanding of the statutory system of water resource management?
2. Do you know about the Water Act (2002)? Discuss understanding of main provisions of the Act?

3. What changes have you noticed since 2002 in the management of water resources in your area?
4. Do you know about Water Resource User Associations? Discuss understanding of WRUAs and membership or plans to register the same
5. Discuss appreciation of and views on permit system, water rights
6. Determine participants views on water pricing mechanisms

C. INTERFACE OF CUSTOMARY AND STATUTORY SYSTEMS OF WATER MANAGEMENT

1. Discuss participants understanding of the interface that should exist between customary and statutory systems
2. Determine their perspectives on the forms of recognition of customary law present in Kenyan statutory law

CONCLUSIONS AND RECOMMENDATIONS

1. Discuss ways in which custom and statute can interact in the development of sustainable water resource management systems

FOCUS GROUP DISCUSSION GUIDELINE

C. ICE BREAKERS

4. Introductions
5. Background of participants
6. General state of community

D. ROLE OF WOMEN

1. Identify women's use of multiple sources of water for multiple purposes
2. Establish women's role in decision-making about water use in homestead
3. Determine women's perceptions of water rights related to different uses in the local environment – for example clean drinking water, water for vegetable gardens, water for animals etc.
4. Discuss their perception of and interaction with formal and informal local water governance institutions
5. Determine if there are women represented in local water governance institutions and their perception of these roles

C. LOCAL WATER GOVERNANCE INSTITUTIONS

1. Discuss if local institutions facilitate participation of women in prioritization of users and uses of water
 - a. Establish the perception of women of their role as citizens and rights holders
 - b. Discuss the relationship between their perception versus their actual capacity to articulate their rights
2. What decisions are taken in these institutions? Are there gendered or classed patterns of priority?
3. How are the women who are represented in the local water governance institutions elected?
4. Does the criterion of election depend on age, education, marital status, widowed/single mothers, family background etc.?

5. Establish who the women elected see themselves as representing and who do they see themselves as accountable to
6. Discuss the women's perception of local water rights in relation to different users and uses

D. WOMEN'S INFLUENCE ON THE FORMATION AND IMPLEMENTATION OF NATIONAL WATER GOVERNANCE SYSTEMS.

1. What are the networks in which the women are embedded - family/kin, political party, CBO/NGO membership, water users associations etc.?
2. Discuss any government, donor agencies or civil society measures that have been taken to increase their participation and empowerment?

WRMA RESPONDENT

**PROJECT TITLE: RECOGNITION OF CUSTOMARY LAW FOR SUSTAINABLE
WATER RESOURCE MANAGEMENT: A CASE STUDY OF THE ELGEYO
MARAKWET**

Provide respondent with Consent form

INTERVIEW GUIDE FOR GOVERNMENT OFFICIALS

A. BIODATA

1. Name
2. Sex
3. Designation
4. Specific responsibilities in the organisation
5. Number of years worked in the organisation
6. Other relevant working experience

B. INFORMATION ON THE OFFICE/AGENCY

1. What is the role of your organisation/agency/office in water resource management?
2. Discuss the organisational structure of the organization
3. Recruitment of staff for the institution, capacity building etc.
4. Discuss the regulatory framework which the institution is mandated to implement
5. What instruments are used to implement the rules and laws set out in the legal mandate. E.g. Instruments used to implement provisions of the Water Act on water use, quality etc.?
6. Discuss challenges faced in implementation of the rules and regulations under the Act
7. What mechanisms are used to address any conflict that may arise

C. WATERCONSERVATION AND MANAGEMENT

1. Discuss any plans for management and protection of water resources in Marakwet District. Confirm if there any around Sambalat.

2. Describe how the Authority plans for allocation of water resources
3. Have any parties applied for permits to provide water services in the Marakwet district?
4. What are some of the most important considerations you take into account while giving permits?
5. What rights are granted to the permit holders?
6. How does your agency enforce conditions of the permits?
7. What long term plans does the agency on ensuring sustainability of water resources in the area?
8. How does the agency ensure water quantity and quality control in the area?

D. INTERFACE BETWEEN STATUTORY AND CUSTOMARY MANAGEMENT OF WATER RESOURCES

1. Discuss any linkages of your agency with community associations/institutions of the Marakwet
2. What role, if any, do the customary associations or institutions play in relation to this institution's role and its mandate?
3. What are some of the challenges faced in interaction of the various institutions?
4. Have any community institutions sought representation in your agency?

BIBLIOGRAPHY

Cases

Mazibuko v City of Johannesburg [2009] ZA 28 (Constitutional Court)

Commonwealth v Yarmirr (2001) 208 CLR 1.

Gabčíkovo-Nagymaros Project (Hungary v. Slovakia) [1997] ICJ Rep 7.

Government of the Republic of South Africa v Grootboom [2001] 1 SA 46 (Constitutional Court)

Mabo v Queensland (No 2) (1992) 175 CLR 1.

Minister of Health and Others v Treatment Action Campaign and Others [2002] 5 SA 721 (Constitutional Court)

Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805)

SS Wimbledon, [1923] PCIJ (ser A) No 1

Legislation

Agriculture Act 1963 (Kenya)

Constitution 2010 (Kenya)

The Constitution (Repealed) Act 1964 (Kenya)

Constitution of the Republic of South Africa Act 1996 (South Africa)

Environmental Management and Coordination Act 1999 (Kenya)

Ethiopian Water Resources Management Proclamation (2000)

Forest Act 2007 (Kenya)

Irrigation Act 1966 (Kenya)

Judicature Act 1967 (Kenya)

Local Government Act 1963 (Kenya)

Registered Land Act [Repealed by Act 3 of 2012] 1963 (Kenya)

Water Act 2003 (Kenya)

Water and Sewerage Act 2002 (Guyana)

Water Resources Act 1997 (South Australia)

Water Resource Act 1963 (UK)

Water Resource Management Authority, *Water Resource Management Rules*, Legal Notice No. 171 (28th September 2007)

Water Resource Management Rules 2007 (Kenya)

Water Resources Commission Act 1996 (Ghana)

Water Resources Decree 1993 (Nigeria)

Water Resources Management Act 2009 (Tanzania)

Water Act 1989 (Victoria)

Articles/Books/Reports

Abrams, Robert H., 'Water Allocation by Comprehensive Permit Systems in the East: Considering a Move Away from Orthodoxy' (1990) 9 *Virginia Environmental Law Journal* 255

Acheson, James M. and University Press of New England, *Capturing the Commons: Devising Institutions to Manage the Maine Lobster Industry* (University Press of New England, 2004)

Adams, William M, Elizabeth E Watson and Samuel K Mutiso, 'Water, Rules and Gender: Water Rights in an Indigenous Irrigation System, Marakwet, Kenya' (1997) 28 *Development and Change* 707

International EnergyAgency, *World Energy Outlook 2011* (IEA/OECD, 2011)

Agrawal, Arun and Krishna Gupta, 'Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai' (2005) 33(7) *World Development* 1101

Allott, A N, 'What is to be done with African Customary Law?' (1984) 28(1-2) *Journal of African Law* 56

Allott, Philip, *The Health of Nations: Society and Law Beyond the State* (Cambridge University Press, 2002)

Alston, Philip and Gerard Quinn, 'The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights' (1987) 9(2) *Human Rights Quarterly* 156

Alvarez, Jose E., 'The Return of the State' (2011) 20 *Minnesota Journal of International Law*

Andelson, Robert V. (ed), *Commons without Tragedy: The Social Ecology of Land Tenure and Democracy*, (Centre for Incentive Taxation, 1991)

Anderson, Terry Lee and Pamela Snyder, *Water Markets: Priming the Invisible Pump* (Cato Institute, 1997)

Anton, Donald K and Dinah L Shelton, *Environmental Protection and Human Rights* (Cambridge University Press, 2011)

Anton, Donald K., 'The 2012 United Nations Conference on Sustainable Development and the Future of International Environmental Protection' (2012) 7(1) *Consilience: The Journal of Sustainable Development* 64

Aristotle, *Nicomachean Ethics*. Translated by W D Ross (Internet Classics Archive, 350 BCE)

- Aristotle and Benjamin Jowett, *Aristotle's Politics* (Modern library, 1943)
- Arnold, J E M and J Gabriel Campbell, 'Collective Management of Hill Forests in Nepal: The Community Forestry Development Project' (Paper presented at the Common Property Resource Management, Washington, DC, 1986)
- Atanraoi, Pole et al, *Customary land tenure and sustainable development: complementarity or conflict?* (South Pacific Commission Noumea and Institute of Pacific Studies University of the South Pacific, 1995)
- Austin, John and Wilfrid E. Rumble, *The Province of Jurisprudence Determined. Cambridge Texts in the History of Political Thought* (Cambridge University Press, first published 1832, 1995)
- Australian Law Reform Commission, *The Recognition of Aboriginal Customary Laws*, ALRC 31 (1986)
- Bakker, Karen, 'Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales' (2005) 95(3) *Annals of the Association of American Geographers* 542
- Bakker, Karen, *An Uncooperative Commodity: Privatizing Water in England and Wales* (Oxford University Press, 2003)
- Bank, World, *Water Resources Sector Strategy: Strategic Directions for World Bank Engagement* (2004)
- Bartram, Jamie and Guy Howard, 'Domestic Water Quantity, Service Level and Health: What Should Be the Goal for Water and Health Sectors' (2002)
<http://www.who.int/water_sanitation_health/diseases/WSH0302.pdf>
- Basurto, Xavier and Elinor Ostrom, 'Beyond the Tragedy of the Commons' (2009) 52(1) *Economia delle fonti di energia e dell ambiente* 35
- Bates, Bryson et al (eds), *Climate Change and Water*, IPCC Technical Paper VI (IPCC Secretariat, 2008)
- Beccar, Lily, Rutgerd Boelens and Paul Hoogendam, 'Water Rights and Collective Action in Community Irrigation' in Rutgerd Boelens and Paul Hoogendam (eds), *Water Rights and Empowerment* (Uitgeverij Van Gorcum, 2002) 1

Beech, Mervyn W H, 'Sketch of Elgeyo Law and Custom' (1921) 20(79) *Journal of the Royal African Society*

Behnke, Roy H Jr, *Open-range Management and Property Rights in Pastoral Africa: A Case of Spontaneous Range Enclosure in South Darfur, Sudan* (Overseas Development Institute, 1985)

Benda-Beckmann, Franz von, 'Law out of Context: A Comment on the Creation of Traditional Law Discussion' (1984) 28(1/2) *Journal of African Law* 28

Benda-Beckmann, Franz von, 'Who's Afraid of Legal Pluralism?' (2002) 47 *Journal of Legal Pluralism and Unofficial Law* 37

Benjamin, Paul et al, *Institutions, Incentives, and Irrigation in Nepal, Decentralization: Finance & Management Project Report* (Associates in Rural Development, 1994)

Benkler, Yochai, 'Property, Commons, and the First Amendment: Towards a Core Common Infrastructure' (2001) *White Paper for the First Amendment Program, Brennan Center for Justice at NYU School of Law, March 2001* <<http://www.benkler.org/WhitePaper.pdf>>

Bennett, Tom, 'Comparative Law and African Customary Law' in Mathias Reimann and Reinhard Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press, 2006)

Benvenisti, Eyal and George W. Downs, 'The Empire's New Clothes: Political Economy and the Fragmentation of International Law' (2007) 60 *Stanford Law Review* 595

Berkes, Feeny (ed), *Common Property Resources: Ecology and Community Based Sustainable Development* (1989)

Berkes, Fikret, Johan Colding and Carl Folke, 'Rediscovery of Traditional Ecological Knowledge as Adaptive Management' (2000) 10(5) *Ecological Applications* 1251

Bernard, Penny, 'Ecological Implications of Water Spirit Beliefs in Southern Africa: The Need to Protect Knowledge, Nature and Resource Rights' (2003) 27 *USDA Forest Service Proc RMS* 148

Bilal, Asad, Huma Haque and Patricia Moore, *Customary Laws Governing Natural Resource Management in the Northern Areas* (IUCN, Environmental Law Programme, 2003)

Bimie, Patricia, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 3rd ed, 2009)

Birnie, Patricia, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 2009)

Blackstone, William, *Commentaries on the Laws of England* (1979)

Boer, Ben, 'Implementing Sustainability' (1992) 14 *Delhi Law Review* 1

Bois, Francois du, 'Water Rights and the Limits of Environmental Law' (1994) 6 *Journal of Environmental Law* 73

Borgen, Christopher J., 'Whose Public, Whose Order? Imperium, Region, and Normative Friction' (2007) 32 *Yale Journal of International Law*

Bosselman, Fred, 'Adaptive Resource Management through Customary Law' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005)

Bosselmann, Klaus, *The Principle of Sustainability: Transforming Law and Governance* (Ashgate, 2008)

Bosselmann, Klaus, 'Sustainability and the Courts: A Journey Yet to Begin? ' (2010) 3(1) *Journal of Court Innovation* 337

Bosselmann, Klaus and David Grinlinton (eds), *Environmental Law for a Sustainable Society*, New Zealand Centre for Environmental Law Monograph Series (New Zealand Centre For Environmental Law, 2002)

Bourquain, Knut, *Freshwater Access from a Human Rights Perspective: A Challenge to International Water and Human Rights Law*, International Studies in Human Rights (Martinus Nijhoff, 2008)

Boyle, Alan, 'The Gabčíkovo-Nagymaros Case: New Law in Old Bottles' (1997) 8 *Year Book of International Environmental Law*

Boyle, Alan and David Freestone (eds), *International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford University Press, 1999)

Bruns, Bryan Randolph and Ruth S. Meinzen-Dick, 'Water Rights and Legal Pluralism: Four Contexts for Negotiation' (2001) 25(1) *Natural Resources Forum* 1

Brütsch, Christian and Dirk Lehmkuhl, *Law and Legalization in Transnational Relations* (Routledge, 2007)

Burchi, Stefano, 'The Interface Between Customary and Statutory Water Rights – A Statutory Perspective' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005)

Burchi, Stefano, 'The Interface between Customary and Statutory Water Rights – A Statutory Perspective' (2005) (45) *FAO Legal Papers Online* <<http://www.fao.org/Legal/prs-ol/lpo76.pdf>>

Burchi, Stefano and Ariella D'Andrea, 'Preparing National Regulations for Water Resources Management. Principles and Practices' (2003) *FAO Legislative Study* 80

Burton, Steven J, 'Law as Practical Reason' (1988-89) 62 *Southern California Law Review* 747

Butler, Lynda L., 'Allocating Consumptive Water Rights in a Riparian Jurisdiction: Defining the Relationship Between Public and Private Interests' (1985) 47 *University of Pittsburg Law Review* 95

Callies, David, Peter Orebech and Hanne Petersen, 'Three case studies from Hawaii, Norway and Greenland' in Peter Orebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005)

Capaldo, Giuliana Ziccardi, *The Pillars of Global Law* (Ashgate, 2008)

Caponera, Dante Augusto, *Legal and Institutional Aspects of Water Resources Development in Africa*, Background Paper. Legislation Branch FAO (FAO, 1976)

Caponera, Dante Augusto, *Principles of Water Law and Administration: National and International* (Taylor & Francis, 2007)

Carson, Rachael, *Silent Spring* (Houghton Mifflin, 2002)

Cassese, Antonio *Human Rights in a Changing World* (Temple University Press, 1990)

Castree, Noel, 'Neoliberalising Nature: Processes, Effects, and Evaluations' (2008) 40(1) *Environment and Planning A* 153

Chanock, Martin, 'Customary Law, Sustainable Development and the Failing State' in Peter Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005) 338

Charnovitz, Steve, 'The Globalization of Economic Human Rights' (1999) 25 *Brook Journal of International Law* 113

Charters, Claire, 'Indigenous Peoples and International Law and Policy' in Benjamin J. Richardson, Shin Imai and Kent McNeil (eds), *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Hart, 2009)

Charters, Claire and Rodolfo Stavenhagen (eds), *Making the Declaration Work: The United Nations Declaration on the Rights of Indigenous Peoples* (IWGIA, 2009)

Chartrand, Lisa, 'Accommodating Indigenous Legal Traditions in Canada' (2005)
<<http://www.indigenousbar.ca/pdf/Indigenous%20Legal%20Traditions.pdf>>

Cheserek, Grace, 'Indigenous Knowledge in Water and Watershed Management: 'Marakwet' Conservation Strategies and Techniques' (2005) 3 *FWU, Topics of Integrated Watershed Management – Proceedings*

Choe, Olivia S., 'Appurtenancy Reconceptualized: Managing Water in an Era of Scarcity' (2003-2004) 113 *Yale Law Journal* 1909

Chomsky, Noam, *Profit over People - Neoliberalism and Global Order* (Steven Stories Press, 1999)

Christensen, Norman L, 'The Report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management' (1996) 6(3) *Ecological Applications* 665

Chynoweth, Paul, 'Legal research' in Andrew Knight and Les Ruddock (eds), *Advanced research methods in the built environment* (Blackwell Publishing, 2008)

Ciriacy-Wantrup, Siegfried V. and Richard C. Bishop, 'Common Property' as a Concept in Natural Resource Policy' (1975) 15 *Natural Resources Journal* 713

Coase, Ronald H, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1

Cohen, Jean L., 'Whose Sovereignty? Empire Versus International Law' (2004) 18(3) *Ethics and International Affairs* 1

Coke, Edward, *First Institute of the Laws of England* (Garland first published 1628, 1979)

Colding, Johan and Carl Folke, 'Social Taboos: "Invisible" Systems of Local Resource Management and Biological Conservation' (2001) 11(2) *Ecological Applications*, 584

Coleman, Jules L, *Risks and Wrongs* (Cambridge University Press, 1992)

Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance* (Oxford University Press, 1995)

Constitution of Kenya Review Commission, 'Verbatim Report of Constituency Public Hearings, Marakwet East Constituency. Held at Tot Centre on 1st July 2002. ' (CKRC, 11 July 2012 2002)

Cotterrell, Roger, *The Politics of Jurisprudence: A Critical Introduction to Legal Philosophy* (LexisNexis, 2nd ed, 2003)

Coward, E W (ed), *Irrigation and Agricultural Development in Asia* (Cornell University Press, 1980)

Craig, Donna, 'Best Practice Models and Approaches for Indigenous Engagement in the Murray Darling Basin. Research Report Prepared for Murray Darling Basin Commission for the Development of the Indigenous Action Plan' (Macquarie University Centre For Environmental Law, 2004)

Craig, Donna and Elizabeth Gachenga, 'The Recognition of Indigenous Customary Law in Water Resource Management' (2010) 20 *Water Law* 278

Craig, Donna et al, *An Agreement Approach that Recognises Customary Law in Water Management* (Land & Water Australia, 2009)

Craig, Donna and Michael Jeffery, 'Recognition and Enforcement of Indigenous Customary Law in Environmental Regimes and Natural Resource Management' in Lee Paddock et al (eds), *Compliance and Enforcement in Environmental Law* (Edward Elgar Cheltenham, 2011) 535

Cutler, Claire A 'Critical Reflections on the Westphalian Assumptions of International Law and Organization: A Crisis of Legitimacy' (2001) 27 *Review of International Studies* 133

Davies, John, 'Irish Reports' in A Grosart (ed), *The Works in Verse and Prose ... of Sir John Davies* (Blackburn, 1876)

Davies, Matthew, 'The Irrigations System of the Pokot Northwest Kenya' (2008) 43(1) *Azania: Archaeological Research in Africa* 50

Davis, Megan and Hannah McGlade, *Background Paper on International Human Rights Law and the Recognition of Aboriginal Customary Law* Background paper (Law Reform Commission of Western Australia) ; No. 10 (March 2005) (Law Reform Commission of Western Australia, 2005)

Dellapenna, Joseph and Joyeeta Gupta, 'Toward Global Law on Water' (2008) 14(4) *Global Governance: A Review of Multilateralism and International Organizations* 437

Dellapenna, Joseph W., 'The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century' (2002) 25 *University of Arkansas at Little Rock Law Review*

Dellapenna, Joseph W. , 'Is Sustainable Development a Serviceable Legal Standard in the Management of Water?,' (2004) 127(1) *Journal of Contemporary Water Research and Education*

Dellapenna, Joseph W. and Joyeeta Gupta, 'A Book Conversation with the Editors and a Reviewer. Law and Water Governance: Past, Present, and Future' (2011) 36(3) *Water International* 398

Demsetz, Harold, 'Toward a Theory of Property Rights' (1967) 57 *American Economic Review* 354

Dennis, Michael and David P. Stewart, 'Justiciability of Economic Social and Cultural Rights: Should There Be an International Complaints Mechanism to Adjudicate the Rights to Food, Water, Housing and Health?' (2004) 98 *American Journal of International Law* 462

Development, International Law Association Committee on Legal Aspects of Sustainable, 'Fifth and Final Report: Searching for the contours of international law in the field of sustainable development' (Paper presented at the New Delhi Conference 2002., New Delhi, 2002)

Dietz, Thomas, Elinor Ostrom and Paul C. Stern, 'The Struggle to Govern the Commons' (2003) 302(5652) *Science* 1907

Dobbs, Richard et al, *Resource Revolution: Meeting the World's Energy, Materials, Food and Water Needs*, (McKinsey Global Institute, 2011)

Döll, Petra et al, 'Impact of Water Withdrawals from Groundwater and Surface Water on Continental Water Storage Variations' (2012) 59-60 *Journal of Geodynamics* 143

Dovers, Stephen and Robin Connor, 'Institutions and Policy Change for Sustainability' in Benjamin J. Richardson and Stepan Wood (eds), *Environmental Law for Sustainability: A Reader*, Osgoode Readers (Hart Publishing, 2006)

Durette, Melanie, 'A Comparative Approach to Indigenous Legal Rights to Freshwater: Key Lessons for Australia from the United States, Canada and New Zealand' (2010) 27 *Environmental and Planning Law Journal* 296

Eastern and Central Africa Programme for Agricultural Policy Analysis, 'Accommodating Customary Water Management Arrangements to Consolidate Poverty-focused Water Reform: A Policy Brief' (ECAPAPA, 2007) <<http://hdl.handle.net/10625/42486>>

Editor, 'Customary Law: Its Place and Meaning in Contemporary African Legal Systems' (1965) 9(2) *Journal of African Law* 82

Ehrlich, Paul R, *The Population Bomb*, A Sierra Club-Ballantine book (Ballantine Books, 1968)

Ellickson, Robert C, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991)

Ellickson, Robert C., 'Taming the Leviathan: Will the Centralizing Tide of the Twentieth Century Continue into the Twenty-first?' (2000) 74(1) *Southern California Law Review*

Ellis, Jaye, 'Sustainable Development as a Legal Principle: A Rhetorical Analysis' (2008) *SSRN eLibrary*

Esty, Daniel C, 'A Term's Limits' (2001) *Faculty Scholarship Series*<http://digitalcommons.law.yale.edu/fss_papers/434>

FAO, 'Country Fact Sheet Kenya' (2012) *Aquastat*<http://www.fao.org/nr/water/aquastat/data/factsheets/aquastat_fact_sheet_ken_en.pdf>

Federation of Women Lawyers - Kenya and Georgetown University Law Center International Women's Human Rights Clinic, 'Kenyan Laws and Harmful Customs Curtail Women's Equal Enjoyment of ICESCR Rights' (2008) *A Supplementary Submission to the Kenyan Government's Initial Report under the ICESCR, scheduled for review by the Committee on Economic, Social, and Cultural Rights during its 41st session (Nov. 3-21, 2008)*<<http://www2.ohchr.org/english/bodies/cescr/docs/info-ngos/FIDAKenya41.pdf>>

Finnis, John, 'Describing Law's Foundation' (2011) *UCL Colloquium 26 January 2011*

Finnis, John, *Philosophy of Law. Collected Essays: Volume IV* (Oxford University Press, 2011)

Finnis, John, *Reasons in Action*, Collected Essays (Oxford University Press, 2011)

Finnis, John M., 'On Hart's Ways: Law as Reason and as Fact' (2008) No.7 *Oxford Legal Studies Research Paper*<<http://ssrn.com/paper=1100170>>

Fisher, Douglas, *The Law and Governance of Water Resources: The Challenge of Sustainability*, New Horizons in Environmental Land Energy Law Series (Edward Elgar 2009)

Fisher, Douglas, 'Sustainability - The Principle, its Implementation and its Enforcement' (2001) 18 *Environment & Planning Law Journal* 361

Fitzmaurice, Malgosia, *Contemporary Issues in International Environmental Law* (Edward Elgar, 2009)

Fitzpatrick, Daniel, 'Evolution and Chaos in Property Rights Systems: The Third World Tragedy of Contested Access' (2006) 115(5) *The Yale Law Journal* 996

Food and Agriculture Organization of the United Nations, 'Country Profile- Kenya' (2005) *Water Report No. 9*<http://www.fao.org/nr/water/aquastat/countries_regions/kenya/index.stm>

Fuentes, Ximena, 'International Law-Making in the Field of Sustainable Development: The Unequal Competition between Development and the Environment' (2002) 2(2) *International Environmental Agreements: Politics, Law and Economics*

Gadamer, H G, *Reason in the Age of Science* (Fredrick Lawrence trans, MIT Press, 1981)

Gakubia, Robert, 'Water Services Sub-sector Working Group' (Paper presented at the Annual Water Sector Conference KICC, Nairobi, 24 October 2010)

George, Robert P, *The Autonomy of Law: Essays on Legal Positivism* (Oxford University Press, 1999)

German, C St (ed), *St German's Doctor and Student* (Selden Society, 1974)

Ghai, Yash, 'Review of The Place of Customary Law in the National Legal Systems of East Africa by William Twining ' (1964) 2(4) *The Journal of Modern African Studies* 613

Ghai, Yash Pal, 'Proposed Constitution of Kenya- An Analysis' (2010)
<<http://www.mediafire.com/view/?8m9w1oowjdcoite>>

Giordano, Meredith A and Aaron T Wolf, 'Sharing Waters: Post-Rio International Water Management' (2003) 27 *Natural Resources Forum* 163

Gleick, Peter, 'Basic Water Requirements for Human Activities: Meeting Basic Needs' (1996) 21 *Water International* 83

Glenn, H.Patrick, *Legal Traditions of the World: Sustainable Diversity In Law* (Oxford University Press, 2007)

Goldfarb, William, *Water Law* (Lewis Publishers, 2 ed, 1988)

González, Ana Marta, *Contemporary Perspectives on Natural Law: Natural Law As a Limiting Concept* (Ashgate, 2008)

González, Ana Marta, 'Dos visiones del derecho. La epiqueya en Aristóteles y Kant [Two visions of law. The epiqueya in Aristotle and Kant]' (2002) 46 *Persona y Derecho [Person and Law]*

Government, Australian Commonwealth, 'Restoring the balance in the Murray-Darling Basin' (2010) *Water for the Future*<<http://www.environment.gov.au/water/publications/mdb/pubs/restoring-balance.pdf>>

Government of Australia, 'Water Rights' (2011) *National Water Market*<<http://www.nationalwatermarket.gov.au/about/rights.html>>

Gray, K. and S.F. Gray (eds), *The Idea of Property in Land, Land Law: Themes and Perspectives* (Oxford, 1998)

Gray, Kevin R., 'World Summit on Sustainable Development: Accomplishments and New Directions?' (2003) 52(1) *The International and Comparative Law Quarterly* 256

Green, Leslie, 'Legal Positivism' (2009) *The Stanford Encyclopedia of Philosophy* <<http://plato.stanford.edu/archives/fall2009/entries/legal-positivism/>>

Griffiths, John, 'The Idea of Sociology of Law and its Relation to Law and to Sociology' (2005) 8 *Current Legal Issues*

Griffiths, John 'What is Legal Pluralism?' (1986) *Journal of Legal Pluralism* 1

Group, The Foreign Policy, *Failed States. An Eighth Annual Collaboration between Foreign Policy and Fund for Peace* (2012)
<http://www.foreignpolicy.com/failed_states_index_2012_interactive>

Gunlycke, Naemi and Anja Tuomaala, 'Detecting Forest Degradation in Marakwet District, Kenya Using Remote Sensing and GIS' (2011) <http://www.natgeo.lu.se/exjobb/exj_200.pdf>

Hale, Matthew, *The History of the Common Law of England* (University of Chicago Press, first published 1713, 1971)

Hale, Matthew, 'Reflections by the Lord Chiefe Justice Hale on Mr Hobbes His Dialogue of the Lawe' in W Holdsworth (ed), *A History of English Law* (Methuen 1956) vol 5,

Hance, Allen S, 'Prudence and providence: On Hobbes's Theory of Practical Reason' (1991) 24(2) *Man and World* 155

Hardin, Garrett, 'Extensions of "The Tragedy of the Commons"' (1998) 280(5364) *Science* 682

Hardin, Garrett, 'The Tragedy of the Commons' (1968) 162(3859) *Science* 1243

Harrington, John A. and Ambreena Manji, 'Mind with Mind and Spirit with Spirit': Lord Denning and African Legal Education' (2003) 30(3) *Journal of Law and Society* 376

Hart, Herbert Lionel Adolphus, *The Concept of Law* (Clarendon Press, 1961)

Harvey, David, *A Brief History of Neoliberalism* (Oxford University Press, 2007)

Hayek, Friedrich von, *Law, Legislation and Liberty: A New Statement of the Liberal Principles and Political Economy.*, The Political Order of a Free People (London: Routledge, 1979)

Healey, Chris and Eugene Hunn, 'The Current Status of TEK: Papua New Guinea and North America' in Nancy M. Williams and Graham Baines (ed), *Ecologies for the 21st Century: Traditional Ecological Knowledge, Wisdom for Sustainable Development*, Report of the Traditional Ecological Knowledge Workshop, Centre for Resources & Environmental Studies (Australian National University, 1993) 43

Hedley, T, 'Speech in Parliament on Royal Impositions ' in ER Foster (ed), *Proceedings in Parliament 1610* (Yale University Press 1966)

Hepburn, Samantha, 'Statutory Verification of Water Rights: The 'Insuperable' Difficulties of Propertising Water Entitlement' (2010) 19(1) *Australian Property Law Journal* 1

Hess, Charlotte and Elinor Ostrom, 'Ideas, Artifacts, and Facilities: Information as a Common Pool Resource' (2003) 66 *Law and Contemporary Problems* 111

Hicks, R D, *Aristotle: De Anima* (Cambridge University Press, 1907)

Hillier, Tim, *Sourcebook on Public International Law* (Cavendish, 1998)

Hinz, Manfred O, 'Traditional Governance and African Customary Law: Comparative Observations from a Namibian Perspective' in N Horn and A Bösl (eds), *Human Rights and Rule of Law in Namibia* (Macmillan, 2008)

Hobbes, Thomas, *De Cive: The English Version [1647]* (Howard Warrender trans, Clarendon Press, first published 1647, 1983)

Hobbes, Thomas (ed), *A Dialogue between a Philosopher & a Student of the Common Laws of England* (University of Chicago Press, 1971)

Hobbes, Thomas, *Leviathan* (Fontana, 1976)

Hodgson, Stephen, 'Creating Legal Space for Water User Organizations: Transparency, Governance and the Law ' (2009) (100) *FAO Legislative Study*

Hodgson, Stephen, *Land and water- The Rights Interface*, FAO Legislative Study (FAO, 2004)

- Hodgson, Stephen and FAO, *Modern Water Rights: Theory and Practice* (FAO, 2006)
- Holden, Paul and Mateen Thobani, *Tradable Water Rights: A Property Rights Approach to Resolving Water Shortages and Promoting Investment* (The World Bank, 1996)
- Hooker, M B, *Legal Pluralism: An Introduction to Colonial and Neo-Colonial Laws* (Clarendon Press, 1979)
- Horn, Laura, 'Sustainable Development' - Mere Rhetoric or Realistic Objective?' (2011) 30 *University of Tasmania Law Review* 119
- Huggins, Chris, 'Water Policy and Law in a Water-Scarce Country: Implications for Smallholder Irrigation in Kenya ' in Herbert G Blank, Clifford M Mutero and Hammond Murray-Rust (eds), *The Changing Face of Irrigation in Kenya. Opportunities for Anticipating Change in Eastern and Southern Africa* (IWMI, 2002)
- Hume, David, *A Treatise of Human Nature* (Oxford University Press, first published 1739, 2000)
- Hussey, Karen, Stephen Dovers and CSIRO (eds), *Managing Water for Australia: The Social and Institutional Challenges* (CSIRO, 2007)
- Hutchinson, Terry C M, *Researching and Writing in Law* (Lawbook Co, 2006)
- Institute of Economic Affairs, *A Rapid Assessment of Kenya's Water Sanitation and Sewerage Framework* (IEA, 2007)
- International Development Law Organization, 'The Legal Framework of Water Resource Management. Lessons learned from the IDLO Seminar on Legal Framework of Water Resource Management Conducted on September 11-22, 2006 in Rome' (2006) (6) *Development Law Update*
- Ray Ison, 'What are the Critical Governance Research Needs? Urban Perspectives' (Paper presented at the National Climate Change Adaptation Research Facility (NCCARF) Water Governance Forum, Canberra, 16 November 2010)
- Jackson, Robert B et al, 'Water in a Changing World' (2001) (9) *Issues in Ecology* 1
- Jackson, Sue and Cathy Robinson, 'Indigenous Customary Governance' (CSIRO, 2009)

Jacobs, Michael, 'Sustainable Development as a Contested Concept' in Andrew Dobson (ed), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* (Oxford University Press, 1999)

James, AJ, 'Institutional Challenges for Water Resources Management: India and South Africa' (2003) *Water, Households and Rural Livelihoods (WHIRL) Project Working Paper 7* <<http://www.nri.org/whirl>>

Jeffery, Michael and Donna Craig, 'Non-Lawyers and Legal Regimes: Public Participation for Ecologically Sustainable Development' in David Leary and Balakrishna Pisupati (eds), *The Future of Environmental Law* (UNU Press, 2010) 103

Jessica Litman, 'The Public Domain' (1990) 39 *Emory Law Journal* 965

Joseph, Ssenyonga, 'The Marakwet Irrigation System as a Model of a Systems Approach to Water Management' in Benjamin Kipkorir, Robert Soper and Joseph Ssenyonga (eds), *Kerio Valley: Past, Present and Future* (University of Nairobi, Institute of African Studies., 1983) 96

Jr, Barton H. Thompson, 'Environmental Policy and State Constitutions: The Potential Role of Substantive Guidance' (1996) 27 *Rutgers Law Journal* 863

Kabeer, Naila, 'Can the MDGs Provide a Pathway to Social Justice? The Challenge of Intersecting Inequalities' (UNDP 2010)

Kalinoe, Lawrence Kuna, *Water Law and the Nature of Customary Water Rights in Papua New Guinea* (PhD Thesis, Doctor of Philosophy Thesis, University of Wollongong, 1998)

Kapfudzaruwa, Farai and Merle Sowman, 'Is There a Role for Traditional Governance Systems in South Africa's New Water Management Regime?' (2009) 35(5) *Water SA* 683

Karatna, Patcharasorn, *Analysis of a Common Pool Resource* (Doctor of Philosophy Thesis, University of South Australia, 2005) <<http://arrow.unisa.edu.au:8081/1959.8/82987>>

Karrou, Mohammed et al, 'Yield and Water Productivity of Maize and Wheat under Deficit and Raised Bed Irrigation Practices in Egypt' (2012) 7(11) *African Journal of Agricultural Research* 1755

Kenny, Charles and Andy Sumner, *More Money or More Development: What Have the MDGs Achieved?* Working Paper 278 (Centre for Global Development, 2011)

Kipkorir, Benjamin and Frederick Welbourn, *The Marakwet of Kenya: A Preliminary Study* (East African Educational Publishers, 2008)

Kohli, Amit, Karen Frenken and Cecilia Spottorn, 'Disambiguation of Water Use Statistics' (2010) <<http://www.fao.org/docrep/013/al815e/al815e00.pdf>>

Kosoy, Nicolas et al, 'Pillars for a flourishing Earth: Planetary Boundaries, Economic Growth Delusion and Green Economy' (2012) 4(1) *Current Opinion in Environmental Sustainability* 74

Kraemer, R. Andreas, 'Governing Water - International Law Development - The Principle of Subsidiarity' in Charles Buchanan, Paula Vicente and Evan Vlachos (eds), *Making the Passage through the 21st Century: Water as a Catalyst for Change* (Luso-American Foundation, 2009) 233

Kuppe, René et al, *Law & Anthropology: Natural resources, Environment, and Legal Pluralism* (Martinus Nijhoff, 1997)

Kwa, Eric et al, 'Indigenous Governance of Natural Resources within Melanesia: A Project to Develop Legal Capacity-Building Strengthening Community-Based Institutions, Customary Laws and Environmental Management Approaches' (Macquarie University, 2005)

Kwa, Eric Lokai, *Traditionalizing Sustainable Development: The Law, Policy and Practice in Papua New Guinea* (PhD Thesis, University of Auckland, 2006)
<<http://hdl.handle.net/2292/2873>>

Kyed, Helene Maria, 'The Politics of Legal Pluralism: State Policies on Legal Pluralism and their Local Dynamics in Mozambique' (2009) 59 *Journal of Legal Pluralism* 87

Kymlica, Will, *Multicultural Citizenship: A Liberal Theory of Minority Rights* (Oxford University Press, 1996)

Lansing, J Stephen, *Perfect Order: Recognizing Complexity in Bali*, (Princeton University Press, 2006)

Larson, Rhett B, 'Holy Water and Human Rights: Indigenous Peoples' Religious-Rights Claims to Water Resources' (2011) 2 *Arizona Journal of Environmental Law and Policy*

Lee Paddock et al (eds), *Compliance and Enforcement in Environmental Law: Toward More Effective Implementation*, The IUCN Academy of Law series. (Edward Elgar, 2011)

Lawrence Lessig, Code and the Commons, (Keynote Address at the Conference on Media Convergence, Fordham University Law School, February 9, 1999)<<http://cyber.law.harvard.edu/works/lessig/fordham.pdf>>

Leys, Collins, *Market-driven Politics: Neoliberal Democracy and the Public Interest* (Verso, 2001)

Lindsay, Jonathan M, 'Creating a Legal Framework for Community-based Management: Principles and Dilemmas' (1998) *Decentralization and Devolution in Forestry*<<http://www.fao.org/docrep/x3030e/x3030e09.htm>>

Lobban, Michael (ed), *A History of the Philosophy of Law in the Common Law World, 1600-1900*, A Treatise of Legal Philosophy and General Jurisprudence (Springer, 2007)

Locke, John *Two Treatises of Government* (Cambridge University Press, first published 1689, 1988)

Lovei, Magda and Bradford S Gentry, *The Environmental Implications of Privatization: Lessons for Developing Countries*, World Bank Discussion Papers (World Bank, 2002)

Lowe, Vaughan, 'The Politics of Law-Making: Are the Method and Character of Norm Creation Changing?' in Michael Byers (ed), *The Role of Law in International Politics: Essays in International Relations and International Law* (Oxford University Press, 2000)

Maass, Arthur and Raymond L. Anderson, . . . *and the Desert Shall Rejoice: Conflict, Growth, and Justice in Arid Environments* (MIT Press, 1986)

MacCormick, Neil and Ota Weinberger, *An Institutional Theory of Law: New Approaches to Legal Positivism* (D Reidel Publishing, 1986)

MacCormick, Neil, 'Contemporary Legal Philosophy: The Rediscovery of Practical Reason' (1983) 10(1) *Journal of Law and Society* 1

MacCormick, Neil, *Practical Reason in Law and Morality* (Oxford University Press, 2009)

Magsig, Bjorn-Oliver, 'Overcoming State-Centrism in International Water Law: 'Regional Common Concern' as the Normative Foundation of Water Security' (2011) 3(1) *Goettingen Journal of International Law* 317

Margat, Jean, Karen Frenken and Jean-Marc Faurès, 'Key Water Resources Statistics in Aqstat' (2005) *FAO's Global Information System on Water and Agriculture* <<http://ftp.fao.org/agl/aglw/docs/PaperVienna2005.pdf>>

Marong, Alhaji B M, 'From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable Development' (2004) 16(21) *The Georgetown International Environmental Law Review*

Martin, Edward G, *Resource Mobilization, Water Allocation, and Farmer Organization in Hill Irrigation Systems in Nepal* (Ph.D Thesis, Cornell University, 1986)

Matson, J N, 'The Common Law Abroad: English and Indigenous Laws in the British Commonwealth' (1993) 42 *The International and Comparative Law Quarterly* 753

McDonald, Leigh, 'Can Collective and Individual Rights Coexist?' (1998) 22 *Melbourne University Law Review* 310

McKean, Margaret A. , 'The Japanese Experience with Scarcity: Management of Traditional Common Lands' (1982) 6 *Environmental Review* 63

Mehari, Abraham et al, 'Integrating Formal and Traditional Water Management in the Mkoji Sub-catchment, Tanzania: Is it Working?'
<<http://www.bscw.ihe.nl/pub/bscw.cgi/d2607619/Mehari.pdf>>

Meinzen-Dick, Ruth, 'Beyond Panaceas in Water Institutions' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15200

Meinzen-Dick, Ruth and Rajendra Pradhan, 'Implications of Legal Pluralism for Natural Resource Management' (2001) 32(4) *IDS Bulletin* 10

Melamed, Claire, Andrew Scott and Tom Mitchell, 'Separated at Birth, Reunited in Rio? A Roadmap to Bring Environment and Development Back Together. A Background Note' (2012) <www.odi.org.uk>

Menski, Werner, *Comparative Law in a Global Context: The Legal Systems of Asia and Africa* (Cambridge University Press, 2nd ed, 2006)

Merry, Sally Engle, 'Legal Pluralism' (1988) 22(5) *Law & Society Review* 869

Michael, Redclift, 'The Meaning of Sustainable Development' (1992) 23(3) *Geoforum* 395

Miche, Villey, *Compendio de filosofía del derecho* (Eunsa, 1979)

Migai-Akech, 'Governing Water and Sanitation in Kenya' in Charles O Okidi, Patricia Kameri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya. Implementing the Framework Law* (East African Educational Publishers, 2008) 305

Migai-Akech, *Institutional Reform in the New Constitution of Kenya* (International Centre for Transitional Justice, 2010)

Migai-Akech, 'Land, the environment and the Courts in Kenya. Background Paper for the Environment and Land Law Reports. A DFID/KLR Partnership' (2006)

Migai-Akech, Patricia Kameri-Mbote and Charles O Okidi, *Environmental Governance in Kenya: Implementing the Framework Law* (East African Education Publishers, 2008)

Ministry of Water and Irrigation (Kenya), 'Ministerial Strategic Plan 2009-2012. Water for all' (2008)

Ministry of Water and Irrigation (Kenya), 'The National Water Resources Management Strategy (NWRMS)' (2006)

Ministry of Water and Irrigation (Kenya), 'The National Water Services Strategy (NWSS) 2007-2015' (2007)

Ministry of Water and Irrigation (Kenya), *An Overview of the Community Project Cycle (CPC)* (Ministry of Water and Irrigation, Kenya, 2007)

Ministry of Water and Irrigation (Kenya), *Water Sector Reform in Kenya and the Human Right to Water* (Ministry of Water and Irrigation, Kenya, 2007)

Ministry of Water and Irrigation Kenya, 'Issue Paper on Increasing Access to Water & Sanitation Services to the Underserved' (Paper presented at the Annual Water Sector Conference, 2008)

Mobbs, Catherine and Ken Moore (eds), *Property: Rights and Responsibilities: Current Australian Thinking* (Land & Water Australia, 2002)

Moore, Sally Falk, 'Law and Social Change: The Semi-Autonomous Social Field as an Appropriate Subject of Study' (1973) 7 *Law & Society Review* 719

Moore, Sally Falk, *Law as Process* (LIT Verlag Münster, 2 ed, 2000)

Morris, William Edward, 'David Hume' (2011) *The Stanford Encyclopedia of Philosophy* <<http://plato.stanford.edu/archives/fall2011/entries/hume/>>>

Morss, John R, 'Can Custom Be Incorporated in Law - On the Place of the Empirical in the identification of Norms' (2008) 53 *American Journal of Jurisprudence* 85

Mukherji, Aditi and Tushaar Shah, 'Groundwater Governance in South Asia: Governing a Colossal Anarchy' (2002) *Water Policy Research Highlight No. 13, IWMITATA Vallabh Vidyanagar*

Mulindo, J C, W Chepkonga and T Chepkonga, 'Institutions for Irrigation Water Management and Use: A Comparative Analysis of the Perkerra and Kerio River Basins' (Paper presented at the 10th KARI Biennial Scientific Conference, KARI Headquarters Nairobi, 2006)
<http://www.kari.org/fileadmin/publications/10thProceedings/Poster/Institution_IrrignWaterMgt.pdf>

Mumma, Albert, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' (Paper presented at the International workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa, 26-28 January 2005, 2005)

Mumma, Albert, 'Kenya's New Water Law: An Analysis of the Implications for the Rural Poor' in Mark Giordano, Barbara Van Koppen and John Butterworth (eds), (CABI, 2008)

Mumma, Albert, 'The Role of Local Communities in Environmental and Natural Resource Management: The Case of Kenya' in LeRoy Paddock et al (eds), *Compliance and Enforcement in Environmental Law. Toward More Effective Implementation* (Edward Elgar, 2011)

Murphy, James B., 'Habit and Convention at the Foundation of Custom' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007)

Murphy, James Bernard, 'Nature, Custom, and Reason as the Explanatory and Practical Principles of Aristotelian Political Science' (2002) 64(3) *The Review of Politics* 469

Mutua, Makau, *Human Rights: A Political and Cultural Critique* (University of Pennsylvania Press, 2002)

Mwebaza, Rose, *The Right to Public Participation in Environmental Decision-making: A Comparative Study of the Legal Regimes for the Participation of Indigeneous People in the*

Conservation and Management of Protected Areas in Australia and Uganda. (Doctor of Philosophy Thesis, Macquarie University, 2007)

Nature, International Union for Conservation of, *Rule: Reforming Water Governance* (Island Press, 2009)

Nazer, Daniel K, 'The Tragicomedy of the Surfers' Commons' (2004) 9(2) *Deakin Law Review*

New Zealand Law Commission, *Converging Currents. Custom and Human Rights in the Pacific*, Study Paper 17 (New Zealand Law Commission, 2006)

Nkonya, Leticia Kuchibanda, *Drinking From Own Cistern: Customary Institutions and their Impacts on Rural Water Management in Tanzania* (PhD Thesis, Kansas State University, 2006)

North, Douglass C, *Institutions, Institutional Change and Economic Performance (the Political Economy of Institutions and Decisions)*. (Cambridge University Press, 1990)

Note, "What Price for the Priceless? Implementing the Justiciability of the Right to Water" (2007) 120 *Harvard Law Review* 1067

Nyamu-Musembi, Celestine, *For or Against Gender Equality? Evaluating the Post-ColdWar "Rule of Law" Reforms in Sub-Saharan Africa*, Occasional Paper- UNRISD (United Nations Research Institute for Social Development 2005)

Nyamu-Musembi, Celestine and Andrea Cornwal, 'What is the "Rights-Based Approach" All About? Perspectives from International Development Agencies ' (2004) *IDS Working Paper* 234

Nyamu, Celestine, 'How Should Human Rights and Development Respond to Cultural Legitimization of Gender Hierarchy in Developing Countries?' (2000) 41(2) *Harvard International Law Journal* 381

Nye, Joseph S and John D Donahue, *Governance in a Globalizing World. Visions of Governance for the 21st Century* (Brookings Institution Press, 2000)

Ochieng', Benson Owuor, 'Institutional Arrangements for Environmental Management in Kenya' in Migai Akech, Patricia Kameri-Mbote and Charles O. Okidi (eds), *Environmental Governance in Kenya: Implementing the Framework Law* (East African Education Publishers, 2008) 183

Office of the United Nations High Commissioner for Human Rights, 'Frequently Asked Questions on a Human Rights-Based Approach to Development Cooperation' (2006) <<http://www.ohchr.org/Documents/Publications/FAQen.pdf>>

Okoth-Ogendo, HWO, 'Formalising "Informal" Property Systems. The Problem of Land Rights Reform in Africa' (2006)
<http://web.undp.org/legalempowerment/reports/national%20consultation%20reports/country%20files/15_kenya/15_4_property_rights.pdf>

Okoth-Ogendo, HWO, 'Managing the Agrarian Sector for Environmental Sustainability' in Charles Okidi, Patricia Kameri-Mbote and Migai-Akech (eds), *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers Ltd, 2008) 222

Okoth-Ogendo, HWO, *Property Theory and Land-use Analysis: An Essay in the Political Economy of Ideas* (Institute for Development Studies, University of Nairobi, 1974)

Okoth-Ogendo, HWO, *Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya* (ACTS Press, 1991)

Olson, Mancur D, 'Articulating Custom. The Politics and Poetics of Social Transformations in Samoa' (2000) 45(19) *Journal of Legal Pluralism & Unofficial Law* 19

Ørebech, Peter, 'Customary Law and Sustainable Development' (Paper presented at the Workshop in Political Theory and Policy Analysis, Bloomington, Indiana, 6 March 2006)

Ørebech, Peter, 'The Place of Customary Law in Democratic Societies' in P Ørebech et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005)

Ørebech, Peter, 'Sustainable development by means of market distribution mechanism' (Paper presented at the Econometrics of Environment and Transdisciplinary : LIst International Conference, Lisbon, Portugal, April 10-12, 1996 1996)

Ørebech, Peter and Fred Bosselman, 'The Linkage between Sustainable Development and Customary Law' in P Ørebech et al (eds), *The Role of Customary Law in Sustainable Development*, (Cambridge University Press, 2005) 12

Ørebech, Peter et al (eds), *The Role of Customary Law in Sustainable Development* (Cambridge University Press, 2005)

Ostrom, Elinor, *Crafting Institutions for Self-governing Irrigation Systems* (ICS Press, 1992)

Ostrom, Elinor, 'A Diagnostic Approach for Going beyond Panaceas' (2007) 104(39) *Proceedings of the National Academy of Sciences of the United States of America* 15181

Ostrom, Elinor, 'A General Framework for Analyzing Sustainability of Social-Ecological Systems' (2009) 325(5939) *Science* 419

Ostrom, Elinor, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990)

Ostrom, Elinor, 'Institutions and the Environment' (2008) 28(3) *Economic Affairs*

Ostrom, Elinor and Xavier Basurto, 'The Evolution of Institutions: Toward a New Methodology' (2009) *SSRN eLibrary*

Ostrom, Elinor et al, 'Revisiting the Commons: Local Lessons, Global Challenges' (1999) 284(5412) *Science* 278

Ostrom, Elinor and Roy Gardner, 'Coping with Asymmetries in the Commons: Self-Governing Irrigation Systems Can Work' (1993) 7(4) *The Journal of Economic Perspectives* 93

Ostrom, Elinor, Roy Gardner and James Walker, *Rules, Games, and Common-pool Resources* (University of Michigan Press, 1994)

Ostrom, Elinor and Charlotte Hess, 'Private and Common Property Rights' (2007) *SSRN eLibrary*

Ostrom, Elinor, Larry Schroeder and Susan Wynne, 'Analyzing the Performance of Alternative Institutional Arrangements for Sustaining Rural Infrastructure in Developing Countries' (1993) 3(1) *Journal of Public Administration Research and Theory* 11

Ostrom, Elinor, James Walker and Roy Gardner, 'Covenants With and Without a Sword: Self-Governance is Possible' (1992) 86(2) *The American Political Science Review* 404

P V Kane, 'Hindu Customs and Modern Law. Sir Lallubhai A. Shah Lectures (1944)' in (University of Bombay, 1950)

Pahl-Wostl, Claudia, 'A Conceptual Framework for Analysing Adaptive Capacity and Multi-level Learning Processes in Resource Governance Regimes' (2009) 19 *Global Environmental Change*

Pahl-Wostl, Claudia, Joyeeta Gupta and Daniel Petry, 'Governance and the Global Water System: A Theoretical Exploration' (2008) 14(4) *Global Governance: A Review of Multilateralism and International Organizations* 419

PawBowski, Artur, 'The Sustainable Development Revolution' (2009) 4(1) *Problems of Sustainable Development*, 65

Peet, Richard and Michael Watts, *Liberation Ecologies: Environment, Development, Social Movements* (Routledge, 2004)

Perreau-Saussine, Amanda and James Bernard Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007)

Perry, Robin, 'Balancing Rights or Building Rights? Reconciling the Right to Use Customary Systems of Law with Competing Human Rights in Pursuit of Indigenous Sovereignty' (2011) 24 *Harvard Human Rights Journal* 71

Philip Alston, 'Making Space for New Human Rights: The Case of the Right to Development' (1998) 1 *Harvard Human Rights Year Book* 3

Policy, International Council on Human Rights, *When Legal Orders Overlap: Human Rights, State and Non-state Law* (2009)

Postema, Gerald J, 'Classical Common Law Jurisprudence (Part 1)' (2003) 2(2) *Oxford University Commonwealth Law Journal*, 155

Postema, Gerald J, 'Custom in International Law: A Normative Practice Account' in Amanda Perreau-Saussine and James B. Murphy (eds), *The Nature of Customary Law* (Cambridge University Press, 2007)

Postema, Gerald J, *Legal Philosophy in the Twentieth Century: The Common Law World, A Treatise of Legal Philosophy and General Jurisprudence* (Springer, 2011)

Poteete, Amy R, Marco A Janssen and Elinor Ostrom, *Working Together: Collective Action, the Commons, and Multiple Methods in Practice* (Princeton University Press, 2010)

Pradhan, Rajendra (ed), *Legal Pluralism and Unofficial Law in Social, Economic and Political Development, Papers of the XIIIth International Congress, 7-10 April, 2002* (ICNEC Kathmandu, 2002)

Qiao, Shitong, 'Governing the Post-Socialist Transitional Commons: A Case from Rural China' (2012) *Student Scholarship Papers. Paper 122*<http://digitalcommons.law.yale.edu/student_papers/122>

Radin, Margaret J. and Madhavi Sunder, 'The Subject and Object of Commodification' in Martha Etman and Joan Williams (eds), *Rethinking Commodification: Cases and Readinig in Law and Culture* (NYU Press, 2005)

Radin, Margaret Jane, 'On the Domain of Market Rhetoric' (1992) 15 *Harvad Journal of Law & Public Poicy* 711

Ramazzotti, Marco, 'Customary Water Rights and Contemporary Water Legislation Mapping Out the Interface' (2008) (76) *FAO Legal Papers Online*<<http://www.fao.org/Legal/prsol/lpo76.pdf>>

Redclift, Michael, *Sustainable Development: Exploring the Contradictions* (Routledge, 1987)

Rhonheimer, Martin, 'Natural Law as a " Work of Reason". Understanding the Metaphysics of Participated Theonomy ' (2010) 55 *The American Journal of Jurisprudence* 41

Richardson, Benjamin J., 'A Damp Squib: Environmental Law from a Human Evolutionary Perspective' (2011) *SSRN eLibrary*

Rittel, Horst W J and Melvin M Webber, *Dilemmas in a General Theory of Planning* (Institute of Urban & Regional Development, University of California, 1972)

Rockstrom, Johan et al, 'A Safe Operating Space for Humanity' (2009) (461) *Nature* 472

Rodgers, Christopher, 'Nature's Place? Property Rights, Property Rules and Environmental Stewardship' (2009) 68(3) *Cambridge Law Journal* 550

Rogers, Peter and Allan Hall (eds), *Effective Water Governance, Tec Background Papers* (GWP, 2003)

Ronald J Krotoszynski, Jr., "'I'd Like to Teach the World to Sing (In Perfect Har- mony)": International Judicial Dialogue and the Muses - Reflections on the Perils and the Promise of International Judicial Dialogue' (2006) 104 *Michigan State Law Review* 1321

Rose, Carol, 'The Comedy of the Commons: Custom, Commerce, and Inherently Public Property' (1986) 53(3) *The University of Chicago Law Review* 711

Rose, Carol 'Introduction: Property and Language, or, the Ghost of the Fifth Panel' (2006) *Faculty Scholarship Series. Paper 1759*<http://digitalcommons.law.yale.edu/fss_papers/1759>

Rose, Carol M, 'Common Property, Regulatory Property, and Environmental Protection: Comparing Community-based Management to Tradable Environmental Allowances' in Elinor Ostrom, National Research Council (U.S.) and Committee on the Human Dimensions of Global Change (eds), *The Drama of the Commons* (National Academy Press, 2002)

Rose, Carol M., 'Invasions, Innovation, Environment' in D. Benjamin Barros (ed), *Hernando DeSoto and Property in a Market Economy* (Ashgate, 2010) 21

Rose, Carol M, 'Liberty, Property, Environmentalism' (2010) *Social Philosophy & Policy*, Vol. 26, No. 1, 2009

Rose, Deborah Bird, *Nourishing terrains : Australian Aboriginal views of landscape and wilderness* (Australian Heritage Commission, 1996)

Rose, Justin, *The Village and the Leviathan Law, Environmental Governance and the Local Polity in the Federated States of Micronesia* (PhD Thesis, Macquarie University, 2007)

Ross, Andrea, 'Why Legislate for Sustainable Development? An Examination of Sustainable Development Provisions in UK and Scottish Statutes ' (2008) 20 *Journal of Environmental Law* 35

Ross, WD (ed), *Rhetoric*, Oxford Classical Texts (Oxford University Press, 1959)

Ruddle, Kenneth, 'Local Knowledge in the Folk Management of Fisheries and Coastal Marine Environments' in Christopher L. Dyer and James R. McGoodwin (eds), *Folk Management in the World's Fisheries: Lessons for Modern Fisheries Management* (University Press of Colorado, 1994) 161

Runge, C Ford and Edi Defrancesco, 'Exclusion, Inclusion, and Enclosure: Historical Commons and Modern Intellectual Property' (2006) 34(10) *World Development* 1713

Salman, Salman M A, *The Legal Framework for Water Users' Association: A Comparative Study*, World Bank Technical Paper No. 360 (The World Bank, 1997)

Sand, Peter H, *International Environmental Law after Rio* (Oxford University Press, 1993)

Sands, Philippe, *Principles of International Environmental Law* (Cambridge University Press, 2nd ed, 2003)

Santos, Boaventura de Sousa, 'Law: A Map of Misreading. Toward a Postmodern Conception of Law' (1987) 14 *Journal of Law & Society* 279

Santos, Boaventura de Sousa, *Toward a New Common Sense: Law, Science, and Politics in Paradigmatic Transition* (Routledge, 1995)

Sarpong, G A, 'Going Down the Drain? Customary Water Law and Legislative Onslaught in Ghana' (2004)

Sax, Joseph L, 'The Constitution, Property Rights and the Future of Water Law' (1990) 61 *University of Colorado Law Review*

Sax, Joseph L, 'The Limits of Private Rights in Public Waters' (1989) 19 *Environmental Law* 473

Schapera, Isaac, *A Handbook of Tswana Law and Custom* (LIT Verlag Münster, 1938)

Schlager, Edella and Elinor Ostrom, 'Common Property and Natural resources: A Conceptual Analysis' (1992) 68(3) *Land Economics* 249

Segger, Marie-Claire Cordonier and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices and Prospects* (Oxford University Press, 2004)

Selby-Bigge, L A Sir and P H Nidditch (eds), *Enquiries Concerning Human Understanding and Concerning the Principles of Morals by David Hume* (Clarendon Press, 1978)

Selden, J, 'Notes on Sir John Fortescue, De laudibus legum Anglie ' in *J Selden Works* (T Wood, 1726)

Shadle, Brett L., 'Changing Traditions to Meet Current Altering Conditions': Customary Law, African Courts and the Rejection of Codification in Kenya, 1930-60' (1999) 40(3) *The Journal of African History* 411

Shah, Tushar, 'Issues in Reforming Informal Water Economies of Low-Income Countries: Examples from India and Elsewhere' in John Butterworth Mark Giordano Barbara Van

Koppen (ed), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CAB International, 2008)

Sheleff, Leon, *The Future of Tradition Customary Law, Common Law and Legal Pluralism* (Fank Cass 1999)

Siegel, Stephen A, 'The Aristotelian Basis of English Law, 1450-1800' (1981) 56(18) *New York University Law Review*

Siy, Robert Y, Jr , *Community Resource Management: Lessons from the Zanjera* (University of the Philippines Press, 1982)

Smith, Adam, *The Wealth of Nations* (Digireads.com, 2009)

Smith, Ethan Timothy and Christopher Lant, 'Water Resources Sustainability: A Guide to This Issue' (2004) 127(1) *Journal of Contemporary Water Research and Education* 1

Smith, Henry E, 'Community and Custom in Property' (2009) 10(1) *Community and Property* 4

Smith, Henry E, 'Governing Water: The Semicommons of Fluid Property Rights' (2008) 50(2) *Arizona Law Review* 445

Smith, Henry E, 'Semicommon Property Rights and Scattering in the Open Fields' (2000) 29 *Journal of Legal Studies*

Smith, Susan L, 'Using Community Management of Water Resources to Improve Environmental Governance in Failed, Failing and Fragile States' (2009) <http://www.iucnael.org/en/documents/doc_view/400-susan-smith-community-water-resources-management.raw?tmpl=component>

Soper, Robert C 'A Survey of the Irrigation Systems of the Marakwet' in Benjamin E Kipkorir, Robert C Soper and Joseph W Ssenyonga (eds), *Kerio Valley: Past Present and Future* (University of Nairobi, Institute of African Studies, 1983)

Sprankling, John G, *Understanding Property Law* (Matthew Bender & Co, 1999)

Sprankling, John G., 'The Antiwilderness Bias in American Property Law' (1996) *University of Chicago Law Review* 63

Stake, Robert E., 'Qualitative Case Studies' in Norman K. Denzin and Yvonna S. Lincoln (eds), *The Sage Handbook of Qualitative Research* (Sage Publications, 3rd ed, 2005) 433

Strack, Michael S, *Rebel Rivers: An Investigation into the River Rights of Indigenous People of Canada and New Zealand* (University of Otago, 2008)

Stump, Daryl, "'Ancient and Backward or Long-Lived and Sustainable?' The Role of the Past in Debates Concerning Rural Livelihoods and Resource Conservation in Eastern Africa' (2010) 38(9) *World Development* 1251

Subramanian, Ashok, Vijay N Jagannathan and Ruth Meinzen-Dick, *User Organizations for Sustainable Water Services* (World Bank, 1997)

Tamanaha, Brian, *General Jurisprudence of Law and Society* (Oxford University Press, 2001)

Tamanaha, Brian Z, 'Understanding Legal Pluralism: Past to Present, Local to Global' (2007) 29 *Sydney Law Review*

Tan, Poh Ling, 'A review of the legal basis for indigenous access to water' (Griffith Law School, 2009) <<http://waterplanning.org.au/wp-content/uploads/2009/02/pl-tan-indigenous-water-forum-report-11-feb09.pdf>>

Tang, Shiu Y and Elinor Ostrom, *The Governance and Management of Irrigation Systems: An Institutional perspective*, ODI Irrigation Management Network Paper (Overseas Development Institute, 1993)

Techera, Erika J, *Law, Custom and Conservation: The Role of Customary Law in Community-based Marine Management* (PhD Thesis, Macquarie University, 2009)

The World Bank, 'Sustaining Water for All in a Changing Climate. World Bank Group Implementation Progress Report of the Water Resources Sector Strategy' (2010)

Dag Einar Thorsen, 'The Neoliberal Challenge. What is Neoliberalism'(Working Paper, Department of Political Science University of Oslo, October 2009)

Touraine, Alain, *Beyond neoliberalism* (Polity Press, 2001)

Tropp, Håkan, 'Water Governance: Trends and Needs for New Capacity Development' (2007) 9 (Supplement 2) *Water Policy*

Twining, William, 'Globalisation and Legal Scholarship' (2009) *Montesquieu Lecture 2009*

Twining, William L, *General Jurisprudence: Understanding Law From a Global Perspective*, Law in context (Cambridge University Press, 2009)

UNDP and IFAD, 'The Challenges of Water Governance' in The United Nations World Water Development Report (ed), *In World Water Assessment Programme, Water: A shared responsibility*. (UNESCO, 2nd ed, 2006) 44

United Nations Department of Economic and Social Affairs, 'Valuing and Charging for Water' in World Water Assessment Programme (ed), *Water: A Shared Responsibility*. (UNESCO 2nd ed, 2006.) 400

United Nations Environment Programme, *The Fifth Global Environment Outlook (GEO-5)* (United Nations Environment Programme (UNEP), 2012)

United Nations Environment Programme (ed), *Global Environment Outlook GEO₄ Environment for Development*, Global Environment Outlook Report (United Nations Environment Programme, 2007)

United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNON, 2010)

University of Dar-es-Salaam, International Water Management Institute and Natural Resource Institute, 'Implications of Customary Laws for Implementing Integrated Water Resources Management' (Department for International Development, 16 September 2011 2004)

Upham, Frank, 'Mythmaking in the Rule of Law Orthodoxy' (2002) *Rule of Law Series*

Uphoff, NT, *Improving International Irrigation Management with Farmer Participation* (Westview, 1986)

Valauri, John T., 'Dialectical Jurisprudence: Aristotle and the Concept of Law' (2010) *SSRN eLibrary*

Van Koppen, Barbara , Mark Giordano and John Butterworth (eds), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CABI, 2008)

Vani, M S, 'Customary Law and Modern Governance of Natural Resources in India-Conflicts, Prospects for Accord and Strategies' (Paper presented at the Legal Pluralism and Unofficial Law in Social, Economic and Political Development International Congress, Chiang Mai, Thailand, 7 to 10 April 2002)

Vapnek, Jessica et al, *Law for Water Management: A Guide to Concepts and Effective Approaches*, FAO Legislative Study 101 (FAO, 2009)

Vincent, Linden, *Hill Irrigation: Water and Development in Mountain Agriculture* (Overseas Development Institute, 1995)

Waldron, Jeremy, 'Property' in Edward N. Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Fall 2008 ed, 2008)

Walters, M, 'The "Golden Thread" of Continuity: Aboriginal Customs at Common Law and Under the Constitution Act 1982' (1999) 44 *McGill Law Journal* 711

Waters, Timothy William, "'The Momentous Gravity of the State of Things Now Obtaining": Annoying Westphalian Objections to the Idea of Global Governance' (2009) 16(1) *Indiana Journal of Global Legal Studies* 25

'Water Sector Reforms: Five Years On' (2008) *Kisima. A Forum for Analysis and Debate on Water and Sanitation Issues in Kenya*

Watson, Elizabeth E, William M Adams and Samuel K Mutiso, 'Indigenous Irrigation, Agriculture and Development, Marakwet, Kenya' (1998) 164(1) *The Geographical Journal*

Weber, Max (ed), *On Law and Economy in Society* (Harvard University Press, 1954)

Weiss, Edith Brown, 'Environmentally Sustainable Competitiveness: A Comment' (1993) 102(8) *The Yale Law Journal* 2123

West, Mark, 'Legal Rules and Social Norms in Japan's Secret World of Sumo' (1997) 26 *Journal of Legal Studies* 165

Widgren, Mats et al, *Islands of Intensive Agriculture in Eastern Africa: Past & Present* (British Institute in Eastern Africa, 2004)

Winchester, Brian N, 'Emerging Global Environmental Governance' (2009) 7(22) *Indiana Journal of Global Legal Studies* 7

World Water Assessment Programme, *Water a Shared Responsibility* The United Nations World Water Development Report 2 (UNESCO, 2006)

Wouters, Patricia, 'The Relevance and Role of Water Law in the Sustainable Development of Freshwater' (2000) 25(2) *Water International* 202

Wouters, Patricia and Andrew Allan, 'What Role for Water Law in the Emerging “Good Governance” Debate?' (2004) 15(3) *Journal of Water Law* 85

Young, Catherine G, 'The Minimum Core of Economic and Social Rights: A Concept in Search of Content' (2008) 33 *The Yale Journal of International Law* 113

Treaties

Convention and Statute on the Regime of Navigable Waterways of International Concern, opened for signature 20 April 1921, 7 LNTS 35 (entered into force 31 October 1922)

Convention on the Protection and Use of Transboundary Watercourses and International Lakes opened for signature 17 March 1992, 1936 UNTS 269 (6 October 1996)

Convention on Wetlands of International Importance especially as Waterfowl Habitat, opened for signature 2 February 1971, 996 UNTS 245, (entered into force 21 December 1975)

International Covenant on Civil and Political Rights, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976)

International Covenant on Economic, Social and Cultural Rights, opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976)

Protocol for Sustainable Development of Lake Victoria Basin between Kenya, Uganda and Tanzania signed on 29th November 2003 (entered into force 1 December 2004)

Revised Protocol on Shared Watercourses, opened for signature 7 August 2000, SADC Depository <http://www.sadc.int/index/browse/page/159> (entry into force 22 September 2003)

Treaty on European Union, opened for signature 7 February 1992, [2009] OJ C 115/13 (entered into force 1 November 1993)

UN Convention on the Law of the Non-Navigational Uses of International Watercourses, opened for signature 21 May 1997, [1997] 36 ILM, 700 (not yet in force)

United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, opened for signature 14 October 1994, 1954 UNTS 3 (entered into force 26 December 1996)

United Nations Framework Convention on Climate Change, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994)

Other

Agenda 21: Programme of Action for Sustainable Development, UN GAOR, 46th sess, Agenda Item 21, UN Doc A/Conf.151/26 (14 June 1992)

Committee on Economic, Social and Cultural Rights, *General Comment 3: The Nature of State Parties' Obligations*, 5th sess, UN Doc E/1991/23 (14 December 1990)

Committee on Economic, Social and Cultural Rights, *General Comment 15: The Right to Water*, 29th sess, Agenda Item 3, UN Doc E/C.12/2002/11 (29 November 2002)

Declaration of the United Nations Conference on the Human Environment, UN Doc A/Conf.48/14/Rev. 1(1973)

Declaration on the Right to Development, UN GAOR, 97th Meeting, UN Doc A/Res/41/128 (4 December 1986) annex

The Dublin Statement on Water and Sustainable Development, United Nations International Conference on Water and the Environment, (Adopted 31 January, 1992)

Economic Development and the Conservation of Nature, United Nations GA Res. 1831(XVII), UN GAOR, 17th Session, Supplement. No. 17, U.N. Doc. A/RES/1831 (XVII) (1962).

Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District- Kenya, February 10 2010)

Focus Group Discussion with a Group of Older Women on the Customary Water Governance System (Marakwet District-Kenya, February 10 2010)

Focus Group Discussion with a Group of Younger Women on the Customary Water Governance System (Marakwet District-Kenya, February 10 2010)

Government of Kenya, Sessional Paper No. 10 of 1965

Government of Kenya, *The National Water Policy on Water Resource Management and Development*, Sessional Paper No 1 of 1999

The Human Right to Water and Sanitation, GA Res 64/292, UN GAOR, 64th sess, 108th mtg, Agenda Item 48, Supp No 49, UN Doc A/64/L.63/Rev.1 (26 July 2010)

Human Rights and Access to Safe Drinking Water and Sanitation, Human Rights Council Res 64/292, UN GAOR 15th sess, 108th plen mtg, Agenda Item 3, UN Doc A/HRC/15/L.14 (30 September 2010)

Informal discussion with researcher working with Hydro-geologists Without Borders (Nairobi University, 24 January 2011)

International Labour Organization, Convention Concerning Indigenous and Tribal Peoples in Independent Countries, 1650 U.N.T.S. 383 (June 27, 1989)

International Law Association (ILA), *New Delhi Declaration of Principles of International Law Relating to Sustainable Development*, ILA Resolution 3/2002, annex, UN Doc. A/57/329 (6 August 2002)

International Law Association, *Berlin Rules on Water Resources*, Report of the 71st Conference (2004)

International Law Association, *First Report of the International Law Committee on International Law on Sustainable Development*, (2004)

International Law Association, *The Helsinki Rules on Uses of the Waters of International Rivers*, Report of the 52nd Conference(1966)

Interview with Jacob Turot (ELDOWAS Company Limited, Eldoret, 12 February 2011)

Interview with Joseph Rono (Kerio Valley Development Authority, Tot Office- Marakwet District, 12 February 2011)

Interview with Joseph Yego Lokanda, Chief of Kaben Location (Marakwet District-Kenya, 22 November 2010)

Interview with Mr. Munene Muigai (Lake Victoria North Water Services Board Regional Office Eldoret, 6th February 2011)

Interview with Parish Priest of Tot (Endo, Markwet District 21 November, 2010)

Interview with Yash Pal Ghai Chairman of the Constitution of Kenya Review Commission (Nairobi 24 November 2010)

The Johannesburg Declaration on Sustainable Development, Agenda item 13, UN Doc A/CONF.199/L.6/Rev. 2, (4 September 2002)

Kenya, *Parliamentary Debates*, House of Representatives, 18 July 2002, 1762 (Mr. Nooru)

Ministry of Water and Irrigation Kenya, *National Water Master Plan* (1980)

Rio Declaration on Environment and Development, UN Doc A/CONF.151/26 vol. 1 (1992)

Rio+20 United Nations Conference on Sustainable Development, *The Future We Want*, Agenda item 10, A/CONF.216/L.1 (Re-issued on 22 June, 2012)

Second World Water Forum, *Ministerial Declaration of The Hague on Water Security in the 21st Century* (22 March, 2000)

Susanne Wymann von Dach, Interview with Engineer Mahboub Maalim, Permanent Secretary of the Kenyan Ministry of Water and Irrigation, (InfoResources, Berne, Autumn 2007)

United Nations Commission on Human Rights, *Report on the Workshop on the Justiciability of Economic, Social and Cultural Rights*, 57th sess, Agenda 10, E/CN.4/2001/Add.2 (22 March 2001)

United Nations Declaration on the Rights of Indigenous Peoples, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Supp No 49, UN Doc A/RES/61/295 (13 September 2007)

United Nations Economic and Social Council, Commission on Human Rights, *Report by the Special Rapporteur on the Right to Food*, U.N. Doc. E/CN.4/2002/58 (Jan. 10, 2002)

United Nations Millennium Declaration, GA Res 55/2, UN GAOR, 56th sess, Agenda item 60(b), UN Doc A/RES/55/2 (8 September 2000)

United Nations, Report of the *World Summit on Sustainable Development*, Resolution 1, UN Doc. A/Conf 199/20 (9 April 2002) annex

United Nations World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment (1987)

Universal Declaration of Human Rights, GA Res 217A (III) UN GAOR, 3rd sess, 183rd plen mtg, UN Doc A/810 (10 December 1948)